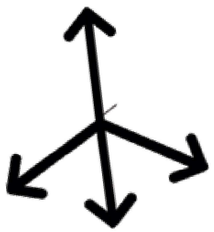
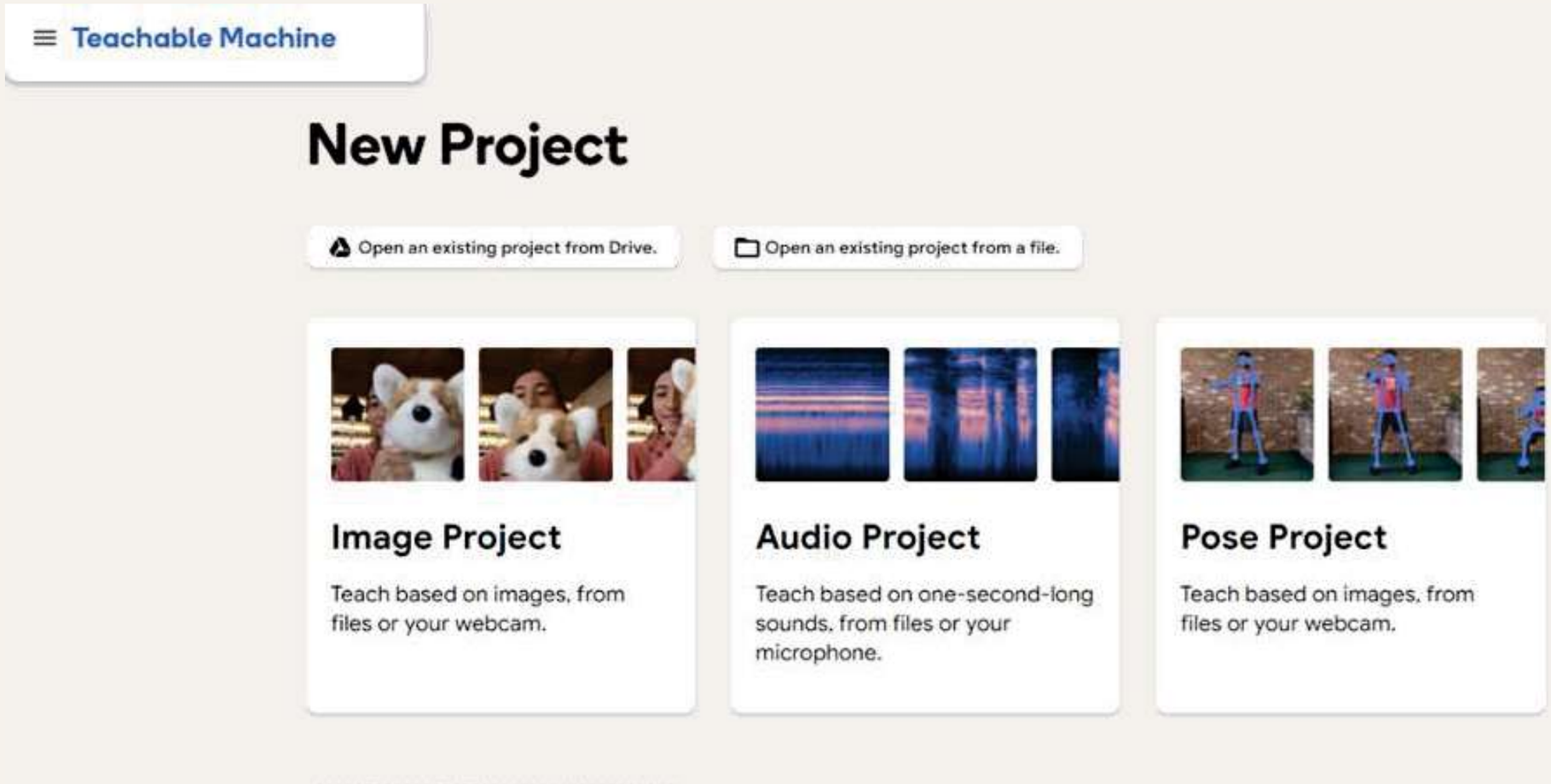
Smart Direction Controller



Introduction

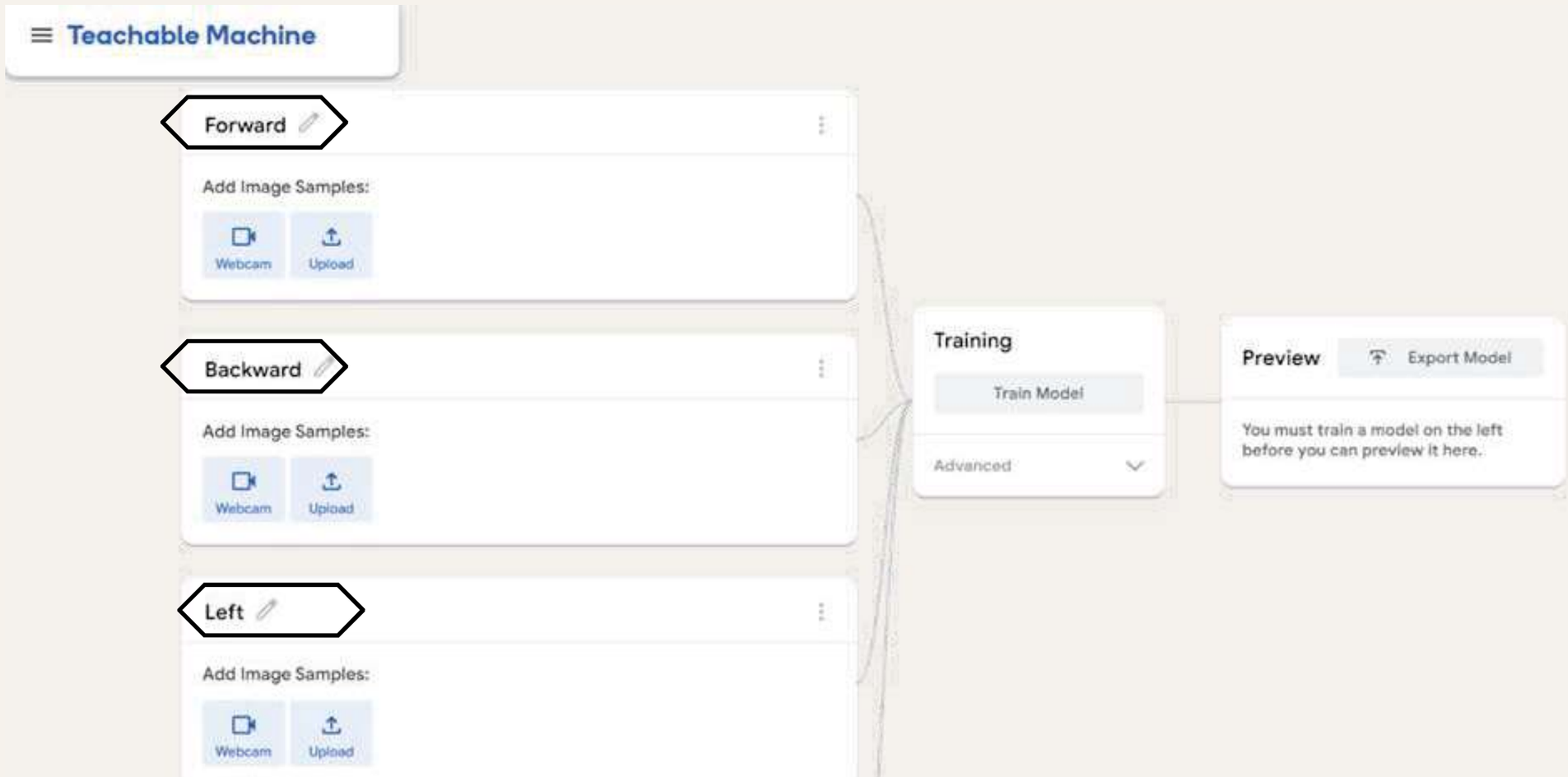
Robots are playing an essential role in automation across all sectors like construction, military, medical, manufacturing, etc. A smart direction controller is a robot which can be controlled by different direction arrows. The integration of STEMBOT and google teachable platform is done to capture and detect any direction arrow. The STEMBOT is trained by some direction arrows to move in forward, backward, left, and right directions. After detecting the arrow, the STEMBOT then operates the motors.

Step 1: - Train the robot using image project



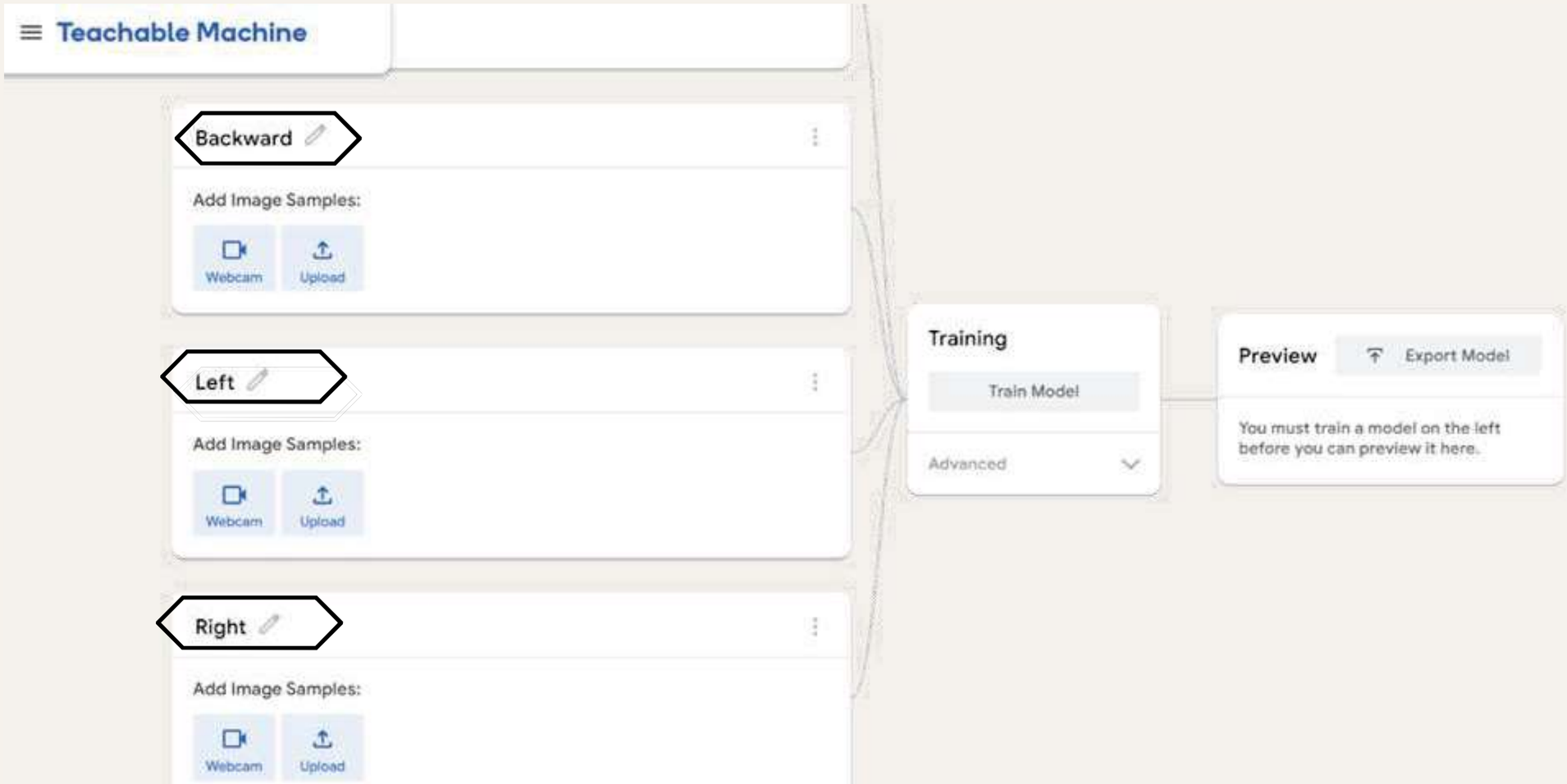
continue to next. . . .

