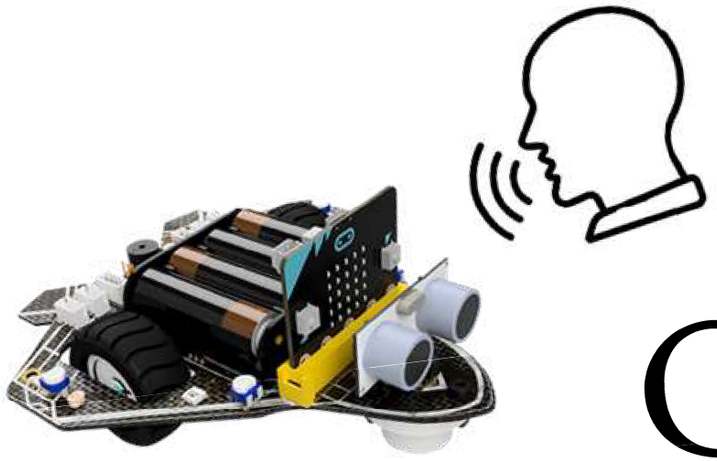
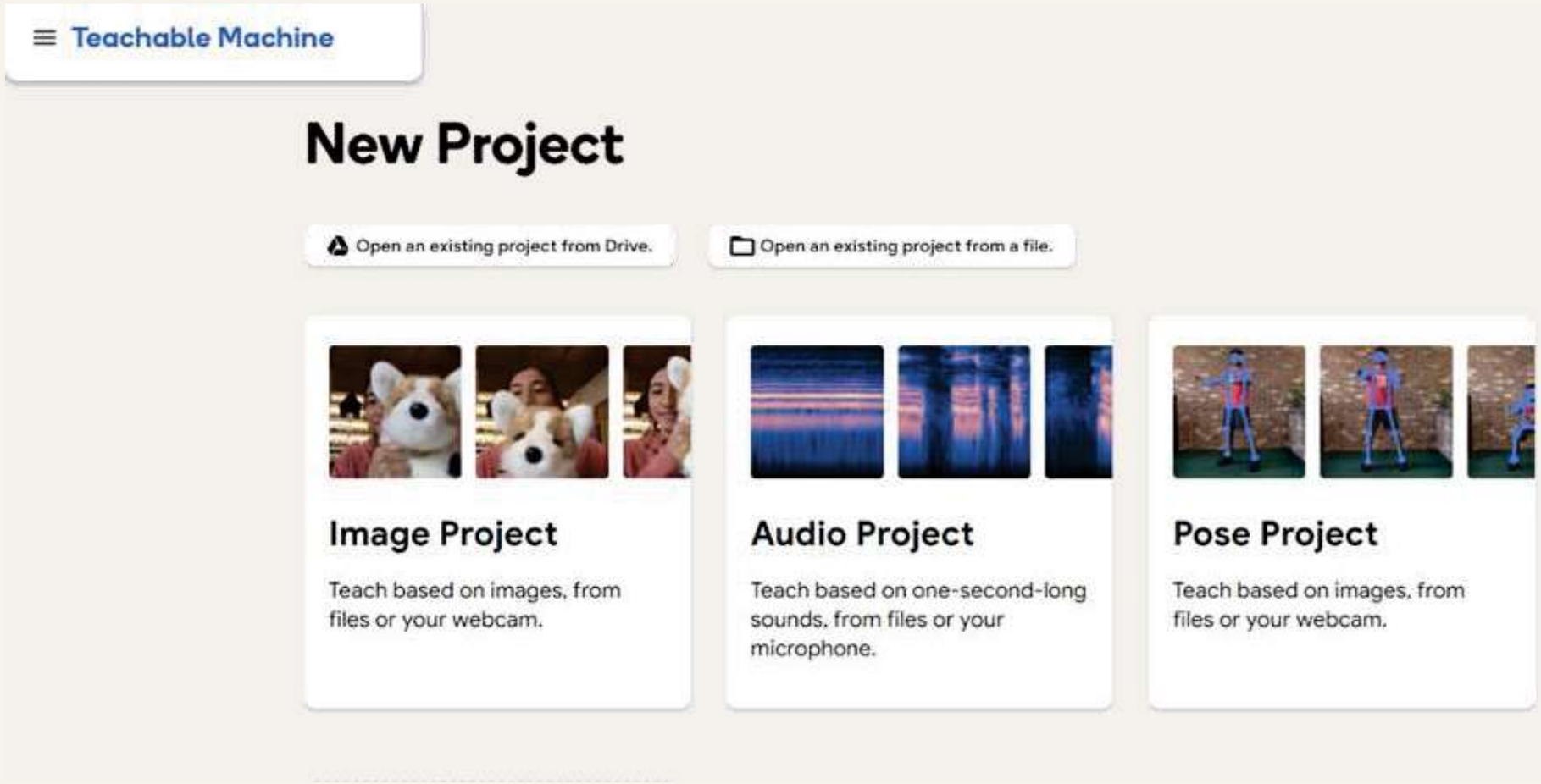


Voice Controlled Robot

Introduction

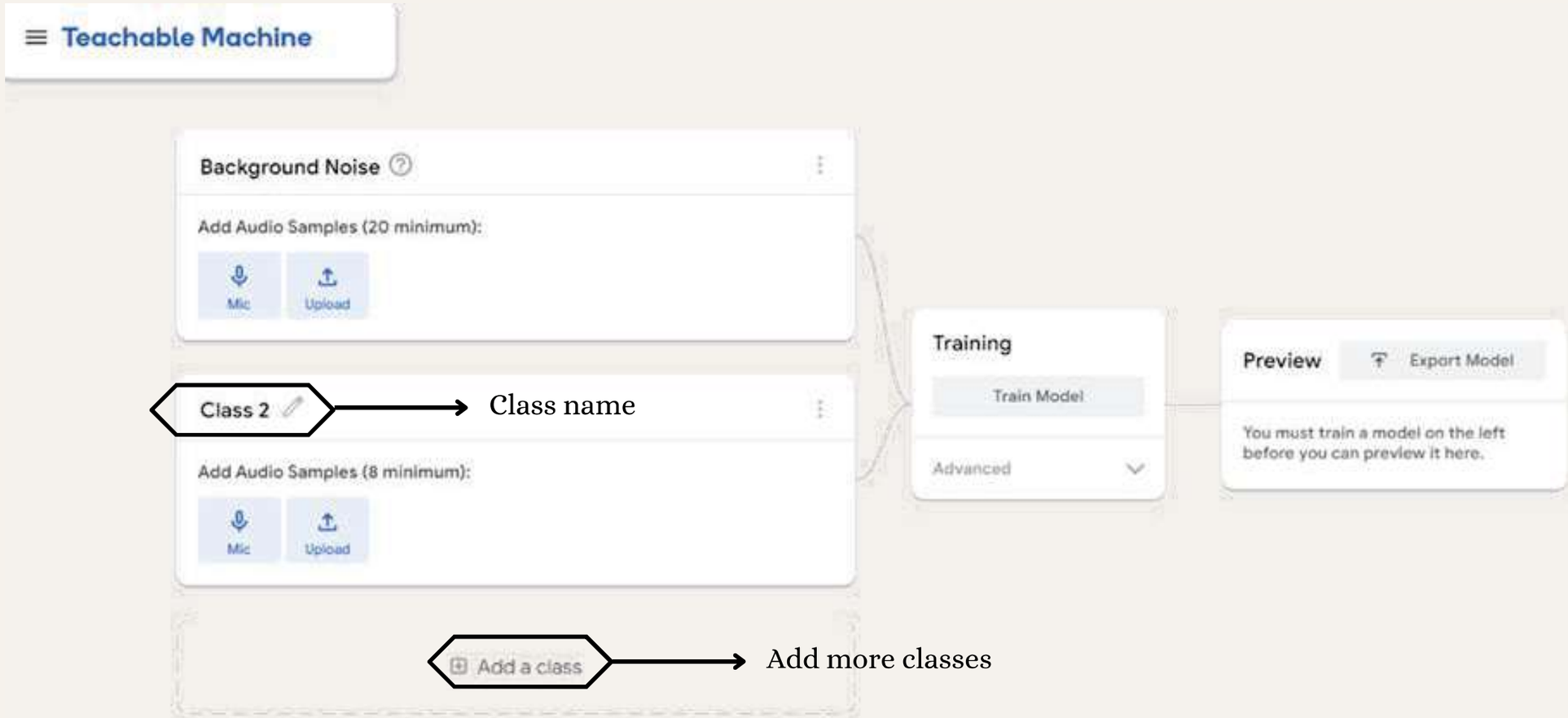
A Robot is an automatic machine designed to carry out a task. The Voice controlled robot helps to control the robot through voice commands sent by the user. The integration of STEMBOT and google teachable platform is done to capture and read the voice commands. The STEMBOT is trained by the voice commands to move in forward, backward, left, and right directions. After receiving the commands, the STEMBOT then operates the motors.

Step 1: - Train the robot using audio project



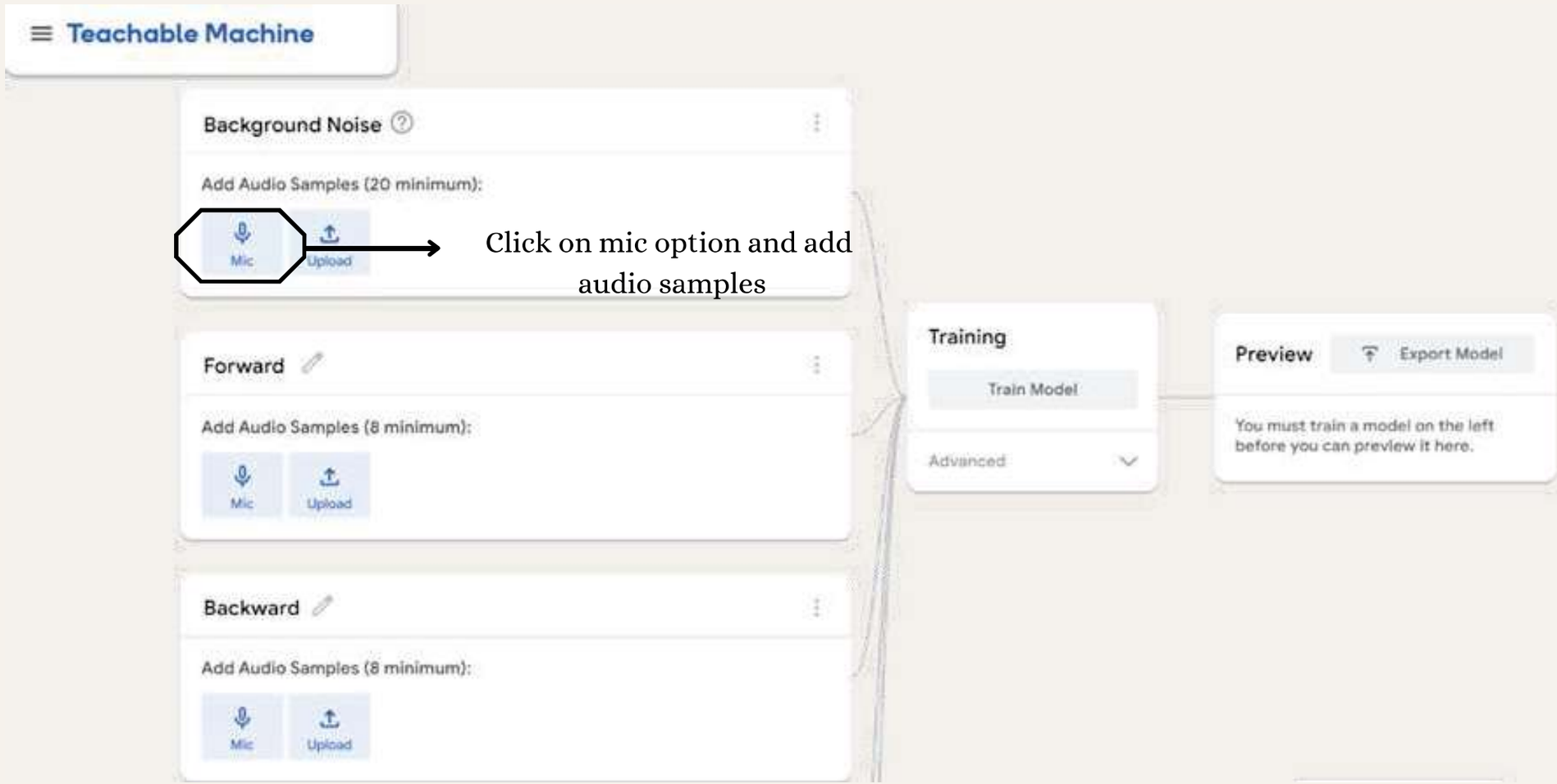
continue to next. . . .

