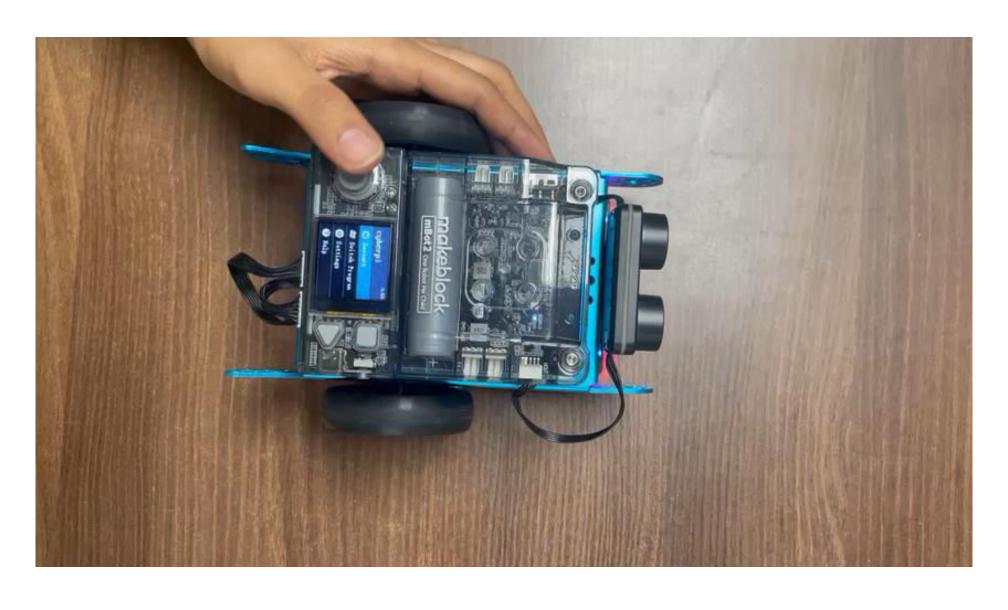


Project: Speech controlled robot navigation



Let us watch this video....







What did we see?



Observations:

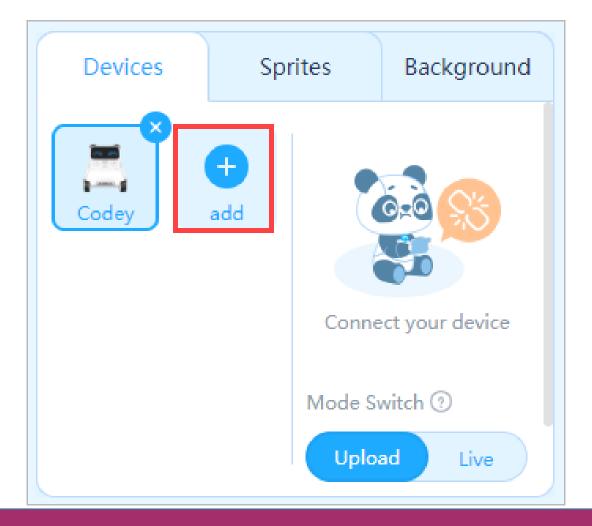
• When mBot is connected with wifi, robot is recognising the voice for 2 sec and is performing the action given by the user to robot.

• The robot is recognising forward, backward, left, right command to move the robot



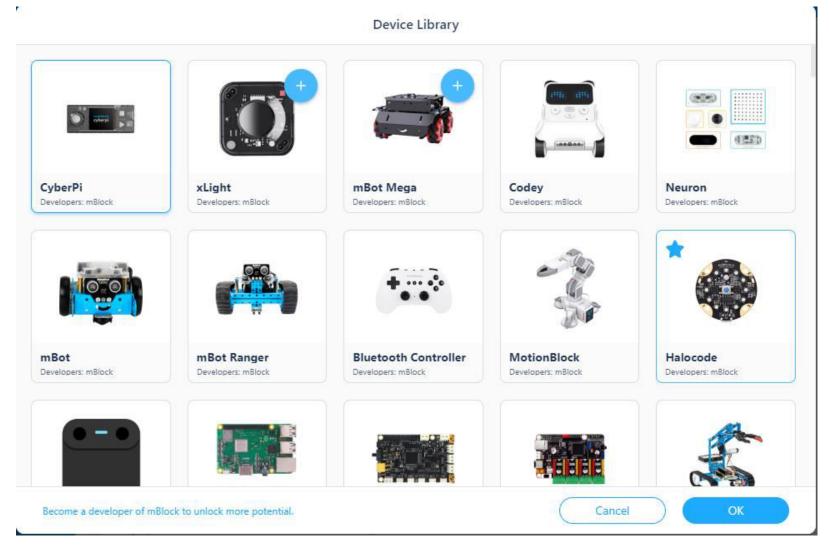


Step 1: Open mBlock Software. Go to Devices tab and click on the add button.





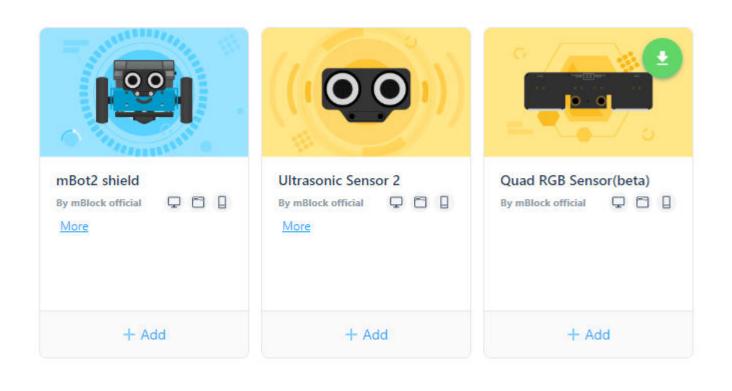
Step 2: Select CyberPi as a device to program it.