Step 2: - Create 4 classes named Forward, Left, Right, Stop.



continue to next. . . .

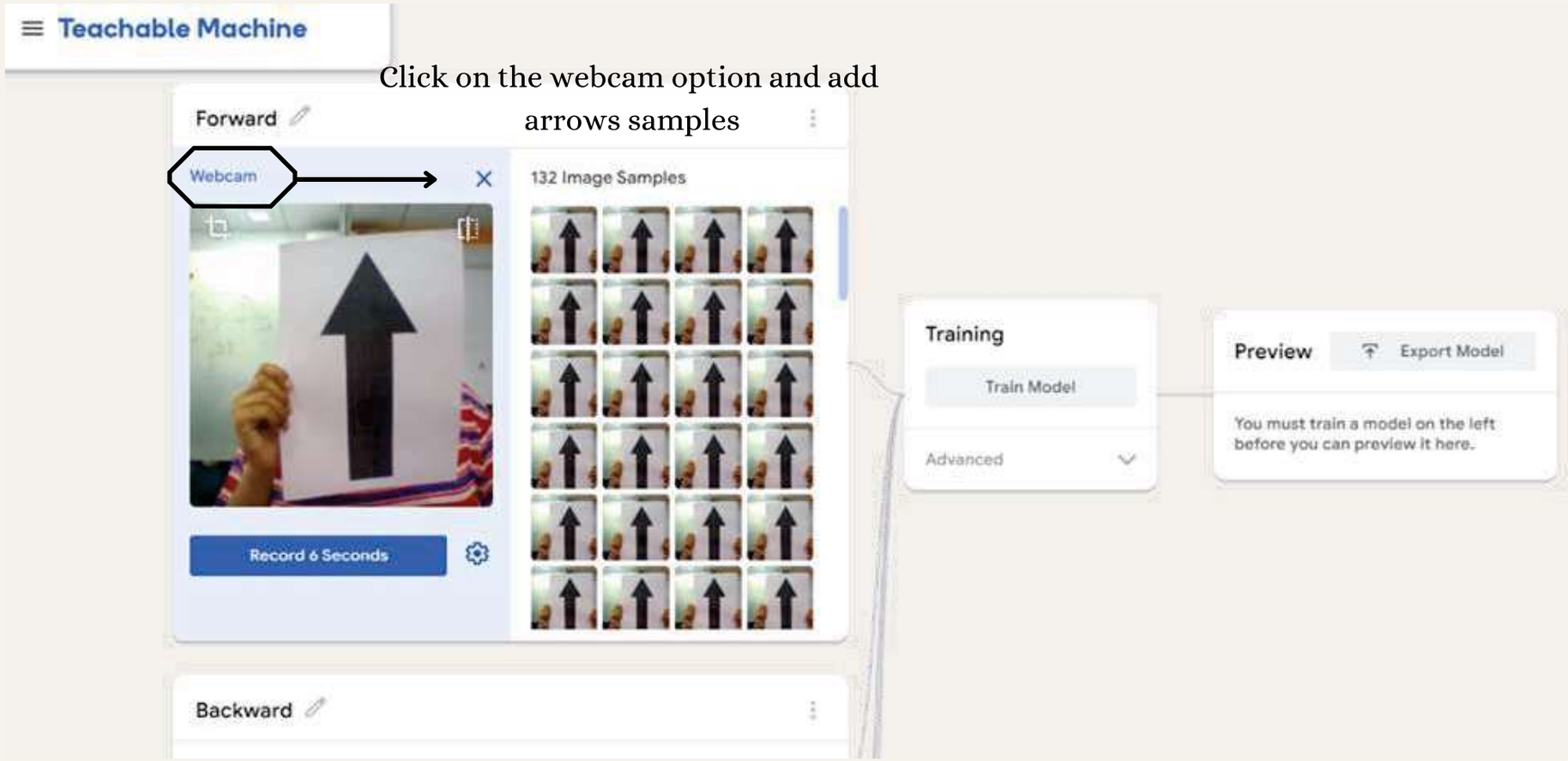
Step 2: - Create 4 classes named Forward, Left, Right, Stop.



continue to next. . . .

Step 3: - - Add direction arrows samples.

Forward

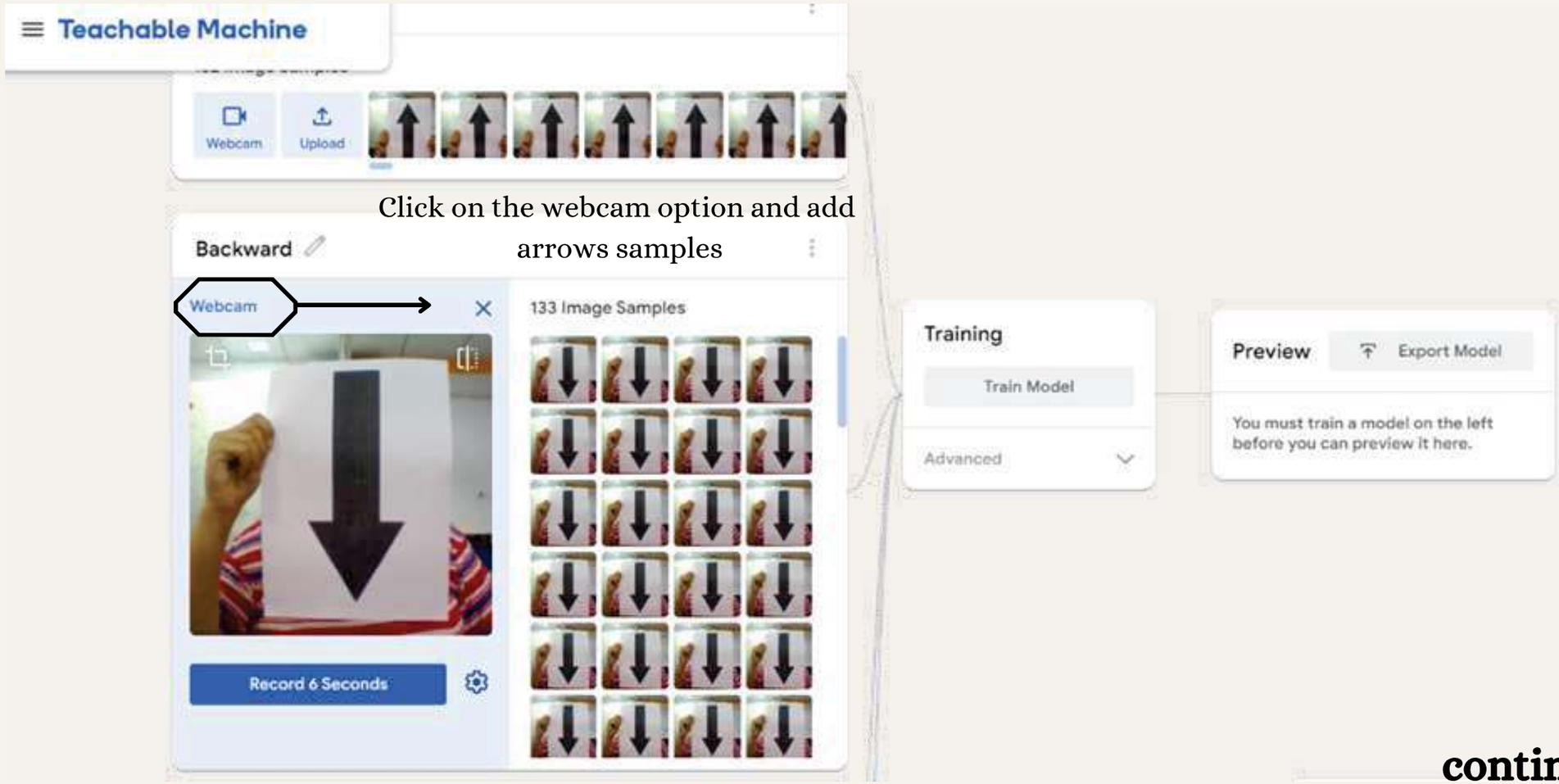


Click on the webcam option and add arrows samples

continue to next. . . .

Step 3: - Add gesture samples.

