

App Lab Knowledge Organiser

App Lab Toolbox Guide

UI Controls

Anything that involves showing/displaying any item on the screen is going to be here.

Data

Allows you to save data to a Database and get data from a Database.

Control

Allows you to use blocks such as IF statements or loop to control the flow of your program.

Variables

Allows you to set variables or read variables.

Functions

Allows you to build your own functions to run certain pieces of code.

Canvas

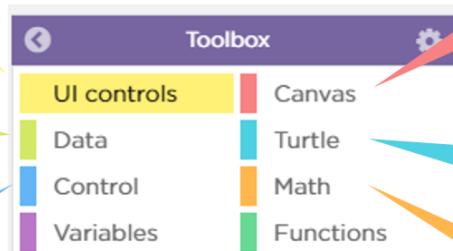
Allows you to put a canvas on the screen and add various objects to it.

Turtle

Allows you to put a turtle on the screen to draw lines, and create shapes and turn.

Math

Allows you to add all of your basic Maths functions to your program.



Design Elements

Button

Button

abc

Label

Radio Button

Image

Screen

Text Input

Text Input

Dropdown

Checkbox

Canvas

Text Area

What is event-driven programming?

Event-driven programming is an approach to programming in which code is written to respond to events. Events can be triggered by users, such as clicking on a button or entering some text. In automated systems, sensors can be used to detect events such as when a particular temperature is reached in a glasshouse or a specific water level is detected on a flood defence system.

Drop down boxes are usually followed by the 'change' event.

Buttons are usually followed by the 'click' event.

```
onEvent (▼ "checkAnswer", ▼ "click", function () {
  if (getChecked("radio_button4")) {
    setScreen (▼ "correctScreen");
  } else {
    setScreen (▼ "wrongScreen");
  }
});
```

IF statements can help set conditions to tell the program what to do.

```
onEvent (▼ "DropdownDoctor", ▼ "change", function () {
  2 if (getText (▼ "DropdownDoctor") == "David Tennent") {
    setImageURL (▼ "imageDoctor", ▼ "david-tennant2.png");
  } else {
  4   setImageURL (▼ "imageDoctor", ▼ "matt-smith2.png");
  5 }
  6 }
  7 });
```