



Introduction

Technology today is such a varied and flexible career field that you can never know where it might take you. Learning to code will equip you with all the tools necessary to accomplish any task and solve whatever problems are thrown your way, with any career choice that you make.

Coding is easier than you think. Whilst the process of learning to code may start off being a little intimidating at first, it does get easier over time. The reality is, it's more to do with the breaking down of a problem logically rather than writing complicated algorithms. You don't have to be a genius in order to code.

Coding skills allow you to build websites and applications you need to get tasks done without having to rely on others to do it for you. In a business world where websites and applications are important parts of the landscape, your ability to do these things for yourself will increase your productivity and efficiency. Whether you want to earn money from what you make or change the world for the better by helping people through technology, learning to code is such an empowering skill to learn.

“Everybody in this country should learn to program a computer... because it teaches you to think.”



Benefits of Coding

Logical Thinking

You learn how to break down a problem into individual steps and to use a language that the computer understands to logically create a working program whilst communicating your thoughts in a structured way. Any professional job or career that you pursue is going to favour and reward quick thinking and the ability to solve problems in nimble ways. Consider learning to code as an advanced course in critical thought. One that just brings a solid skill foundation along with it.

Bring Ideas to Life

The nearly endless ways of coding and solving problems can inspire ideas to grow. You will start to develop a certain mindset on approaching problems and enabling you to look at challenges from a bigger picture to adapt to working through issues. You will get the chance to personally develop the projects that match your vision without having it lost in translation, which is always the risk when you're working with other people.

Grow Confidence

You become more confident in using your computer as you begin to understand how it works and how it can be controlled through programming. Confidence will grow further and have a positive affect on your social life as coding can provide an outlet for you to interact with the rest of the world. You develop the ability to make applications and websites for things you care about and want to share.

“One of the best feelings is knowing that you accomplished something great. Learning to code gives you that excitement and empowerment.”



Tips and Tricks

Everyone has their own coding tips, here at First Coding we've listed a few of our own.

- **Always carry a notebook:** Ideas and solutions to coding problems can appear at any time, anywhere and having a notebook close to hand ensures that you can record your thoughts easily. Be sure to write down every idea, good or bad. This will also prove useful in tracking the progress of ideas.
- **Learn to play chess:** Chess is a good way of training your brain to think ahead. This is a great coding skill, being able to think ahead and cater for a multitude of scenarios.
- **Keep your code simple:** Why use a sledgehammer to crack a nut? A solution to a problem is often solved in just a few lines of code. This will also make it easier for someone else to read and understand.
- **Watch your syntax:** Always be careful of your spelling.
- **Sensible naming:** Name elements such as variables in your code sensibly. What job does your variable or function have in your code? Choose a name to reflect this.
- **Start small:** Start off with small projects and be patient. Don't try to run before you can walk, experience comes with time.
- **Code of practice:** If you are revisiting one of your old programs or collaborating with other programmers on a project, always leave code in a better state than you found it.
- **Keep learning:** Develop the ability to continually learn through books, blogs and experimenting with new concepts. This is why side projects are so important in learning new skills and experimenting with new ideas.
- **Maximise your time:** Planning your work before you sit down at the computer is a great way to maximise your coding time. Set a limit and don't go over your allotted coding time, your body and brain need breaks. Don't get distracted, there are so many distractions all around us that it's hard at times to remain focussed. Plan your work goals for the day and you'll have no problem in making the time you have available as efficient as possible.
- **Keep practicing:** Practice, practice and practice again.

“The programmers of tomorrow are the wizards of the future... coding is the closest thing to a superpower.”