Backward

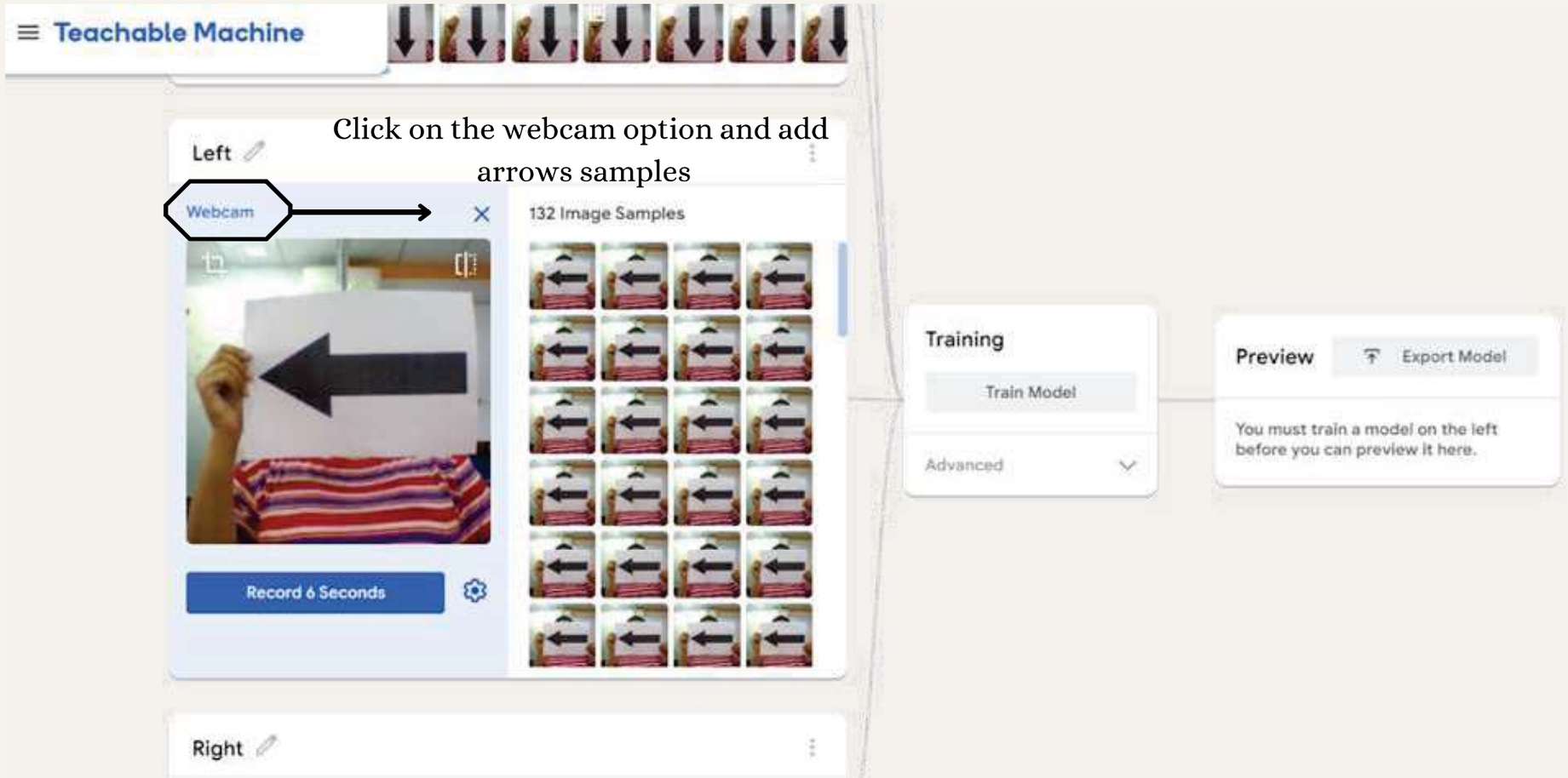


Click on the webcam option and add arrows samples

continue to next. . . .

Step 3: - Add gesture samples.

Left

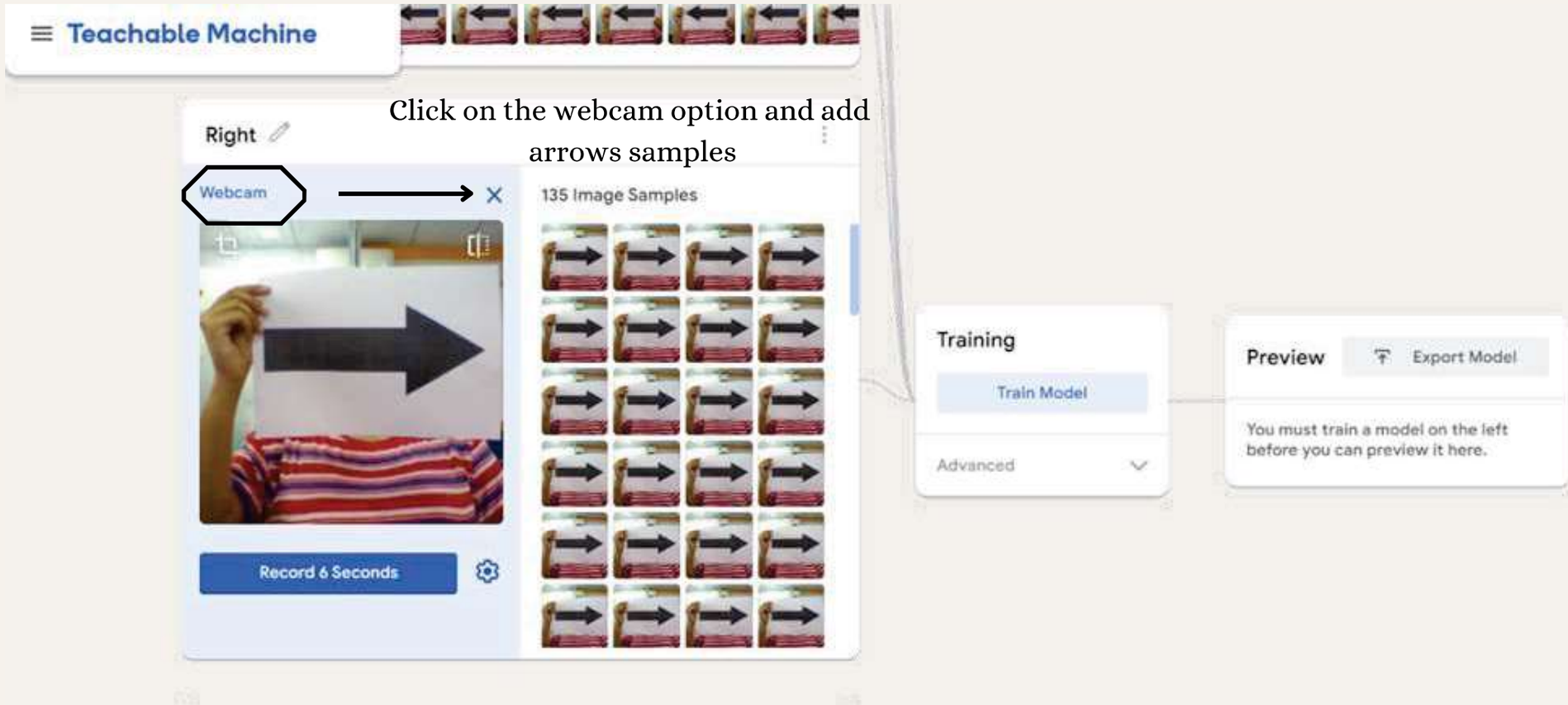


Click on the webcam option and add arrows samples

continue to next. . . .

Step 3: - Add gesture samples.

