

CoderDojo

Orientation for
parents and
guardians



What is CoderDojo?

A global, volunteer-led movement of free, not-for-profit coding clubs (Dojos) for young people aged 7 to 17. The movement places a strong emphasis on openness and on showing how coding can be a force for positive change in the world.

Dojos are:

- Set up and run by volunteers
- Clubs, not classes
- Free for young people to join and attend
- Focused on project-based learning
- Environments for peer mentoring
- Fun, friendly, and informal
- Inclusive and social



Who are the members of a Dojo?

- **Champions:** Dojo organisers. The Dojo champion is usually your first point of contact.
- **Ninjas:** Young people aged 7 to 17 attending the Dojo. Ninjas are the reason we run CoderDojos!
- **Mentors:** Volunteers who provide support, guidance, and encouragement to the Ninjas.
- **Parents and guardians:** Many Dojos require parents or guardians to stay for the duration of the Dojo session. Parents and guardians are also welcome to contribute their time and skills to the Dojo!
- **Other volunteers:** People helping out in various ways without taking on a champion or mentor role.



Welcome to the global community

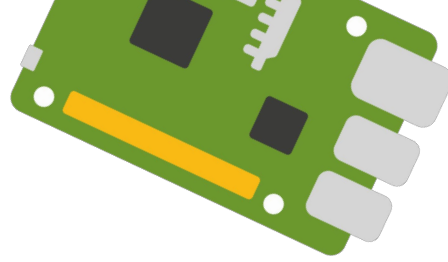
There are **Dojos** supporting **young people** to learn coding skills in cities, towns, and villages **all over the world.**

Our open-source movement first started in Ireland in 2011 with the first Dojo, and the CoderDojo Foundation was established in 2013 to support Dojos and to help others who share this vision.

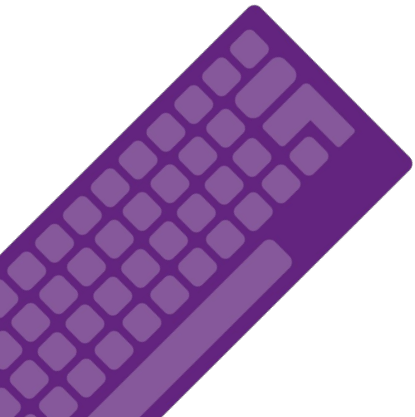
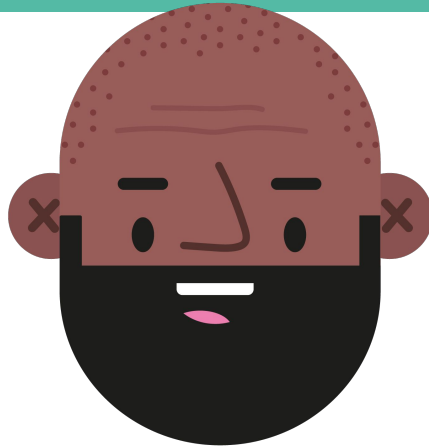
At the end of 2018, there were almost **2000 Dojos** in **100 countries.**



What is coding?



Coding, or computer programming, is the skill of taking a problem and creating a set of instructions – which we call a computer program – for a computer to solve that problem. Computer programs can be anything from simple ones that add two numbers together, all the way up to complex websites, video games, or apps.



Why is learning to code important?

Learning to code teaches young people to **think logically** to build programs and solve complex issues. And because writing and debugging code involves learning through trial and error, it also helps young people develop **independence, perseverance, and resilience**.

We live in a world where digital technologies are becoming increasingly prevalent. **Technology is being integrated into nearly every industry and sector, from agriculture to healthcare, or even legal compliance.** Undoubtedly, a knowledge of coding helps young people to prepare for careers in a variety of fields!



CoderDojo



Skills developed at Dojos

Young people learn much more than just programming skills at a Dojo. The following skills are also fostered by CoderDojo:

- **Communication**
- **Creativity**
- **Critical thinking**
- **Empathy**
- **Resilience**

