



CoderDojoWA

TRAINING HANDBOOK

CREATING CODING COMMUNITIES

An initiative of the  **Fogarty Foundation**

Partners:





CODERDOJO DEFINITIONS

CoderDojo	CoderDojo is a global open source movement of fun, free and social coding clubs (Dojos) for young people aged 7-17.
CoderDojo Foundation	The CoderDojo Foundation is a registered charity in the Republic of Ireland. The Foundation consists of a core team based primarily in Dublin, Ireland. The Foundation is focused on supporting new and existing Dojos through resource and community development while also scaling CoderDojo through partnerships and creating awareness globally.
CoderDojo WA	CoderDojo WA is a Western Australian network of independent Dojos in Western Australia. It was founded in 2013 by the Fogarty Foundation to provide young Western Australians with the opportunity to develop their digital skills in creative and purposeful ways.
The Fogarty Foundation	<p>The ripple effect, depicted in the Foundation's logo, is at the very essence of everything that the Foundation does – creating greater outcomes for long term impact.</p> <p>The Fogarty Foundation is a not-for-profit that advances positive social change through education. The Foundation supports and develops programs across the broad spectrum of the community.</p> <p>The CoderDojo WA website, social media pages and mailing list are operated by the Fogarty Foundation. The Fogarty Foundation does not manage any Dojos; instead, the Foundation provides support, training sessions, occasional social events, information, communications and partnership linkages to help the CoderDojo WA community to grow and thrive.</p>
Dojo	A Dojo is a club where young people aged 7-17 years come to learn how to code, work on projects, make games and more. The word Dojo is a Japanese word meaning “house of learning”.
Champion	A Champion is a Dojo coordinator/organiser who is responsible for running a Dojo. There can be one or more Champions for each Dojo. The Champion manages all aspects of running the Dojo. You don't need to know how to code to organise a Dojo.
Mentor	A Mentor is a volunteer who helps Ninjas learn to code by providing encouragement to Ninjas at the Dojo. If a Mentor has knowledge and a background in coding/technology/computer science they can provide special assistance to more advanced Ninjas. However, you do not need to know how to code to be an encouraging and supportive Mentor.
Ninja	A Ninja is a young person aged 7-17 years, with an interest in coding, who attends a Dojo.
Kata	CoderDojo Kata is an open forum for the CoderDojo community to share resources with one another. Kata includes a wide range of learner and organiser resources.
Zen	CoderDojo Zen is a community platform that allows users to register a CoderDojo profile, create and verify a new Dojo location, and manage their Dojo – users, registration etc. Ninjas and volunteers can also join the community forums on Zen to ask questions and chat with other Dojos.



TRAINING HANDBOOK

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WELCOME MESSAGE

Hello and welcome to CoderDojo WA! In joining this community, you have become part of a unique international and state network of diverse individuals who are united by their common interest in helping the next generation get into coding.



CODERDOJO

A GLOBAL COMMUNITY



WHY CODE?



Coding is a tool that lets you write your story with technology. It's how we talk to the machines that are increasingly woven into our lives. If you can code, you can communicate your ideas with a computer or a program so they can be brought to life in bigger, brighter and more creative ways. It allows you to create things like software, apps, websites and tools to analyse the world around us.

WHY SHOULD I LEARN HOW TO CODE?

WA is risking a workforce that is under skilled and under-prepared for the future. The number of jobs available in digital industries is on the increase and a shortfall in skilled and ready for work graduates is predicted to create a 'digital innovation bottleneck' in Australian businesses. With a significant increase in the use of computer and tablet technologies in schools, particularly in Australia, it is important to make the distinction between technology consumers and technology creators. Rather than focusing exclusively on the use of available technology, WA needs people who can create new technologies using code.

CoderDojo WA aims to provide young people with more opportunities to develop their digital literacy skills across the board, becoming creators and not just consumers of technology. By giving young people the time to explore, design and create in a digital landscape, CoderDojo WA acts to overcome the challenges of engaging more youth in STEM (Science, Technology, Engineering and Mathematics), ensuring that Western Australia can take a leading role in the digital economy.

Whether they choose to pursue a career in technology or not, it is clear that in the digital economy every young person will benefit from some knowledge of coding.

***CODING ALLOWS YOU TO BECOME A CREATOR,
NOT JUST A CONSUMER, OF TECHNOLOGY***

GLOBAL LEADERS & TRENDSETTERS ALL AGREE ON THE IMPORTANCE OF CODING!

Mark Zuckerberg

Founder, Facebook

Our policy at Facebook is literally to hire as many talented engineers as we can find. There just aren't enough people who are trained and have these skills today.

Sheryl Sandberg

Chief Operating Officer, Facebook

An understanding of computer science is becoming increasingly essential in today's world. Our national competitiveness depends upon our ability to educate our children—and that includes our girls—in this critical field.

Melanie Perkins

Former Perth high school student and now CEO of her multimillion dollar start-up company, Canva

Have an idea and want to turn it into a reality? Want to build something that impacts millions of people around the globe? Want a job or to start a business in one of the best paid industries with the best working conditions? Become a software engineer.

It's the hard work and dedication of incredible software engineers that turned my idea into a reality that is now being used by over six million people around the globe.

Professor Ian Chubb

Former Chief Scientist of Australia

We've got to make things. We can spend our lives waiting for others to invent things we can pick up and use, or we can invent and produce things and get them onto the market. Invention and innovation is an important part of our economy and we need to ensure people have the talent and skills to do it.

President Barack Obama

Don't just buy a new video game — make one. Don't just download the latest app — help design it. Don't just play on your phone — program it.

Bill Gates

Chairman, Microsoft

Learning to write programs stretches your mind, and helps you think better, creates a way of thinking about things that I think is helpful in all domains.



WHAT IS CODERDOJO?



CoderDojo is a world-wide open source social education movement oriented around running free computer coding clubs (Dojos) for young people aged 7-17 (Ninjas).

At a CoderDojo, Ninjas work on their own code-related projects such as websites, apps, game development and more, with the support of volunteer Mentors.

A Dojo is NOT a class or a workshop. Rather, a Dojo is a club – a social environment in which young people can have fun learning to code. Dojos can be run by universities, other tertiary or vocational educational institutions, schools, businesses, libraries, youth centres and more.

There is no such thing as a typical Dojo, and the activities run vary from club to club. However, all Dojos share the ethos of CoderDojo which is documented in the CoderDojo ECHO and Charter (p. 21 – 33).

At a Dojo, Ninjas have the opportunity to:

- Become creators, not just consumers, of technology.
- Develop their logical thinking and problem solving abilities.
- Have their eyes opened to the wide variety of career opportunities in STEM and creative digital industries, and to other future possibilities and un-imagined jobs.
- Connect with other young people and Mentors who are interested coding.



WHAT IS CODERDOJO?



THE PEOPLE IN A DOJO

NINJA

7 – 17 year old participant

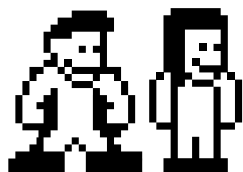
CHAMPION

The Dojo organiser. A Dojo only needs one Champion, but if there is more than one Champion it means that they can share the responsibility of running the Dojo.

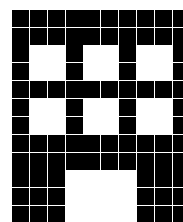
MENTOR

A Mentor is a community volunteer who helps the Ninjas in a Dojo. Mentors may have experience in coding and IT, or they may have no technical experience. Many CoderDojo Mentors are parents, grandparents or guardians of Ninjas. Mentors are not there to teach Ninjas how to code, they are there to support, guide and encourage the Ninjas as they work on their own projects and solve their own problems. Any person with a passion for digital literacy and helping the younger generation is encouraged to get involved!

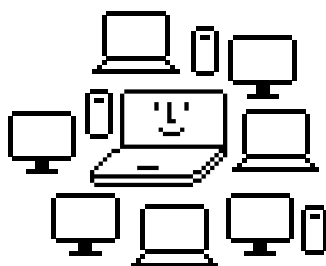
THE INGREDIENTS OF A DOJO



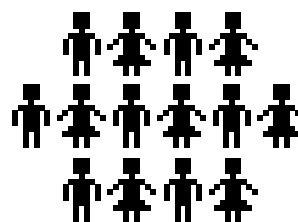
1-3 Champions



A room



Computers
(could be supplied by Dojo or BYO)



Ninjas and Mentors



WHAT IS CODERDOJO?

THE CODERDOJO FOUNDATION

The global CoderDojo community is supported by the CoderDojo Foundation. The CoderDojo Foundation consists of a core team based primarily in Dublin, Ireland. The CoderDojo Foundation was established in 2013 by CoderDojo co-founder James Whelton. Due to CoderDojo's rapid growth, the founders need a structured entity to support them and help them to scale, which is where the Foundation came in. CoderDojo and the Foundation share the same vision: every child worldwide should have the opportunity to learn code and to be creative with technology in a safe & social environment.

The CoderDojo Foundation exists to;

- create resources, like best practice guides and educational materials, and build tools to aid the community in collaboration and communication.
- support the awesome CoderDojo community by handling support requests, verifying Dojos to appear on the website for prospective attendees and Mentors to find, and facilitating knowledge sharing and discussion.
- negotiate and manage international partnerships to benefit the CoderDojo community and spread the CoderDojo brand and philosophy of open, free and child-centric learning around the world.
- build awareness of CoderDojo and the benefits of learning code by representing the movement at major national and international events.

A BRIEF HISTORY OF CODERDOJO

CoderDojo is a global movement which was originally founded in Ireland by James Whelton and Bill Liao. In early 2011, when James Whelton was an 18 year old coder in Cork, he received some publicity after hacking the iPod Nano. As a result, some of the younger students at his school expressed an interest in learning how to code. He set up a computer club in his school where he started teaching students basic HTML and CSS. Later that year he met Bill Liao, an entrepreneur and philanthropist. Seeing the positive impact James was having, Bill expressed an interest in growing the project. Together the pair founded CoderDojo.

In July 2011 the first CoderDojo was launched at the National Software Centre in Cork. The first sessions were immensely popular, with people travelling from Dublin (almost three hours away!) on a regular basis to attend. Owing to this popularity, and a desire to share the CoderDojo format, James and Bill decided to open source the model.

This encouraged rapid growth, initially across Ireland and then globally in North America and Italy. By making the movement open source, thousands of dedicated Champions and Mentors set up more Dojos across the world, making the CoderDojo movement a global phenomenon. There are now more than 1,100 verified Dojos in dozens of countries, with new Dojos starting almost every day.



CoderDojo Founders Bill Liao and James Whelton



#CREATEWITHCODE

CODERDOJO



MENTOR YOUR PEERS

ROBOTICS

DEVELOP GAMES

BUILD WEBSITES

CREATE APPS

MINECRAFT MODS

PROGRAMMING

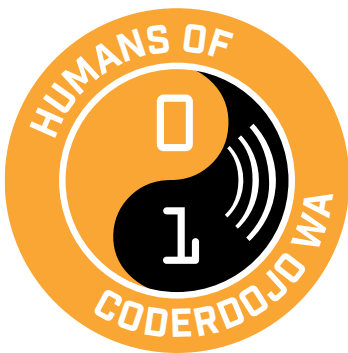
GET CODING!
www.coderdojowa.org.au



MELISSA ETTINGER

Software Developer and CoderDojo WA Mentor

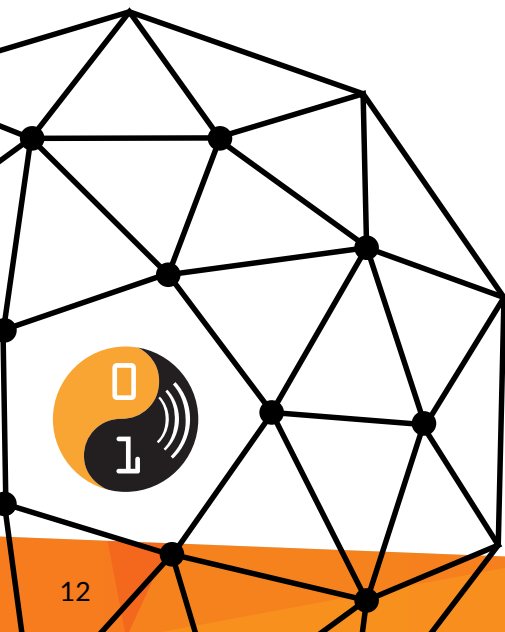
BANKWEST DOJO



STORY

I am currently working as a Software Developer at Bankwest. I am part of a team who is improving the way we deliver change to match the fast moving and ever changing world of technology. It is amazing to see people of all levels working together and continuing to grow their knowledge and skill set. I often see our junior level employees who are more in touch with the new technologies teaching those of a senior level.

Having studied Computer Science at university and working as a Software Developer, becoming involved in CoderDojo was a natural thing to do. Last year, I ran an all-girls CoderDojo event at Bankwest. We invited girls from all over WA to come to create and learn together for a day. I loved seeing the girls collaborate together, teaching one another and learning new things. It was inspiring to see what some of these young women could accomplish in just a few hours. There is always so much more to learn and we need the next generation to be involved in technology in order to keep accomplishing amazing things.





CODERDOJO

WESTERN AUSTRALIA



WHAT IS CODERDOJO WA?

THE FOGARTY FOUNDATION

The Fogarty Foundation was established by Brett and Annie Fogarty in 2000, to support and provide educational and leadership opportunities for young people across the WA community. They believe that education is the most effective way to support individuals and the community.

Over the years, the Foundation has partnered with a range of organisations that deliver innovative projects and educational opportunities that support young people to achieve their potential and inspire community leadership.

The Foundation also runs some of its own programs, including the UWA Fogarty Foundation Undergraduate Scholarships Program and Fogarty EDvance, as well as supporting the CoderDojo program in Western Australia through CoderDojo WA.



The Fogarty Scholars
www.fogartyfoundation.org.au

CoderDojo WA is a regional network of CoderDojos in Western Australia. In 2013, the Fogarty Foundation committed to establishing the CoderDojo program in Western Australia by providing training, support and ongoing encouragement to the WA community.

The first Dojos were run out of Perth's universities and by 2014, there were three Dojos in operation in WA. Since this time the number of Dojos in Perth has grown significantly. In 2016, the CoderDojo Foundation announced that Perth is home to more Dojos than any other city in the world! Regional Dojos are also popping up across the state.

The Fogarty Foundation, through CoderDojo WA, works to help build and maintain this growing network of community organisers by providing training and support for Champions and Mentors and organising social events that are aimed at connecting participating individuals and organisations. By providing this training and support to community members, we are equipping them to activate and maintain their own Dojos, creating a ripple effect of impact in the community (this ripple effect is depicted in our logos).

Through CoderDojo WA, the Foundation has done more than get kids coding. We are building a coding community – a connected and diverse network of passionate individuals and organisations who are working together to underpin Australia's future prosperity.





CoderDojoWA

VISIT OUR WEBSITE TO FIND OUT MORE ABOUT CODERDOJO WA

Register to start or help out a Dojo

Find a Dojo in your area

*Stay up to date with your Dojo news
& find out about events & Dojo opportunities*

*Hear what members of the
CoderDojo WA family have to say*

www.coderdojowa.org.au



THE CODERDOJO WA COMMUNITY



OUR MISSION

Our mission is to get kids coding. As a community, we do this by running and supporting Dojos in Western Australia where young people can be inspired to learn, create projects and make new friends.

