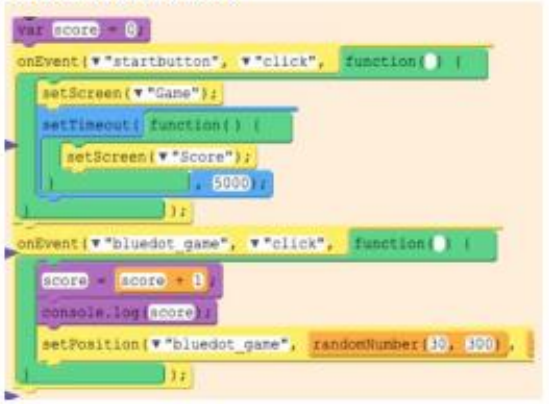
DIGITAL WORLD
@TOYNBEE

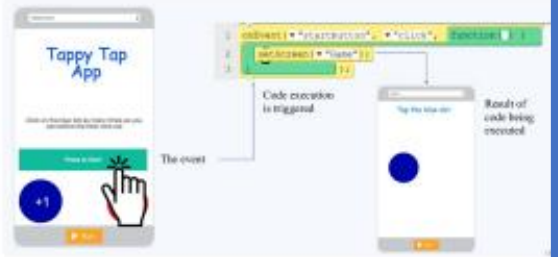
8.6 Mobile App

In a world where there's an app for every possible need, this unit aims to take the learners from designer to project manager to developer in order to create their own mobile app.

Decomposition	Is breaking a problem down into more manageable chunks.
Workspace	Build your programme by adding in blocks from the toolbox
Set Property block	Changes the elements on your screen
Event Driven Programming	When the flow of the program is controlled by events
Selection	Selects pathways through the code dependent on conditions
Variables	A value that can be changed (speed, lives, score)
Function	Inbuilt code that performs a specific task Sequence Parts of the code that run in order
getTEXT ("id")	is a built-in subroutine that collects the text entered into a textbox; "id" is to be replaced with the name given to the text box.
parameters	In computer programming, a parameter or a formal argument, is a special kind of variable, used in a subroutine to refer to one of the pieces of data provided as input to the subroutine
Button	linked to an event that will capture and process the data when it is clicked
Text boxes	allowing for the user to input a text string
Checkboxes	allowing for the user to indicate a yes or no response

Below you can see two **events**, one event where the start button is clicked and one event where the blue dot is clicked.



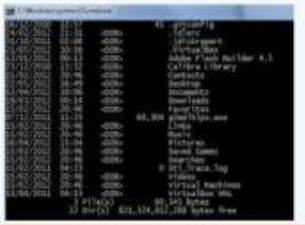


This is the **App Lab** web address:
https://code.org/educate/applab

You are using a programming language called **JavaScript** when coding in App Lab, but you use blocks, like you did with Scratch.

Graphical User Interface (often pronounced GOO-EY)

A way to communicate what you want to a software application by clicking/hovering/typing/activating graphical elements like buttons, labels, etc.



Opposite of a GUI - Command Line Interface

Event-driven programming

In event-driven programming, the flow of the program is controlled by events.

- Events can be user actions such as:
- Mouse clicks (or the touchscreen equivalent)
- Key presses OR Hovering over a picture
- Voice input ("OK Google...")

Events can also be also be triggered by:

- Sensors (e.g. if movement is sensed, turn the light on)
- Messages from other programs

Selection: in the snippet of code below, what text will show on the screen if the score variable has a value of 11?

Apps are big business!
The overall mobile app market is expected to generate **$935 billion** in 2023. Most of this revenue is generated from advertising and in app purchases on free apps