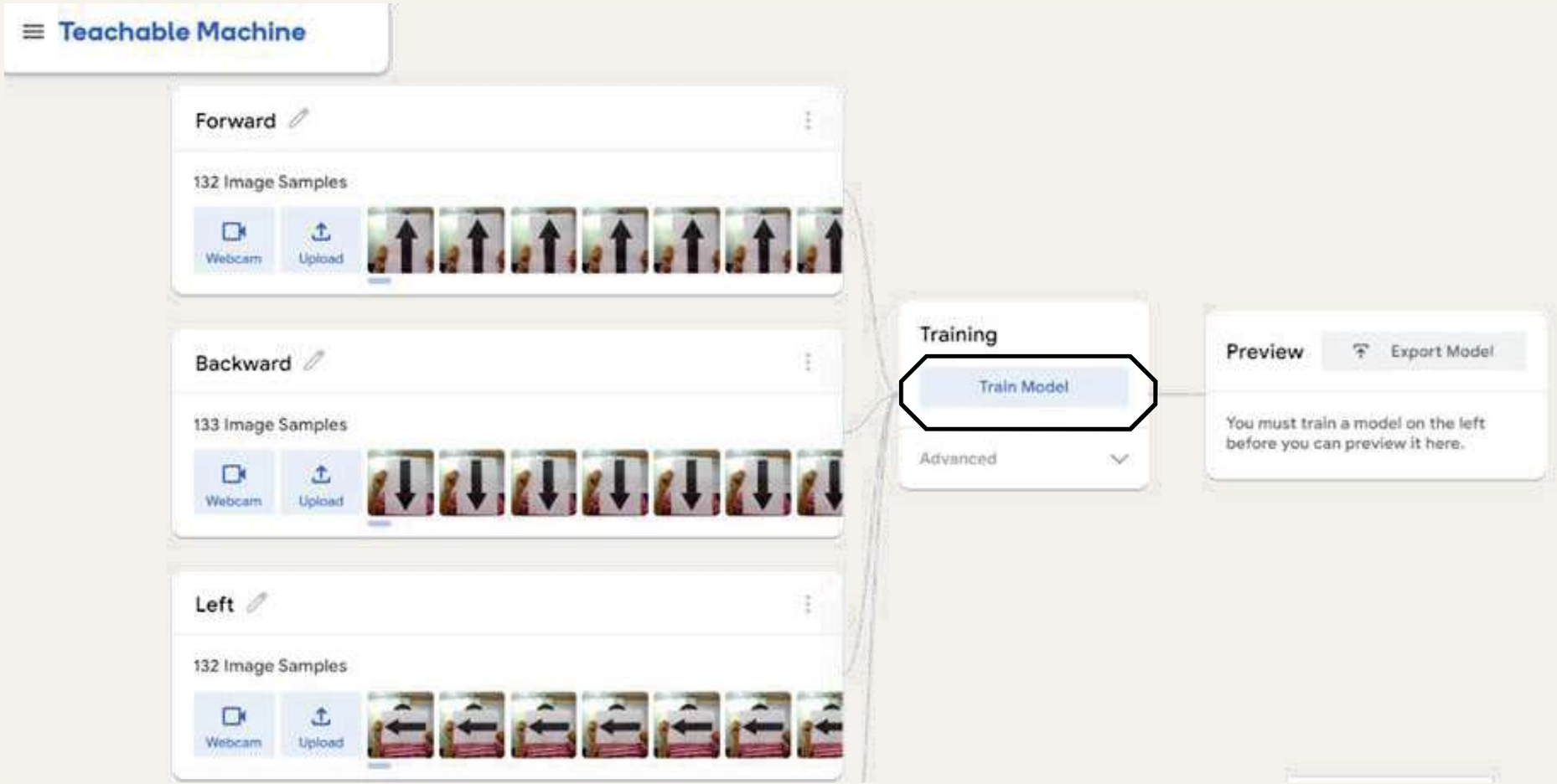
Right



Click on the webcam option and add arrows samples

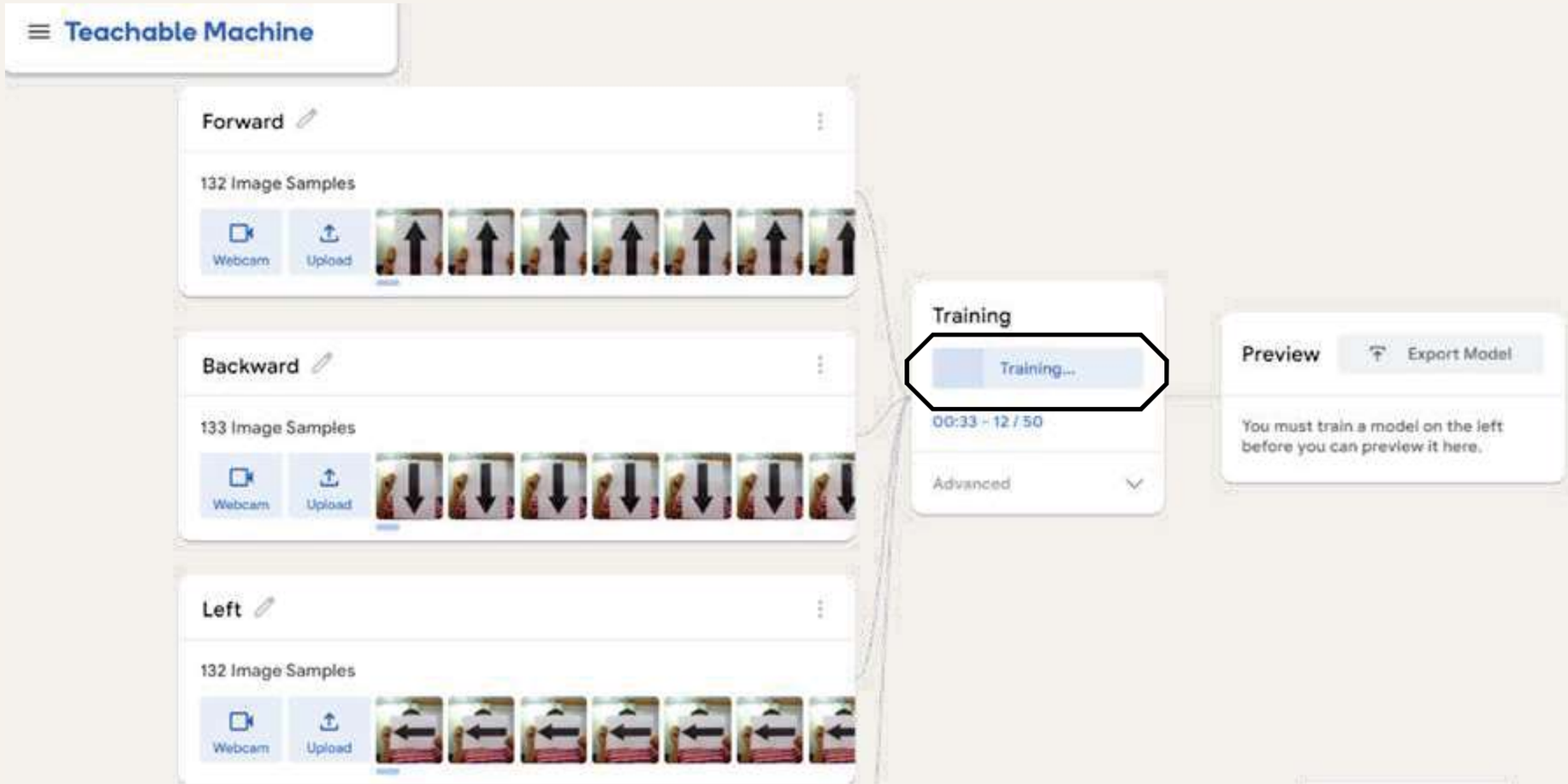
continue to next. . . .

Step 4: - Click on the Train Model option.



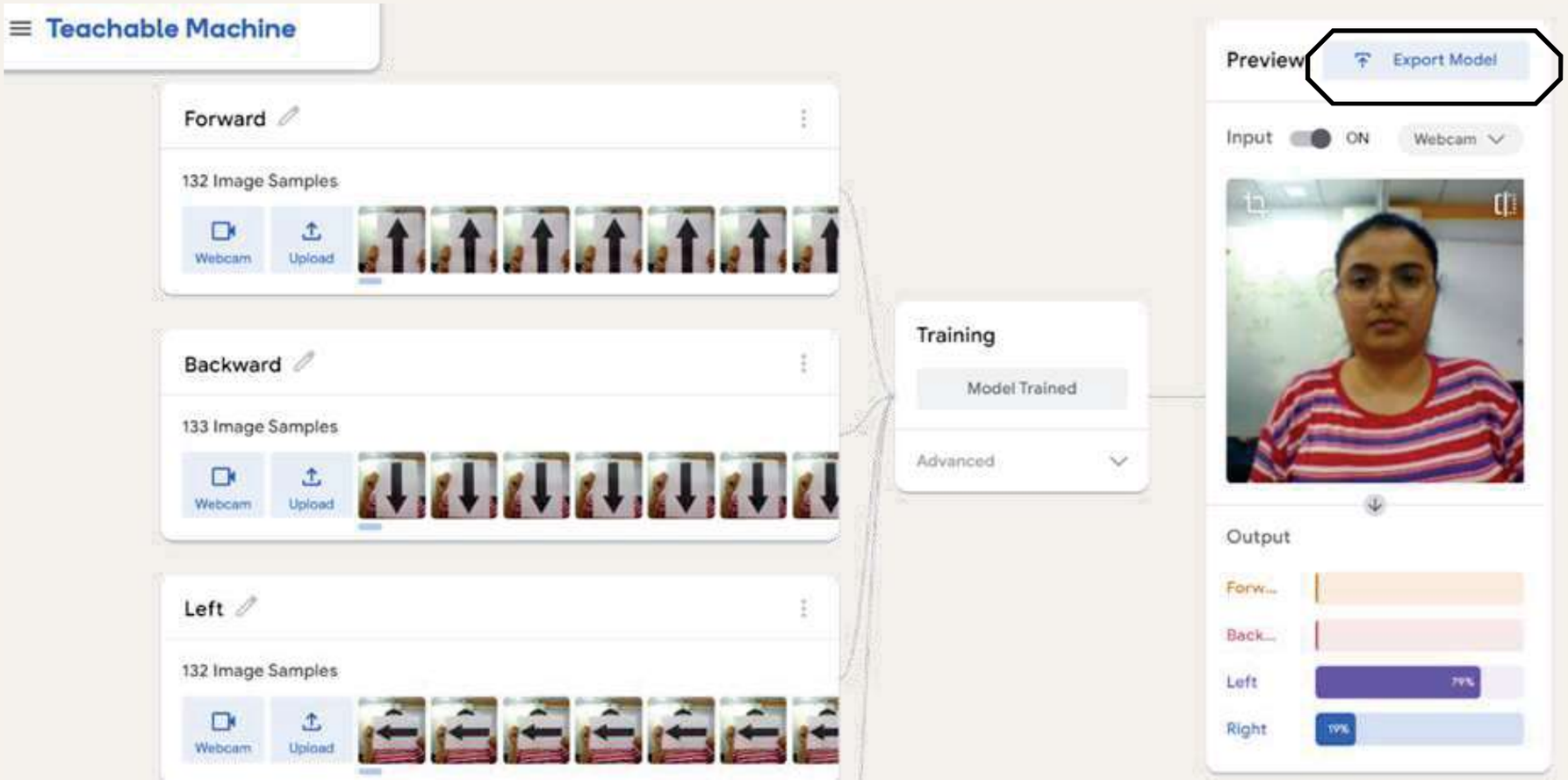
continue to next. . . .

Step 5: - Model is start training



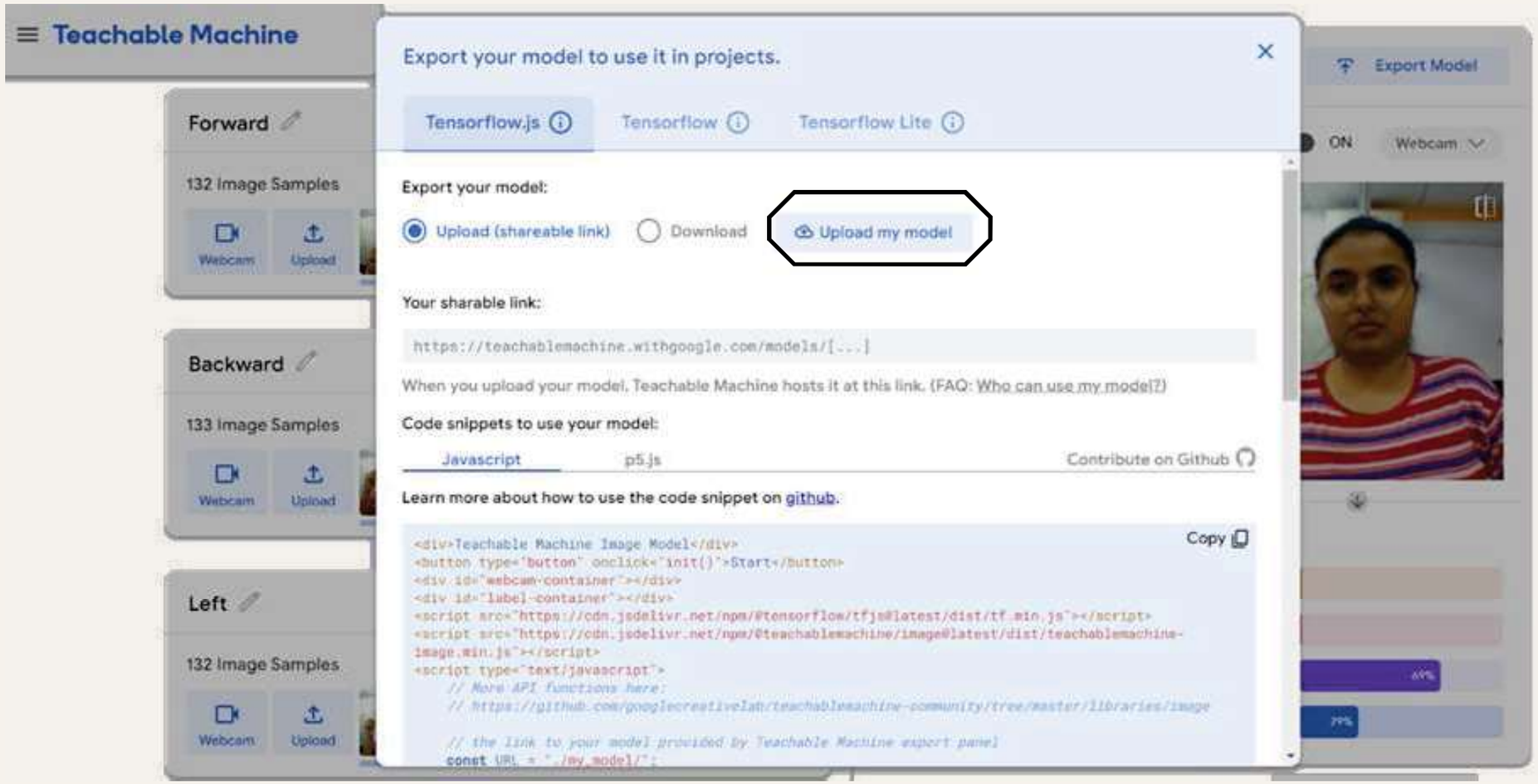
continue to next. . . .