OUR VISION

Our vision is to get Dojos happening right across WA. By 2020, we want all young Western Australians aged 7-17 to be able to access fun, free and social learning environments that motivate them to get coding.

OUR PURPOSE

Our purpose is to make sure that WA has a bright future by developing a digitally literate workforce that will drive WA's long term prosperity, giving our young people the best chance of success in the future.

CODERDOJO WA VALUES

The CoderDojo WA values provide guidance to our community. By abiding by these values, we can collectively optimise our individual Dojos as well as the Western Australian learning network.

Initiative. Instead of sitting back and waiting for someone else to do something, we take action and try new things. We don't get too stressed about taking the first 'perfect step'. Instead, we look for a pathway and try it! We learn from failure and keep on improving.

Generosity. We share what we are doing with others, in person and online, so that we can all get to know each other and help each other. We share our time as well as our passions, to help motivate and inspire others in the CoderDojo WA community.

Positivity. We encourage others at the Dojo to keep on trying to improve their coding skills. We encourage other members of the CoderDojo WA community by commenting on what they share in person and online, and by acknowledging them and what they do.

Connectivity. We connect with those who are different from us, because everyone has something to offer and we become even better when we work together. We listen to and consider the opinions of others. We go out of our way to connect with new members of our community so that they feel included.



HOW TO BE AN EFFECTIVE MEMBER OF THE COMMUNITY

In a network, YOU are extremely important, because the network only exists due to your unique value as an individual and your active participation. Here are the ways you can become an effective member of the CoderDojo WA community:

CONNECT

All community members (including Ninjas and parents) should **register** a profile on Zen, join the CoderDojo WA mailing list, and **participate** in the Zen forum discussions. Champions and Mentors should also be active on the Facebook community page. Effective CoderDojo WA community members take responsibility to **stay informed** about happenings with CoderDojo and CoderDojo WA, **share** stories with others, **ask** questions when stuck, and **support** others in the community.

REACH OUT

If you are feeling left out, not included, without direction or uncertain about what you should be doing, please reach out on the CoderDojo WA Facebook community group and Zen forum, letting others know what you have to offer (i.e. time, expertise, assistance).

CREATE

At Dojos, we encourage Ninjas to work on their own projects in order to further their learning. To be an effective Member of the CoderDojo WA community, you might like to have your own projects going, so that you can further your own learning too. This also gives you something to talk about and share with Ninjas.

You don't need to have a coding background in order to get started on your own coding project! Find a project or a goal to work on (build a simple website, complete courses on codecademy.com etc.). If you're an experienced programmer, find something new to create. It doesn't really matter what your project is, how good it is, or how simple it might be; if you have something technology/code related that you enjoy doing in your own time, you will be able to share and talk about it with Ninjas.



THE CODERDOJO WA COMMUNITY

CELEBRATE

Read our newsletter and watch out on Facebook and the Zen forums to hear about community celebrations throughout the year. Come along for some food and fun!

CHECK IN

We encourage the community to complete our census, polls and surveys that are released from time to time. The results help us continually improve our support of the community. We share this information with you every year and you can download survey results from our website.

CONTRIBUTE TO THE CODERDOJO FOUNDATION

The CoderDojo head office in Ireland starts and supports groups and communications that are global in scale. Sometimes they are looking for people to join committees and to contribute to special international projects. If you would like to participate in the global network we suggest you explore the options on their website, stay connected to their social media accounts and keep an eye out for groups you want to be a part of. You can also contact them directly and ask to get involved in your area of interest: info@coderdojo.com

The CoderDojo Community Platform; Zen, is an open source platform. This means that you are able to make suggestions for improvements, and if you have coding skills, you are also invited to help improve the platform!

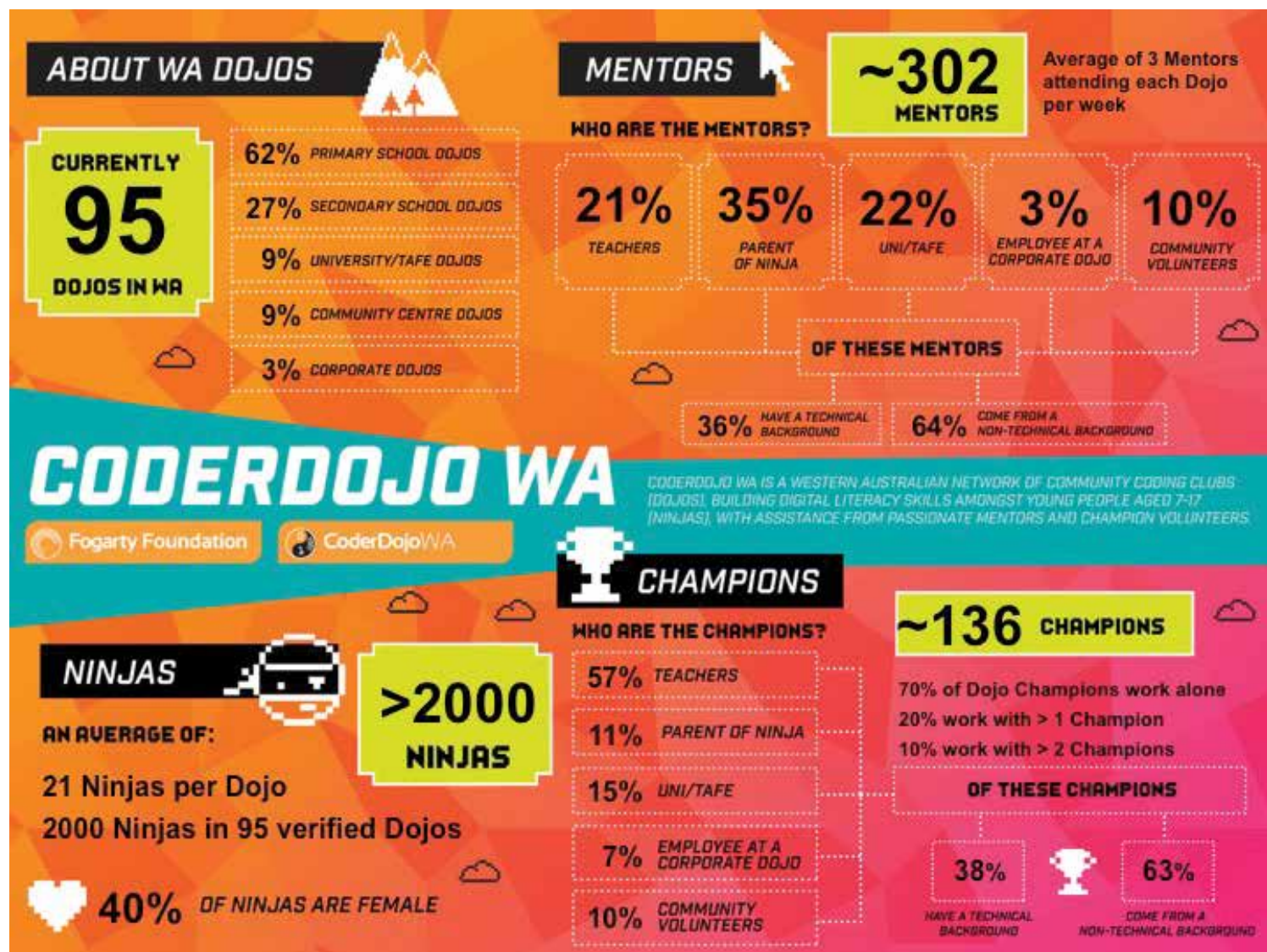
To make suggestions or offer your help, visit the project page on GitHub:

<https://github.com/CoderDojo>



KANCHO CALLING DOJO CENSUS

Here's our 2016 Census Infographic



THE GRAPHIC CAN BE DOWNLOADED FROM THE CODERDOJO WA WEBSITE

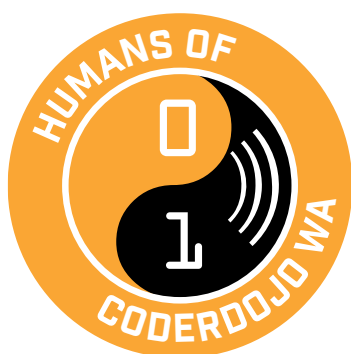
[HTTP://CODERDOJOWA.ORG.AU/CATEGORY/SURVEY/](http://CODERDOJOWA.ORG.AU/CATEGORY/SURVEY/)



LEWIS ALMOND

CoderDojo WA Ninja

CURTIN UNIVERSITY DOJO

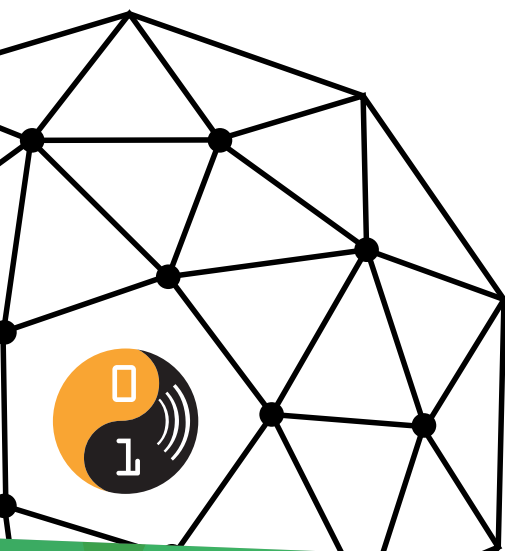


STORY

I started working with code when I was in Year Three; four years ago now. I cannot remember a time when I wasn't pulling something apart. At the Curtin Dojo, we have visiting professionals come in and do a quick talk to us about their inventions. My favourite was a doctor who had designed and made a 3D printed Robotic Fish. It was designed to test salt levels in waterways. It really inspired me and made me want a 3D printer even more! It made me realise the practical applications of what I am interested in.

I was awarded a Black Belt badge after my first Dojomester at Curtin. I found out I was the youngest ever in Australia, and probably the world to get that, so that was really good. This year I have been made House Captain at my school and I don't know if I would have been able to achieve any of that without being involved in CoderDojo.

I think we need to introduce coding earlier in schools. I have been coding since Year 3 and the Year 10 teacher of technology at my school thinks that the younger kids don't understand anything about coding. The kids in our Robotics Club are far more ahead than the older kids, but we are not being recognised because of our age.





CODERDOJO

EMBODYING THE ETHOS



CODERDOJO ECHO:

ETHOS, CULTURE, HAPPINESS AND OUTCOMES



CoderDojo's vision is a world where every child has the opportunity to learn how to code and to be creative in a fun, safe and social environment.

To support the establishment of 'cool' learning environments, the CoderDojo ECHO (Ethos, Culture, Happiness and Outcomes) guide has been developed. It has been designed to be simple, understandable, practical and as translatable as possible. It is a useful guide to help existing and new Champions and Mentors implement best practices and establish a positive learning environment at all Dojos.

COLLABORATION AND TEAMWORK

Different people have different strengths, and learning from each other is a benefit of working in groups and teams. We recommend encouraging Ninjas to self-organise into teams. This can help them to better understand their individual strengths and learn how to work with others.

An easy way to encourage this is to ensure that there are two/three Ninjas working on the same computer occasionally, taking turns at the keyboard.

WORKING IN MIXED GROUPS

Teams do not have to be of the same age group or ability, mix it up and give everyone a chance to learn and grow with group collaboration! All Ninjas will have the opportunity to develop leadership skills and to help less experienced kids at the Dojo. Ninjas are encouraged to make friends and become role models and Mentors in their Dojo, as their coding skills improve.



GENDER

If possible try to ensure that groups are mixed and not just restricted to a certain gender so that young people are working across gender.

CoderDojo volunteers around the world make a special effort to ensure that girls and young women are given the opportunity to engage with technology. Encouraging Dojo attendees to work in mixed groups is a great way to encourage diversity and inclusion.

Diversity within teams is a known catalyst for innovative thinking and for creativity and encouraging girls to become mentors as soon as possible is a strong catalyst for more girls to engage.

COLLABORATION

Dojos should consider the opportunity to establish teams across Dojos and across geographic borders. Not only does this introduce borderless sharing and virtual learning, it also increases diversity within teams and emphasises the global nature of community.

VOLUNTEERS AND PARENTS/GUARDIANS

VOLUNTEER MENTORS

Dojos all around the world are facilitated by volunteer Mentors who donate their time and share their knowledge and skills. Dojos benefit from the generosity and benevolence of individuals who foster and encourage young digital creators and explorers. Mentors encourage young people to explore technology for themselves and are there to assist when young people need it. Mentors are not at a Dojo to teach or lecture, and while technical skills and a background in coding is beneficial, the encouragement and support that Mentors provide are equally as important in ensuring the success of the Dojo.

YOUTH MENTORS

One of the best ways to learn is to pass on what you have learned to others by becoming a Mentor. At Dojos, young people are encouraged to share their knowledge with others.

Ninjas should be encouraged to help less experienced kids, beginners, and younger children. Younger, less experienced kids are also encouraged to work in groups. This not only gives responsibility and provides development opportunities for the Ninjas, it also gives the young attendees peer role models to look up to!

PARENTS AND GUARDIANS PITCH IN!

As one of CoderDojo's founders Bill Liao often says, "CoderDojo is free, but it's not a free ride!" While it varies from club to club, parents and guardians are usually asked to stay for the duration of the Dojo, and while they're there, they are encouraged to help out in any way they can.



CODERDOJO ECHO:

ETHOS, CULTURE, HAPPINESS AND OUTCOMES



In addition to mentoring, parents and guardians are encouraged to help out with other tasks, like taking on the registration of kids, check in, managing any social media accounts that the Dojo may have or even organising local outreach activities.

They are encouraged to work with all the Ninjas at a Dojo and not just their own child. They are also reminded to keep their fingers off the keyboards! This is to enable the Ninjas to have full creative freedom and to direct their own learning journeys.

CHANGEMAKERS

TECHNOLOGY AND CODING AS TOOLS FOR POSITIVE CHANGE

Ninjas are encouraged to work on themes and projects of direct interest to them. Projects that have a positive social, environmental or community impact can be introduced to help Ninjas identify opportunities to positively influence the world around them.

Kids and young people are frequently motivated by projects focused on protecting the environment, sharing knowledge, solving a social problem, supporting a community and themes around physical and mental wellbeing.

ENABLING AND EMPOWERING KIDS

In Dojos all across the world, Ninjas are being empowered with life skills to help them to succeed. As well as teamwork and collaboration skills, Ninjas are encouraged to present their projects and develop their communication and leadership skills.

TOP TIP: A DOJO HAS A CLUB ATMOSPHERE SO SOCIALISING, CHATTING AND MAKING FRIENDS IS ENCOURAGED!

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Original Source: <http://kata.coderdojo.com/wiki/ECHO>



At their local Dojos, Ninjas develop confidence and learn how to trust in their own voices by directing their own learning and by taking on responsibility through peer-to-peer mentoring.

YOUNG PEOPLE ARE GIVEN RESPONSIBILITY IN THEIR DOJO

Ninjas are involved in the running of their Dojos and are included in major Dojo decisions. Ninjas also determine the subjects and concepts that they would like to explore and learn.

INFORMAL AND FUN

CODERDOJO IS A CLUB ENVIRONMENT, WHICH IS FUN AND ENGAGING!