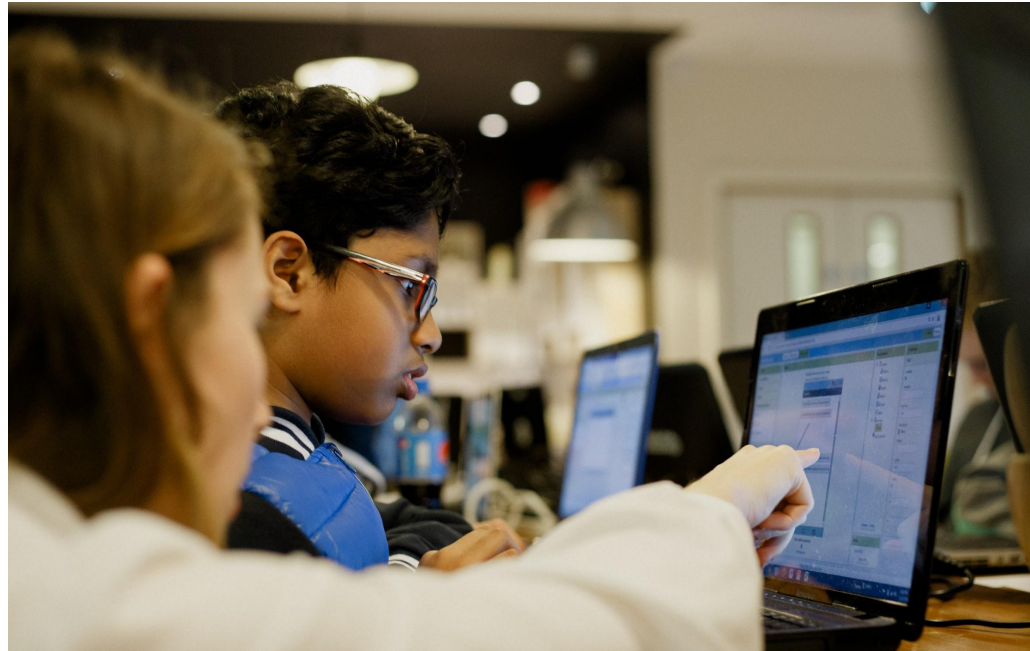


What your child will work on at a Dojo

Ninjas are introduced to coding resources and materials, and given the tools to create and explore through project work. They get support from mentors to follow their individual interests by building their own projects, at their own pace.

Educational resources

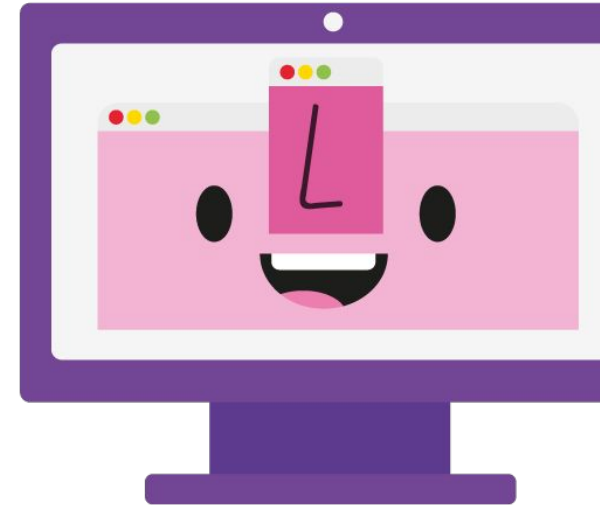
Most Dojos use educational resources during their sessions. The Raspberry Pi Foundation and the CoderDojo Foundation both produce freely available educational project resources. You can find these at coderdojo.com/resources and projects.raspberrypi.org



Programming languages

Common programming languages used in Dojos include:

- **Scratch:** A simple visual programming language that covers many of the key principles of coding
- **Python:** A popular and easy-to-learn text-based programming language used by professional coders for everything from websites to data science
- **HTML/CSS:** The core languages used to build websites
- **JavaScript:** This language is key for making interactive websites
- **App Inventor:** A graphical tool that Ninjas can use to build apps for Android devices
- **Unity:** A professional-level games development tool capable of creating detailed 3D games using pre-made models and textures



How you can support your child at a Dojo

Let your child follow their interests!

Projects are often primarily led by the topic that Ninjas wish to explore. So encourage your child to let their imagination run wild :)

Show them you're still learning too

- Work through projects with your child and solve problems as a team
- Help them find the answer by asking leading questions and allowing them to figure things out by themselves as much as possible
- Show them that it's OK to make mistakes to encourage learning through trial-and-error
- Resist the temptation to correct errors for your child, touching the keyboard as little as possible





Getting involved as a parent

- **Become a mentor** – help out at your child's Dojo sessions!
- **Volunteer other skills** – there are many tasks involved in running a Dojo, from administration and registration to keeping websites and social media pages up to date. Dojos benefit from having volunteers with a wide array of skills
- **Start a Dojo** – if you are considering starting a Dojo, you can find more info at coderdojo.com/start-a-doj.