Step 2: - Create 4 classes named forward, backward, left, and right.



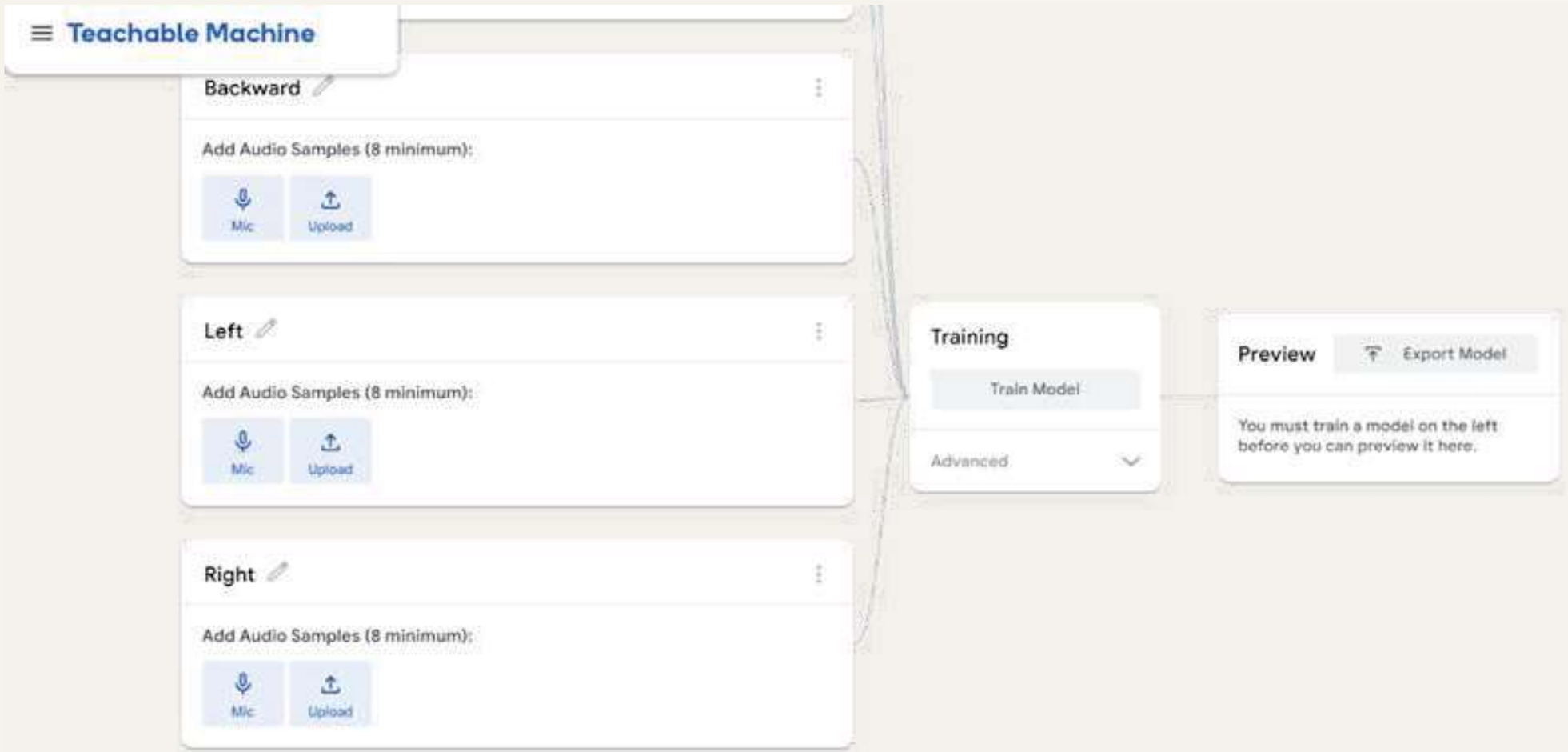
continue to next. . . .

Step 3: - Write the classes name and add audio samples.



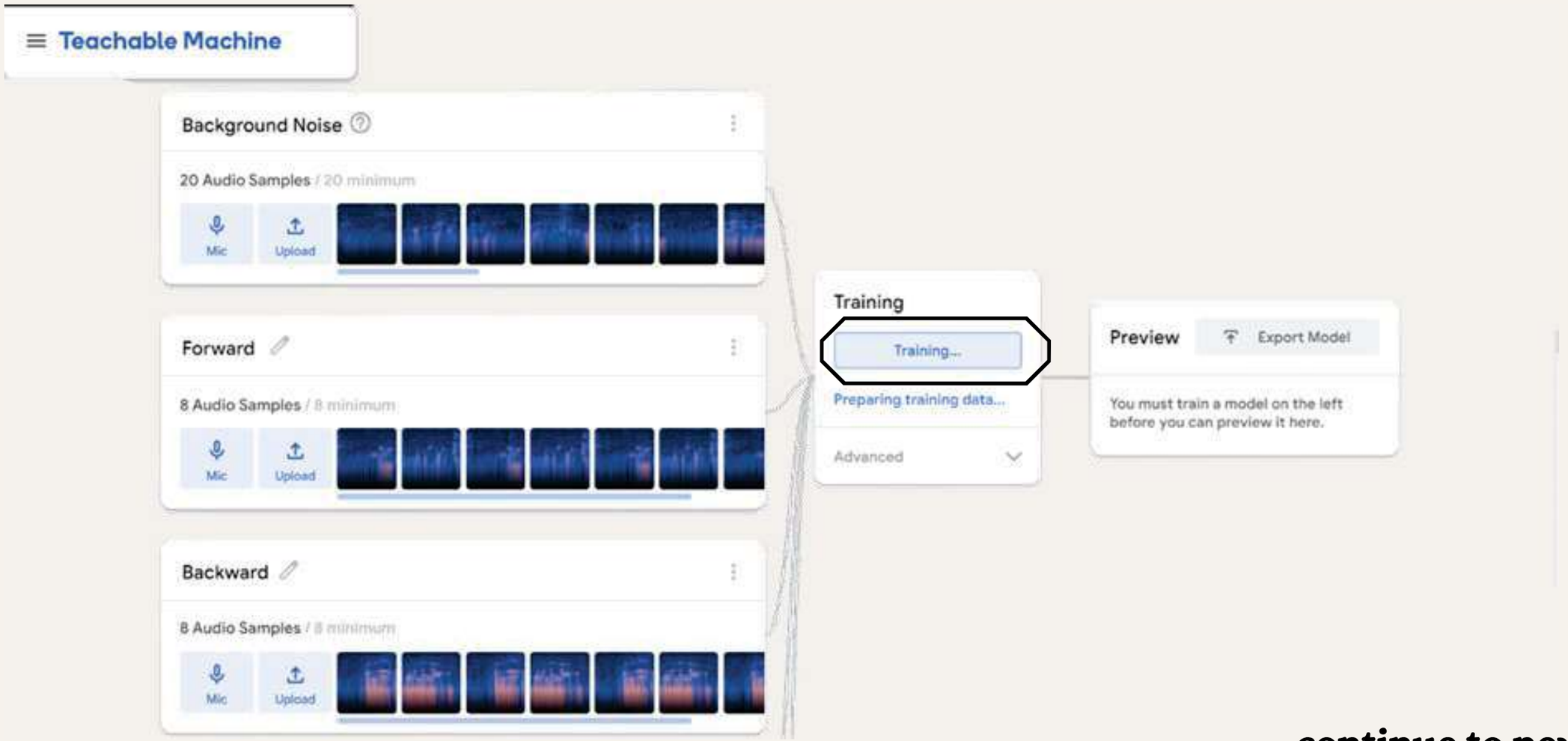
continue to next. . . .

Step 3: - Write the classes name and add audio samples.



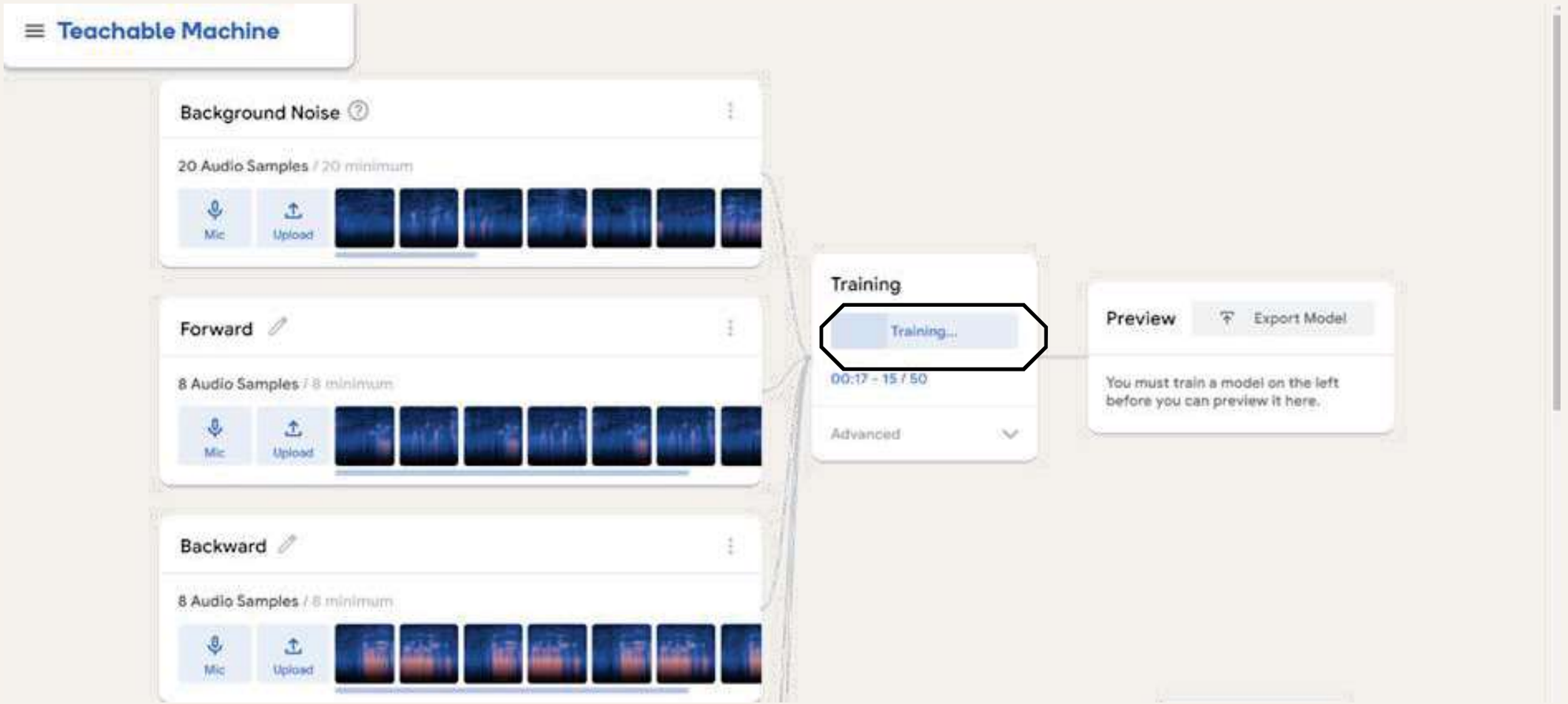
continue to next. . . .

Step 4: - Click on Training option.