The atmosphere in a Dojo is fun and social. Dojos are clubs with their own communities. Seats are set up in groups, with Ninjas given the opportunity to chat and work together (avoid lecturers/teachers at the top of the room with Ninjas sitting in lines, listening.)

CoderDojo clubs operate regularly which enables frequent opportunities for development and socialisation, both of which are of great benefit to Ninjas. Champions and Mentors should try and encourage friendships to form in their Dojo by pairing like-minded Ninjas and facilitating conversations between Ninjas.

All of the roles at a Dojo are relevant and interaction between all roles is important; everyone should support each other. Mentors, Champions and Ninjas are all in it together, everyone should have a voice and everyone should be respected.

Ninjas are at the centre of all Dojos; their engagement and happiness should be monitored to ensure that all are included and involved. Kindness is at the core of what CoderDojo is all about!

Not all young people will choose to attend every Dojo session. Some come once, some every week, some come regularly. Young people are welcome to attend when they want to, though they are encouraged to come regularly.

FEEDBACK SHOULD BE CONSTRUCTIVE AND POSITIVE

No idea is a bad idea and there is no such thing as failure. Ideas are sought, encouraged and taken into account. Ninjas learn as they explore and learn from making mistakes and taking risks; allow Ninjas to do this.

Sometimes, it is appropriate to provide Ninjas with group feedback, sometimes it is best to do so on a one to one basis.

TOP TIP: TEAMWORK AND COLLABORATION HELPS YOUNG PEOPLE TO DEVELOP CONFIDENCE AND TO IMPROVE COMMUNICATION SKILLS!



Ninjas can get frustrated and disappointed, that's ok; help them through this with advice, support and encouragement.

SELF-LED LEARNING

At Dojos, Ninjas are encouraged to explore coding, computer programming and technology by applying these to their interests. They are encouraged to develop lifelong competencies and a passion for learning. They can think about their own hobbies, pastimes, and interests and then use technology to reflect these. Allow Ninjas to direct their learning by choosing what they want to learn.

Encourage young people to have a choice about what they are learning and encourage them to try to find the answers to their own questions from their peers, the internet and then from Mentors. "Ask 3, then me" is the motto that reminds adults that Ninjas should look for three other sources of help and information before approaching their Mentors.

Some Ninjas may need help discovering their interests. Explore and encourage them to think about topics in which they are interested. Don't give them an interest, but probe them to see what might spark their own interests.

It is important to remember that some Ninjas may excel at coding while others may struggle, and some may not like coding at all. Don't be disappointed if some Ninjas opt out of the Dojo, this happens in all clubs (sporting, drama, etc.). The important thing is that they have had the opportunity to identify that coding is not for them.

NON-CURRICULUM BASED

Ninjas are not forced to follow a set learning path. They may be introduced to certain concepts in programming and are then encouraged to experiment further through their own projects. Ninjas set their own goals with help from the Mentors at a Dojo. Their learning journey reflects their own pace of learning and their own abilities. Some Ninjas move from apps to websites to games, others like to explore different programming languages. Some Ninjas will be happy to stay working in Scratch for a year, others won't. Individual paths and journeys evolve and this is a good thing.

Some Dojos use rewards systems such as open badges or coloured belts (USB/USB belts/silicon wristbands) as a motivator and as awards for diligence, persistence and for attaining different skill levels (see p. 58 - 60).

TOP TIP: NOT ALL YOUNG PEOPLE WILL LOVE CODING. IT IS OK TO LEARN THAT THEY DON'T LIKE IT TOO! SOME THOUGH, WILL REALLY GET IT AND BECOME SUPERSTARS!



LEARNING THROUGH PROJECT WORK

Learning through project work is a different approach to following a curriculum. Ninjas are guided to learn the basics; they can then further their learning based on what they want to achieve within their projects, rather than through following a prescribed learning path.

For example, while many Ninjas may be working on HTML, every website will look and feel different. They will be themed according to the Ninja's interests and may contain different functionality and subject matter, based on the Ninja's goals for their project.

INCLUSIVE AND FREE

CODERDOJO PARTICIPATION IS ALWAYS FREE!

There is no charge for attending any Dojo worldwide. This enables Dojos to be open and inclusive for all members of society who wish to participate.

Mentors and parents provide their time and resources on a voluntary, free-of-charge basis. This is fundamental to the atmosphere at a Dojo.

No one will be turned away or excluded because they can't afford access to technology or to a club where they can belong and learn.

For advice on how to fundraise for your Dojo, see p. 70

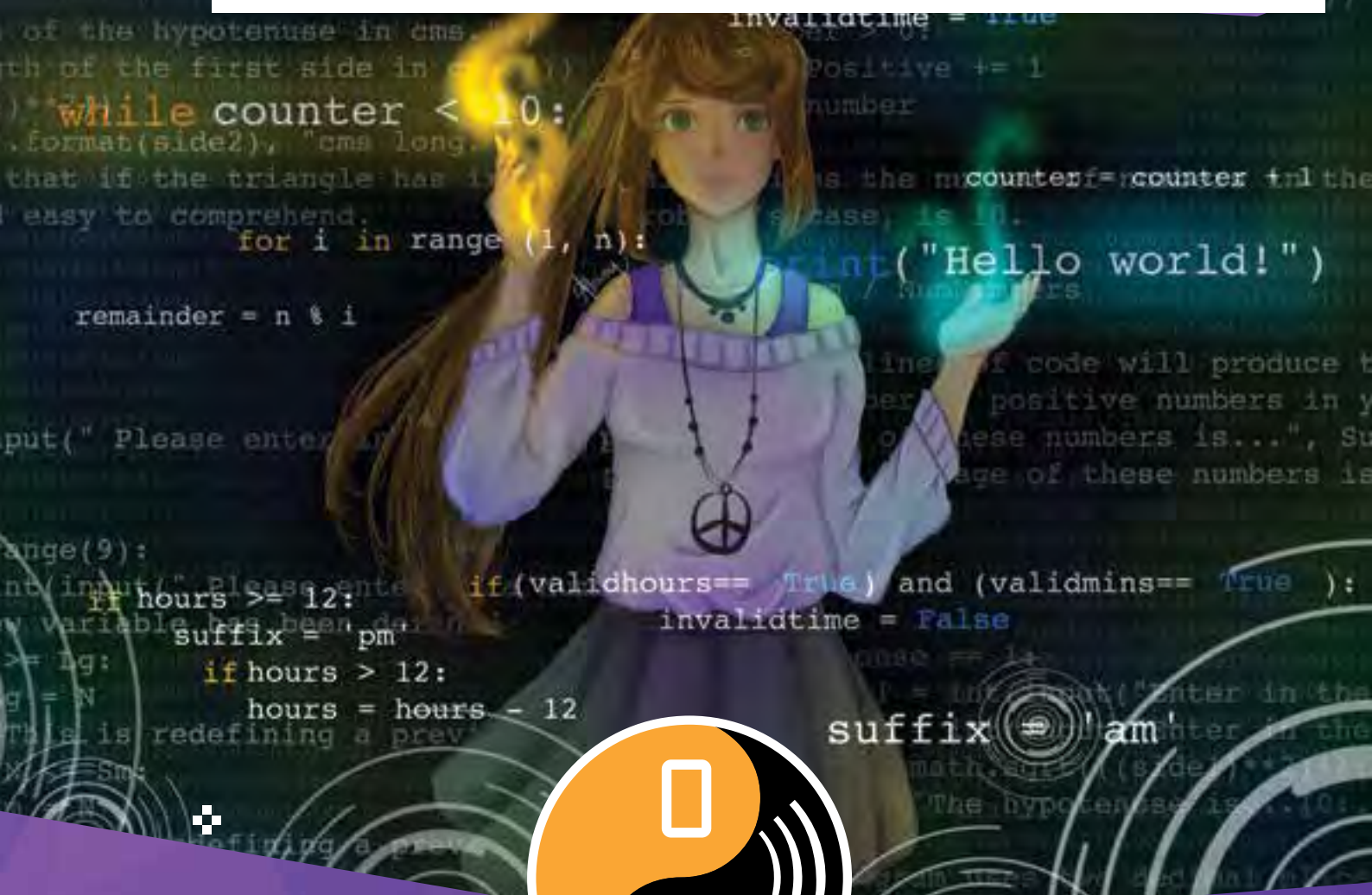
TOP TIP: SOME YOUNG PEOPLE WILL BE MORE ADVANCED AND AUTONOMOUS THAN OTHERS AND WILL USE THE DOJO AS A SPACE TO WORK ON THEIR EXISTING PROJECTS AND GET ADVICE.



#CODELIKEAGIRL

CODERDOJO GIRLS

CHANGE THE WORLD WITH TECHNOLOGY



WEB DEVELOPER

SOFTWARE DEVELOPER

COMPUTER PROGRAMMER

GAME DEVELOPER

SOFTWARE ENGINEER

APP DEVELOPER

GET CODING!
www.coderdojowa.org.au



CODERDOJO IS OPEN TO ALL!

CoderDojo is fully inclusive and encourages diversity. All young people regardless of gender, social status, religion, race, sexual orientation or beliefs are welcome to attend their local CoderDojo.

ACTIVELY ENCOURAGE GIRLS TO GET INVOLVED IN CODING!

It is estimated that out of the people currently pursuing careers in computer programming, the number of women participants is lower than 20% globally.

It is a goal of CoderDojo to encourage more young women to engage with programming and have visible role models available to them in order for them to be able foresee opportunities in this area.

For more information on how to encourage more girls to code please visit the CoderDojo Girls page on our website www.coderdojowa.org.au, or join the CoderDojo Girls Group on Zen: <https://zen.coderdojo.com/>

TOP TIP: SOME NINJAS ARE INITIALLY INTERESTED IN THE CODE ITSELF WHILST OTHERS ARE ATTRACTED TO CODING BY THE CREATIVE POSSIBILITIES IT UNLOCKS. ENSURE YOU PROVIDE A RANGE OF “HOOKS” TO ENGAGE DIVERSE NINJAS.



OPEN SOURCE

CODERDOJO IS OPEN SOURCE

Since its establishment, CoderDojo has been based on an open source model. Anyone, anywhere can set up a Dojo, if they operate within the CoderDojo ethos and values.

CoderDojo Champions and Mentors are part of the global open source CoderDojo movement and network. All are encouraged to share their insights and improvements. Kata, the CoderDojo community content and knowledge base, is the place to share resources and lessons learned:

http://kata.coderdojo.com/wiki/Main_Page

USE OF OPEN SOURCE SOFTWARE

CoderDojo encourages Ninjas to use open source software which is free of charge and accessible by all. When they use open source tools, ninjas can become aware of their potential role in contributing to and shaping software to make it better. In future they may like to help shape and improve technology in practical and meaningful ways.

MOTTOS

ONE RULE, BE COOL!

Helping, sharing, supporting, encouraging, cooperating and being kind are all very COOL! Bullying, lying, time wasting and generally disruptive behaviour are all considered uncool!

This motto has been around since the very first CoderDojo session and is used by Dojos and volunteers all around the world.

ASK 3, THEN ME!

This motto is used to encourage Ninjas to be self-motivated in their learning and not to be overly reliant on Mentor support.

Ninjas are asked to problem solve themselves and with their peers before consulting an adult. Ask yourself first, then ask the internet/use a search engine, next ask your peers, and only then ask a Mentor!

IF YOU MADE IT, YOU CAN PLAY IT!

Ninjas are empowered to be creators, not just consumers of technology and their time at a Dojo is focused on this. To encourage active, creative participation with technology, Ninjas do not simply play games at their Dojo. Ninjas who are hooked on gaming are encouraged to create their own games or to make modifications for games that they already play (like Minecraft!), so that they're using their time at Dojos constructively creating, not passively consuming!

THE ZEN OF CODERDOJO

ONE RULE: BE COOL!



BE RESPECTFUL



BE INCLUSIVE



BE HELPFUL



BE PATIENT



BE POSITIVE



*IT'S A CLUB, NOT A CLASSROOM. IT'S FREE & VOLUNTARY TO ATTEND.
NINJAS (7-17) WORK ON THEIR OWN PROJECTS.
THERE IS NO SET CURRICULUM. IT'S SUPPORTED NOT STRUCTURED.
EVERYONE HELPS EACH OTHER.*





CODERDOJO FOUNDATION CHARTER

All Dojos are required to agree with the below CoderDojo Charter. This Charter encompasses the basic ethos and core aspects of the CoderDojo movement, which all Dojos are founded on. The introduction of the Charter was announced by co-founder James Whelton to the CoderDojo Organisers Group on the 3rd of December, 2013.

CHARTER

For the purposes of this Charter, “CoderDojo” shall mean the open source, volunteer led movement orientated around running free not-for-profit coding clubs. “Dojos” shall mean the not-for profit coding clubs established to support communities and spread the philosophy of CoderDojo.

All Dojos are independent, autonomous, community groups set up to inspire young people to learn code. All Dojos have different styles of operating, but they all hold the same ethos.

- We commit to inspiring and supporting young people to learn how to create technology.
- We commit to the highest possible standards of child protection in our jurisdiction.
- We commit to not charging the children attending, nor their parents.
- We commit to encourage parent participation within our Dojo.
- We commit to sharing our knowledge for free.
- We commit to share our knowledge within our Dojo and with other Dojos.
- We commit to take care and uphold the good name of the global CoderDojo community.
- We commit to encouraging collaboration, peer to peer mentoring and project work between the attendees.
- We commit to welcoming volunteers and children regardless of gender, race, sexual orientation, creed, religion or ability.

CODERDOJO FOUNDATION (CDF) COMMITMENTS TO YOU:

- CDF commits to act in the interest of the global CoderDojo community.
- CDF commits to facilitating the community in sharing its knowledge.
- CDF commits to sharing our resources for free.
- CDF commits to encouraging active involvement in our organisation.



AGREEMENT

On registration, you are making an agreement with the CoderDojo Foundation and are agreeing to follow the CoderDojo ethos.

- You are entitled to use the CoderDojo name, logo and website to promote your activity for non-commercial use.
- You are entitled to fundraise on the condition that it is made explicit that you do so for your Dojo or as a group of Dojos under a group name (E.g. Dojos of California). Inappropriate fundraising is a breach of this Charter.
- It is your responsibility to ensure that you are compliant with legislation in your jurisdiction when undertaking any activities, including fundraising, for your Dojo or group of Dojos.
- If the terms of this Charter are breached, CoderDojo Foundation retains the right to remove the group from the website. In this case your coding club shall cease using the CoderDojo name, brand and logo in the promotion of your coding club and on third party websites.
- Opinions expressed by any individual Dojo or people in the registered Dojo do not represent the views of CoderDojo Foundation.
- CoderDojo Foundation may terminate this Charter with any Dojo without cause on thirty days' notice.
- As CoderDojo Foundation is an Irish entity, this Charter is subject to Irish law and you agree to that.

DISCLAIMER OF LIABILITY

CoderDojo Foundation accepts no responsibility or liability whatsoever where a party is injured while engaging in the activities of a registered group. It is the responsibility of each club to ensure they maintain valid and appropriate insurance.

You are solely responsible for the activities conducted by your own Dojo. Agreeing to this Charter does not constitute endorsement of those activities by the CoderDojo Foundation.