Step 6: - Click on Export model



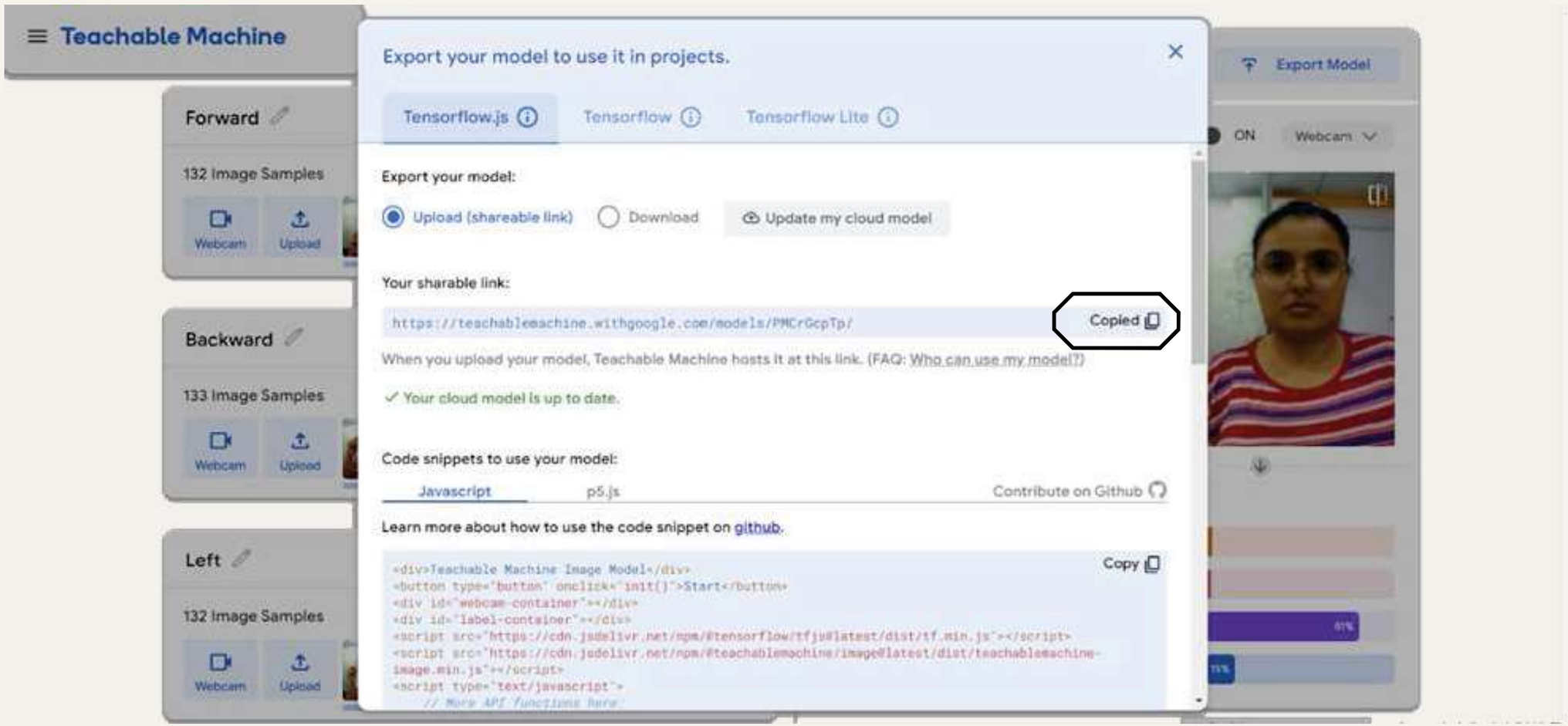
continue to next. . . .

Step 7: - click on upload my channel



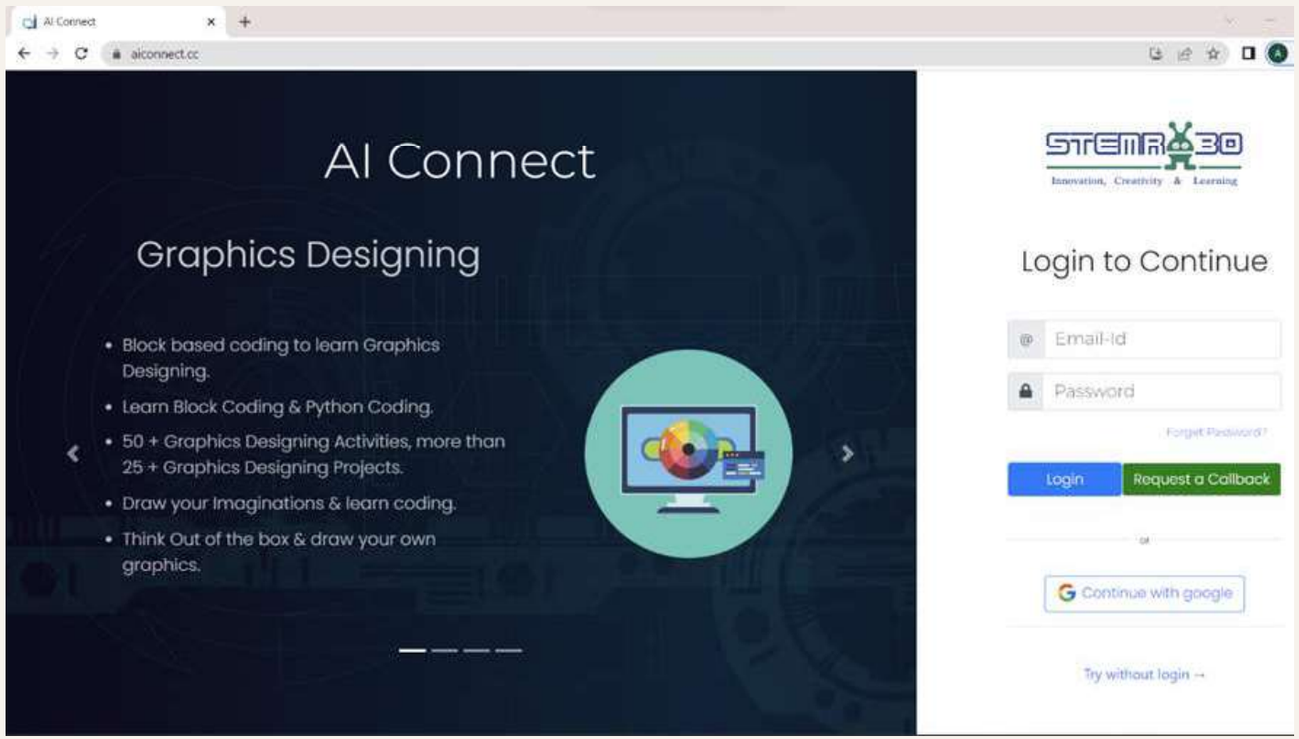
continue to next. . . .

Step 8: - copy the link.



Source Code

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

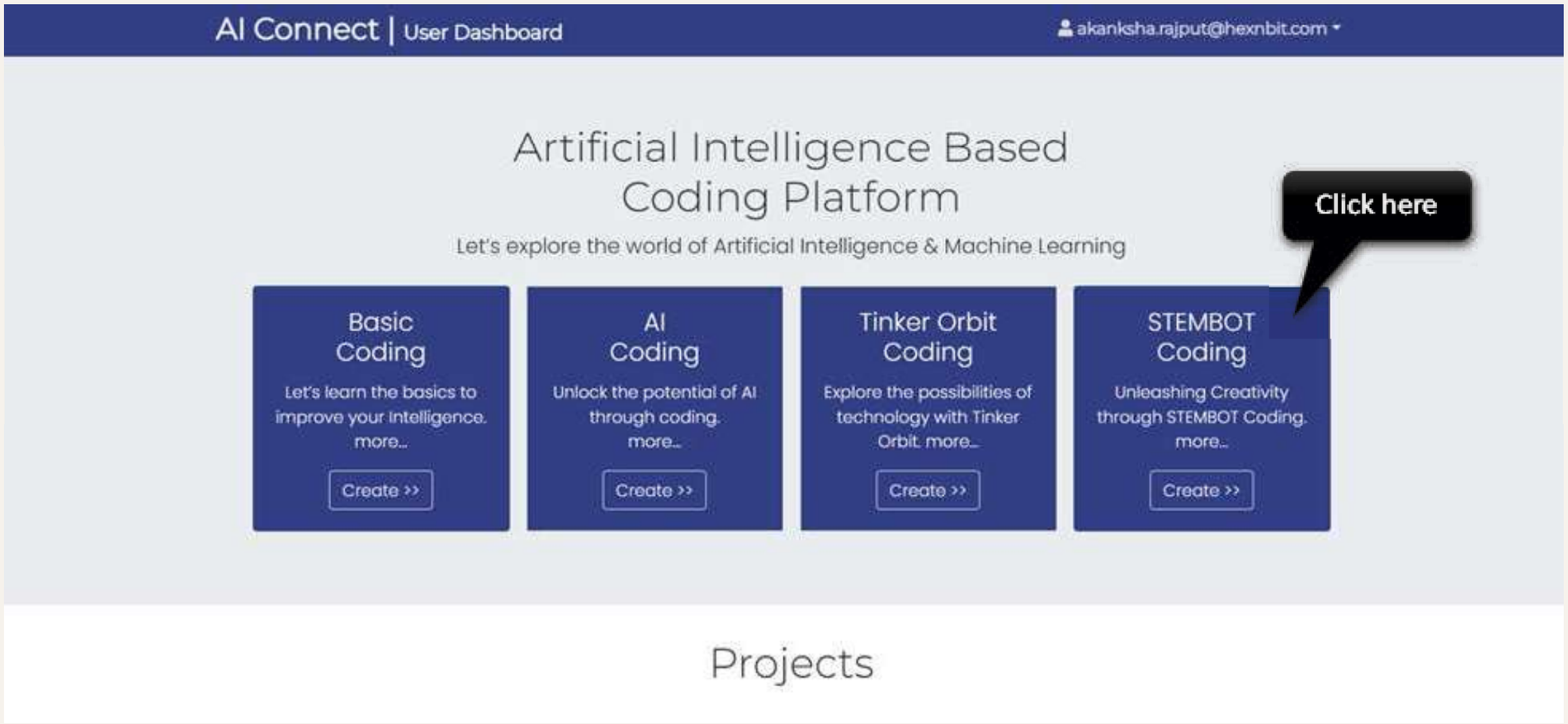


continue to next. . . .