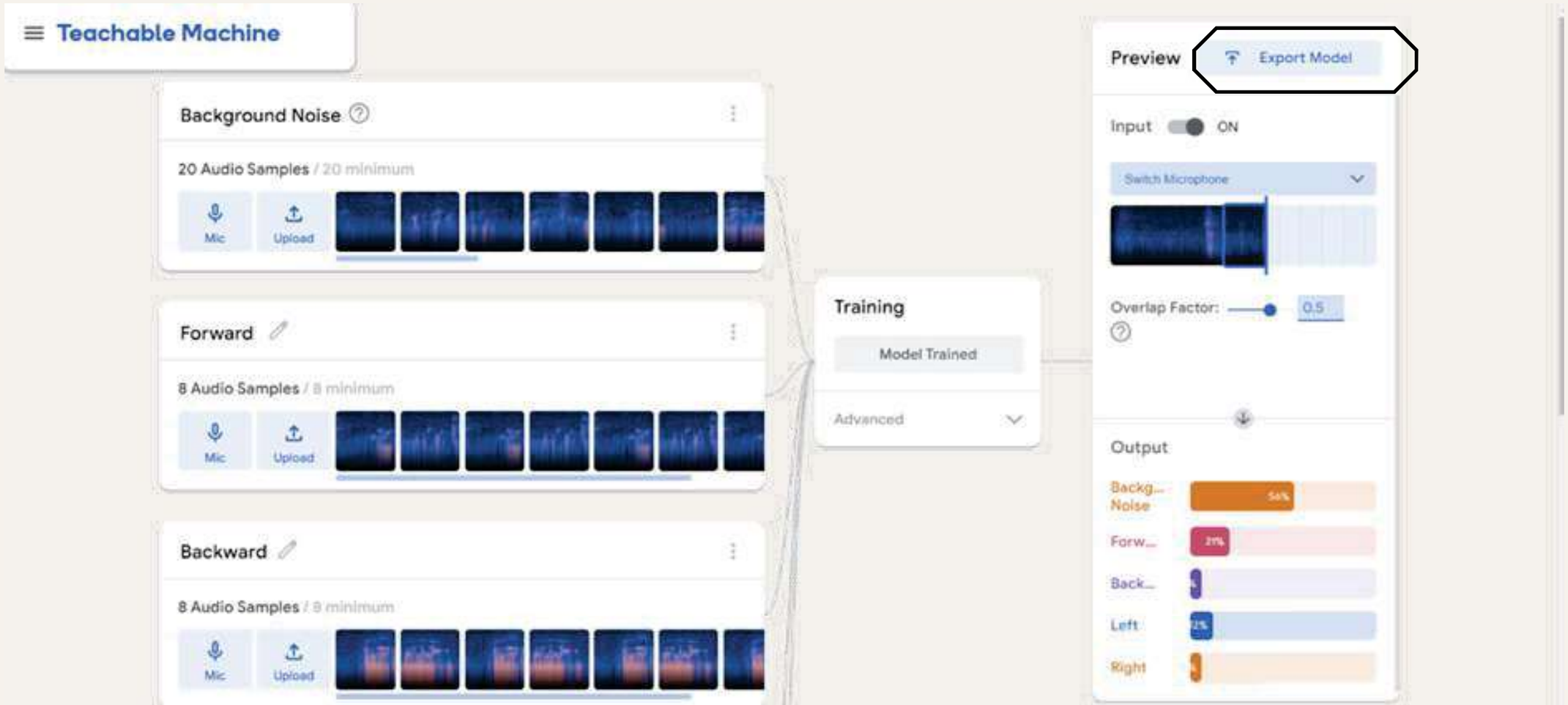
continue to next. . . .

Step 5: - Model is start training



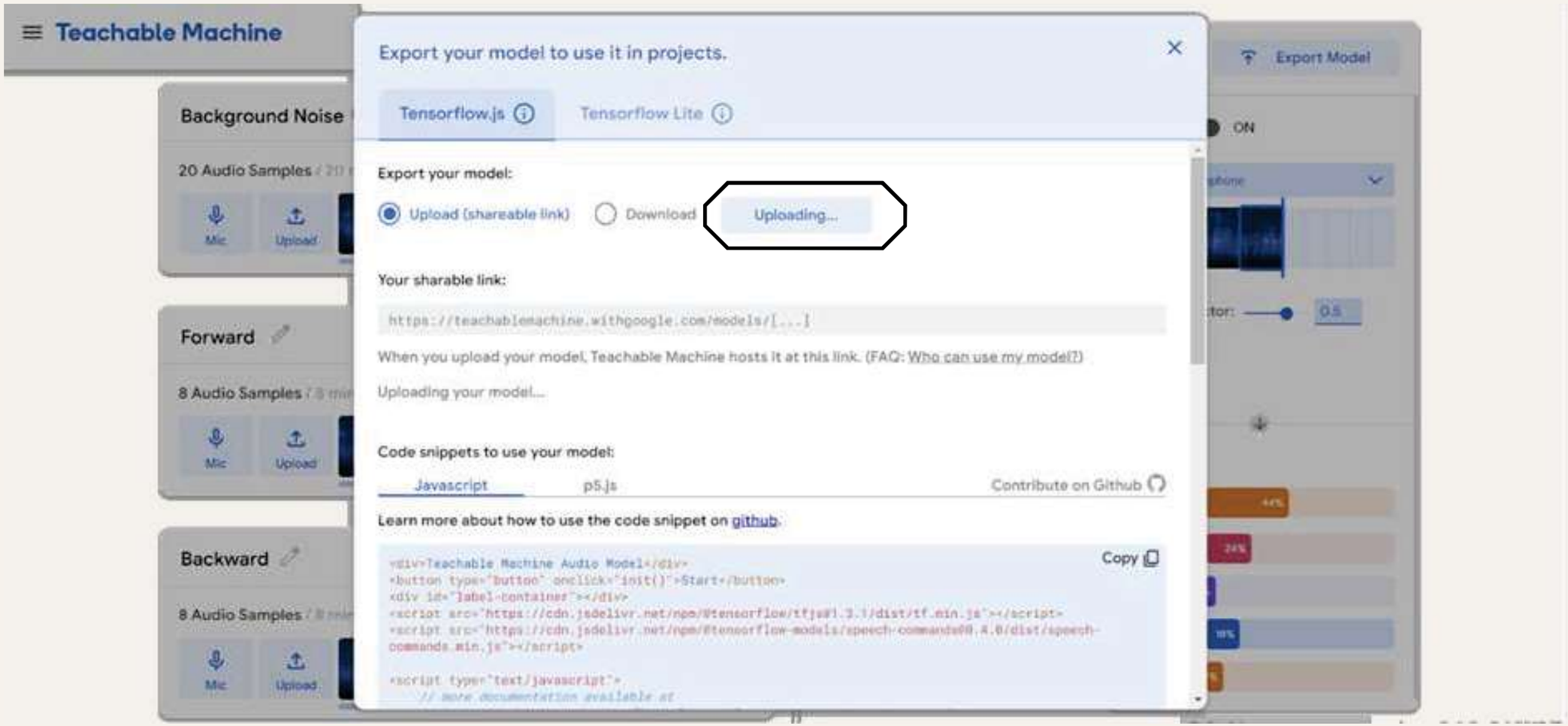
continue to next. . . .

Step 6: - Click on Export model



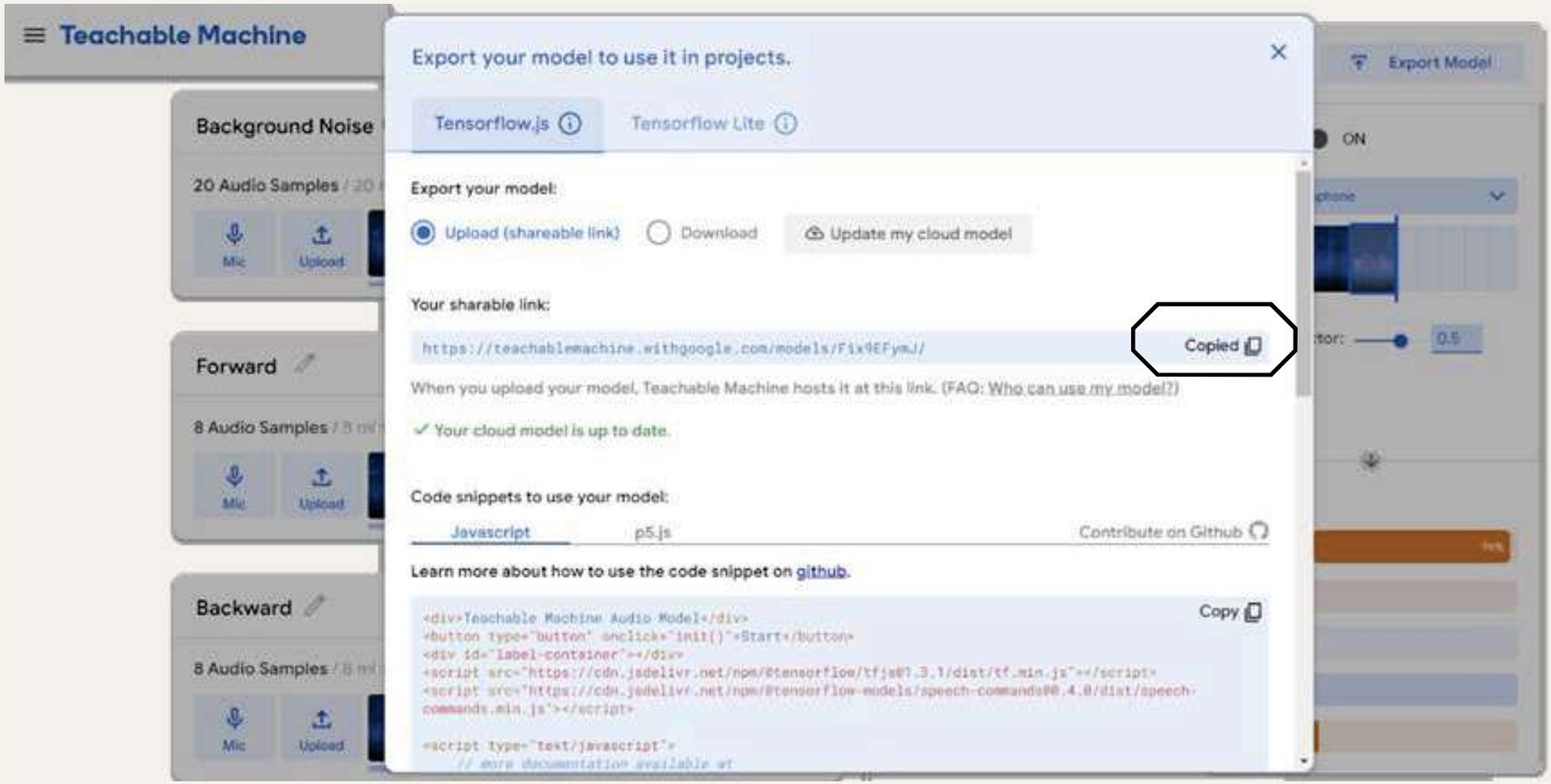
continue to next. . . .

Step 7: - click on upload my channel



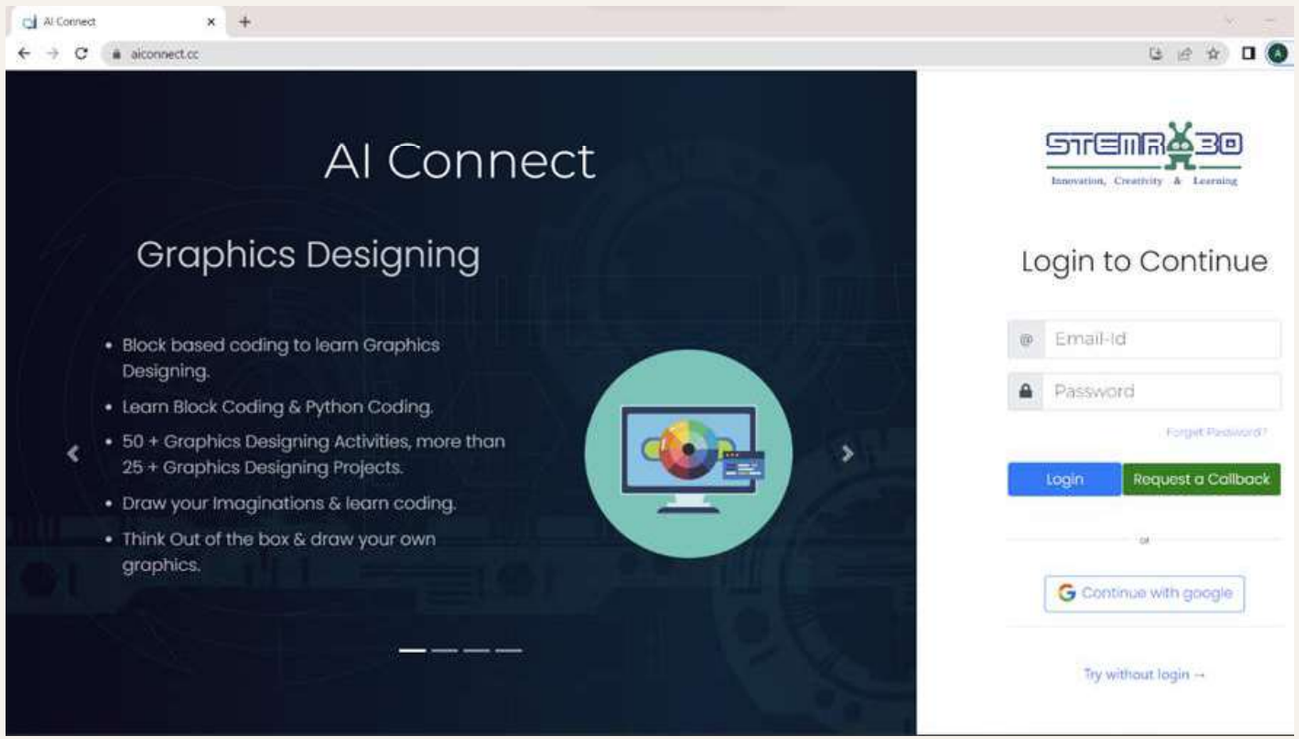
continue to next. . . .