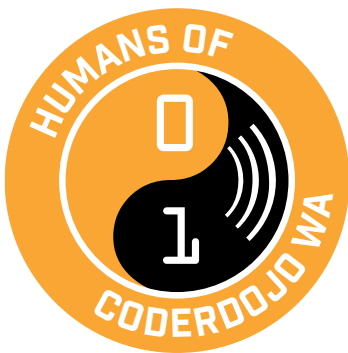
The CoderDojo Foundation team in Ireland



JONATHAN TENNANT

Software Engineer and
CoderDojo WA Champion

EDITH COWAN UNIVERSITY DOJO

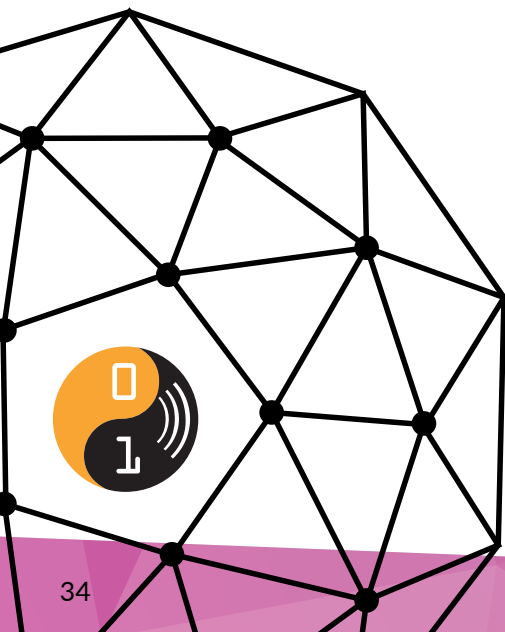


STORY

Developing software is about more than just the coding, it's about the activity of breaking down, or otherwise tackling a problem. These skills, once learned, can be applied constantly in day-to-day life. In terms of coding and computers having "totally saved" me, this could be covered a thousand times over by having access to Google and stack-overflow at my fingertips.

CoderDojo was a natural fit for us. I was teaching my son how to code as a way to improve his ability to reason and to improve his mathematics skills, so joining a Dojo just made sense. It is always a pleasure to see the fascinating creations that our Ninjas come up with, certainly "inspiring" "eye-opening", "funny", "rewarding" are all appropriate ways to describe this experience.

My hopes are that by showing today's generation how we are solving problems, and enhancing their understanding of what is involved in software development, will better enable them to understand the foundations of the technologies they will be working with in the future, because it is certain that the kinds of problems they will be solving will be vastly different to what we're doing today.





CODERDOJO

REGISTER A CODING COMMUNITY



COMMUNITY PLATFORMS

CoderDojo WA hosts the website www.coderdojowa.org.au. Champions and Mentors should start their CoderDojo journey by signing up on this website so that you can connect to the WA network of Dojos and the supportive community we represent. Once we know who and where you are, we can send you information about events and opportunities for Dojos and volunteers in WA. Once you have signed up through CoderDojo WA, you will be redirected to the CoderDojo Global website.



The CoderDojo team in Ireland host the website www.coderdojo.com where you can register to create or volunteer at a Dojo, access great resources, join community forums and manage your Dojo. The CoderDojo website has two community platforms that sit behind the main page – CoderDojo Zen is a platform where you can locate, create and manage a Dojo, and CoderDojo Kata is a resource platform where you can access a wide range of learner and organiser resources.





ENCOURAGE COMMUNITY MEMBERS TO PARTICIPATE ON ZEN

Once you have signed yourself up, you should ensure that all Ninjas and parents have signed up to CoderDojo WA through our website so that they can be included in our community announcements. All Champions, Mentors and Ninjas (and/or their parents) should then register on CoderDojo Zen. After a Dojo is verified on Zen (see p. 39), Ninjas, Mentors and Champions can be added to the Dojo. You can then create events, manage attendance, award digital badges and more. CoderDojo and CoderDojo WA often hold competitions and giveaways. However, only Dojos and Ninjas that are actively using the Zen platform are eligible to receive these offers.



CoderDojo Zen



CoderDojo Kata

**CHECK OUT THE CODERDOJO YOUTUBE CHANNEL FOR TUTORIALS ON
HOW TO USE THE COMMUNITY PLATFORMS [HTTPS://WWW.YOUTUBE.
COM/USER/CODERDOJO](https://www.youtube.com/user/coderdojo)**



CODERDOJO CHAMPION



SO WHAT IS A CHAMPION?

A CoderDojo Champion is an individual who takes charge of setting up, running and maintaining a Dojo. A Champion cares about their community enough to take the initiative and add some CoderDojo magic to it.

Once the Dojo is open, the Champion is the person that Ninjas and Mentors count on to reliably show up, to make sure the doors are open, and to host a welcoming and friendly space. A Champion can be viewed as the project manager of a Dojo.

You don't have to know how to code to be a Champion, you just have to have passion for the mission and the drive to make things happen! Ideal Champions are great at running events, and gathering and organising people with the relevant skills.

Without Champions, there would be no Dojos, so the CoderDojo Foundation and CoderDojo WA want to encourage you as you set up and run your own Dojo.

You are not alone! If you do become a CoderDojo Champion, you will join over 1100 other Champions around the world, in dozens of countries (with a growing number in WA)! As well as this, the CoderDojo Foundation provides direct support for Champions and you can contact them at any time at: info@coderdojo.com. We also encourage new Champions to join the CoderDojo WA Facebook community group and Zen forum and reach out to other Champions in WA with your questions about creating and running a Dojo.



HOW TO CREATE YOUR DOJO IN WA

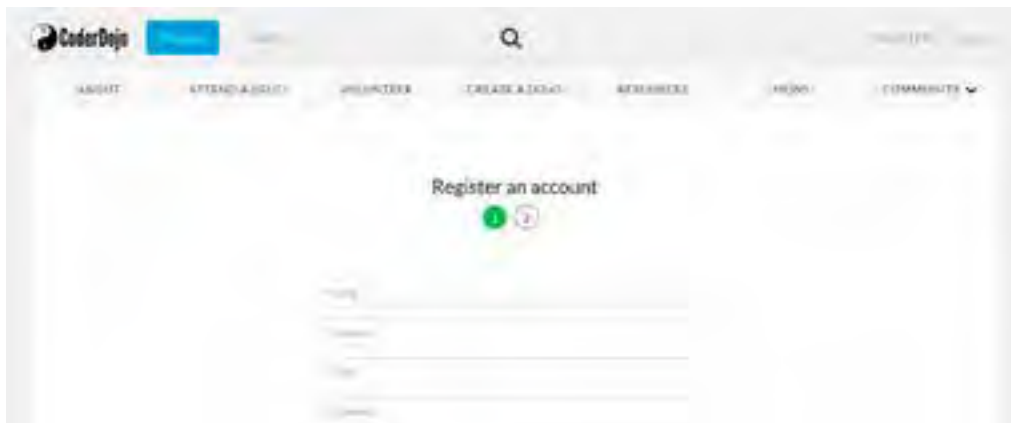
STEP 1. REGISTER AND CONNECT

Register to “Create a Dojo” at www.coderdojo.org.au

By registering through CoderDojo WA, you will automatically be invited to any CoderDojo WA training and social events. You will also be asked to complete occasional surveys and polls about your Dojo. If you elect to join the CoderDojo WA mailing list, you will receive our monthly newsletter which includes events and opportunities for WA Champions, Ninjas and Mentors.

You will then be sent an email asking you to:

- Create a Dojo at www.coderdojo.com. The first step will be registering an account.



Once you have registered an account you can follow the steps to complete your profile, register as a Champion, setup your Dojo, and finally, list your Dojo on the Zen map.



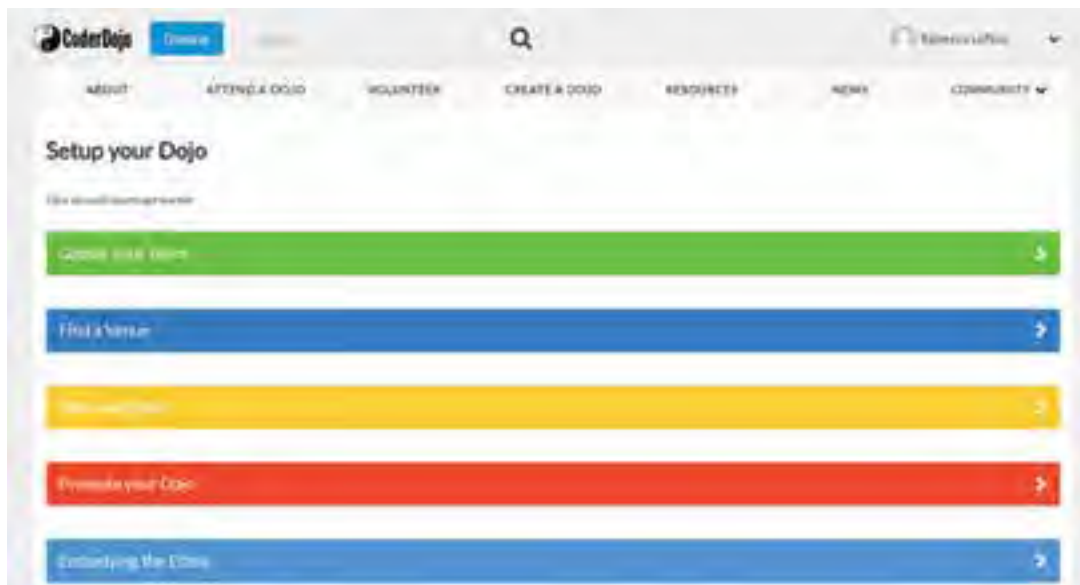
By listing your Dojo on Zen, you will be able to:

- ✓ Manage the attendees at your Dojo.
- ✓ Award badges to the people in your Dojo.
- ✓ Create and manage events at your Dojo.
- ✓ Create a ticketing system for your Dojo.
- ✓ Advertise your Dojo to Ninjas – it will show up on the international map.
- ✓ State whether your Dojo is open to all or private.
- ✓ Find Mentors.



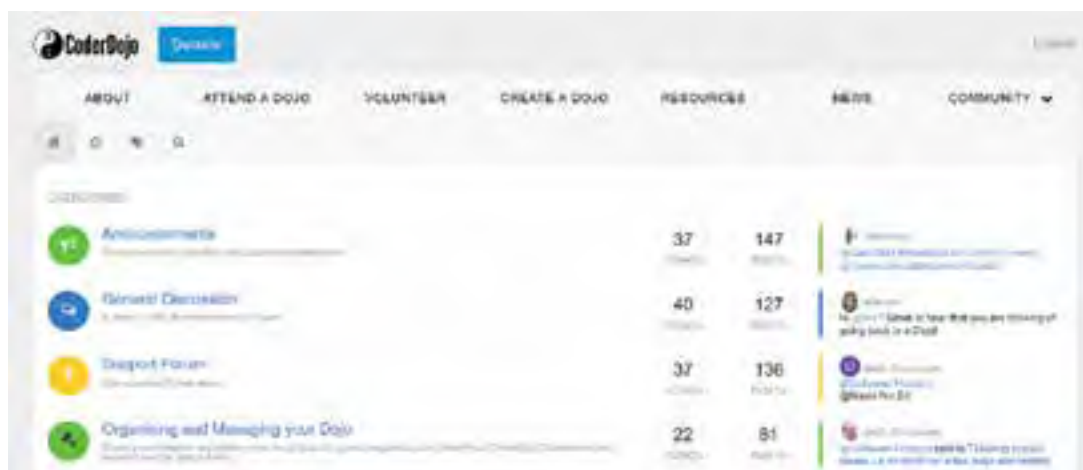
CREATE A DOJO

To set up your Dojo you will need to do things like find your team, find a venue, plan your Dojo and promote your Dojo. The registration process includes a checklist of things to consider.



A good first step is finding a venue and getting it verified and listed on the CoderDojo site so that it appears on the international map. Then you can continue organising all the other aspects of your Dojo, updating your listing as details are confirmed.

- Join the CoderDojo WA group in the CoderDojo Zen community forum, and introduce yourself: <https://forums.coderdojo.com/category/15/coderdojo-wa>



- Join the CoderDojo WA Facebook community group and introduce yourself: www.facebook.com/groups/coderdojowa/. Please keep the group updated of your progress. We love to hear stories from each Dojo!



- Familiarise yourself with the Kata organiser resources:
http://kata.coderdojo.com/wiki/Organising_a_Dojo (much of which are included in this handbook).
- Familiarise yourself with the Kata learning resources:
<https://coderdojo.com/resources/>
- Attend training and social events.
In training sessions, you will have the opportunity to connect with other Mentors and Champions in WA. We will go through the training materials with you and answer any questions you may have about creating your Dojo. Our social events are a time for Champions and Mentors to get together, share stories and tips about running a Dojo, have fun and eat pizza!

STEP 2. FIND YOUR TEAM

You do not need to have a big team, but it is good to have support. How big a team you need depends on how many young people you decide to have at your Dojo.

How to find Mentors

To find Mentors in your area, try to generate local interest and find parents who can help. Reach out to:

- Local business centres
- Community centres
- Local technology companies
- Universities and TAFEs
- School community
- Volunteer-based organisations such as CSIRO ICT in Schools and Code the Future:
www.scientistsinschools.edu.au/ICT/ and www.codefuture.org/

If your Mentors do not have a technical background, that is ok. It is common for volunteers to learn some coding basics at the Dojo, and to work with beginners as a Mentor. More advanced Ninjas may also act as Mentors in the Dojo, though that is up to the Ninja themselves.

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Original Source: http://kata.coderdojo.com/wiki/Dojo_Guide





STEP 3. FIND YOUR VENUE

All around the world Champions have found venues in their local communities who have given them a space for free, where young people can come and explore technology. Many Champions in Western Australia are staff members at host organisations, who take the initiative to set up a Dojo at their workplace

Types of Venues:

- Libraries
- Local businesses
- Makerspaces
- Technology hubs
- Conference Centres
- Shopping Malls
- Canteens
- Schools
- Hotels
- Community centres
- Universities/Colleges/TAFEs
- Co-working spaces

Dojos cannot be hosted in private residences or homes.

VENUE NEEDS

- Computers - We recommend that Ninjas bring their own laptops or try borrow them from family, but sometimes you can get a venue that has computers available for Ninjas to use.
- Plug sockets for charging devices
- Internet access
- Tables, chairs or beanbags for the attendees.

While the above conditions are ideal, they are not essential. Some programs can be downloaded and used off-line. iPads can be used if computers are unavailable, but with limited functionality. For more advanced coding, a computer will be required. If plug sockets are limited, remind Ninjas to bring their devices fully-charged.

VENUE COSTS

It is crucial that the venue you choose opens its doors for free, as this allows you to provide your CoderDojo to the youth in your community at no cost.

Public libraries have proven to be good spaces for holding Dojos as they are free, have a lot of space and an internet connection. You can also consider approaching businesses, maker-spaces, co-working spaces, tech hubs and conference centres in your local area.

Occasionally there can be costs that are out of your control such as insurance. Dojos have handled this by fundraising in different ways (see p. 70).



