Year 9 – App Creator

What do I need to be able to do?

By the end of this unit, you should be able to:

- Understand why App creator is used
- Understand what is meant by Decomposition
- Identify what event driven programming is
- Created a Tappy tap App with some support
- Created own App based on a scenario
- Identify what a variable is

Keywords

App: an application, especially as downloaded by a user to a mobile device.

Functionality: the quality of being suited to serve a purpose well; practicality.

Implement: put (a decision, plan, agreement, etc.) into effect.

Decomposition: Breaking down a problem step by step

Event driven: Responding to an event happening (click, hovering etc

Programming: the process or activity of writing computer programs.

Debug: identify and remove errors

Variable: used to store a piece of data that may be needed later in a program. It can be changed whilst the program is running

Decomposition

- **Decomposition** is breaking a problem down into more manageable chunks.
- Programming an app for a mobile device can be a daunting task to undertake.
- Decomposing the problem helps us make the task less daunting and more achievable.
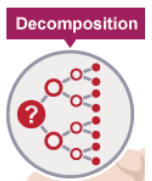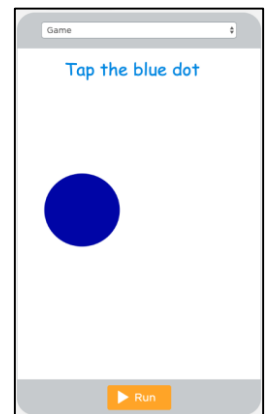
Event driven programming

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
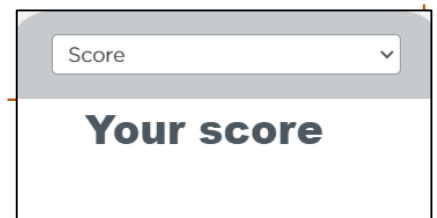- Hovering over a picture
- Voice input ("OK Google...")

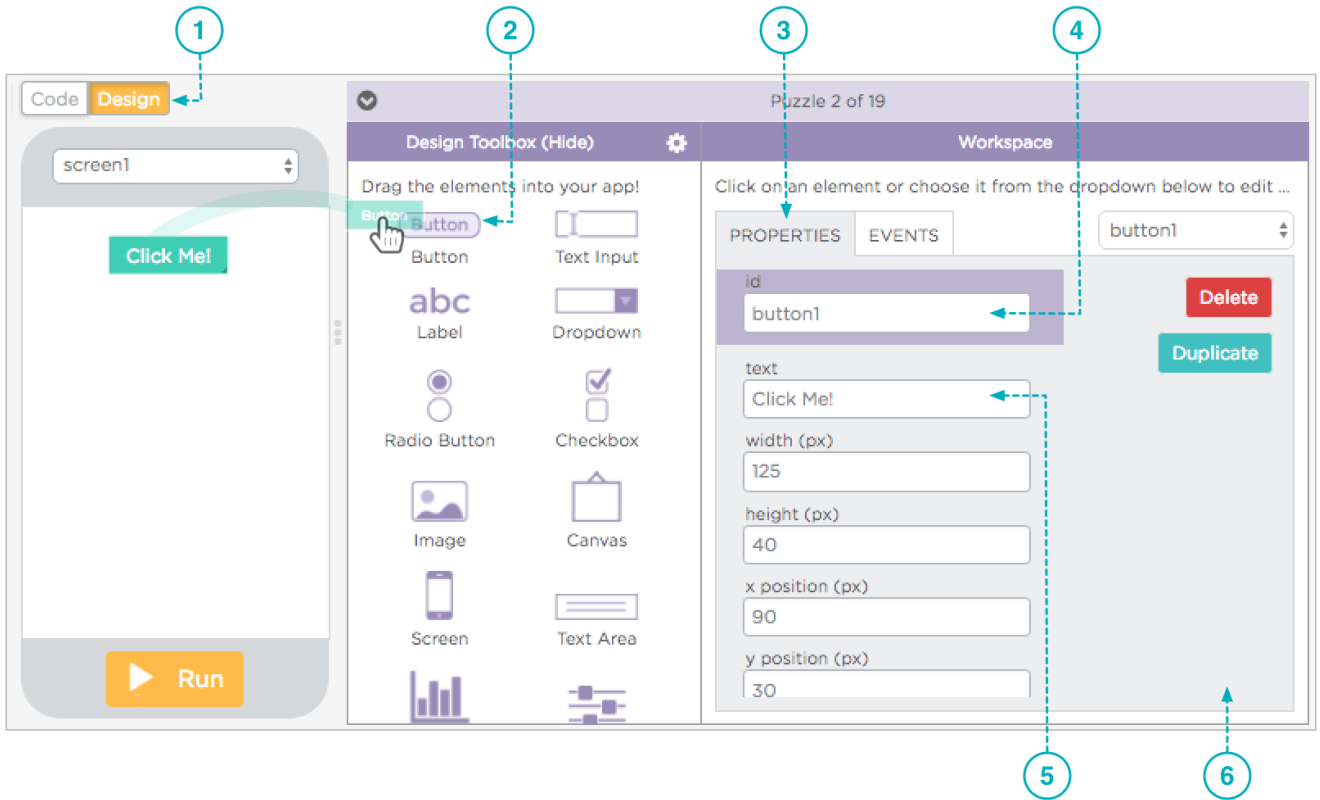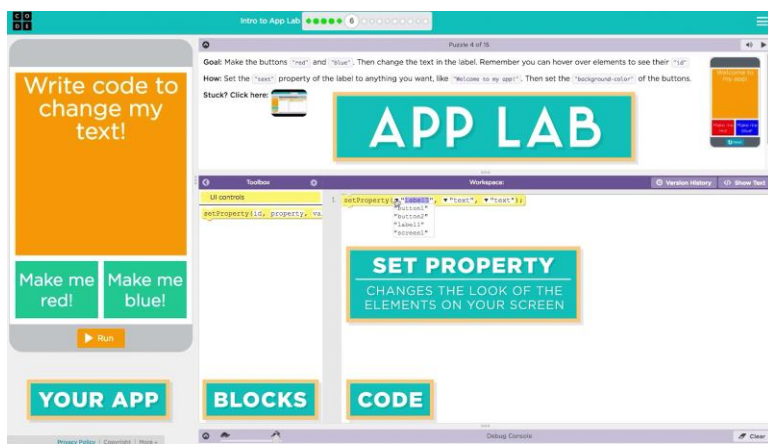Events can also be also be triggered as:

- Sensors
- Messages from other programs

Variables

- A variable is used to store a piece of data that may be needed later in a program (memory location)
- This variable can be changed throughout the program running

1. You'll see a new set of switches above the app area that let you flip back and forth between "Design Mode" and Code Mode".

2. Adding an element is as easy as dragging and dropping it into the app wherever you want. Once it's on the app screen you can reposition it, resize it and change lots of other properties about it.

3. The **Properties** tab shows you everything you can change about the look and feel of a UI element.

4. The **element ID** is important because it's how you refer to the element in your code. We'll discuss element IDs later on.

5. You can make the text that the user sees on the button be whatever you like.

6. Scroll down to see whether other properties for a UI element might be "hiding" down below.