

## Lesson 2 – Familiarising yourself with BlockCode

To follow the installation steps, you only need a computer running Windows, MAC or Linux.

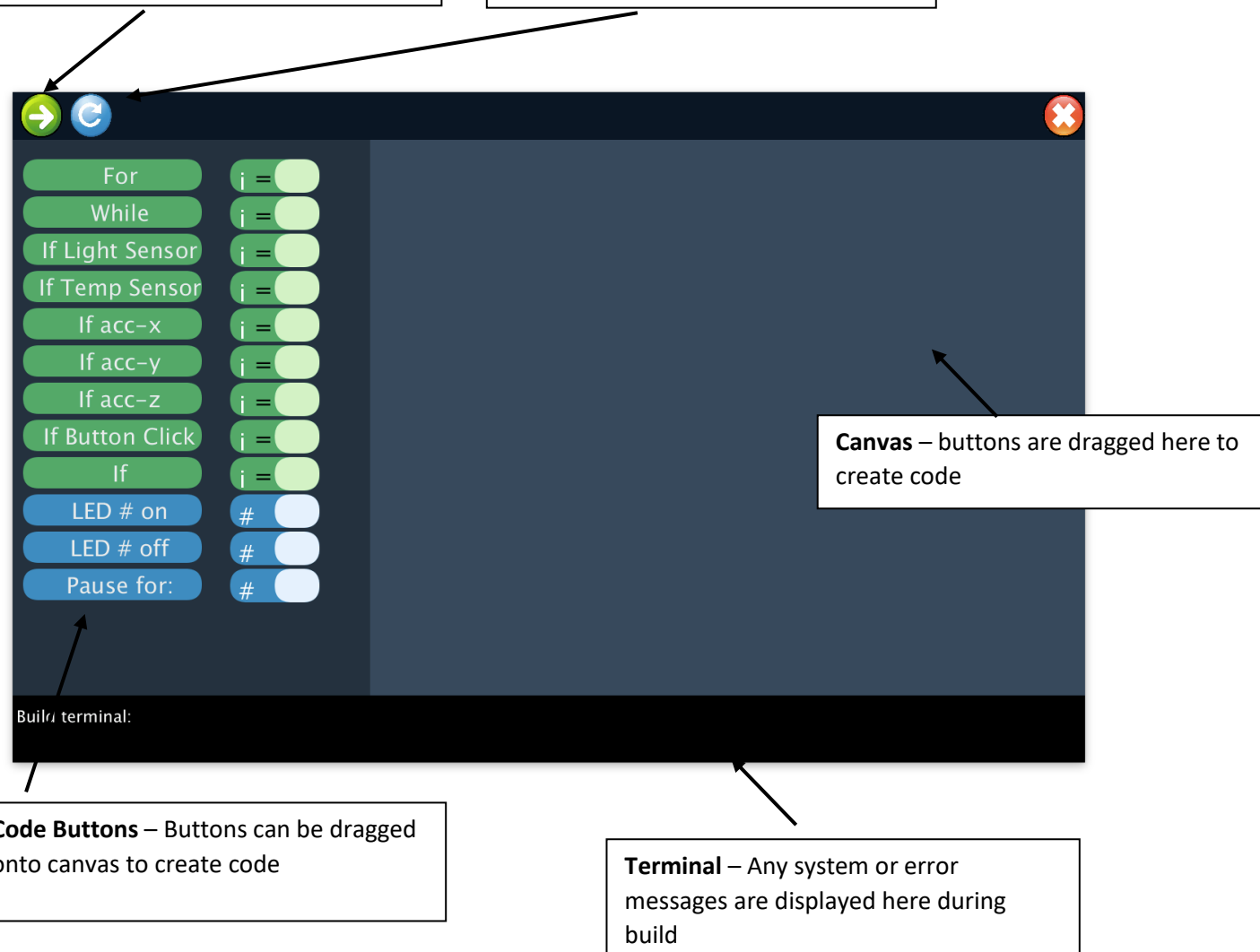
To install:

1. Go to the drop box download page ([www.dropbox.com/BlockCode](http://www.dropbox.com/BlockCode) )
2. Click on the file to download to your computer
3. Open file once downloaded to open program

Once the program has installed and opened, you will see a window like this:

**Build Button** – to compile program and write to an external file

**Restart Button** – to clear the interface to a fresh canvas



## Buttons



### **Green Button:**

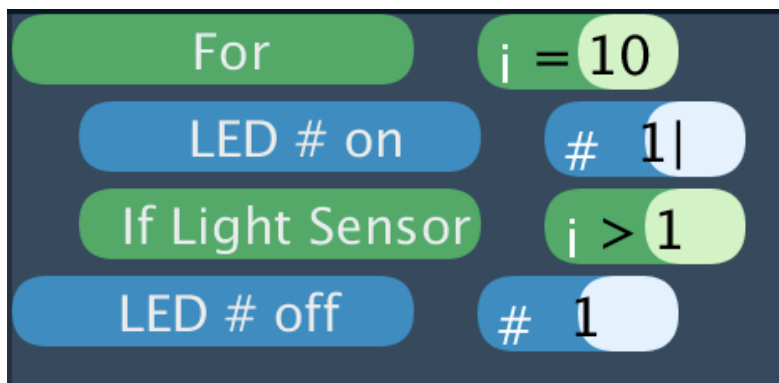
Green buttons are used for loops and conditional statements. The user can enter a value for 'i' and then drag the button onto the canvas. Any buttons dragged onto the canvas following this button, will be indented, unless a space or gap is left between the two buttons. Indented buttons will become part of the functionality of the green button.



### **Blue Button:**

Blue buttons are used for a variety of things. One example would be to activate a certain LED on the Engduino board. Another would be to create a delay or pause. The '#' allows the user to enter their desired number for the function. The user can then drag the button onto the canvas similarly.

## Loops & Conditional Statements



- To **indent** a button, the button must be dragged and dropped on top of the loop or conditional button
- To **outdent** a button, the button must be dragged and dropped below any of the buttons

## **Building and using Code**

To build and upload the code follow the instructions:

1. **Create code by dragging buttons onto canvas**
2. **Click the build button to compile code**
3. **Search for output.ino file in the program directory**
4. **Double-click and then run the file from Arduino**
5. **Follow Lesson 1 instructions to upload code onto Engduino**

## **Summary**

Lesson 2 teaches you on how to familiarise yourself with BlockCode and its elements. Firstly, we will teach you how to download and install the software. We will then teach you how to create and build code on the program. We will also show you how to use both BlockCode and Arduino to create your own Engduino program.