STEP 4. PLAN YOUR DOJO

PLANNING CONTENT

The learning resources page on Kata http://kata.coderdojo.com/wiki/Learning_Resource contains resources, as well as tutorials for Ninjas. This is a great place to start. Some Champions provide their Ninjas with a list of resources at the beginning of the Dojo with a short explanation of each resource, so that Ninjas can then choose what they would like to work on. Some Ninjas may have already started a project, and can continue to work on this at the Dojo. You can also check out Kata for samples of lessons and projects created and used in other Dojos around the world. See p. 54-57 for more tips on running a Dojo.

Remember: A Dojo is not a classroom! Ninjas are not at a Dojo to be “taught” how to code, they are there to learn for themselves. Please be wary of this terminology when advertising for your Dojo.

REGULARITY

In your planning meeting you should consider:

- Day of the week
- Regularity (Once a week, once a month etc.)
- Length of Dojo sessions
- Will you break for school holidays?

TICKETING AND ATTENDANCE

A lot of Dojos find it useful to use a ticketing system (like the one available to use through Zen!) to organise their Dojos and issue tickets for Ninjas, Mentors and parents. Dojos also find that having a paper check-in system at the Dojo is useful for keeping track of attendance.

STEP 5. PROMOTE YOUR DOJO

For Champions running school Dojos, placing a short promo in the school newsletter might be enough to get the word out. The following information can help other groups running Dojos for the public.

EMAIL

We recommend setting up an email address account specifically for your Dojo to deal with queries and promote your Dojo. You can get an @coderdojo.com email address for your Dojo, just ask support staff for this while going through your registration on the Zen platform.

WEBSITE

If it is possible you may like to set up a website for your Dojo. You may choose to use a simple, free blog tool such as WordPress, which will host your content and provide you with a domain. This is also a great starting project for the Ninjas in your Dojo; to build a collaborative listing!





SOCIAL MEDIA

Social networking is a great way to join the CoderDojo community and reach out to other interested people. You may like to set up a Facebook and Twitter account for your Dojo; you can then connect with the global CoderDojo community and promote your Dojo locally.

THESE ARE JUST A FEW SUGGESTIONS AND IDEAS. NOW GET PROMOTING!

You could encourage parents, Mentors, and Ninjas to follow your social media pages to stay informed. You might like to set up an Eventbrite listing for your Dojo sessions, promote your sessions on your social network pages, and list them in a media press release. Share your events with CoderDojo WA and through our social media pages.

When you have an online presence, visit local schools and reach out to other parents through the teachers. Get on the local radio and into the local papers.

All Champions agree that word of mouth is best way to promote your Dojo. Spread the word throughout your community and get them talking.

ATTRACTING NINJAS TO YOUR DOJO!

You can reach out to young people in your community in any number of ways. The best way to attract young people is through their parents. Try contacting schools, youth centres, parent groups and promote your Dojo on CoderDojo WA's social media accounts. It is important to verify your Dojo on Zen so that people can find you.

If you are setting up a school Dojo, then you could use your school newsletter to promote your Dojo and recruit Mentors from within your school community

TOP TIPS FOR CHAMPIONS

1. Don't worry about being polished
2. Don't be afraid to try new things
3. Don't be too concerned if at times Ninjas seem bored or distracted
4. Make the most out of everyone in the room
5. Include Ninjas in decisions and in planning
6. Allow the Dojo to be a continuous work in progress – it will never be perfect or finished. If you can enjoy this journey, it will set a great example for your Ninjas



***INTERESTED IN VISITING
ANOTHER WA DOJO TO SEE
HOW THEY OPERATE?***

***ASK OUR FACEBOOK
COMMUNITY GROUP.
CHAMPIONS ARE USUALLY
HAPPY TO HOST VISITORS.***



CoderDojoWA

FUN, FREE AND SOCIAL



CODERDOJO IS A GLOBAL NETWORK OF INDEPENDENT, COMMUNITY BASED PROGRAMMING CLUBS FOR YOUNG PEOPLE BETWEEN THE AGES OF 7 & 17!

WHY MENTOR?

- Inspire the next generation of coders, tech enthusiasts and entrepreneurs
- Learn from other Mentors and young coders
- Meet and mentor alongside inspirational and talented people
- Gain experience in mentoring and working with young people
- Become a part of the global community of CoderDojo Mentors and Champions

WHY START A DOJO?

- Build and lead a community of like-minded volunteers
- Empower and open up opportunities for young people
- Learn new skills and challenge your technical ability
- Foster a culture of innovation & creativity for young people in your community
- Meet and work with exceptional and passionate people

START ONE TODAY!

WWW.CODERDOJOWA.ORG.AU



SO WHAT IS A MENTOR?

A Mentor guides Ninjas and facilitates their learning and project work during the sessions. Technically-skilled Mentors may have a preferred area and expertise within which they like to work (e.g. HTML, Python etc.) and this can influence the topics supported in the Dojo. If Mentors do not have a technical background in coding, then they can learn alongside the Ninjas. The most important element a Mentor brings to a Dojo is their presence, enthusiasm and guidance. Mentors are there to listen to and encourage Ninjas as they engage in self-directed learning.

Volunteering at a Dojo can be very rewarding, and many Mentors are surprised at how much they learn and gain from the experience! It gives you an opportunity to directly impact kids and young people in the community by helping them to learn how to code and create with technology. Mentors can help out in other ways too. Dojos are always looking for volunteers to help with a wide array of tasks such as registration and check in, producing fliers, updating the website, helping support general Dojo activities, and youth outreach to attract Ninjas.

REGISTER AND CONNECT

As CoderDojo WA is an open source, distributed network of independent Dojos, the Fogarty Foundation does not manage volunteer placements or rosters for Mentors for individual locations. Instead, we provide and suggest many different ways to help you make a connection with a Dojo.

Register to “Volunteer” at www.coderdojowa.org.au

By registering through CoderDojo WA, you will automatically be invited to any CoderDojo WA training and social events, and you will be asked to complete occasional polls and surveys about your CoderDojo experience. If you elect to join the CoderDojo WA mailing list, you will also receive our newsletter which includes events and opportunities for WA Champions, Ninjas and Mentors.

You will then be sent an email asking you to:

- Volunteer at www.coderdojo.com. You will be prompted to Find a Dojo in your area on the Zen map. Once you have found a Dojo that runs at a suitable time you can contact the Dojo Champion to let them know that you are available to help out (contact details are included on the Zen page). Making direct contact with your nearest Dojo is a great option. Not all Dojos are actively seeking volunteers, but some will be very happy to hear from you!



There are a few other ways that you can find a Dojo to volunteer at. Have a read of the following options and take the path most relevant to you:

- Offer your help as a Mentor on the [CoderDojo WA Facebook community group](#). Introduce yourself on the CoderDojo WA Facebook community group, and let Dojo Champions know that you are available to volunteer as a Mentor.



MENTOR AT A DOJO



Make sure you give a brief introduction outlining your background, your location, and the approximate times you might be available to volunteer (after school or weekends). There may even be some volunteer opportunities already listed on the page if you take a look.

- **Join CSIRO ICT in Schools** and ask to get placed at a school Dojo:
www.scientistsinschools.edu.au/ICT/

About this option: CSIRO ICT in Schools are all about matching ICT/software students and professionals with school locations. This is a great option if you are an ICT student or professional. This includes those who work in digital creative industries (web development, game development, 3D modelling etc.) as well as more 'conventional' ICT roles – anything from IT Help Desk staff to System Administrators, Network Engineers, Software Developers, Web Entrepreneurs to IT Project Managers and more.

- **Contact EdConnect Australia** and ask about any “CoderConnect” schools in your area. CoderConnect is a partnership between EdConnect and CoderDojo WA. Schools involved in the EdConnect program, are given extra support in starting a Dojo and finding technical Mentors for their Dojo as part of the CoderConnect partnership: www.edconnectaustralia.org.au

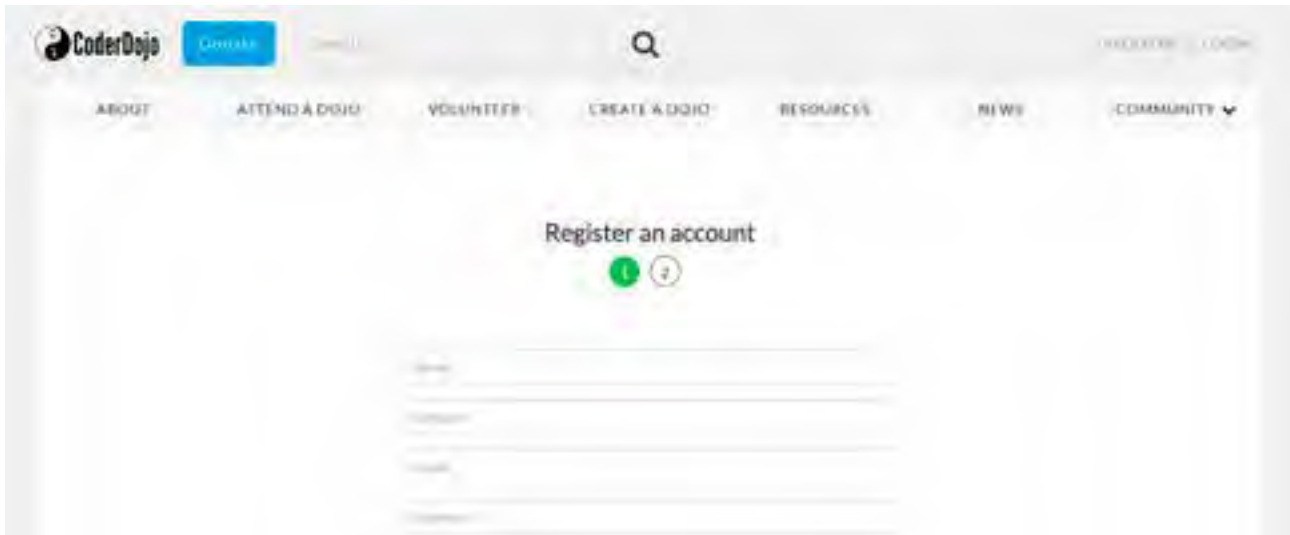
About this option: Becoming a Mentor with EdConnect means that you can be placed at a CoderConnect school while also having the option of extending your role within the school. EdConnect Mentors work in primary or secondary schools. They can choose to do learning support at the school: 1-2 hours a week helping kids with their reading and maths, or working in the library, kitchen, gardens, classroom, breakfast clubs etc. or they can choose to take part in the “Mentor Me” (primary) or “Mentor Mate” (secondary) programs and complete one-to-one mentoring with a student for one hour each week.

- **Join Code the Future** and make contact with a Dojo location: www.codefuture.org/

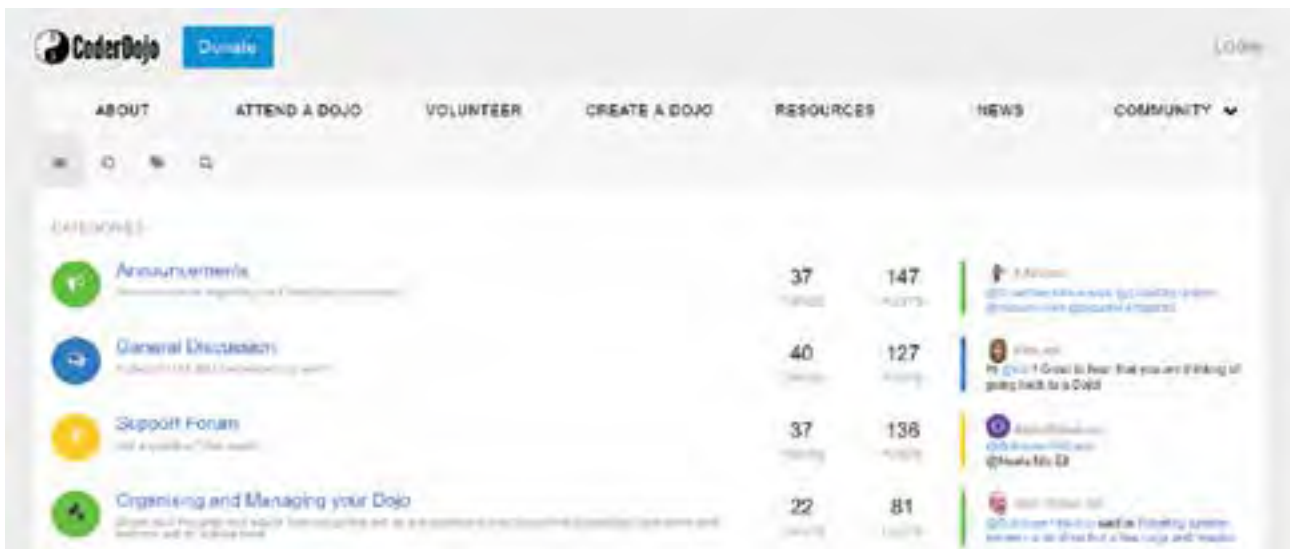
About this option: This website provides a platform on which educators and software professionals can connect. There is no formal registration, screening or placement service offered. This is a great option for software professionals who want to connect with a location and get involved straight away. However, no additional support is provided and as this platform is quite new, the number of locations listed on this site is still growing.



- Register an account as a Mentor, so that a Dojo Champion can find you and add you to their Dojo <https://zen.coderdojo.com/register/user>.



- Join the CoderDojo WA group in the CoderDojo Zen community forum, and introduce yourself: <https://forums.coderdojo.com/category/15/coderdojo-wa>





MENTOR AT A DOJO

- Join the CoderDojo WA Facebook community group and introduce yourself: www.facebook.com/groups/coderdojowa/ Please keep the group updated of your progress. We love to hear stories from each Dojo!
- Familiarise yourself with the Kata organiser resources: http://kata.coderdojo.com/wiki/Organising_a_Dojo (much of which are included in this handbook)
- Familiarise yourself with the Kata learning resources: <https://coderdojo.com/resources/>
- Attend training and social events
- In training sessions, you will have the opportunity to connect with other Mentors and Champions. We will go through the training materials with you and answer any questions you may have about mentoring at a Dojo. Our social events are a time for Champions and Mentors to get together, share stories and tips about running a Dojo, have fun and eat free pizza!

WHAT KIND OF TIME COMMITMENT IS REQUIRED?

DOJOS TYPICALLY MEET FOR TWO HOURS ON A WEEKLY, BI-WEEKLY OR MONTHLY BASIS. MOST DOJOS REQUIRE MENTORS TO MAKE A COMMITMENT OF MENTORING AT LEAST ONCE A MONTH. IF YOU ARE ABLE TO MAKE IT EVERY WEEK/FORTNIGHT THAT'S FANTASTIC, BUT IF YOU CAN ONLY MAKE IT TO ONE SESSION A MONTH THAT ALSO MAKES THE WORLD OF DIFFERENCE TO A DOJO!



Though CoderDojo and CoderDojo WA are generally very flexible and informal, there are a few conditions you need to abide by.

All regular community members (Champions, Mentors and any other adults that regularly attend a Dojo) need a valid Working With Children (WWC) Check card. The only exception is youth volunteers aged under 18, and parents whose children are attending the Dojo.

You can get a WWC application form from any post office. Your host organisation or connection agency should be able to help you to obtain a WWC Check. If you are a Mentor looking to volunteer at a Dojo, you can contact a Dojo Champion and ask them to sign your application form. You must then submit this to your post office, along with 100 points of identification. A passport photograph will be taken at the post office on the day that you submit your application. You will receive your card in the mail, pending your police check, within 3-12 weeks.

