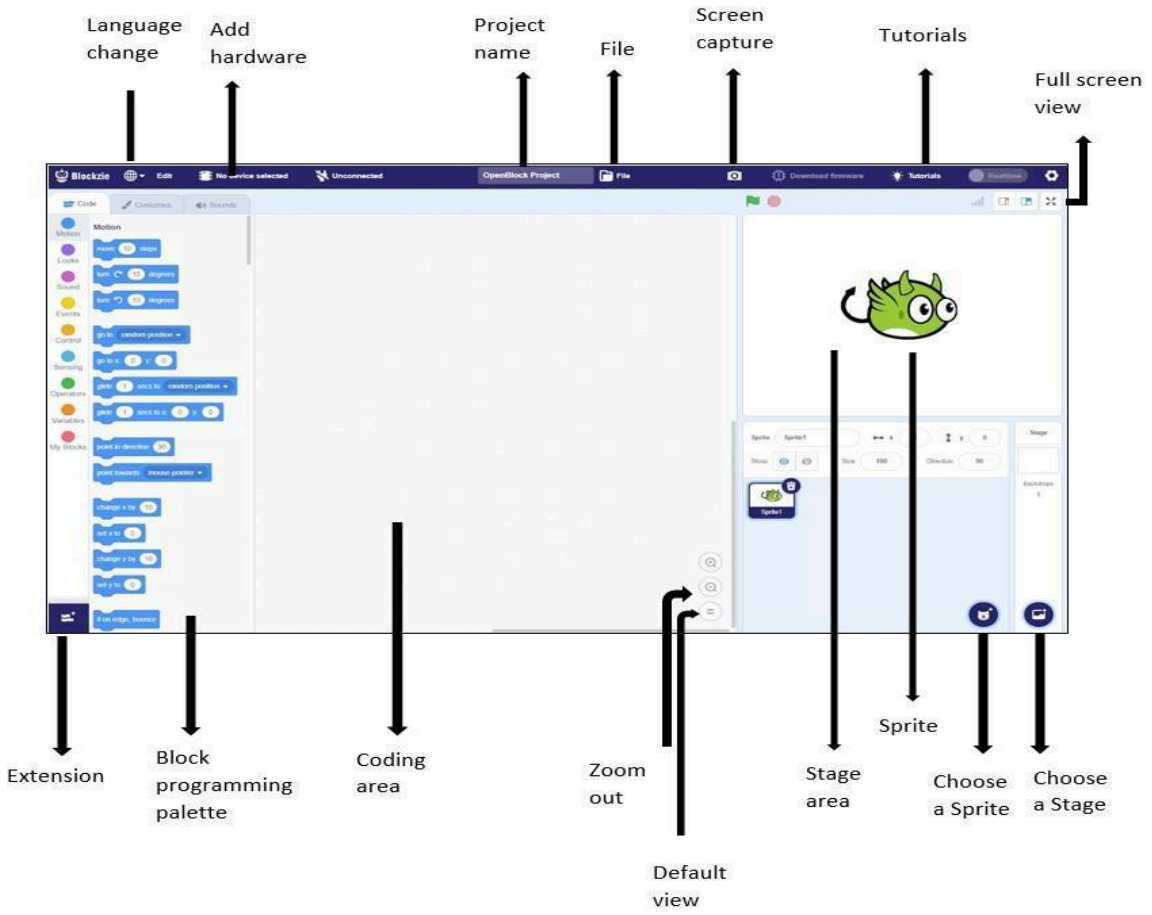
Blockzie Software

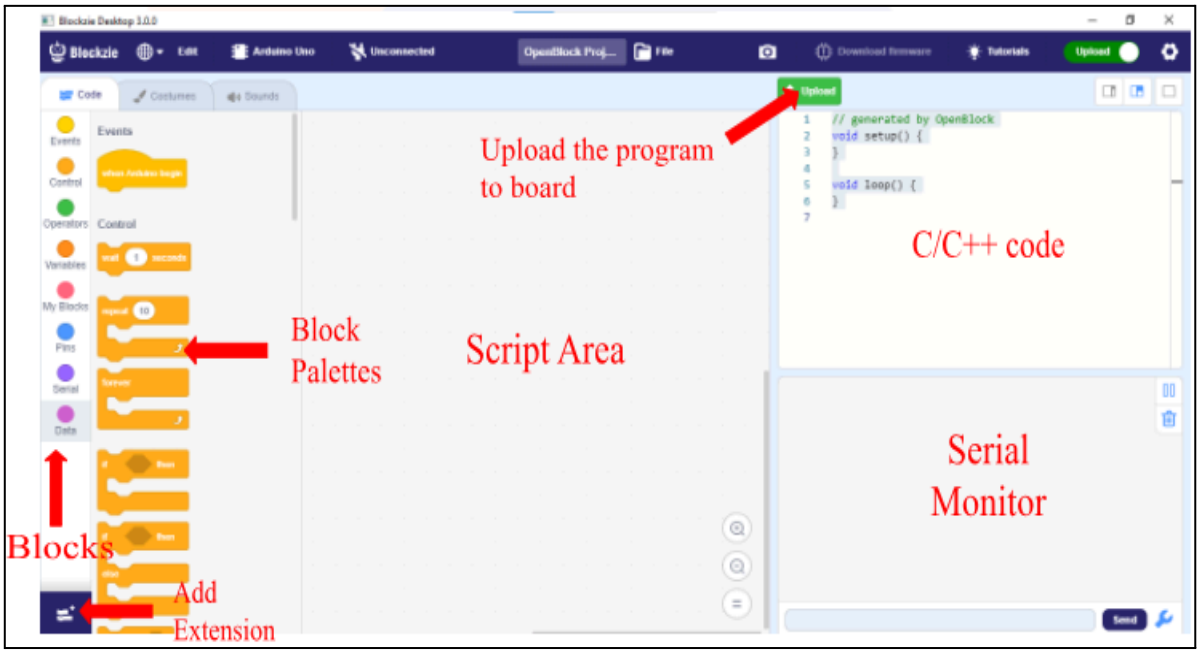
Lets see Interface of the Blockzie software



- **Language Change**: This allows you to change the language of the interface.
- **Add Hardware**: A button to connect hardware like Arduino, ESP boards to your project.
- **Project Name**: The current project name is shown here.
- **File**: A button to open or save your project.
- **Screen Capture**: Take a screenshot of your current project.
- **Tutorials**: Opens help or guides to learn how to use the software.
- **Full-Screen View**: Switches to full-screen mode for a bigger view of your workspace.
- **Extension**: Add new tools or features to your project.
- **Block Programming Palette**: A set of blocks to choose from for creating programs.
- **Coding Area**: The main area where you place blocks to build your code.
- **Zoom Out**: Zooms out to see the full workspace.
- **Default View**: Resets the zoom to normal.
- **Stage Area**: Shows what happens when your code runs, like how sprites move or interact.
- **Sprite**: A character or object that you can program to move or perform actions.
- **Choose a Sprite**: To select or add a sprite to your project.
- **Choose a Stage**: To choose a background for your project.

We know that we do ESP32 Programming in upload mode:

1. **Upload:** This mode allows you to write scripts and upload it to the board that you have selected so that you can use the board even when it is not connected to your computer. We can display data on a serial monitor using this mode.in this mode, only one event block is present.