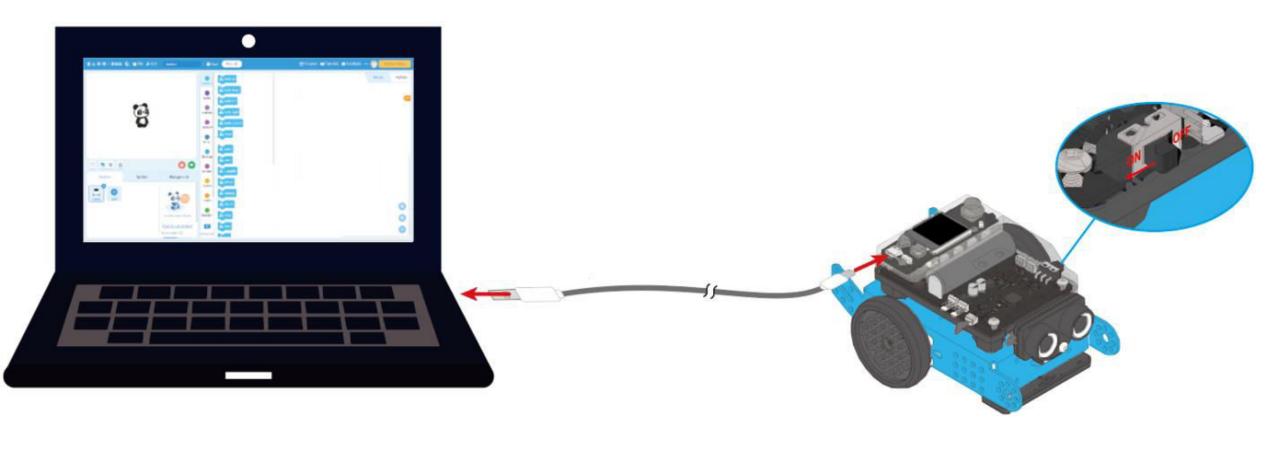
Step 3: Now, click on the extension and add following extensions one by one





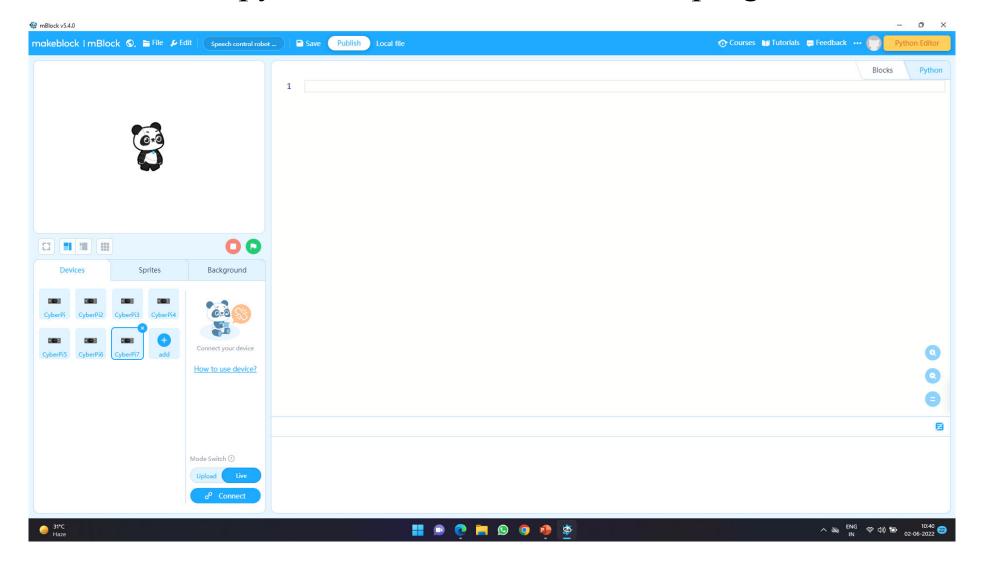


Step 4: Connect mBot2 with PC using an uploading cable





Step 5:Switch to the python tab/screen to write the program.





Step6:Let us write python program for speech controlled robot navigation.

```
#Speech Control Robot Navigation
    import event, time, cyberpi,mbot2
    cyberpi.speech.set_recognition_address(url = "{NAVIGATEURL}")
    cyberpi.speech.set access token(token = "{ACCESSTOKEN}")
    cyberpi.wifi.connect('user', '123456789')
    while not cyberpi.wifi.is_connect():
10
         pass
11
    cyberpi.console.set_font(16)
    cyberpi.console.print('Connected')
    time.sleep(2)
    cyberpi.console.clear()
    cyberpi.console.print('Press Joystick button and give directions')
17
    while True:
18
19
        if cyberpi.controller.is press("middle"):
20
            cyberpi.cloud.listen('english', 2)
21
            cyberpi.console.print(cyberpi.cloud.listen_result())
22
            if str(cyberpi.cloud.listen result()).find(str('forward')) > -1:
23
24
                 mbot2.forward(50, 1)
25
            if str(cyberpi.cloud.listen result()).find(str('backward')) > -1:
26
                 mbot2.backward(50, 1)
27
28
            if str(cyberpi.cloud.listen_result()).find(str('left')) > -1:
29
                 mbot2.turn_left(50, 1)
30
31
            if str(cyberpi.cloud.listen_result()).find(str('right')) > -1:
32
                 mbot2.turn_right(50,1)
33
34
```



Thank you!