Step 8: - copy the link.



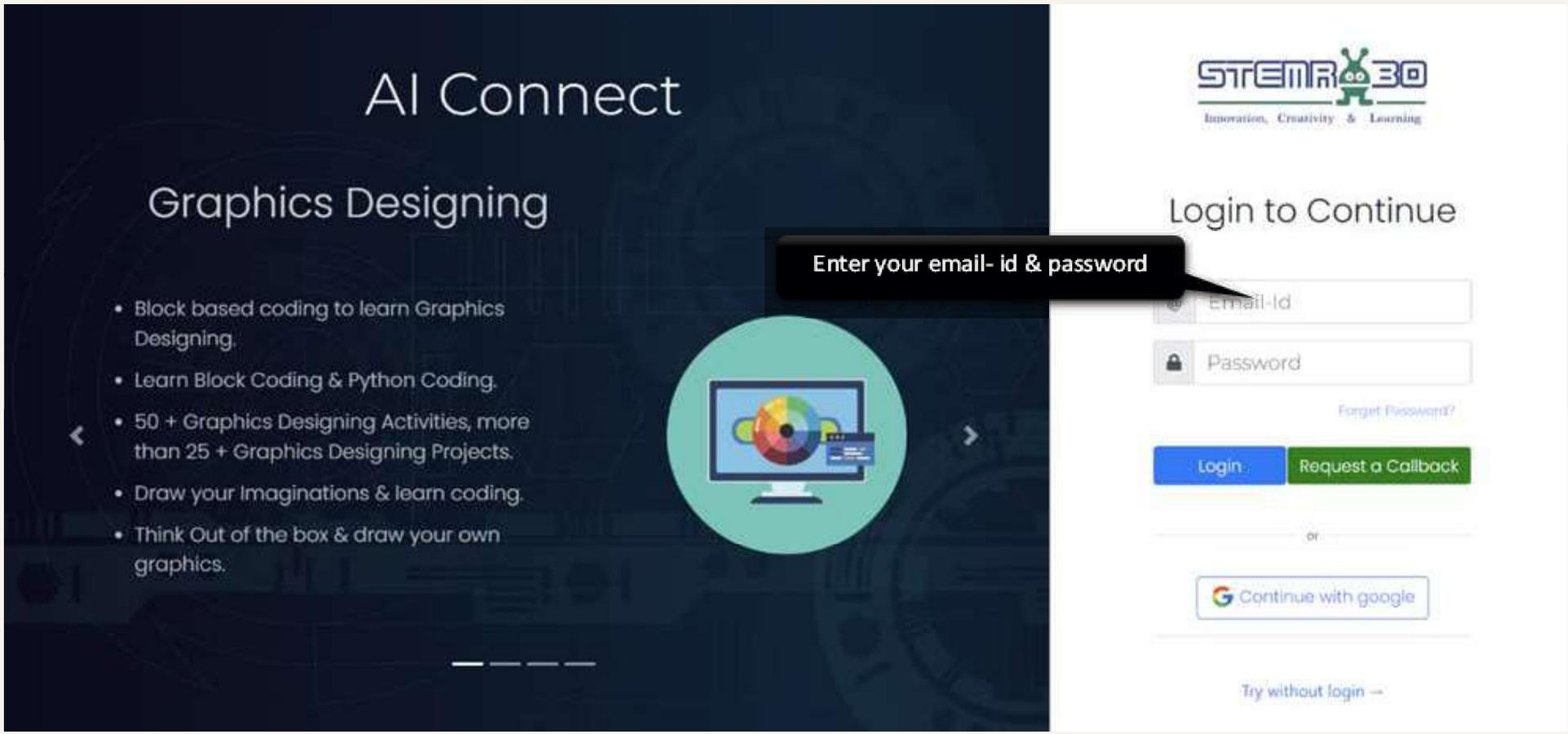
Source Code

Step – 1 Go to https://aiconnect.cc/login.



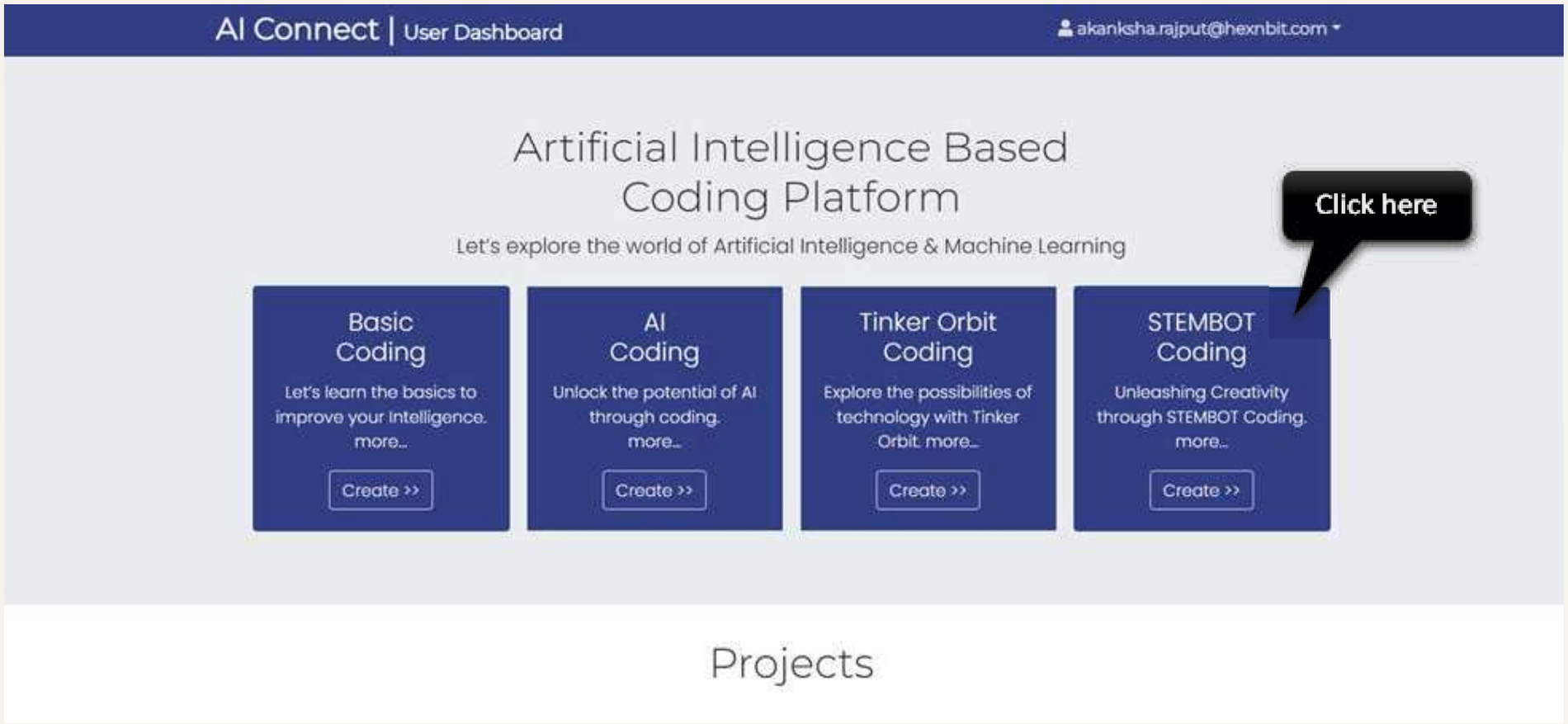
continue to next. . . .

Step-2 Log-in through your aiconnect mail id & password/ continue with google.



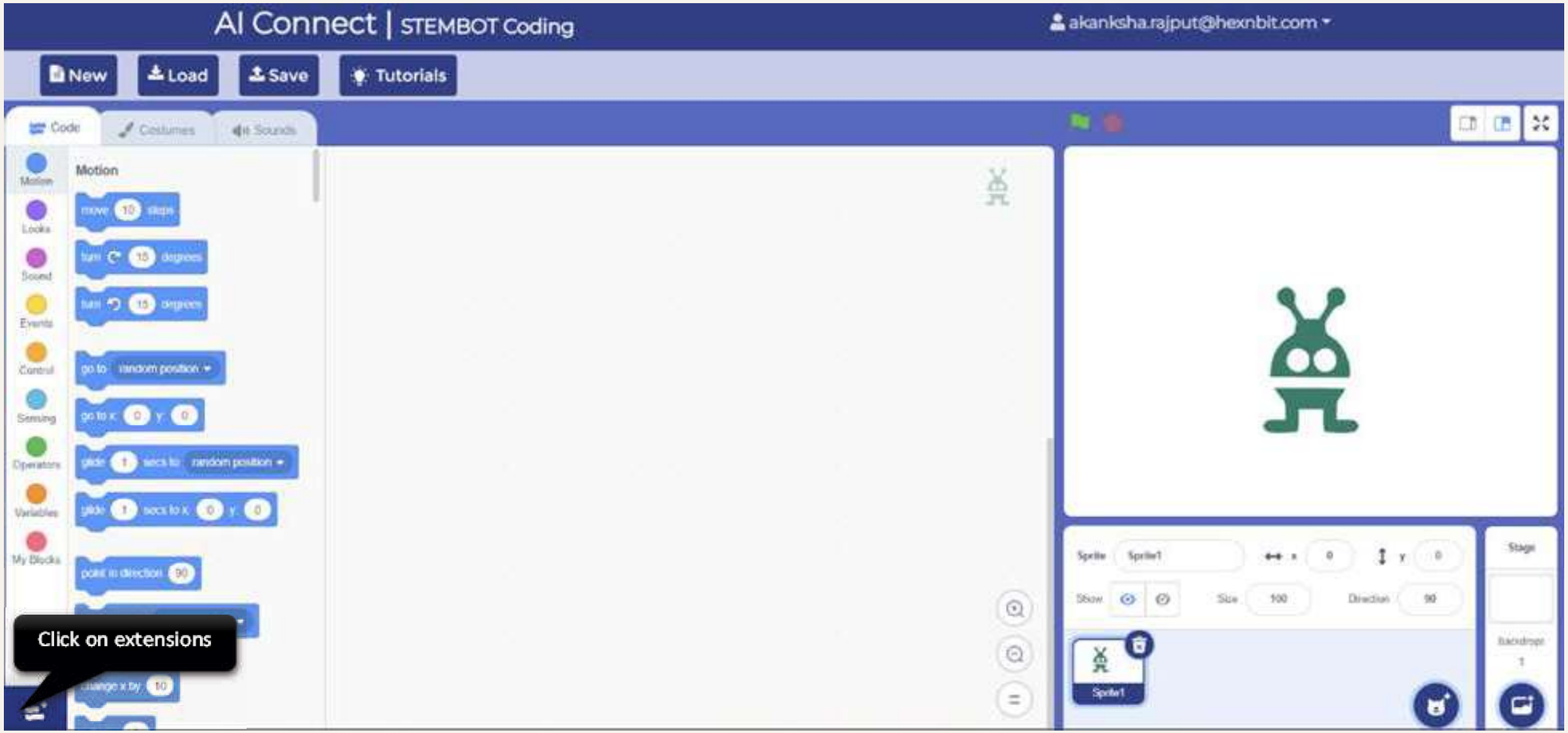
continue to next. . . .