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

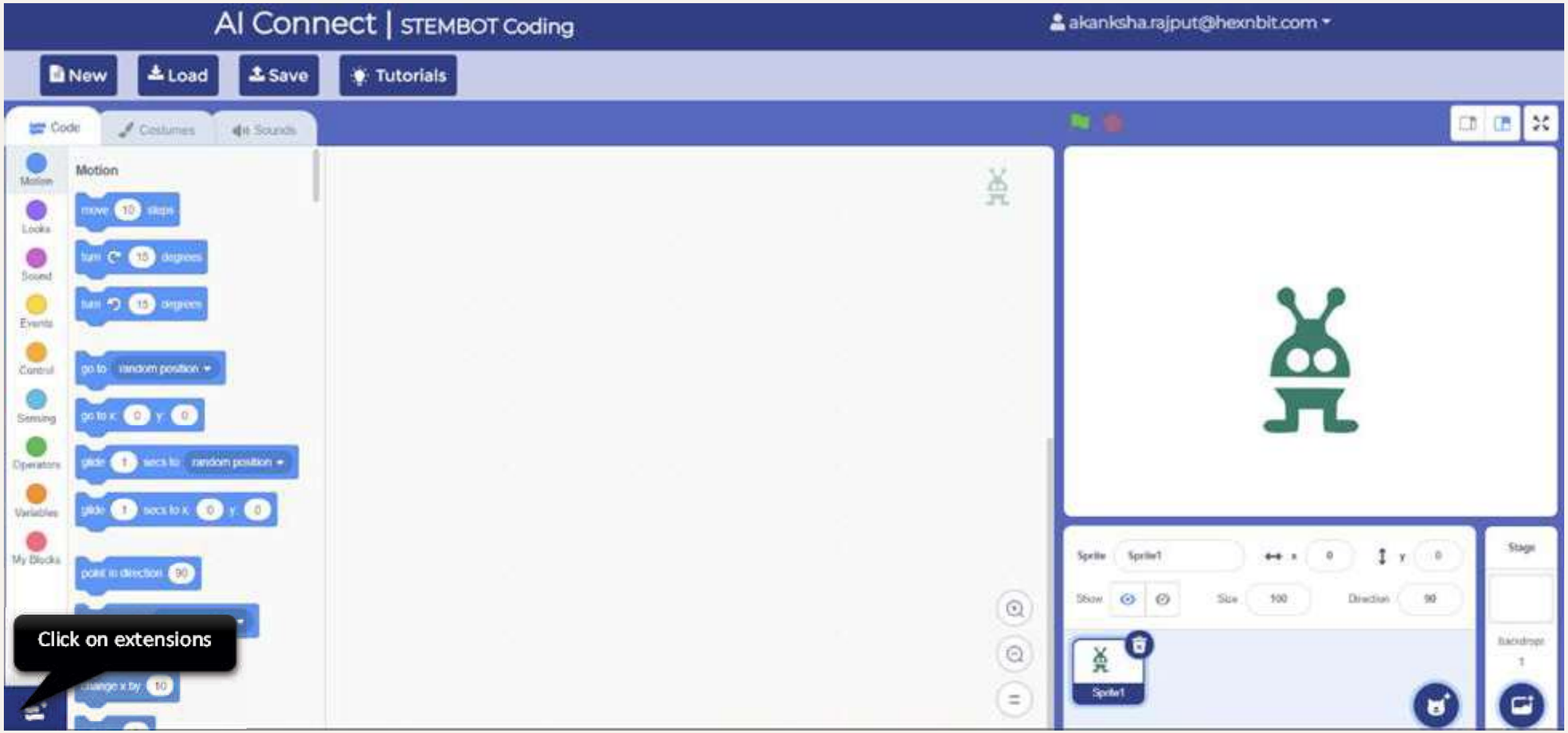
continue to next. . . .

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



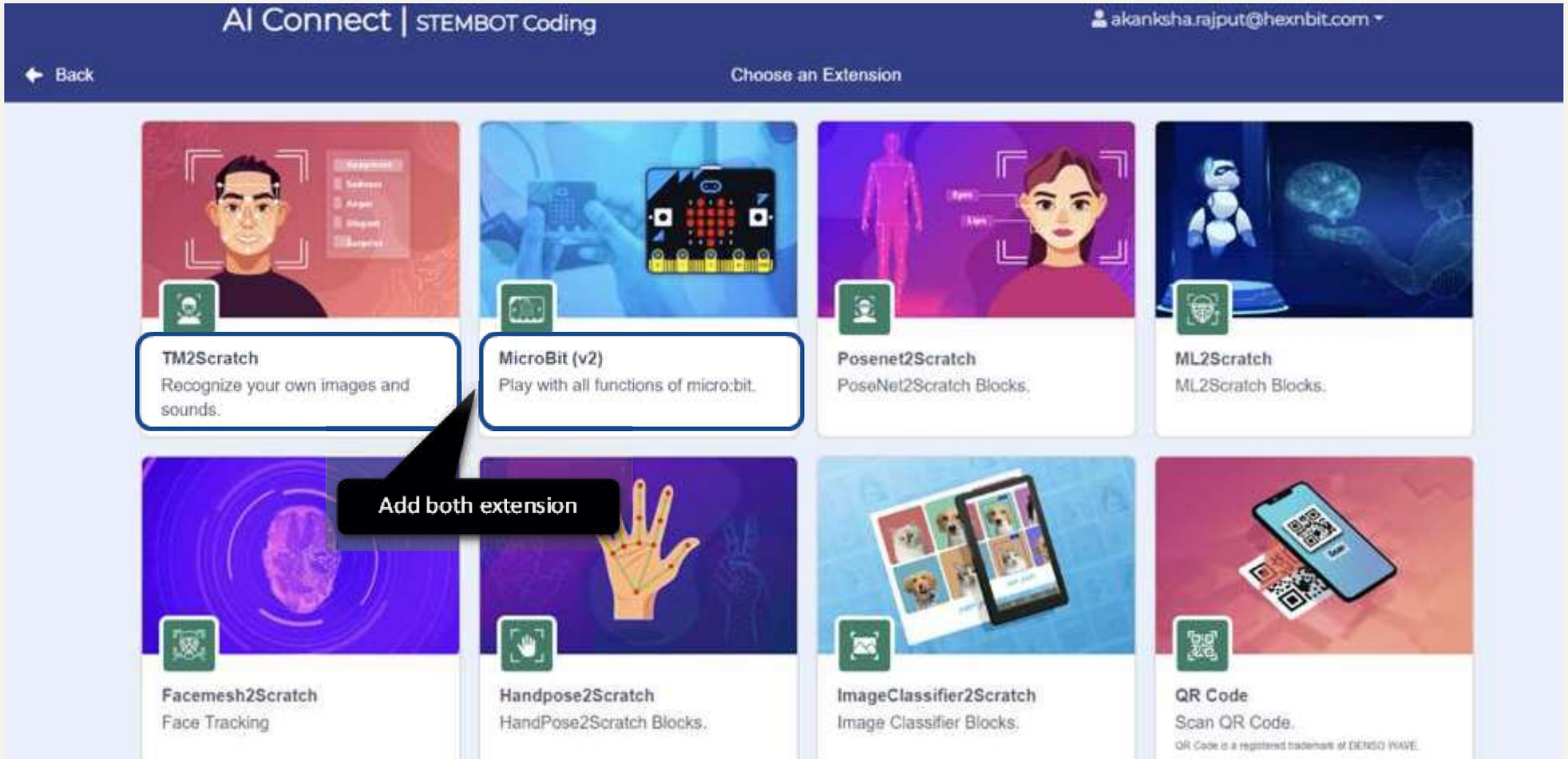
continue to next. . . .

Step-4 Click on extensions.



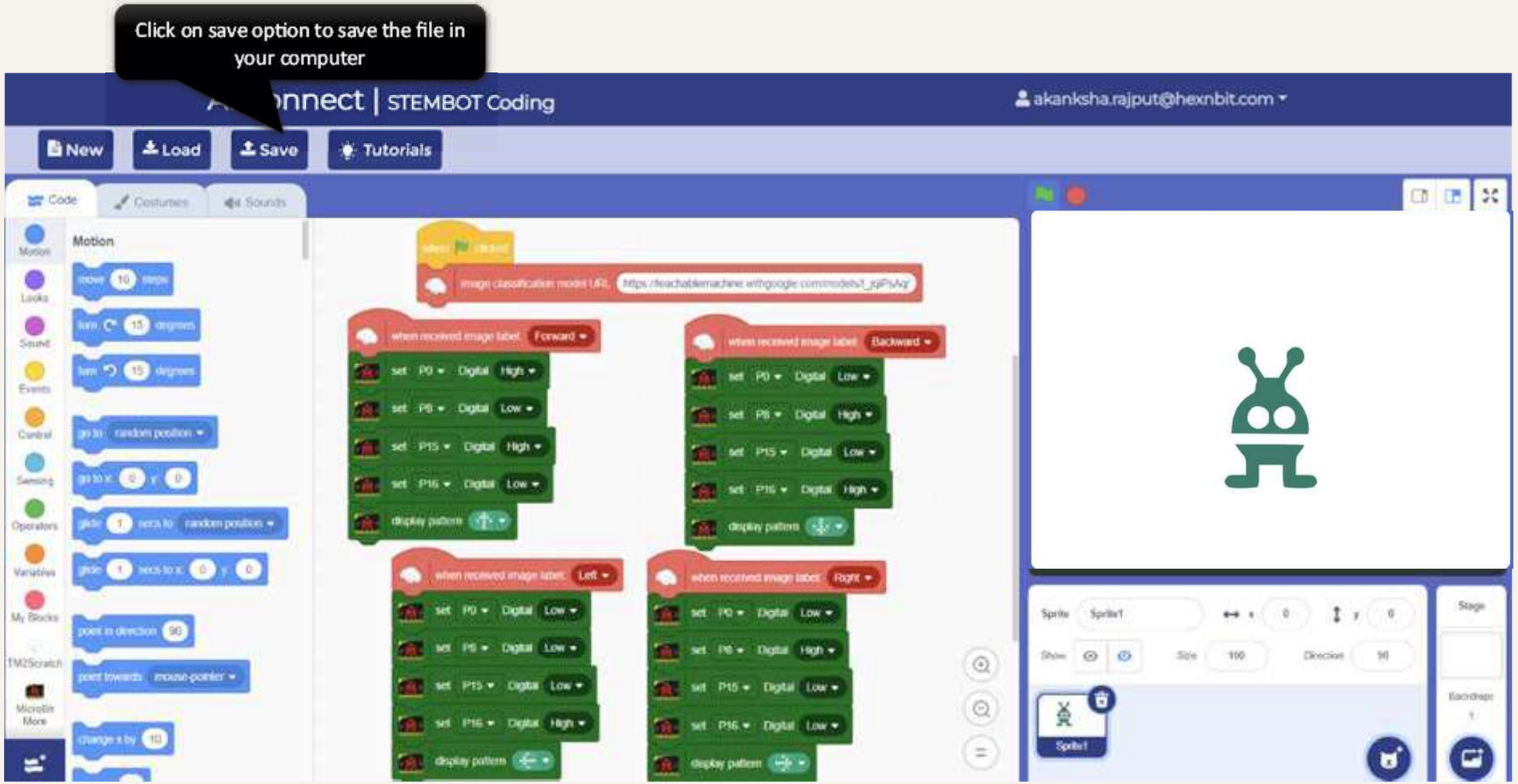
continue to next. . . .

