

# Design and develop

Not every job in the future will require people to be able to code or program. But we increasingly live in a world dominated by computers, where software is a language in itself. Being able to think computationally and understand this language is becoming just as important as learning to read and write.

Learning these skills can seem complicated, but anyone can learn them. It only takes a few hours to learn basic concepts or a few weeks for kids to start developing their own simple websites and apps.


Explore the range of tools and resources available to get your kids off to the right start.

Resource	Audience	Platform	About	Skills
<a href="#">Scratch</a>	Primary school	Website/ App	Website that lets kids create stories, games and animations. Projects not only let kids learn about computational programming but also design and connectivity.	Design and develop Hands on with tech Connect
<a href="#">Tynker</a>	Primary and early high school	Website/ App	Tynker is a website and learning platform that provides a comprehensive learning experience for kids aged anywhere between 7 and 14 to learn programming in a fun and visual way.  Tynker allows kids to create anything from apps, games and control robots with more than 1000 coding activities.	Design and develop Hands on with tech
<a href="#">Lightbot</a>	Primary school	App	A app game that teaches kids to think computationally through interactive logic puzzles.  The app introduces complex programming concepts in a simple and fun way.	Design and develop
<a href="#">Robot Turtles</a>	Primary school	Board game	A board game that "sneakily" introduces the fundamentals of programming. The game not only introduces computational thinking but gives kids an early leg up on concepts that are applied in computer science classes at university level.	Design and develop
<a href="#">Computer Coding for Kids</a>	All ages	Book	Key book to guide kids creating computer programs starting with the very basics. Making complex computer language simple and accessible, the book is a great tool for kids looking to take their first steps into programming or for kids who are already interested to learn more.	Design and develop
<a href="#">Code.org</a>	High School	Website	Online resource to expand access for people interested in computer science. With a massive range of courses, tools and information, code.org aims to reach students no matter their skill level or background to inspire them in learning computer science.	Design and develop
<a href="#">Hadi Partovi TEDx talk</a>	All ages	Video	This persuasive talk shows how essential and easy it is to gain basic understanding of computer science and how important it is to students of the future.	Design and develop Innovation





## 1 in 2


Australians will need skills such as programming, software development and skills to build digital technology.  
- The Foundation of Young Australians, "The Future of Work" 2016, page 10



**Think Critically**  
Problem solving  
High order thinking skills  
Interdisciplinary approach  
Real world problems  
Project based learning



**Communicate Clearly**  
Effective communication  
Self and peer review  
Information fluency  
Media fluency  
Digital fluency



**Work Collaboratively**  
Team building  
Effective communication  
Self and peer assessment  
Collaborative mediums  
Suitable technologies