Step – 3 Click on STEMBOT Coding to create a project/ click on create.



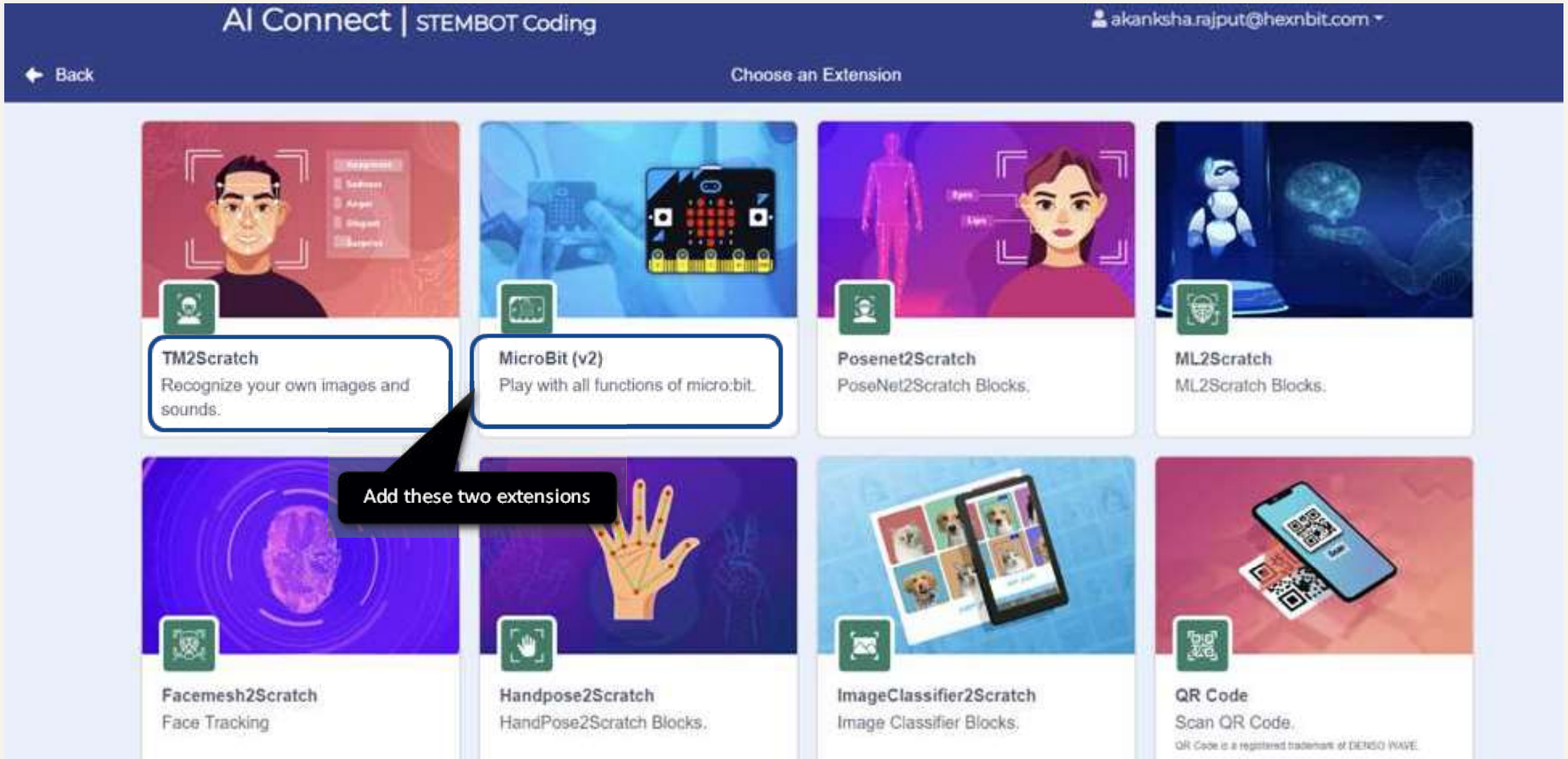
continue to next. . . .

Step-4 Click on extensions.



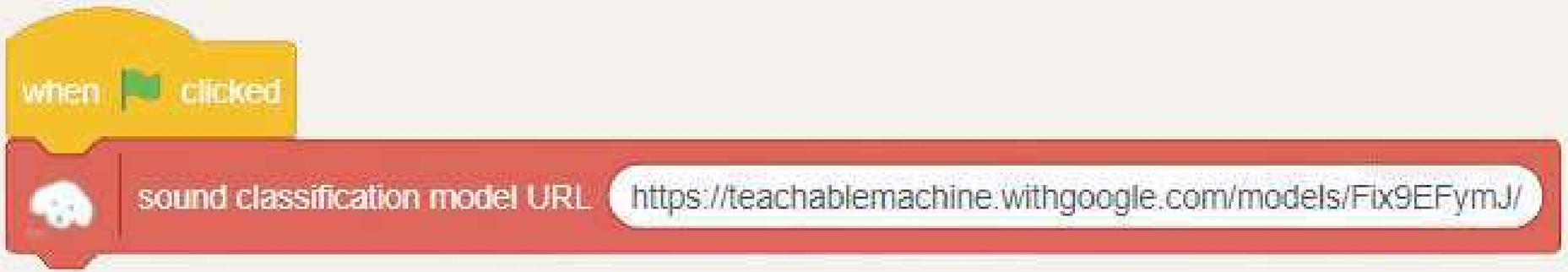
continue to next. . . .

Step-5 Add Micro: bit V2 and Google teachable extensions.



continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.

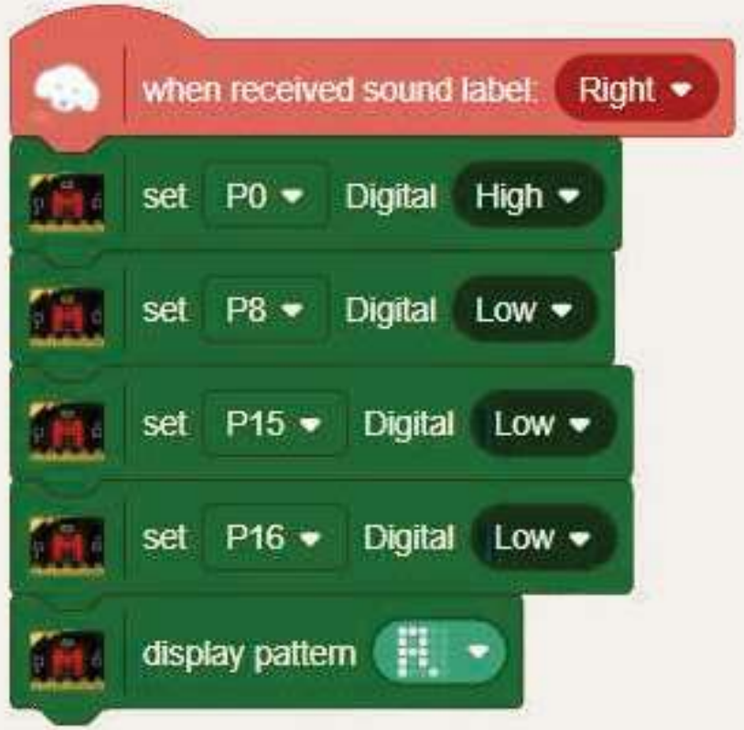


continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.

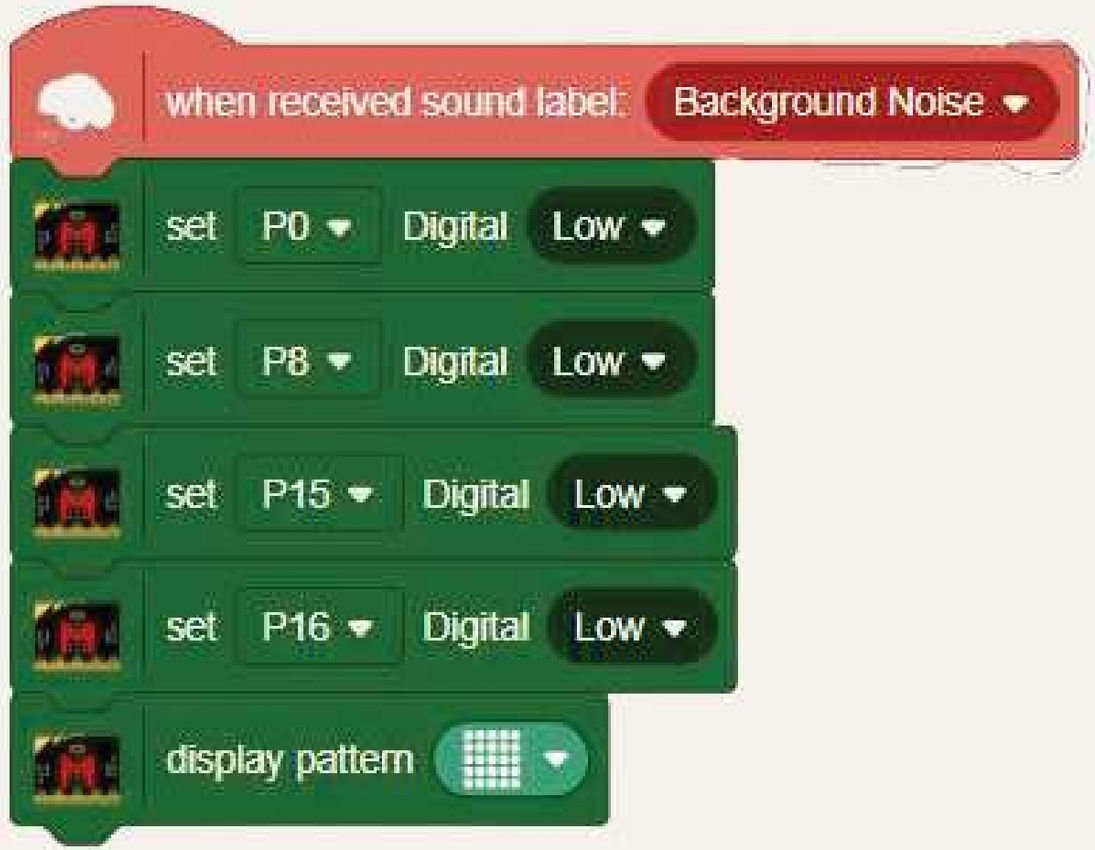
continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.