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



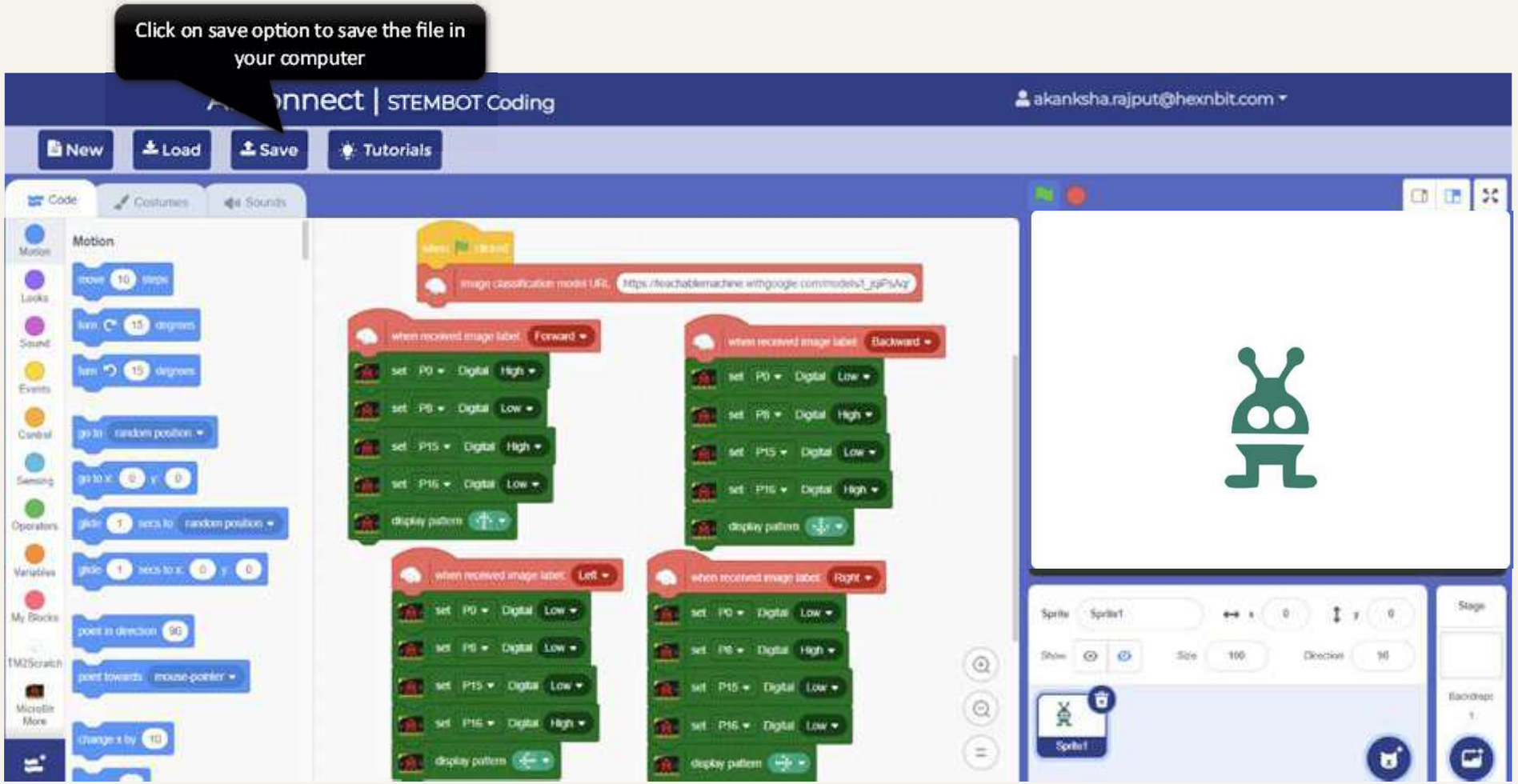
continue to next. . . .

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.

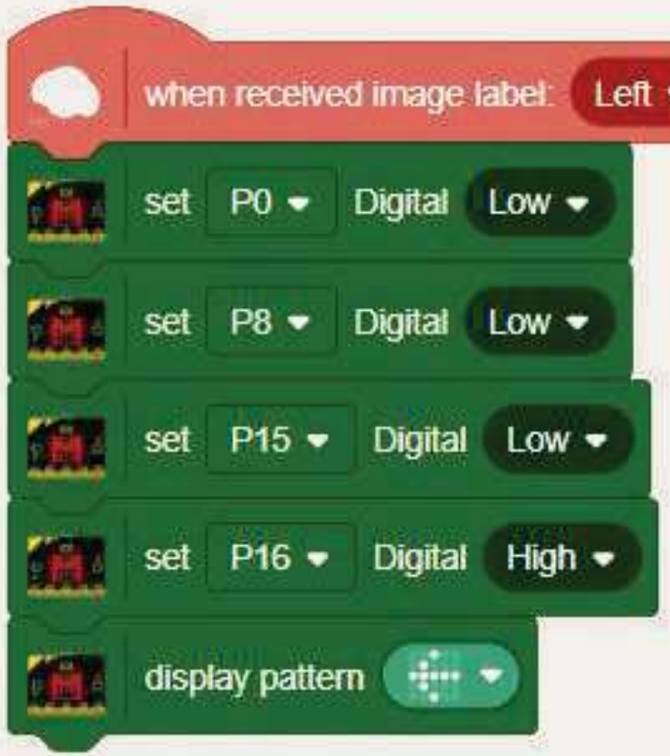


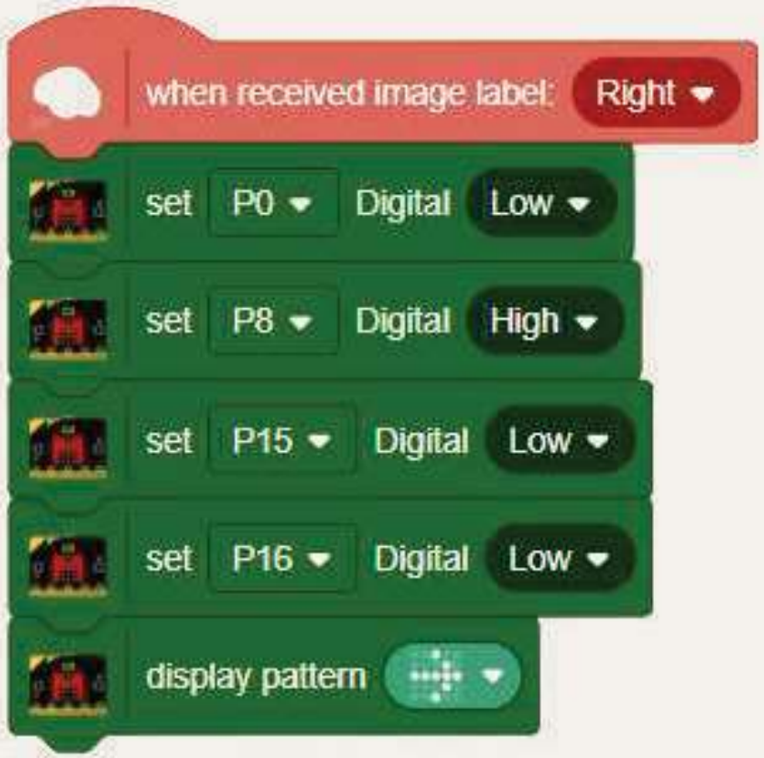
continue to next. . . .

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

continue to next. . . .

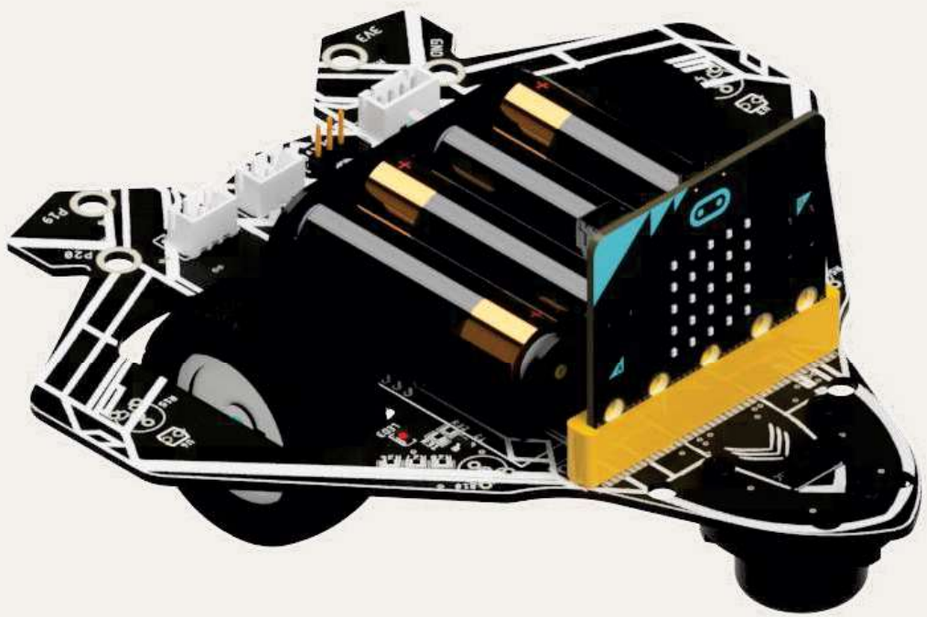
Step- 6 Write the following code on the workspace by dragging the blocks.





