

MOBILE APP DEVELOPMENT

A mobile application, most commonly called an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer.

App Lab is a block or text based programming language. This allows creation and sharing of apps.

The point of an app is to connect and interact with users. App creators tend to have an idea, a problem or a task that they want to develop user an app. These can be huge or relatively small ideas. **Decomposing** the problem helps us make the task less daunting and more achievable. This involves breaking down the task into smaller more manageable parts to start with.

Most computers have an environment with tiles, icons and/or menus. These allow users to interact. This type of interface is called the **graphical user interface (GUI)** because the user interacts with images through a mouse, keyboard or touchscreen. The GUI needs careful design consideration so that the user experience is a positive one so they want to continue to use it.

Making sure the app is successful and actually does what it was intended to do is important. Setting **success criteria** should be determined at the start of the project and can be revisited frequently. The success criteria should be clear and easy to follow.

Evaluating and **debugging** allow for judging the quality of the app and enables errors to be corrected and improvements to be made.

Key Words	
abstraction	Identify the important aspects to start with
algorithm	Precise sequence of instructions
Application (app)	Software designed to run on a mobile device
Computational thinking	Solving problems with or without a computer
debugging	Looking at where a program might have errors or can be improved
blocks	Scratch bricks that we can use to code algorithms
decomposition	Breaking down a problem into smaller parts
execute	A computer precisely runs through the instructions
GUI	Graphical User Interface
iteration	Doing the same thing more than once
selection	Making choices
sequence	Running instructions in order
variable	Data being stored by the computer

Sequence, **selection** and **iteration** are all processes. In order for computers to perform tasks there is more that is needed. For example a computer will take an **input** (this might be automatic or via human input) which the computer will then **process** and the **output** will be visible on the computer monitor.