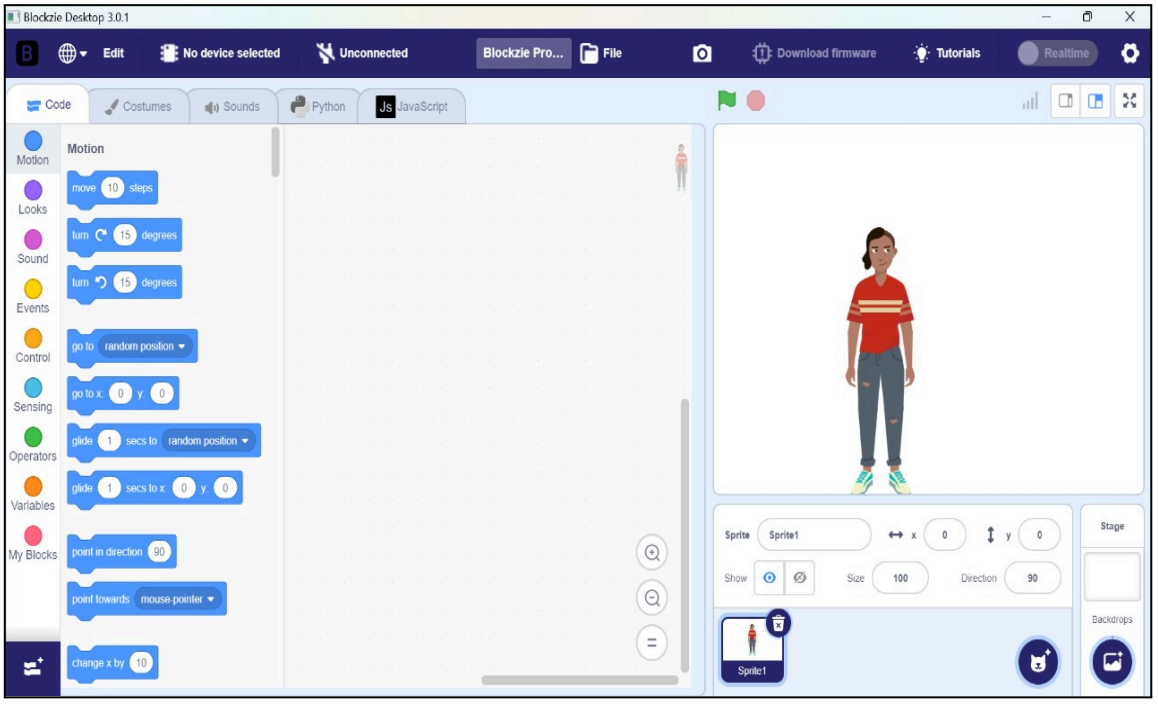
The image shows the Blockzie software, which is used for creating programs to control hardware like Arduino. Here's a simple description of the parts:

- **Blocks**: These are the pieces you use to build your program. You drag them to create instructions.
- **Block Palettes**: This section has different types of blocks, like "Events" or "Control," to choose from.
- **Add Extension**: This button lets you add more sensors or displays or tools to your project like ultrasonic sensor, seven segment four-digit display etc.
- **Script Area**: This is the main area where you place the blocks to make your program.
- **Upload the Program to Board**: This button sends your program to the hardware, like an Arduino, so it can run.
- **C/C++ Code**: Here, you can see the actual code that is created from the blocks you used.
- **Serial Monitor**: This shows information from the hardware, like sensor readings, which helps you check if your program is working correctly.

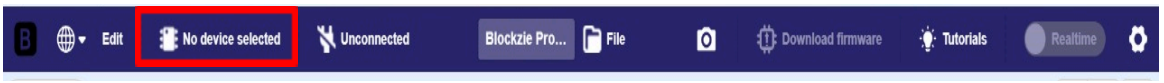
Steps to Code theRobotics kit using the Blockzie software

1. Open Blockzie Software

Now, open Blockzie software for programming the ESP32.