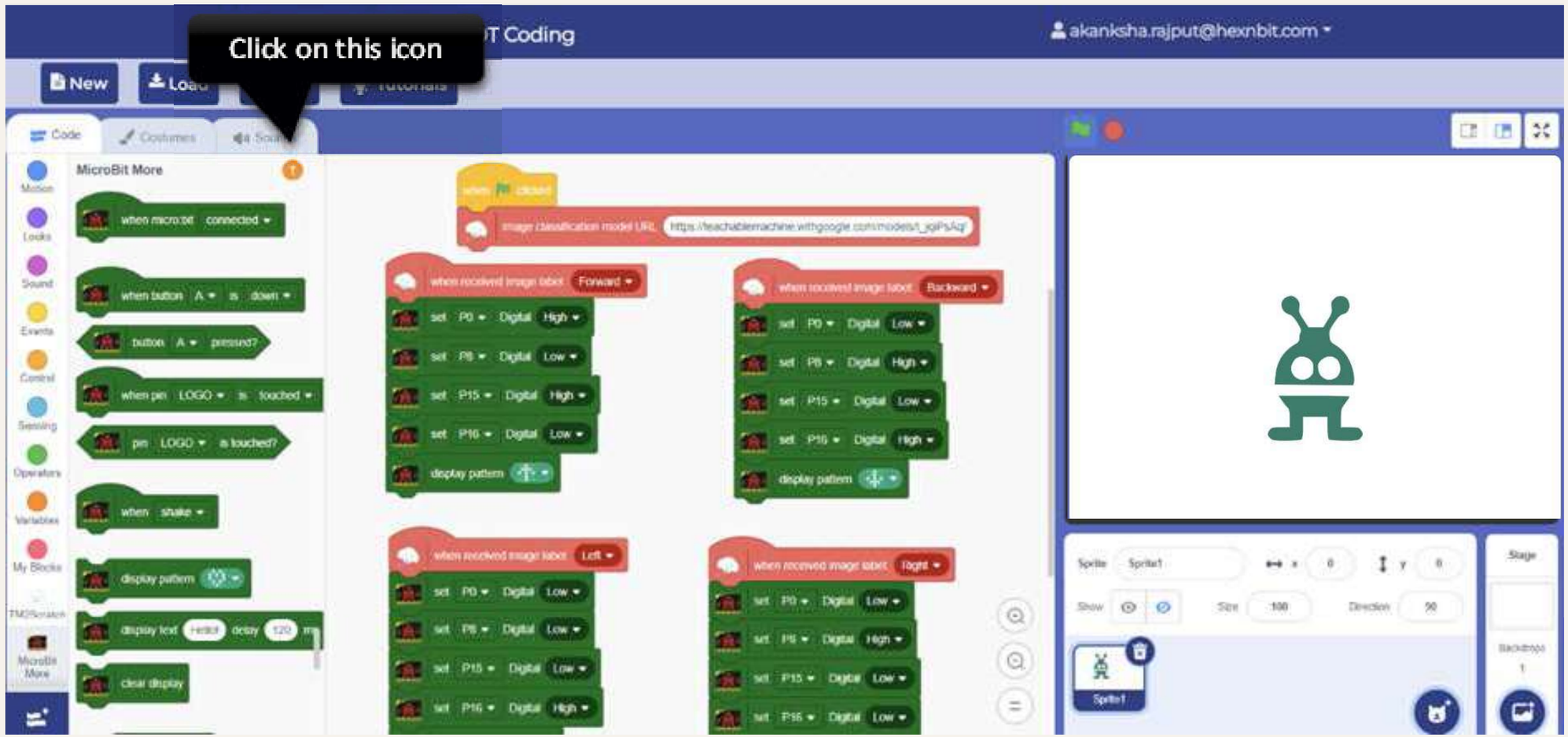
continue to next. . . .

Step- 7 Connect the micro: bit with STEMBOT. And power up the robot by pressing the power button.



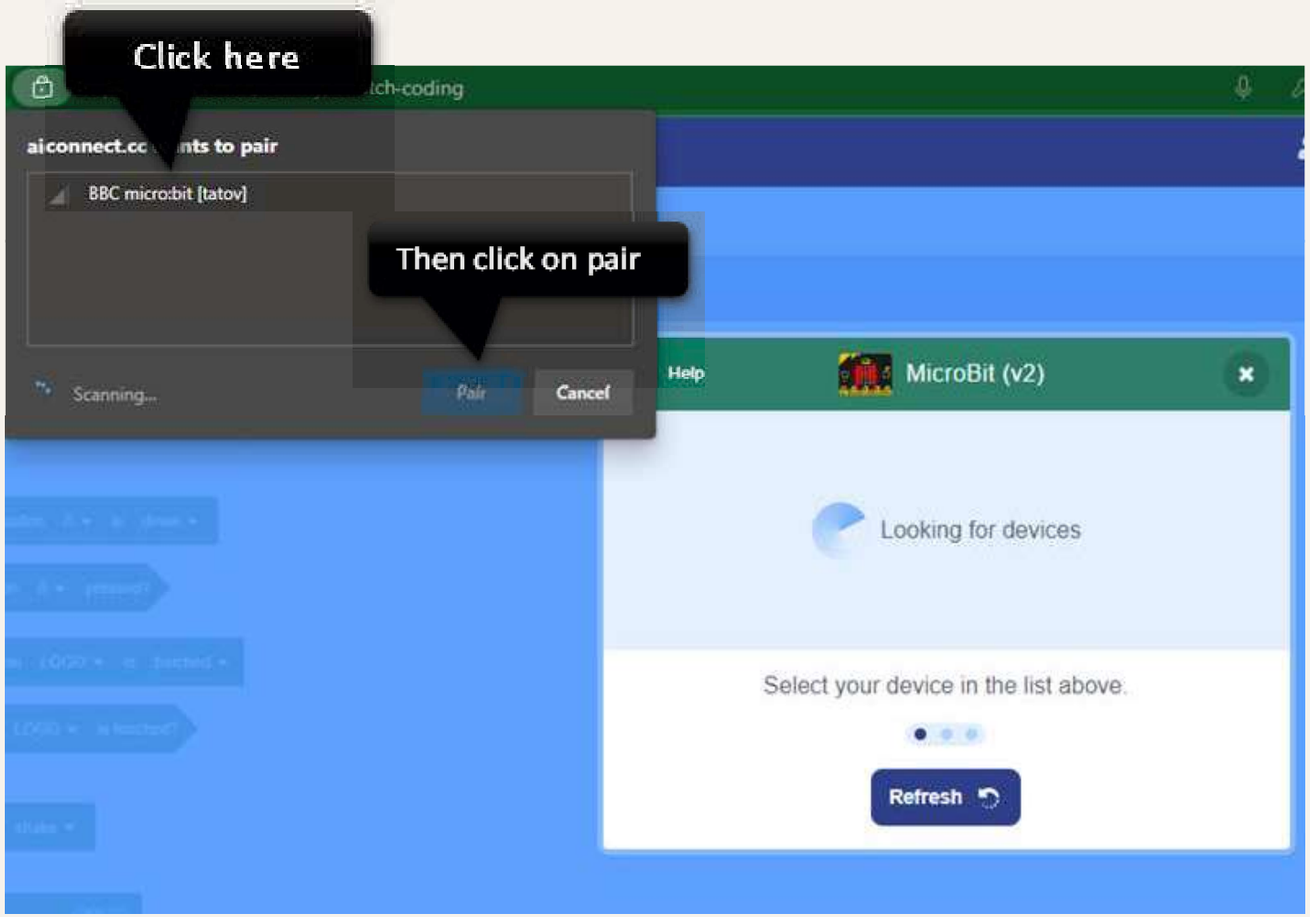
continue to next. . . .

Step- 8 Now connect your micro: bit with aiconnect platform.



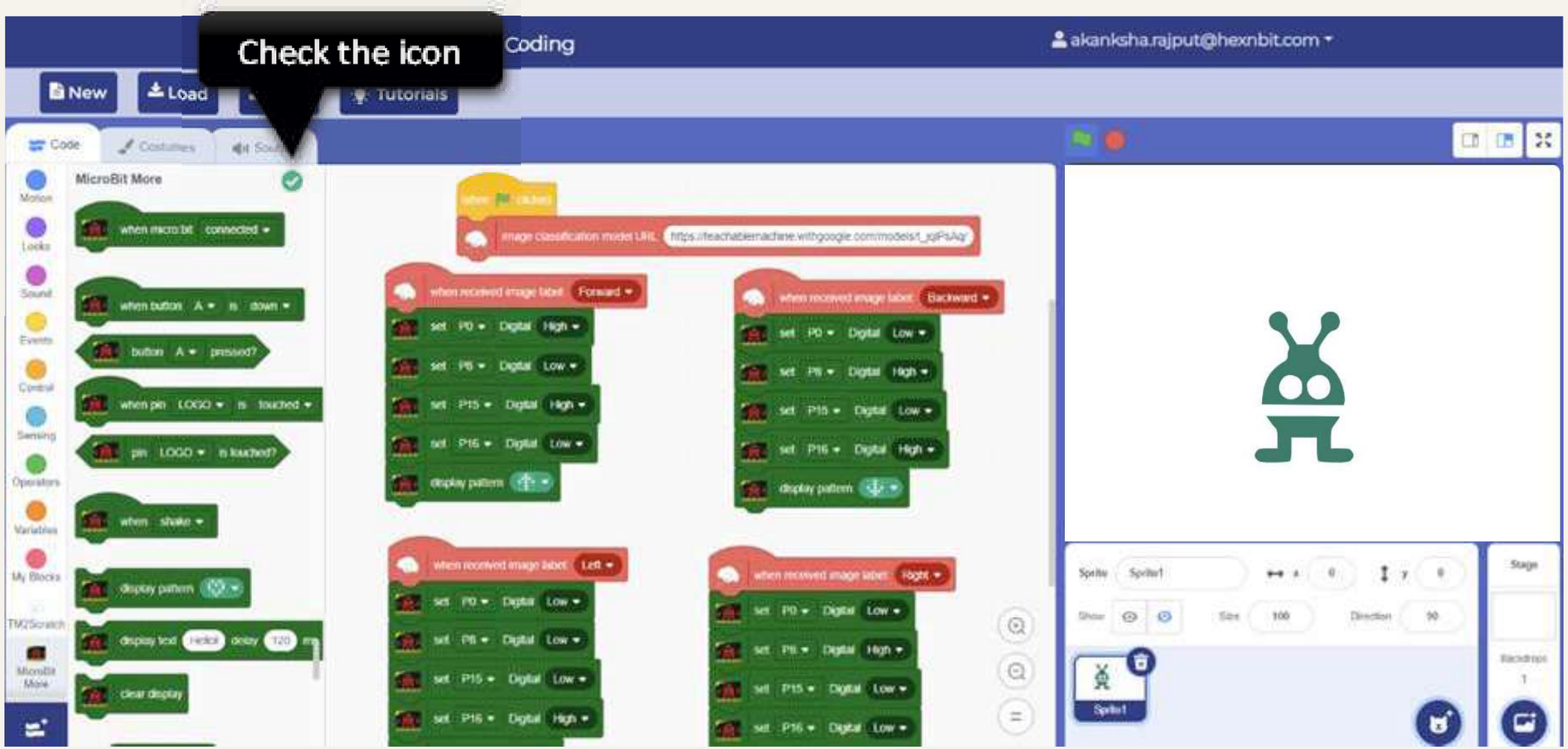
continue to next. . . .

Step- 9 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- 10 Now you can see a green tick icon that means micro: bit is connected with the aiconnect platform via Bluetooth.



Thank you