Mentoring undertaken at a Dojo falls under work category 04. This must be noted on page 2, part 5 of the WWC application form. The "Applicant's job title" on page 2, part 5 can be noted as "Mentor" or ".

Champions should keep a scanned copy of each adult volunteer's WWC card on file and be aware of renewal dates.

WORKING WITH CHILDREN IN WA



The Working with Children (WWC) Check is a compulsory screening strategy in Western Australia for people who engage in certain paid or unpaid work with children, described as "child-related work" under the Working with Children (Criminal Record Checking) Act 2004 (the WWC Act). The WWC Check includes a National Police History Check, but is different from a National Police Certificate because it involves the ongoing collection and assessment of information that is relevant to whether a child may be exposed to a risk of harm should a person engage in child-related work.

For more information, visit:

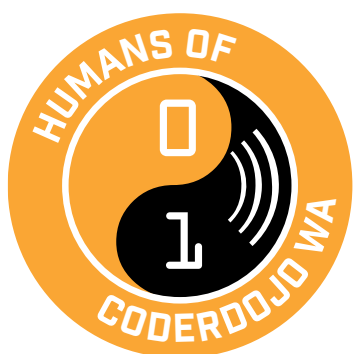
www.workingwithchildren.wa.gov.au



RYAN SCOTT DAY

Engineer Outreach Officer and Dojo Champion

CURTIN UNIVERSITY DOJO

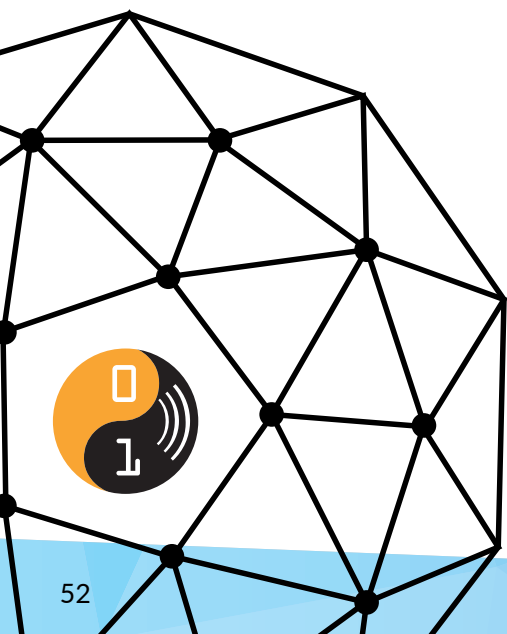


STORY

The first time I remember using a computer in my childhood is when my dad bought me a Nintendo Gameboy Colour the day it came out in 1998. I spent the next week playing it nonstop. I still have it today.

I am in my final year studying Software Engineering at Curtin. I wouldn't have made it here without the help of my Year 12 Computer Science teacher. She was a former computing lecturer at Murdoch University and throughout Year 12 she helped me discover my passion for computing by teaching me university units outside of class. Thanks to her, I got second in WA for my WACE computer science exam and am now studying what I love. These days, I am working on distributed computing and application development of my Cloud Sync project.

At Curtin, I'm part of the ComSSA Club Committee. We heard about CoderDojo and a bunch of us club members joined as Mentors to help out at the Dojo. After a year of mentoring, I was lucky enough to start running the Dojo as its Champion. Coding has helped me so much in the past couple years and I wish I got onto it sooner.





CODERDOJO

THE DOJO EXPERIENCE



Topics covered in Dojos vary, based on the influence of the Champions, Mentors and Ninjas in each Dojo, but commonly Dojos support Scratch, an introduction to programming for young people, and website development using HTML and CSS. Dojos can also work with JavaScript, Python, Ruby and Node.js, game development, Minecraft mods and experiment with hardware and robotics such as Raspberry Pis, Arduino boards and Intel Galileos.

DOJO RITUALS

You may wish to follow these rituals for each of your Dojo sessions to provide consistency and familiarity for everyone at the Dojo. If you use Dojo Rituals, you should encourage all Champions and Mentors to lead and take part so that they become habitual for everyone at your Dojo.

- **Arrival.** Champions and Mentors wait at the door and welcome Ninjas to the Dojo as they arrive.
- **Introduction.** The Champions and Mentors can present a very short introduction at the beginning of EVERY Dojo session. For only a couple of minutes, someone might explain what a Dojo is and what Ninjas are supposed to do during a Dojo session. Although this may feel repetitive, young people need repetition to ensure familiarity and understanding. There may be new Ninjas/parents in attendance, so they will benefit from understanding what the session will be about.
- **Registration.** Please encourage all Ninjas and parents register to “Attend a Dojo” through www.coderdojowa.org.au (they will need an email address to do this) and join the CoderDojo WA mailing list. Once they have done this, they will be emailed a link to CoderDojo Zen where they can register an account. They can then be added to your Dojo.
- **Coding time!** Ninjas have time to work on their coding projects with assistance from Mentors. It may be a good idea to split this session up with a 10-minute break in the middle as an opportunity for Ninjas to grab drinks and a snack.
- **Show Me The Code.** For the last 5-20 minutes of each Dojo session you can run a Show me the Code presentation, where Ninjas get up and show their works in progress. It's useful if you can get different Ninjas each time. Show Me The Code helps Ninjas to consolidate their learning and gives them a chance to see what others in the Dojo are working on. Make sure everyone claps after each Ninja shows of what they've been working on.
- **Dojo Huddle / debrief.** After each Dojo session you may wish to run a 5 minute debrief session for all Champions and Mentors. Champions and Mentors can take turns to run the debrief around two simple questions: what went well? and what could be improved next time?



WHAT TO DO DURING CODING TIME

During Coding Time you want to achieve a room full of Ninjas all working on their own coding projects or studying code on platforms like codecademy.com etc. Exactly how you achieve this is up to each individual Dojo. As every Dojo is different, you should play to the strengths of whoever you have in the room. If you have experienced coders, they can provide more specialised problem-shooting, guidance and suggestions to Ninjas. If you don't have experienced coders, then all Mentors can get stuck in and learn to code alongside the Ninjas.

There is no such thing as a failed Dojo session, so just relax and explore ideas to get your Ninjas working on projects and feeling excited about coding. The CoderDojo resources page www.coderdojo.com/resources/ contains a large number of resources for Ninjas. The resources page will lead you to the Kata platform which organises resources into learning pathways. For example, if a Ninja wants to work on Scratch, the Kata Scratch pathway has a number of resources, including a 4-week Scratch curriculum and sample projects. http://kata.coderdojo.com/wiki/Scratch_Path. Check out p. 76-77 for more resources or visit the CoderDojo WA website www.coderdojowa.org.au/resources. For further tips on running a Dojo, check out the Kata page: http://kata.coderdojo.com/wiki/Tips_Running_Dojo

Coding time may include a structured workshop arranged in advance, for instance, basic Scratch skills, basic web design, basic python – even though the Dojo is a club, not a classroom, some Ninjas may need structured learning time in order to develop their coding skills. This should be optional. Some Ninjas may be listening and following the workshop, others may be working on their own projects.

SPECIAL GUESTS



You may like to approach digital professionals (web developers, game developers, network engineers, software developers, web entrepreneurs etc.) to give short talks on their professions i.e. how they got into their particular field, their favourite part of their job etc., once or twice in the Dojomester (Dojo term). Perhaps your technical Mentors might become “special guests” for a day. You may also like to organise incursions to your Dojo from groups like Scitech www.scitech.org.au or Gecko Steps <http://www.geckosteps.com.au/>.



THE FIRST DOJO SESSION

Here is a schedule you may choose to follow for your first Dojo session. You should run your session for at least an hour if possible. Many Dojos run their sessions for 90 minutes to 2 hours.

1. SET UP – 30 MINUTES BEFORE START

- ✓ Champions and Mentors start to arrive, access room, set up anything that will be required for the session.
- ✓ Make sure you provide Ninjas and parents with clear directions on how to get to the Dojo. Maybe stick a CoderDojo poster on the door.

2. ARRIVAL – 15 MINUTES BEFORE SESSION START

- ✓ Ninjas will start arriving.
- ✓ All Mentors will arrive.
- ✓ Someone should be stationed at the door, greeting Ninjas. It works well if you can have 1-2 people doing the greeting.
- ✓ Sit at a table with the registration list and some sticky labels.
- ✓ Ask for each Ninja's name, greet them by name. Then tick their names of the list and give them each a name tag (write their name on a sticky label and give it to them).



3. NINJAS SETTLE IN – FIRST FIVE MINUTES OF SESSION

Ninjas enter and settle in.

4. WELCOME AND INTRODUCTIONS – 15 MINUTES

- ✓ Introduce Mentors. Explain the concept behind CoderDojo.
- ✓ Show a CoderDojo Video e.g. <http://www.youtube.com/watch?v=k5ciSFjEN1c>
- ✓ Explain the One Rule, Be Cool. Discuss what this means: no bullying, no wasting people's time, show respect to your Mentors.
- ✓ Ask the kids what their goals are for this session, and ask them what they already know about coding. Find out what sorts of things they would like to learn.
- ✓ Describe some of the cool things they can do if they learn to code, using Mentor examples.
- ✓ Introduce the CoderDojo resources page www.coderdojo.com/resources/
- ✓ Show the Code.org video: <http://www.youtube.com/watch?v=nKlu9yen5nc>
- ✓ Introduce the Dojo belts and badge system if you are using this (see p. 55-59).
- ✓ Ask Ninjas and parents to sign up to "Attend a Dojo" on CoderDojo WA and complete their registration on Zen at home so that you can add them to the Dojo on Zen. Show them the CoderDojo Ninja forums on Zen and ask them to check them out at home.

5. ICEBREAKER ACTIVITY – 15 – 30 MINUTES

Many Ninjas attend CoderDojo to meet other kids who have similar interests. By attending a CoderDojo, these young people can develop social skills and make new friends. At your Dojo, you may have kids of various ages from different schools who have never met before. It's important that you give them an opportunity to interact and meet each other. It is worthwhile doing icebreakers throughout the term (not only at the first session). CoderDojo is not just about sitting at a computer, but also getting up and meeting other children at the Dojo.

Here are some suggestions to get you started:

<http://www.activityvillage.co.uk/ice-breaker-games>

<http://youthgroupgames.com.au/top-ten-icebreaker-games/>

<http://www.greatgroupgames.com/icebreaker-games-for-kids.htm>

<http://www.ultimatecampresource.com/site/camp-activities/ice-breakers.page-1.html>

6. CODING TIME! – NEXT 30 TO 100 MINUTES

7. SHOW ME THE CODE! – FINAL 5-20 MINUTES

8. THANK YOU AND GOODBYE – LAST FEW MINUTES

Thank the Ninjas, parents and volunteers for attending. Kids are encouraged to practice coding at home during the week, and to explore things that they can share at the next Dojo.



9. PACK-UP AND DEBRIEF – AFTER END OF SESSION

- Champions and Mentors pack-up session.
- Champions and Mentors run quick debrief.

WARM UP GAMES

CHECK OUT THE KATA PAGES FOR IDEAS ON DIFFERENT WARM UP GAMES THAT YOU CAN RUN DURING YOUR FIRST DOJO
[HTTP://KATA.CODERDOJO.COM/WIKI/WARM_UP_GAMES](http://kata.coderdojo.com/wiki/warm_up_games)



DOJO BELTS AND BADGES

WHAT ARE CODERDOJO BADGES?

Badges are awarded by a Dojo Champion, or by the CoderDojo Foundation, to Ninjas, Mentors and Champions. They appear on their Zen profile page and serve as a visible record of their achievements in learning skills, contributing to their Dojo and to the CoderDojo community as a whole.

Badges can be awarded on the Zen community platform by clicking on the “My Dojos” link in your profile. Find out more about the different types of badges here: <https://zen.coderdojo.com/badges>



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Original Source: <http://kata.coderdojo.com/wiki/Badges>

WHAT ARE CODERDOJO BELTS?

CoderDojo Belts are awarded to the Ninjas at a Dojo by Champions and Mentors. Some Dojos reward Ninjas with coloured USBs, USB belts or silicon wristbands. These can be bulk ordered and may contain the CoderDojo/CoderDojo WA logo (which can be downloaded from the CoderDojo WA website: www.coderdojowa.org.au). It is up to the individual Dojos to source and order Belts for their Dojos. Some examples are shown below:



DIVERGENCE BETWEEN DOJO BELT SYSTEMS

Some Dojos have already implemented a badge/belt system in their Dojo. Some Dojos may be tempted to use their own criteria and decide white belts are for younger kids and blue for older, etc. Many Dojos apply different subject tracks to awarding their belts. For example, a Ninja can work with Scratch and be awarded a yellow, blue or green belt etc. for their work in Scratch and then move on to working towards their yellow, blue or green etc. belts in HTML, Python or for Minecraft modifications! To be awarded a Blue belt in HTML, the recipient must have already completed the yellow belt in that track. Using tracks is a great way of encouraging young people to progress their skills in different areas, there is always another challenge for them to focus on and it is rare that you will run out of challenges for them!



Scratch, Python and Minecraft Belts to be awarded to Ninjas at CoderDojo Athlery (Ireland)



DOJO BELTS AND BADGES

While each Dojo is autonomous, and this is part of what makes CoderDojo special, we endeavour for a standard to be kept for belts across all Dojos locally and globally so that Dojos can all communicate, share and help each other.

To support Dojos in implementing a belt system we have correlated the belt ranking systems from Dojos around the world to provide a clear and concise guide to awarding belts (p. 59).

AWARDING BELTS

Some notes on awarding belts:

COMMUNICATE CLEARLY

Belts should be given to Dojo attendees who have earned them for their dedication to the Dojo and developing their programming skills! Belts should always be awarded for completing some sort of task, otherwise their value will be diminished!

You may like to provide Ninjas with an outline of how the belt system will work in your Dojo. For example:

- We (the whole Dojo – Champions, Mentors, parents and Ninjas) will help you to achieve your belt.
- We will be clear about what is required to get to the next belt level.
- We will give you feedback for next time if you are unsuccessful in receiving a belt.
- An element of 'social good' is a must when progressing through belt levels i.e. mentoring others in the Dojo, making a website for a charity etc.

You can also provide the Ninjas with an overview of what they need to achieve in order to receive a belt (p. 59).

APPLYING FOR A BELT

'Applying' sounds very formal, but the basic idea is that anyone can request to be assessed for a Belt. Mentors and Ninjas can then discuss what is needed to receive a particular belt. They should agree on how the Ninja will demonstrate achievement.

For example:

1. **Learn Skills** (and receive badges for these skills) – these are the practical skills that are picked up at Dojos week in, week out
2. **Put Skills into Practice** – demonstrate that skills are understood and are being put into practice together (not just transcribed)

IF A DOJO CHAMPION DECIDES TO AWARD BELTS (USB OR OTHER) AT A DOJO, THERE WILL BE A COST INVOLVED. SEE P. 70 FOR ADVICE AND GUIDELINES ON FUNDRAISING AT YOUR DOJO.



PUTTING THIS INTO PRACTICE

- Pick a week to award belts. The end of term or a final session of a series is best!
- Work one-to-one with Ninjas and set a challenge of interest to them so that they can progress through the belt levels.
- Mentors should evaluate if the challenge is achieved and is enough to award a belt.
- Award the belt or provide feedback on how to take the project a bit further so that they can be successful in the next round.
- Agreement and consistency is absolutely key in your belt system. You should ensure a unanimous decision process before awarding belts.