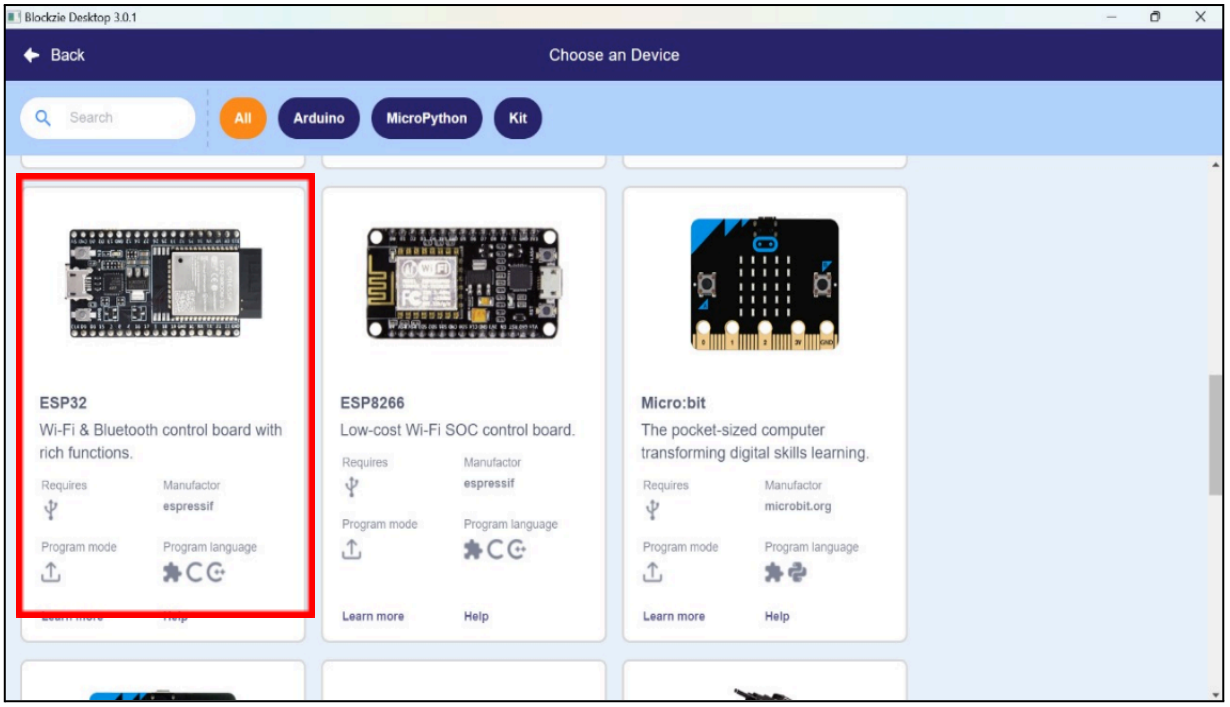


2. Click on “No device selected” from the toolbar:



3. Select “ESP32”:

When you click on the “**No device selected**” then the “**Choose an Device**” window will open. Different types of boards like Arduino Uno, ESP32, Arduino Mini, ESP32, etc. have appeared. Select your device which you use.



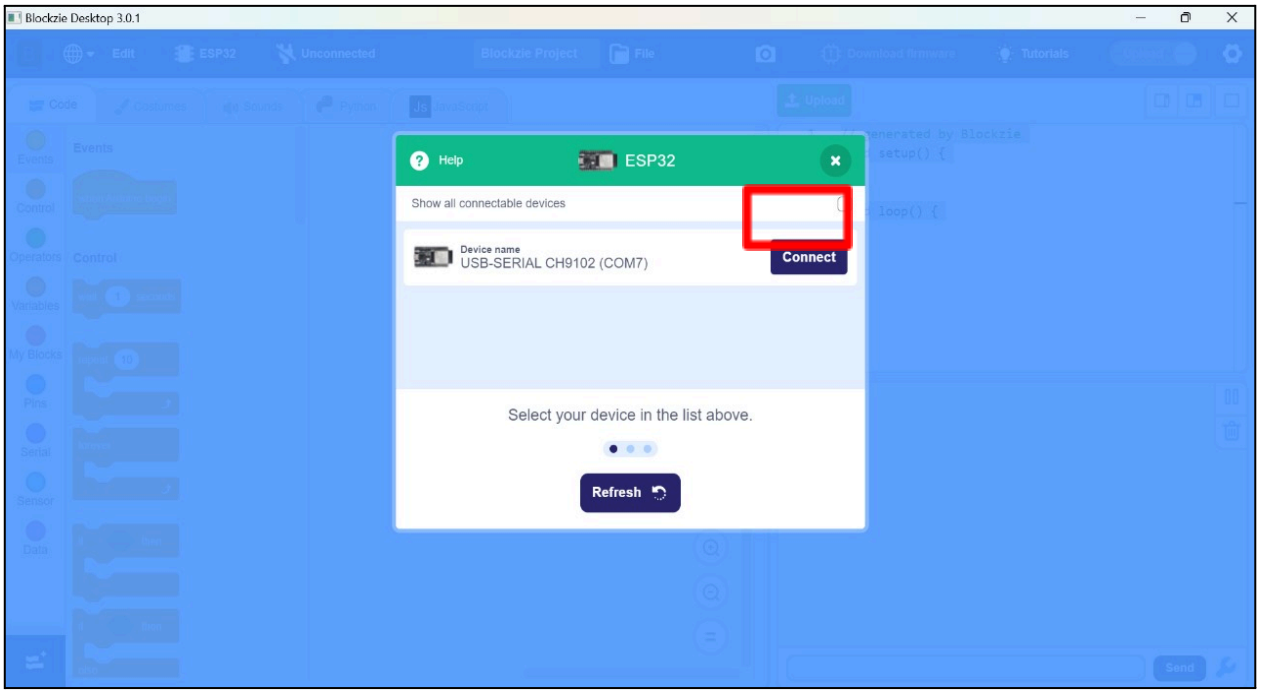
Here, we are working on "**ESP32**" so find and select "**ESP32**".