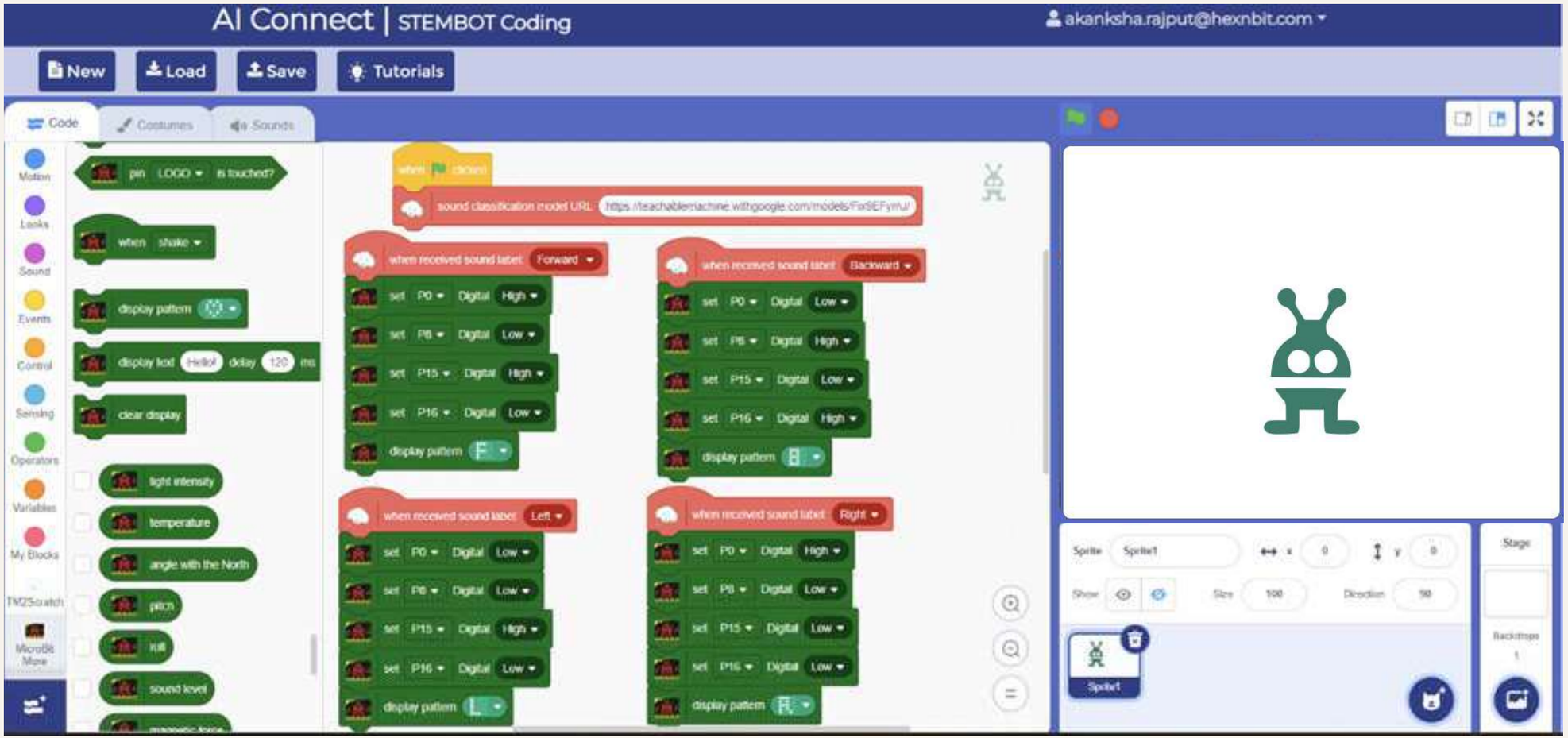
continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.



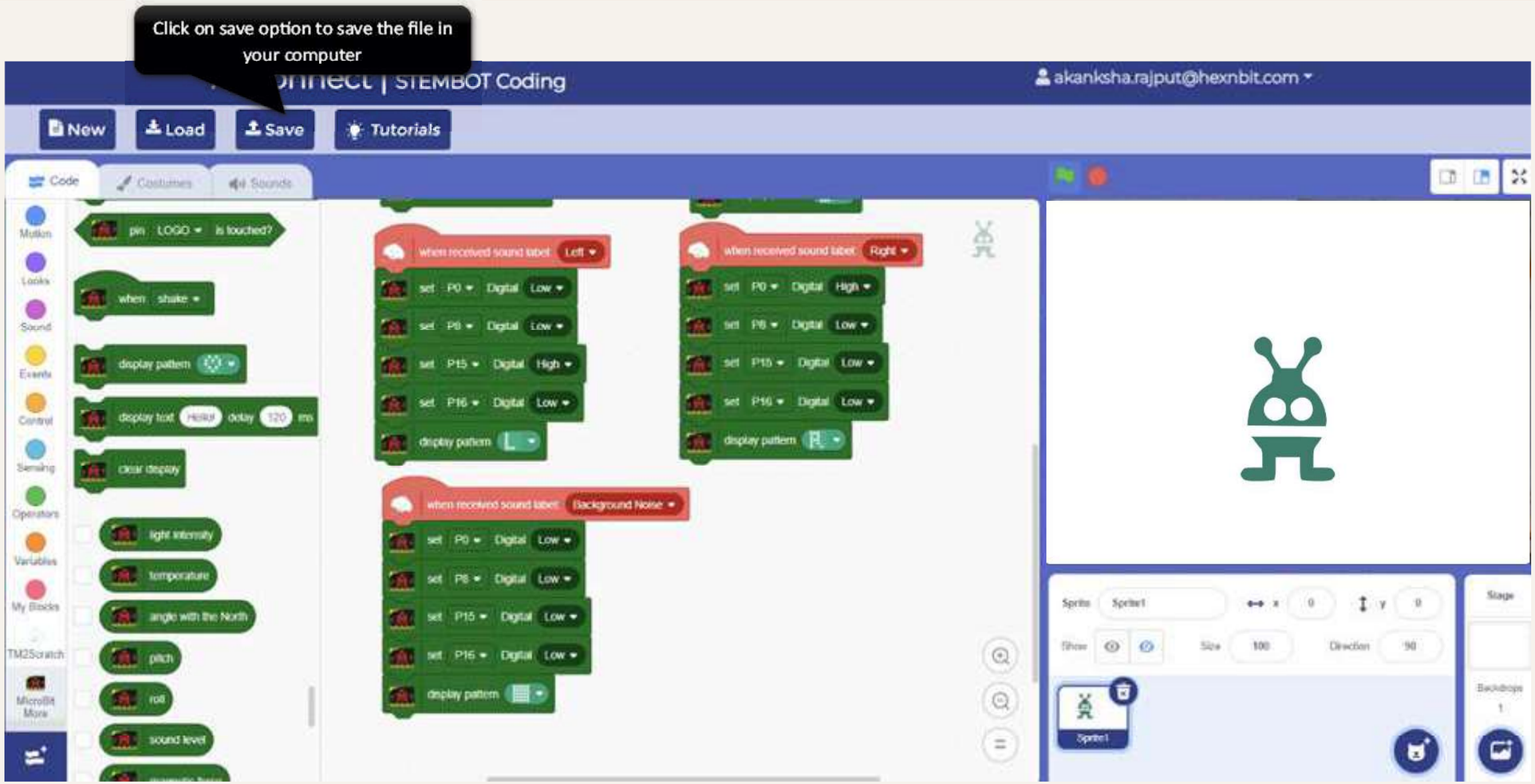
continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.



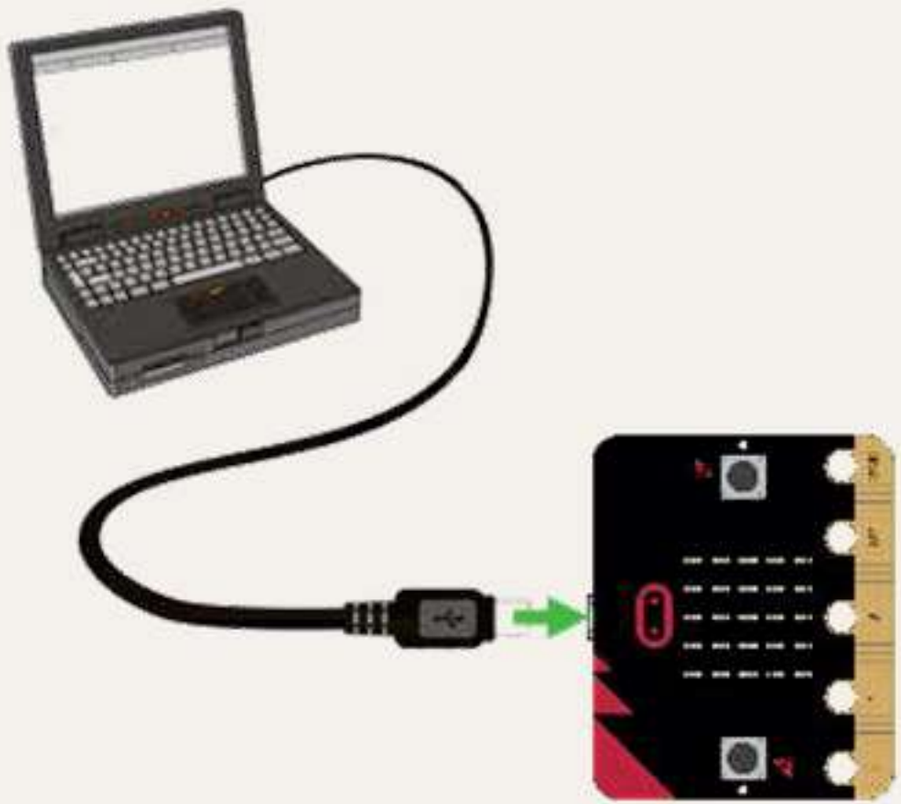
continue to next. . . .

Step- 6 Write the following code on the workspace by dragging the blocks.



continue to next. . . .

Step- 7 Connect the micro: bit with your computer.

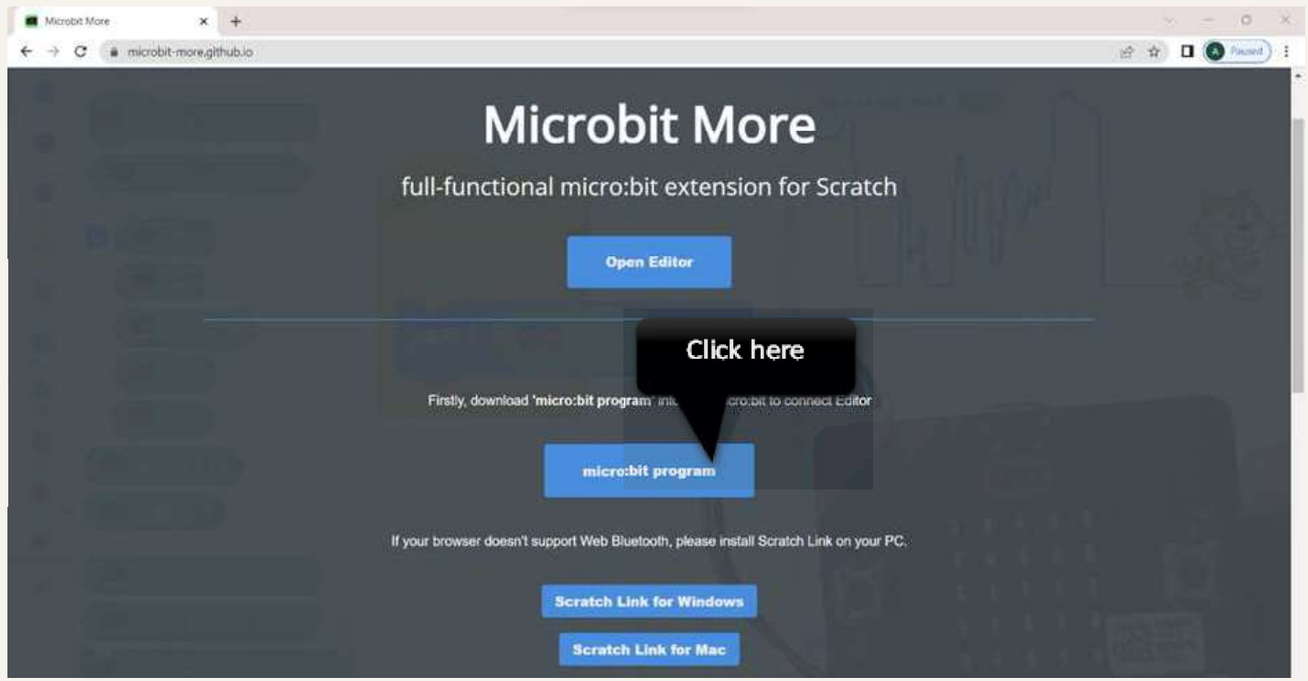


continue to next. . . .

