Hello World

Hello everyone and welcome to a new BE MAKER lesson. In this lesson we will leanr about the first program that every programmer starts with it is called the "Hello, World" program. We are going to use a very popular programming environment called the Arduino IDE which we will download later in the lesson, but first I want to go over what the Arduino is in a brief summary. The BE BOARD is an Arduino Leonardo clone it will allow you to control many objects such as a motor, LED, Servo, etc... but you will also need to program the BE BOARD using the Arduino IDE.

For this lesson you will not need much for this lesson just the BE BOARD and a USB cable that will be used to program and communicate with your computer and display "Hello, World"

{Video showing components used in this lesson}

First this we will need to do is go to Arduino.cc to pick up the Arduino IDE so we can program the BE BOARD which is a Arduino Leonardo Clone.

{Video of Arduino IDE getting downloaded and installed}

Now let's take the BE BOARD and connect it to your computer, if this is the first time you have connected your BE BOARD to your computer it will install. Don't worry if it takes a bit of time, that is just your computer working to find the driver and install it.

Once the BE BOARD is installed you will see it under the Serial Port section under Tools

{Video}

Now I want to explain a few of the features that the Arduino IDE presents. Firstly the main window has several buttons at the top the first one being the verify button which you can use to make sure your code does not have any mistakes, next is the compile and upload button is used to compile your code into machine language and then upload it to the microcontroller on the BE BOARD, The new button is after that which will open a new programming window, Then the open and save button are after that. All the way over on the Right side of the screen is another important button called the serial monitor button which we will use later to view "Hello, World." Now if you look below those buttons you will see the programming area, and below that is wherethe programming dialog area is located this area will display errors or other important pieces of information about your sketch. You also have a few menus the most important being the Tools menu where you will find the "Board" menu and the Serial Port menu that you saw eairlier in this lesson.

{Video}

Now that we now a bit more about the Arduino IDE we can begin to program the BE BOARD to display "Hello, World" on the Serial Monitor.

{Video and explanation off code for this lesson}

Ok let's press the compile and upload button on the Arduino IDE, but first let's make sure that we have the correct serial port selected and also that the Arduino Leonardo is selected as the BE BOARD is an Arduino Leonardo clone.

{Video}

Now that we have the sketch uploaded to the BE BOARD we can see what the Serial Monitor is displaying

{God over Serial Monitor and show the "Hello, World" Displaying}

Thank you for joining me in part 1 of lesson 2 please join me for the next lesson where we will go over what a switch is and how it works with the BE BOARD.