To ensure fairness and transparency in the process you might like to ensure that:

- At least two Mentors agree that the Dojo member is ready to go for his/her belt.
- Any of the Mentors involved are able to veto the decision.
- Veto will be respected (no arguments!).

If someone is not ready to be considered for a higher belt, they must be given clear instruction on what they needed to work on to be ready next time. It is important to follow the 'One Rule: Be Cool' philosophy here. It is not cool to upset someone or make them feel like a failure, so approaching things sensitively is important. Equally, it is not cool to make an award that has no real worth or meaning, so a balance is needed!

CHECK OUT DAVID AND DOUGLAS' PURPLE BELT PROJECT HERE:

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=5SFJ22AVDCU&LIST=PLQBFQK03_SHVLEVTP7JAQFR9RAWI9TX8Z](https://www.youtube.com/watch?v=5SFJ22AVDCU&list=PLQBFQK03_SHVLEVTP7JAQFR9RAWI9TX8Z)

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Original Source: <http://kata.coderdojo.com/wiki/Belts>



WHITE BELT

- Attend 5 Dojo sessions
- Understand the CoderDojo code - One Rule, Be Cool!
- Get to know the names of 5 Ninjas and 2 Mentors
- Create and finish a basic project



YELLOW BELT

- Create a project, as agreed with a Mentor
- Understand the coding concepts you have used in your project
- Share your project with others



BLUE BELT

- Have previously earned the yellow belt in that track
- Create a project, as agreed with a Mentor, that is more challenging than your yellow belt project
- Understand the coding concepts you have used in your project
- Share your project with others
- Help Mentor (e.g. help 2 new Ninjas get started)



GREEN BELT

- Have previously earned the Blue belt in that track
- Complete a project, as agreed with your mentor, that is more challenging than your Blue belt project
- Understand the coding concepts you have used in your project
- Share your project with the group
- Regularly Mentor at the Dojo (weekly or bi-weekly)



ORANGE BELT

- Have previously earned the yellow belt in that track
- Complete a project, as agreed with your Mentor, that is more challenging than your Green belt project
- Understand the coding concepts you have used in your project
- Share your project with the group at your Dojo



RED BELT

- Have obtained White, Yellow, Blue and either Green / Orange belts

OR

- Have written a game that has been recommended by 3 separate CoderDojos

- Red belts to be awarded by the Mentors (as a group) for especially advanced projects



PURPLE BELT

- Have produced a code training video (minimum of 5 minutes in length) that enables learning and has been published on the CoderDojo YouTube Channel and been viewed more than 3,000 times.

OR

- Purple belts to be awarded by the Mentors (as a group) for especially advanced projects



BLACK BELT

- Have produced an open source piece of code that is on GitHub that is in use by 1 million people or more

OR

- Black belts to be awarded by the Mentors (as a group) for especially advanced projects

5 KEY PRINCIPLES

1/5 BE THE LEARNER YOU WANT YOUR NINJAS TO BECOME

"Most human behaviour is learned observationally through modelling. From observing others, one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action." – Albert Bandura.

HOW TO MODEL SELF-DIRECTED LEARNING BEHAVIOURS

- Be persistent, positive and curious. Try not to be flustered, negative or down on yourself if you don't know something. Give things a go.
- Try and learn at least one new thing at each Dojo session.
- Do you have a digital side-project that you are working on, or a code-related topic you are studying? Spend some time of the session on this so that Ninjas can observe and ask about your process.
- If you don't have a project, you should start one!

2/5 QUALITY CONNECTION TRUMPS EXPERTISE

"...The initiation of such learning rests not upon the teaching skills of the leader, not upon his scholarly knowledge of the field, not upon his curricular planning, not upon his use of audio-visual aids, not upon the programmed learning he utilizes, not upon his lectures and presentations, not upon an abundance of books, although each of these might at one time or another be utilized as an important resource. No, the facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal relationship between the facilitator and the learner." - Carl Rogers





HOW TO ESTABLISH A QUALITY CONNECTION

- When you meet a new Ninja, make them feel welcome. Introduce yourself by name and initiate conversation. Tell them a bit about yourself and ask them about their life e.g. their name, where they go to school, what are their interests etc.
- Spend time and effort to get to know the Ninjas on a personal level. Ask about their hobbies and interests. Let them talk and really listen to them.
- Be yourself, and share relevant and appropriate information about yourself in conversation.
- Demonstrate an interest in their progress on their digital projects and on their self-study topics.
- Remember that consistency and reliability builds the trust on which these learning relationships depend. Keep turning up to the Dojo!

3/5 ENABLE PEER-TO-PEER INTERACTION

Our social environments influence the learning process. Learning takes place through the interactions young people have with their peers and teachers. Facilitators should create a learning environment that maximizes the learner's ability to interact with each other through discussion, collaboration, and feedback. – Leo Vygotsky

HOW TO ENABLE PEER-TO-PEER INTERACTION

- Run ice-breakers and other social games at the first session, and whenever appropriate during Dojomesters.
- Get to know Ninjas well enough so that you can self-refer them to each other when they have questions about particular topics.
- Run Show Me The Code presentations at the end of each session where a few Ninjas are encouraged to get up the front and talk about what they have been working on.





4/5 QUESTION, DON'T TELL

Inquiry-based learning involves posing questions, problems or scenarios—rather than simply presenting established facts or portraying a smooth path to knowledge. When young people are encouraged to pose questions and investigate the answers, they feel in charge of their own learning and are more likely to be able to continue learning independently when unassisted by a teacher.

HOW TO HELP NINJAS LEAD THEIR OWN LEARNING

- Utilise the “ask 3 then me” method.
If a Ninja asks you a question and you know the answer, try and resist immediately telling them. See if you can think of a line of questioning that you could use that would enable them to arrive at the answer themselves.
- Don't take the mouse and keyboard from a Ninja. Ask them questions like, “can you see anything on the screen that might be causing that error?”
- Most importantly, use the grandmother method to support learning. That is, by admiring what the Ninjas are doing and acknowledging their achievements.

5/5 MAKE IT REAL, MAKE IT MEANINGFUL

Project-based learning involves students gaining knowledge and skills by working for an extended period of time to investigate and respond to an engaging and complex question, problem, or challenge. Students should be able to decide what they create, which can feature real-world issues and/or be related to student's personal concerns, interests and issues in their lives.

HOW TO HELP NINJAS WORK ON THEIR OWN PROJECTS

- If Ninjas don't have a project to work on, get them to do a brainstorming task with questions like, what inspires you? what matters to you? what bothers you? Then help them to start working on a simple project – for instance, using Scratch, or perhaps creating a simple website.
- Encourage Ninjas to explore and express their non-technology-related interests through projects. For instance, they could create a fan-site for their favourite movie, or a game related to their favourite sport.



CoderDojoWA

DO YOU WANT TO MAKE A DIFFERENCE IN YOUR COMMUNITY?

GET KIDS CODING!

A CODERDOJO IS A FUN FREE, VOLUNTEER-LED CODING CLUB FOR KIDS AGED 7-17

THE 3 KEY INGREDIENTS IN A DOJO ARE:

CHAMPIONS

A community member that has a space (school, community centre, business) that can be used for a Dojo.

MENTORS

A community member that wants to help out at a Dojo.

NINJAS

Kids aged 7-17 who want to learn to code, create games, apps, websites and HAVE FUN!

Dojos usually run once a week for 1 - 2 hours, during each school term, depending on time of year and Mentor availability. This is up to each individual Dojo to decide... as a Champion, you set your own rules!

You don't have to be tech savvy or have fancy resources to be a Champion or a Mentor, you just need to be passionate about helping out, having fun and working with Ninjas.

Join our Facebook page (CoderDojo WA) and visit www.coderdojowa.org.au to register your interest to start a Dojo (Champions), help out (Mentors) or become a Ninja.

Listen out for training events in your area or get started straight away using our free online resources!



HERE IS A QUICK OVERVIEW OF SOME OF THE DOS AND DON'TS TO TAKE INTO ACCOUNT AT YOUR DOJO:

DO

- Do provide a safe, secure environment for the young people attending the Dojo.
- Do treat all young people as individuals, equally and with respect, regardless of gender, age, religion, ethnicity or creed.
- Do involve Dojo attendees, where appropriate, in decision making.
- Do offer constructive, age-appropriate criticism, encouragement and praise.
- Do use material appropriate to the age and wishes of the group.
- Do have fun and encourage a positive and collaborative atmosphere.
- Do be aware of appropriate physical contact. We recommend that Dojos follow the Department of Education's guidelines on child protection, if they don't already have a company policy on this. See appendix 1 or download here: <http://www.det.wa.edu.au/childprotection/detcms/portal/>
- Do respect the personal boundaries of others.
- Do discuss any uncertainties with the Dojo Champion or another adult member.
- Do discuss discipline procedures in the Dojo beforehand, and create a policy.

DON'T

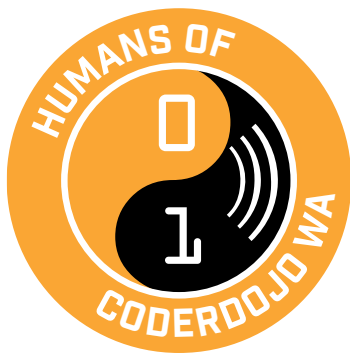
- Do Not spend time alone with children. If meeting with children individually, do so as openly as possible. Leave the door open and inform another responsible adult of the meeting.
- Do Not use or allow the use of offensive or sexually suggestive physical or verbal language to go unchallenged.
- Do Not single out an individual child for unfair favouritism, criticism, ridicule or unwelcome attention.
- Do Not allow or engage in inappropriate touching of any form. Though there may be unavoidable occasions when this takes place, such as providing comfort or reassurance to a distressed child, in all cases, physical contact should only take place with the consent of the child.
- Do Not physically chastise children or young people.
- Do Not socialize inappropriately with children or young people outside of structured organisational activities.
- Do Not take children to your home.
- Do Not take children alone on car journeys. If this is unavoidable, do so only with the full consent and knowledge of the parents and someone in the hosting organisation.
- Do Not do things of a personal nature for children that they can do for themselves.
- Do Not allow allegations a child makes to go without being recorded and addressed.



ANITA AND LOGAN RICHARDS

CoderDojo WA Parent and Ninja

EDITH COWAN UNIVERSITY DOJO



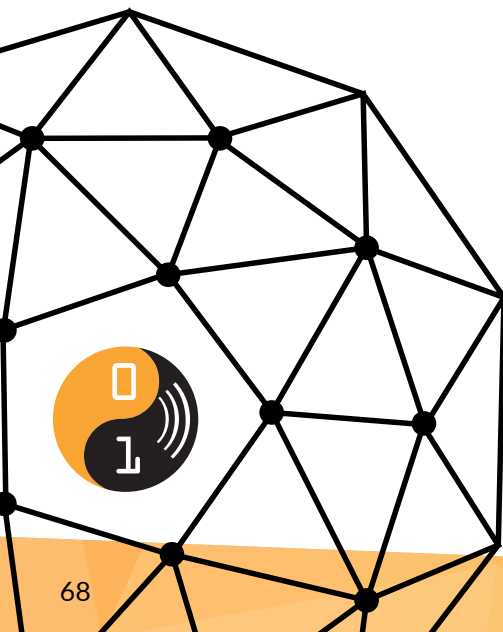
ANITA'S STORY

I have been incredibly inspired by many women who have built thriving online businesses based around graphic design, including learning how to be their own webmasters. That's pretty amazing, to be able to create a home based business and supplement the family's income by using a computer and having a web presence, something that just wasn't even dreamed of when I was growing up. Currently, I'm working on building a couple of websites using WordPress for content management. Many ideas, not enough hours in the day. As a parent I am really keen to ensure that my children learn to code. CoderDojo is brilliant.

Children must understand code. The future is dependent upon this for a huge variety of reasons but especially because a new world has emerged with the opportunities and threats posed by the generative Internet - today's children need the basic skills to be fully conversant within that world and to indeed further contribute to the great work that is collectively known as humanity.

LOGAN'S STORY

I love coding and computers. I love games which is probably why I love coding. My mum heard about CoderDojo and took us there and I didn't really know what to expect, now I love it.





CODERDOJO

POWER UP YOUR DOJO



CAN A DOJO FUNDRAISE?

Yes! As stated in the CoderDojo Charter, Dojos are entitled to fundraise on the condition that it is made explicit that you do so for your Dojo, or as a group of Dojos under a common group name e.g. Dojos of California. Any inappropriate fundraising is a breach of the CoderDojo Charter.

WHY SHOULD A DOJO FUNDRAISE?

CoderDojo has been designed to be zero cost, or as low cost as possible for all Champions. However, we recognise that sometimes a Dojo will encounter a cost that they require money for. Examples of standard costs could include t-shirts, belts for the Ninjas, insurance or youth work training for volunteers. The Foundation would at all times encourage a Dojo to firstly seek in-kind sponsorship to cover the cost as money can greatly complicate the organising of a Dojo.

CAN I ASK FOR DONATIONS FROM PARENTS ATTENDING?

Yes. A Dojo must always be free for attendees. However, if a Dojo requires sponsorship for a specific purpose they can ask parents for an optional donation. This should not be done in a manner where parents of attendees who are unable to donate feel excluded. An example is to make an announcement to parents informing them of what the donation is needed for. Then leaving a donation box at the entrance for a Dojo session.

WHAT ARE THE LAWS AROUND FUNDRAISING?

Different jurisdictions have hugely different legislation regarding fundraising. In Western Australia, organisations that collect and receive money from the public for non-charitable purposes such as for a Dojo, do not need an authority to fundraise.

Important Note: Fundraising regulations may change from time to time. To ensure you have access to the most current information, check with the Department of Commerce:

<https://www.commerce.wa.gov.au/consumer-protection/fundraising-under-another-licence>

FUNDRAISING SUGGESTIONS FOR DOJOS

Please note that wherever possible, we would encourage Dojos to seek to have expenses such as belts, insurance etc. covered directly by a sponsor.

FUNDING THROUGH GRANTS

Dojos have been known to acquire grants and funding from local government bodies, educational bodies and tech initiative funds. If your Dojo is in need of funds it is worthwhile to explore if any of these options might be available in your area. To find out what opportunities are available in WA, visit: <http://grantsdirectory.dlg.wa.gov.au/GrantsSearch.aspx> and listen out on the CoderDojo WA forum and Facebook group.



CORPORATE SPONSORSHIP

Often Dojos have been able to secure sponsorship from local organisations and businesses. We recommend trying this route before resorting to fundraising directly at the Dojo. See the Template Letter for Corporate Sponsorship document:

http://kata.coderdojo.com/wiki/Template_Letter_for_Corporate_Sponsorship to help you with this. Please bear in mind that you should choose to work with appropriate sponsors for a youth based organisation – be responsible with your sponsor choices.

TYPES OF CORPORATE SPONSORSHIP:

Sponsorship in Kind

This could mean having products or services donated, such as a space, technical Mentors, equipment, Wi-Fi access etc. We recommend that Dojos opt for sponsorship in kind over fiscal sponsorship if it is available, as dealing with money may complicate Dojo operations significantly and will create more work for the Champions.