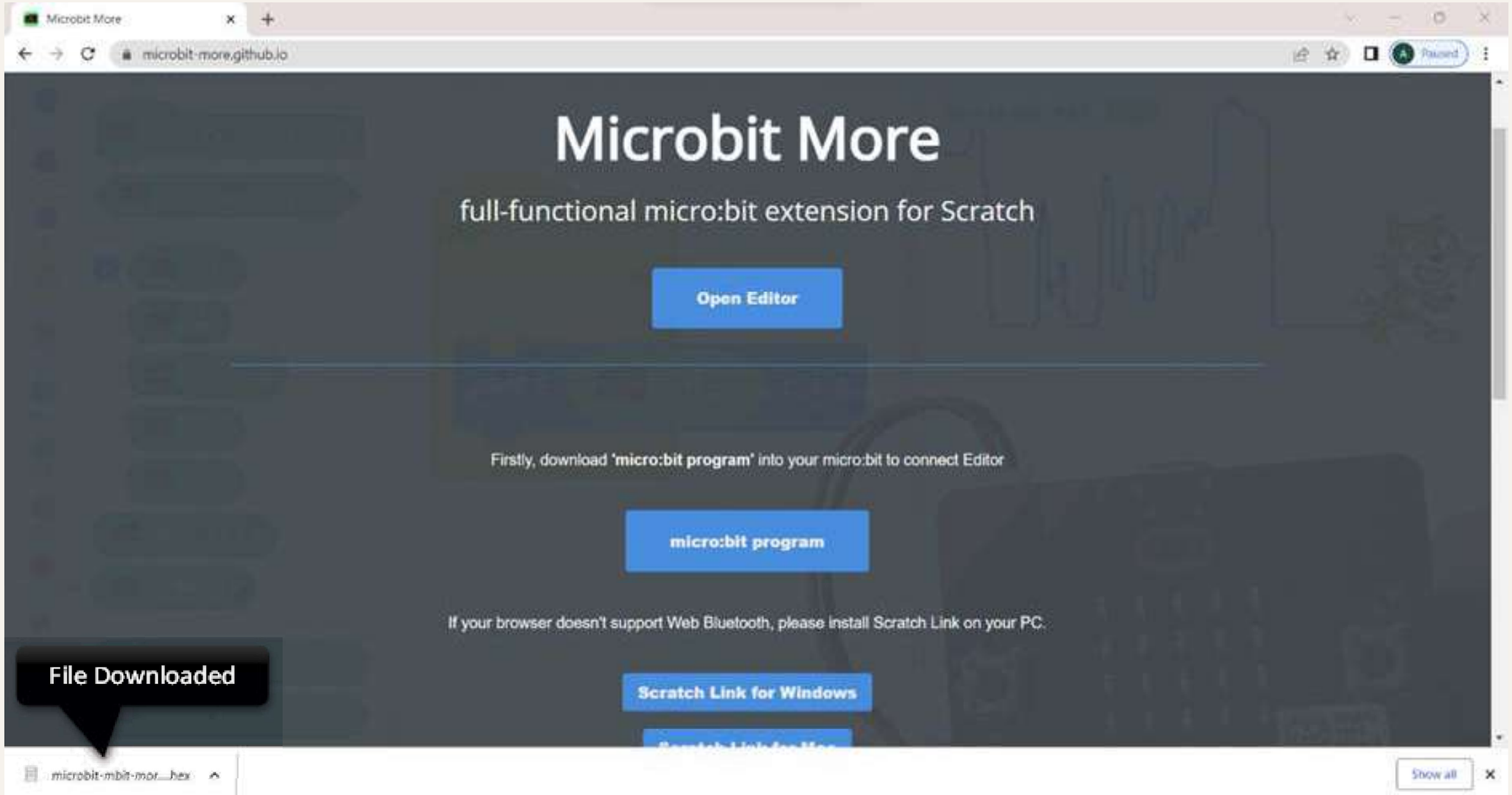
Step- 8 Upload the Bluetooth Hex file inside the micro: bit.

a. Go to Step-2 Log-in through your g-mail id & password/ continue with google.

b. Click on micro: bit program to download the Bluetooth hex file.



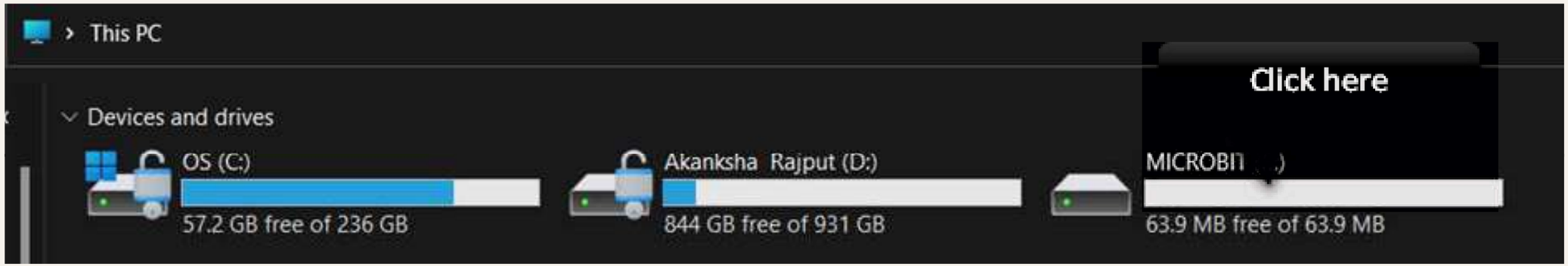
continue to next. . . .



continue to next. . . .

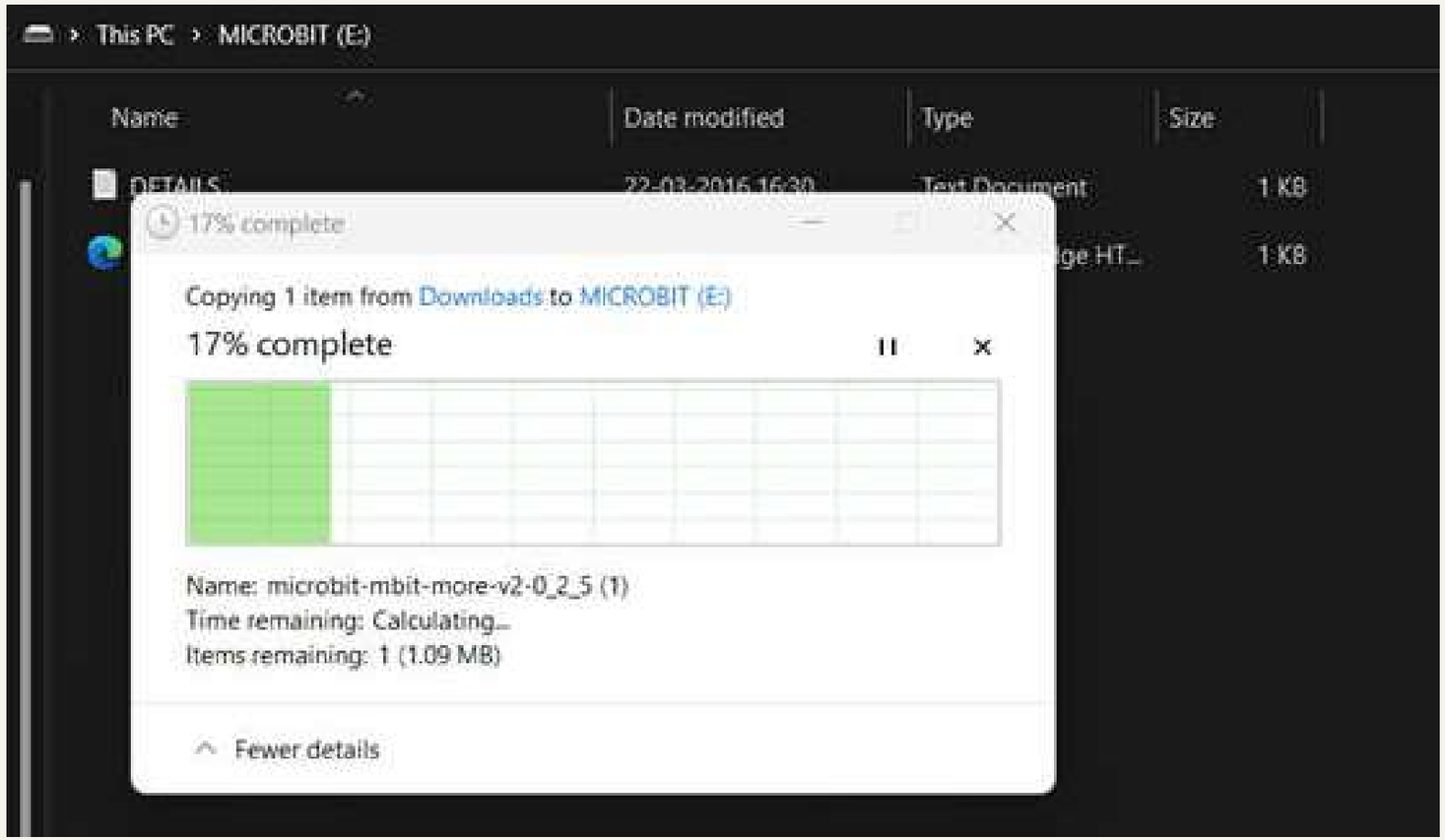
c. Copy this file from the download.

d. go to this pic and click on MICROBIT (E)



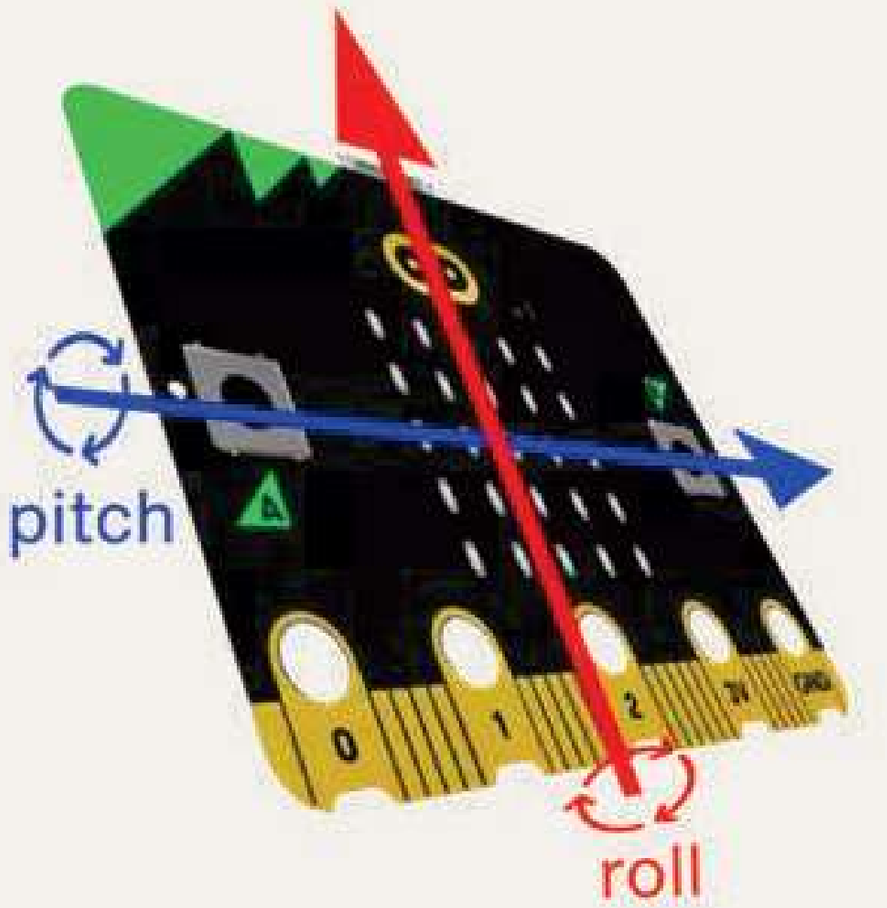
continue to next. . . .

e. paste the copied file in MICROBIT (E)



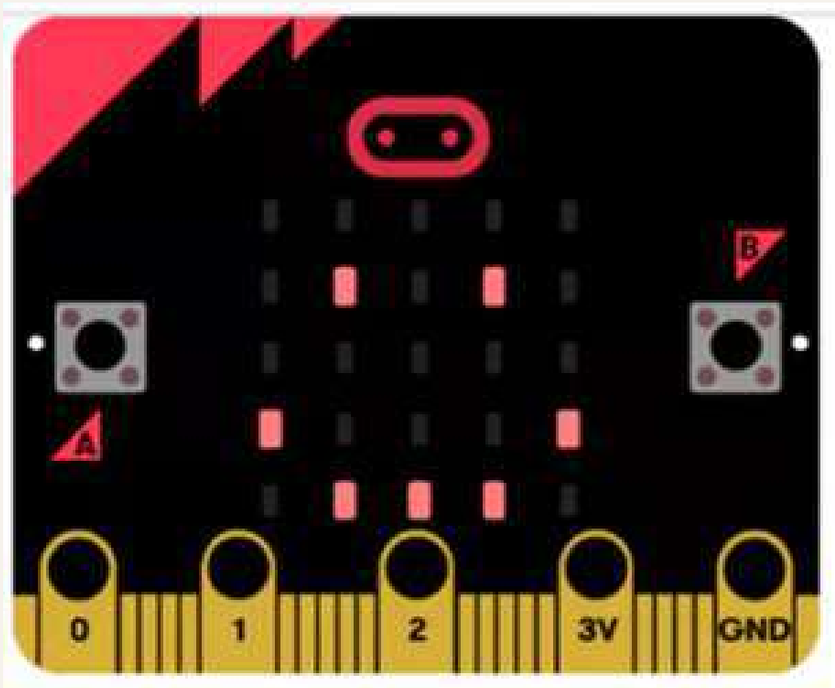
continue to next. . . .

f. Tilt your micro: bit in X, Y and Z directions and try to turn on all the leds.



continue to next. . . .