In doing so, the **ESP32** blocks appear in the Block palette.

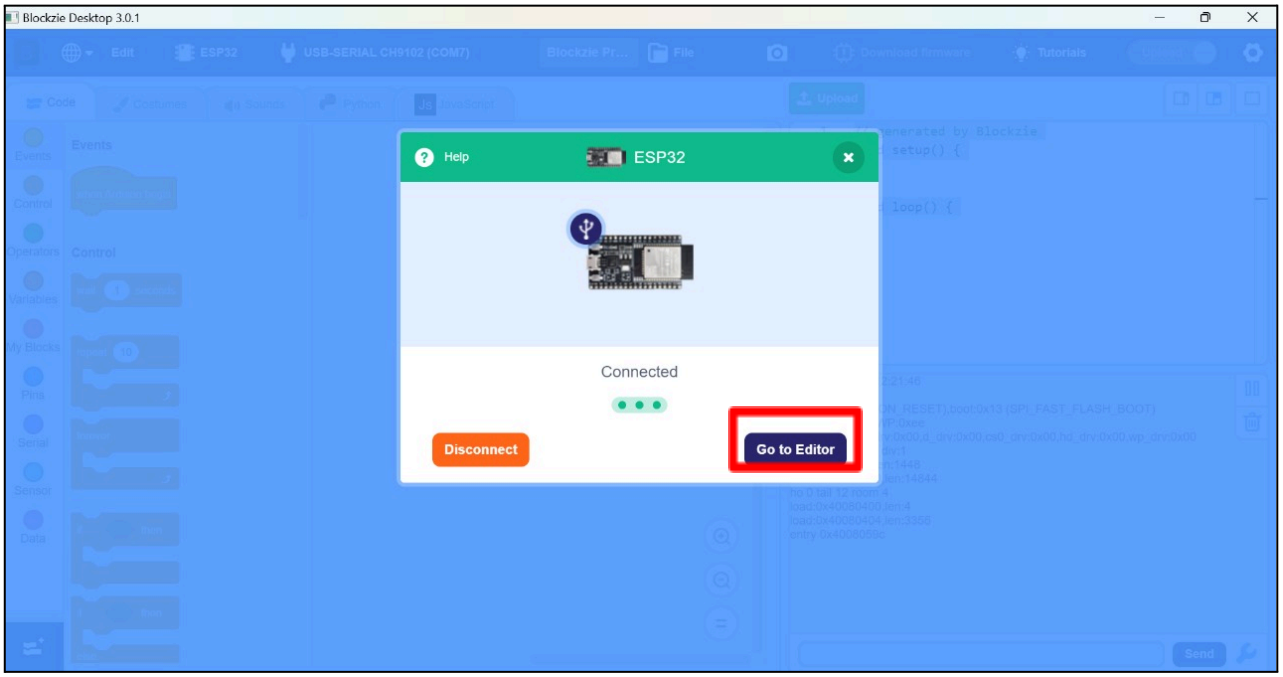
4. Click on "Connect":

After selection of **ESP32**, Blockzie searches for nearby ESP32.

5. Select the Port to which is connected e.g. COMXX or ttyXX. Once you select the port, the icon beside the Connect tab will become connected.



6. Click on “Go to Editor”:



7. Now Connected device and port are being displayed on Blockzie:

Now You will see the ESP32 Robotics Board is connected to Blockzie software and now U can start your Coding journey !