Fiscal Sponsorship/Donations

You are free to accept donations/sponsorship from local organisations and corporations to cover Dojo costs (e.g. insurance) or for investing in your Dojo (e.g. equipment).

FUNDRAISING AT A DOJO

Not all Dojos are able to secure corporate sponsorship, be it in kind or through donations, so in order to cover Dojo costs that may occur there are numerous ways for Dojos to generate funds.

Tuck Shop

Some Dojos have found that they can make all the money they need to cover their costs for the year through running a weekly tuck shop where they sell fruit, chocolate, soft drinks/sodas, crisps/chips etc. to Ninjas and Mentors. Again, please try to ensure that parents/young people do not feel obliged to participate in this.

Local CoderDojo Showcase

If you have a need to raise funds for a certain purpose or project, then a good option to consider could be running a local CoderDojo showcase and inviting attendees' families and local businesses to visit.



FUNDRAISING

Dojo attendees can show off their projects and tell all the Dojo visitors what they've been up to. There could be a bake sale, a collection bucket clearly visible and/or a suggested donation for showcase visitors to contribute to the Dojo.

Create a wish list for your Dojo

If you would like for people to be able to contribute to support your Dojo, but would rather not deal with money, a good option could be to create a wish list for your Dojo of things that you could use in your Dojo. For example, check out what Rob Curran, the Champion of CoderDojo Wilmslow (UK), has created:

<http://www.amazon.co.uk/gp/registry/wishlist/1ANSFTHAP230C>

Other options for raising funds include:

- CoderDojo Coffee Morning
- Dress down days at work
- CoderDojo Fun Run
- Quiz Night for CoderDojo
- World record beating attempt

GLOBAL SUPPORT



ROSS O'NEILL
INFO@CODERDOJO.COM

**COMMUNITY LEAD,
CODERDOJO FOUNDATION**

Ross is based in Dublin, Ireland and supports the WA community of Champions and Mentors as well as the global community.



KAREN WELLINGTON

CODERDOJO WA@FOGARTYFOUNDATION.ORG.AU

CODERDOJO WA PROGRAM MANAGER, FOGARTY FOUNDATION

Karen has been working for the Fogarty Foundation since 2014 to build and support the network of Champions, Mentors, Ninjas and parents in WA. Karen has also been instrumental in formulating the community development approach that has catalysed the growth of the Dojo network throughout WA..

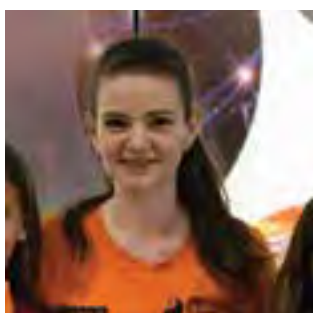


REBECCA LOFTUS

EDFUTURES@FOGARTYFOUNDATION.ORG.AU

EDFUTURES COORDINATOR, FOGARTY FOUNDATION

Rebecca joined the Fogarty Foundation in 2016. As well as providing support and training to Dojos in the Perth metro area, Rebecca is the regional Dojo coordinator and travels to regional and remote locations to support the establishment of Dojos in these communities.

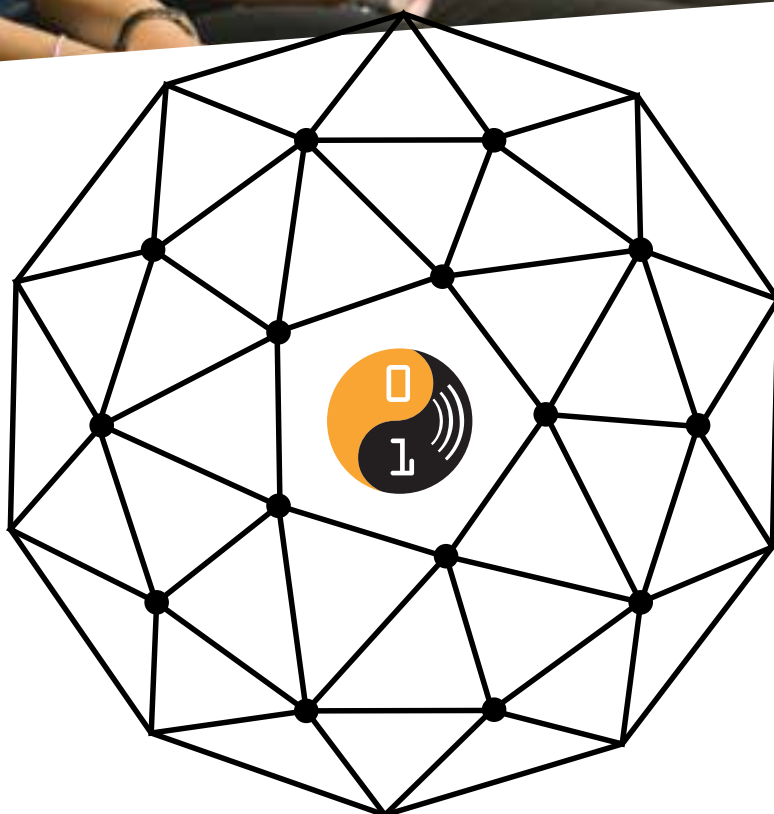


JANELLE DIXON

SUPPORT@FOGARTYFOUNDATION.ORG.AU

CODERDOJO WA SUPPORT, FOGARTY FOUNDATION

Janelle joined the Fogarty Foundation in 2016. Janelle has been a Champion at the University of Western Australia's Dojo since 2014. She now supports the WA community to create, find and attend Dojos in WA and provides advice and support on how to run a successful Dojo.





FINAL MESSAGE

That's all folks! We hope that you have found the information in this handbook useful. Please remember that ultimately the success of your Dojo depends on how active you are in the network. Connect to the community on our Facebook pages and on the Zen forum, read our monthly newsletter, manage your Dojo on Zen, encourage all community members to become active on the CoderDojo WA forum on Zen, listen out for great competitions, giveaways and opportunities from CoderDojo and CoderDojo WA and most importantly, join us for our social nights to kick-back and celebrate YOU! Our final message to the community is always that in a grassroots network like CoderDojo WA:

YOU ARE SUPER IMPORTANT!



RESOURCES

For more resources visit www.coderdojowa.org.au/resources

Get Connected	Description
http://coderdojowa.org.au/	CoderDojo WA website
https://coderdojo.com/	CoderDojo global website
https://zen.coderdojo.com/	CoderDojo Zen Community Platform
http://kata.coderdojo.com/wiki/Main_Page	CoderDojo Kata resources page
http://fogartyfoundation.org.au/	Fogarty Foundation website
https://www.facebook.com/groups/coderdojowa/	CoderDojo WA Facebook Community Page
https://www.facebook.com/CoderDojo/	CoderDojo Global Facebook Page
https://www.facebook.com/CoderDojoWA/	CoderDojo WA Facebook Page
https://www.facebook.com/groups/343167779203878/	CoderDojo Australia Facebook Organisers Group
https://forums.coderdojo.com/category/15/coderdojo-wa	CoderDojo WA Forum
https://github.com/CoderDojo	CoderDojo GitHub
YouTube Tutorials	Description
https://www.youtube.com/watch?v=TWQvS4aNwoQ&index=1&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Registering an account & editing a profile
https://www.youtube.com/watch?v=57fpyD6_eXA&index=2&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Edit a Dojo Profile
https://www.youtube.com/watch?v=r5aJB6YbNMw&index=3&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Joining and posting in Forums
https://www.youtube.com/watch?v=TjO62zqe1hg&index=4&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Manage Users at your Dojo
https://www.youtube.com/watch?v=wYpRJUoQYhw&index=5&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Creating and Managing Events
https://www.youtube.com/watch?v=TR7ISl-DYV4&index=6&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Booking into a Dojo event (Parents / Guardians)
https://www.youtube.com/watch?v=-gpBZjKEAUg&index=7&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Using the Ticketing System
https://www.youtube.com/watch?v=mu9RR8VocXQ&index=8&list=PLQBFqko3_sHVEEbO9j2xborKS68PVJ1Pz	Community Platform Tutorial: Awarding and issuing Digital Badges



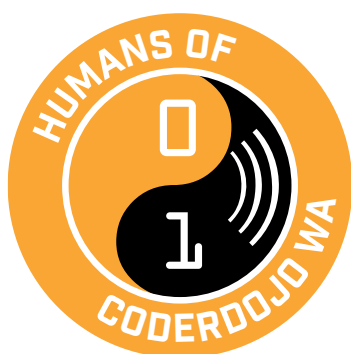
Get Coding Resources	Description
http://kata.coderdojo.com/wiki/Learning_Resource	CoderDojo Kata learner resources
https://www.codecademy.com/	Codecademy – Learn to Code interactively for free
https://code.org/learn	Code.org
https://www.madewithcode.com/	Made With Code
https://www.python.org/	Python
https://www.joomla.org/	Joomla
http://www.minecraftmods.com/	Minecraft Mods
https://www.tynker.com/hour-of-code/	Tynker
https://codecombat.com/	Code Combat
https://www.renpy.org/	RenPy Visual Novel Engine
http://www.codingforart.com/	Coding for Art
http://coderace.me/	Code Racer
https://www.learnstreet.com/cg/simple/projects/	Learn Street
http://codehs.com/	Code HS
http://appinventor.mit.edu/	App Inventor
http://www.w3schools.com/tags/	W3C HTML Reference
https://goggles.webmaker.org/	X-Ray Goggles
http://railsgirls.com/materials	Rails Girls
http://railsforzombies.org/	Rails for Zombies
https://www.csszengarden.com	CSS Zen Garden
http://see.stanford.edu/see/courseinfo.aspx?coll=824a47e1-135f-4508-a5aa-866adcae1111	Stanford Java Class
https://cs50.harvard.edu/	CS50 at Harvard College



JONATHAN DURNFORD

Library Officer and CoderDojo WA Champion

MIDLAND LIBRARY DOJO

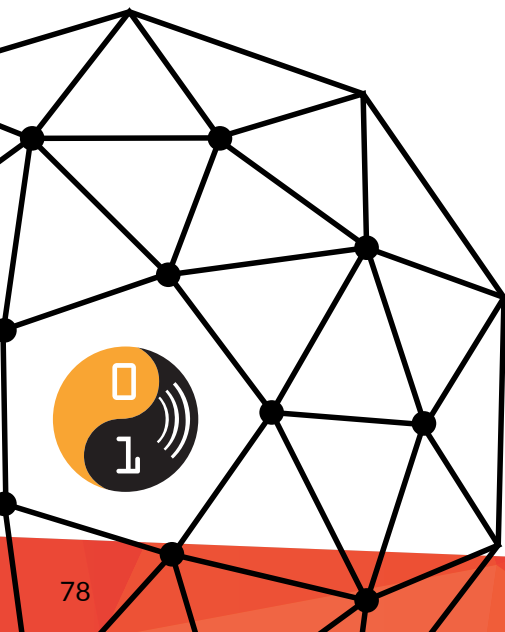


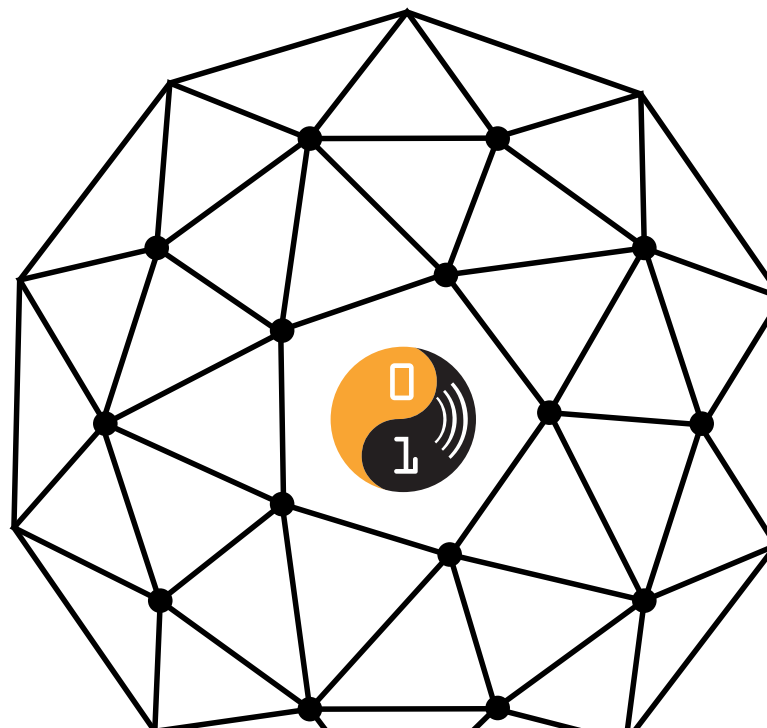
STORY

I run the Midland Library CoderDojo. My boss linked me to the information and asked if we could start a Dojo at the library. I was pretty keen once I got stuck into researching it and now here we are. The Ninjas have solved some catastrophic tech problems for me. I was so relieved!

I find the process of coding difficult, but the outcome is always cool. The freedom of information on the internet allowed me to seek the truth. It let me rise out of a dark place I may well still be in had it not been for the ability to get unbiased information when I needed it. Plus, it's helped me a lot in my work. My job in the library is probably 90% helping people with technology these days. We have senior's computer classes, eBooks, CoderDojo and more.

I have a very early memory of sitting on my dad's lap when he was playing the first Monkey Island computer game. I was too young to read the text, so he read it to me, using different pirate voices. I was transfixed, this was like a bedtime story, only it felt we were trying to complete this adventure together.









CoderDojoWA

POWERED
BY



Fogarty Foundation

OUR PARTNERS



Woodside became the principal partner of CoderDojo WA in 2016. As well as supporting the community and helping us to achieve the CoderDojo mission, Woodside hosts a Dojo at their corporate offices on St Georges Terrace. Loads of Ninjas and volunteers attend each week. Awesome!



Scitech have been supporting the CoderDojo WA program since 2013. As well as Scitech's financial support of the program, they provide in-kind support through the provision of venues and staff time for CoderDojo WA training and celebratory events. Scitech have also supported the expansion of the CoderDojo program into regional locations around Western Australia. We love you, **Scitech** 😊



EdConnect and CoderDojo WA partnered in 2016 to form CoderConnect, with the aim of supporting the development of CoderDojos at EdConnect schools in WA. EdConnect will provide volunteers with specialised training in addition to the Mentor training provided by CoderDojo WA. Through CoderConnect, we hope to match skilled Mentors to EdConnect schools so that we can unleash more tech talent in WA, ensuring that more and more young people will have access to the Dojo family and learning environment.

Additionally, CoderDojo WA is supported in-kind by Churchill Consulting, the Fogarty Foundation Board of Trustees, Spacecubed, the Universities and TAFEs of WA and many other organisations who provide community sector knowledge and access.

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The information in this handbook includes content from the CoderDojo Kata and Zen community platforms and CoderDojo website: www.coderdojo.com. This information has, in some cases, been modified to suit the needs of the WA community. This content has been shared and adapted under the Creative Commons Licence: Attribution-NonCommercial-ShareAlike 4.0 International. The content in this handbook can be reproduced, shared and adapted under the same licence [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/)



*THE FOGARTY FOUNDATION WOULD LIKE TO ACKNOWLEDGE
WOODSIDE AND SCITECH FOR THEIR GENEROUS SUPPORT*