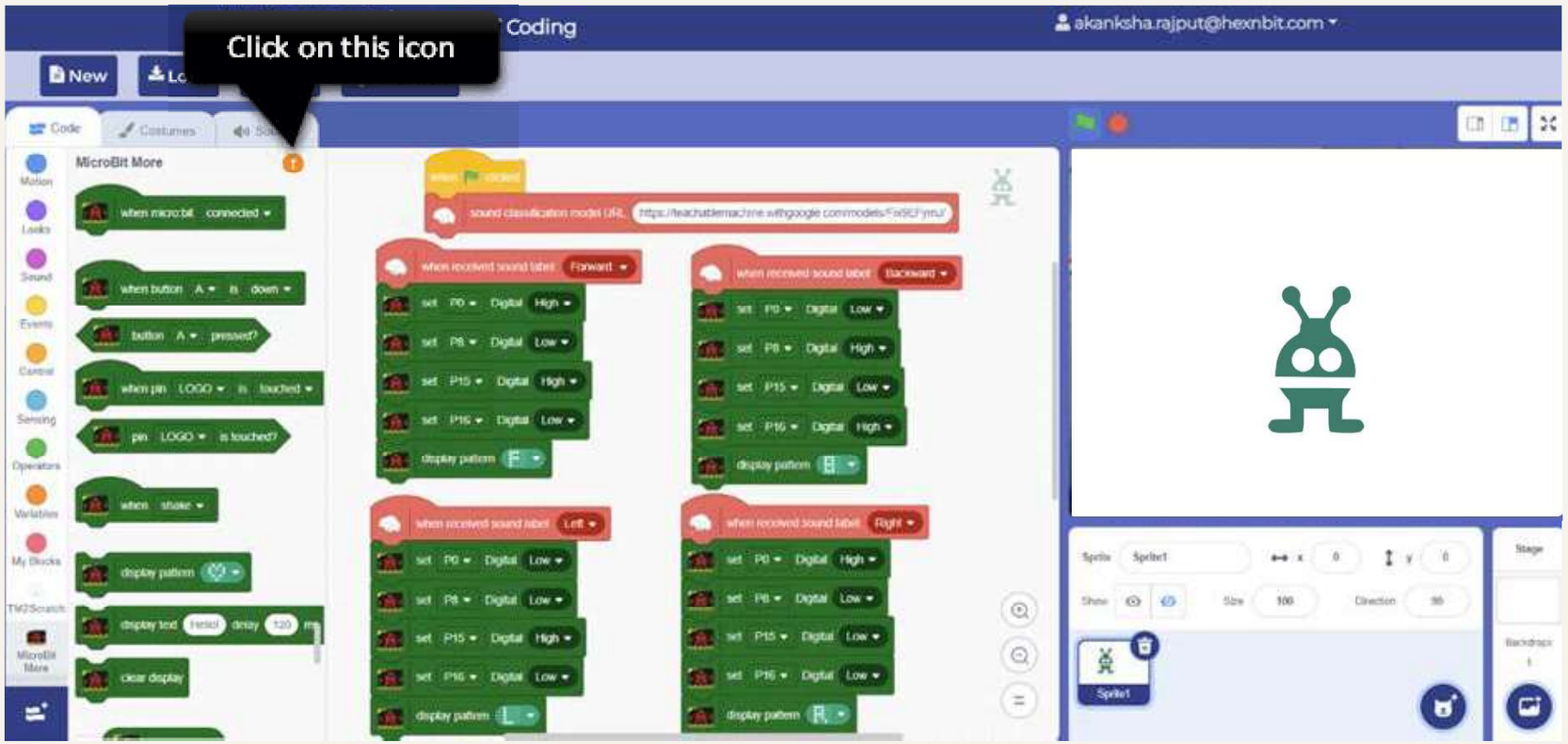
g. If all the led’ s are turned on then the smile icon will display after that it will show your micro: bit name.



continue to next. . . .

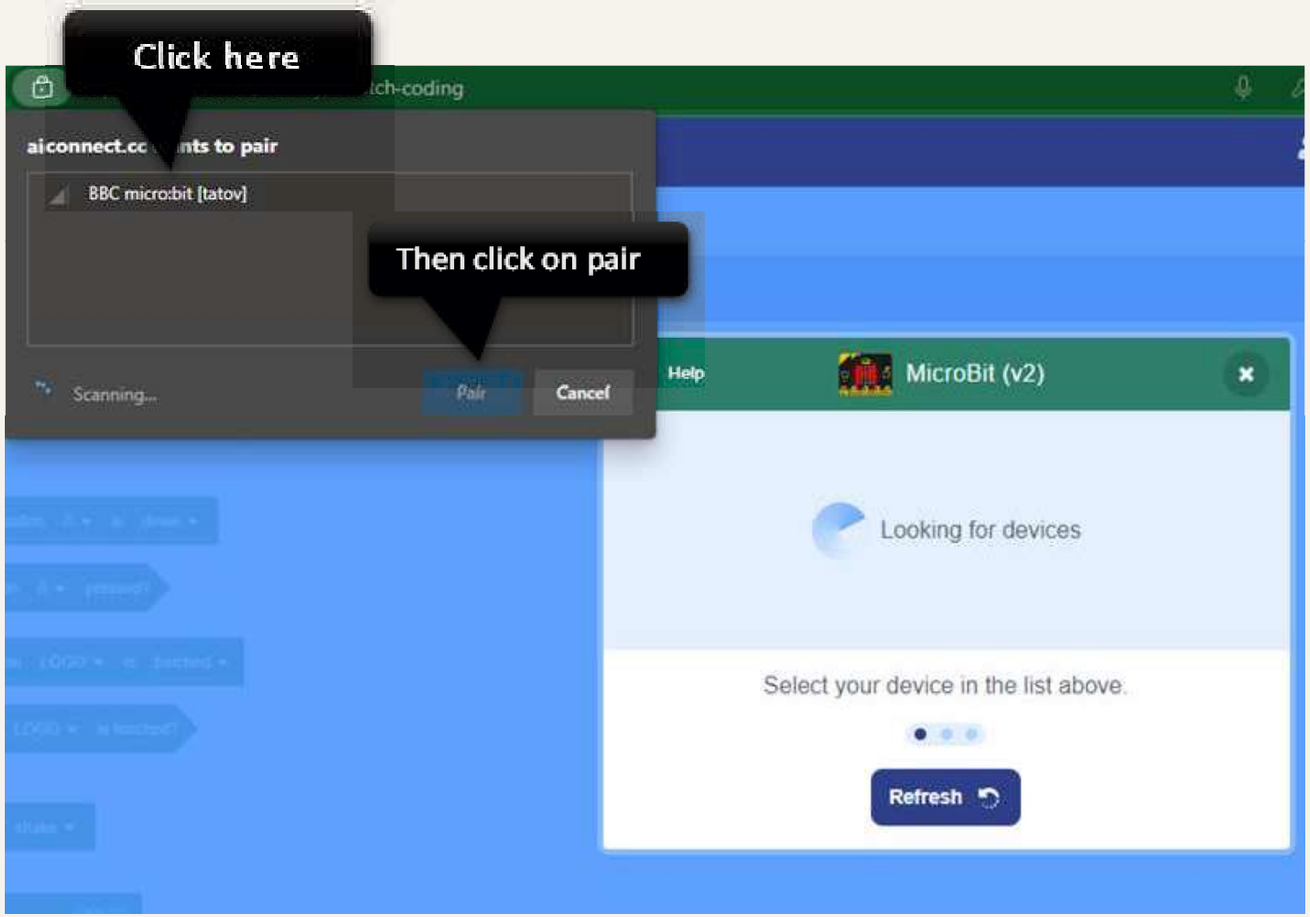
Step- 10 Remove the micro: bit from your computer and connect it with STEMBOT. And power up the robot by pressing the power button.

Step- 11 Now connect your micro: bit with aiconnect platform.



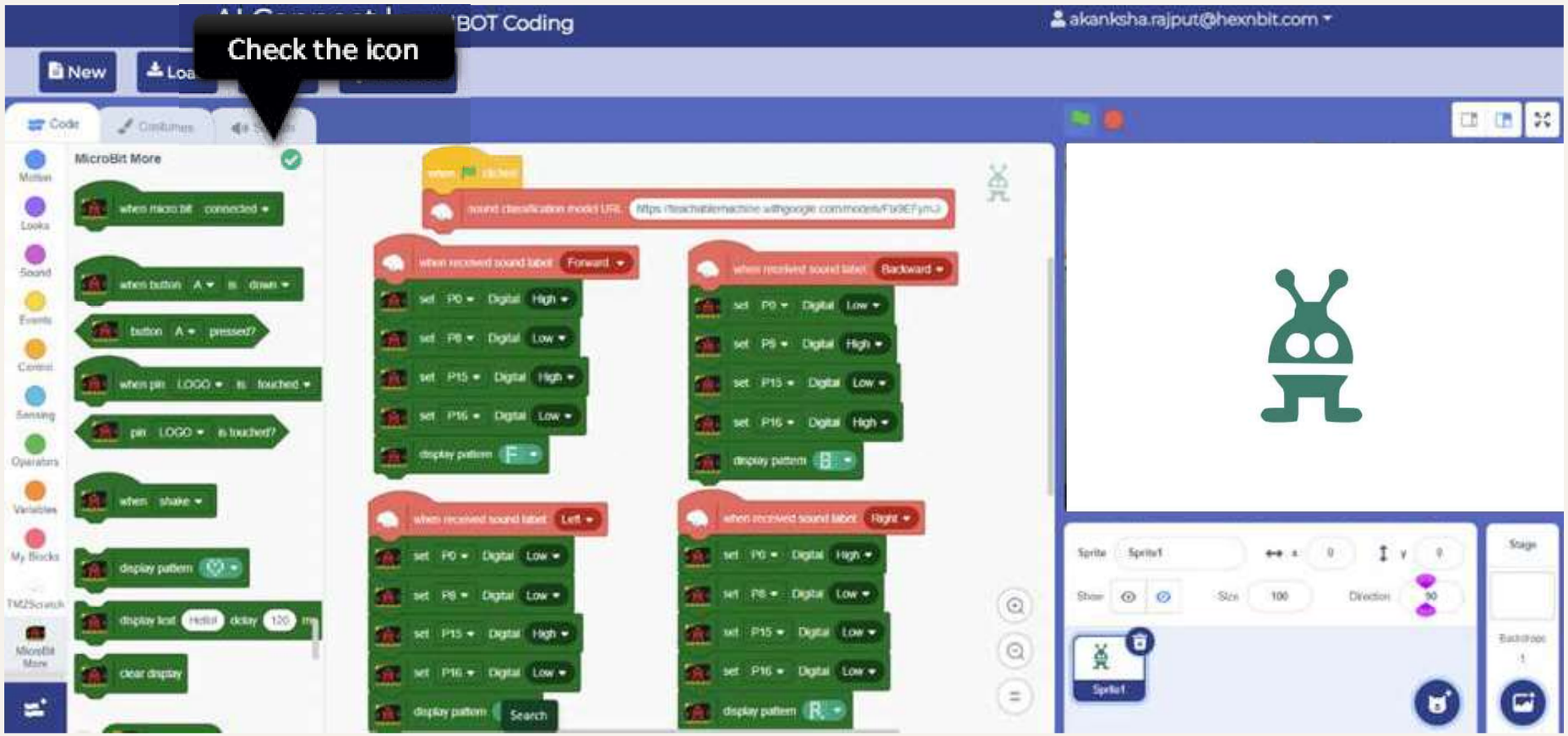
continue to next. . . .

Step- 12 A pop-up window will come where you can see your micro: bit name. Click on the name then click on the pair option.



continue to next. . . .

Step- 13 Now you can see a green tick icon that means micro: bit is connected with the aiconnect platform via Bluetooth.



Thank you