

Deploy - Pose model

What is our GOAL for this MODULE?

We added a machine learning pose model to elevate the user interactions in the biker game.

What did we ACHIEVE in the class TODAY?

- We deployed a pose model in the pictoblox game

Which CONCEPTS/CODING BLOCKS did we cover today?

- Create a pose model in the teachable machine platform.
- Use the extension of the machine learning models.
- Deployment of a pose model in pictoblox.
- Utilize model related blocks to edit the game.

How did we DO the activities?

Activity 1: Create a pose model.

Task: Create a pose model using a webcam and the dataset. Export the model link.

Steps:

1. Opened the teachable machine.
2. Clicked on the pose model.
3. Created the following classes:
 - **Jump**
 - **Don't Jump**
4. Used a webcam to add data samples.
 - Changed recording settings for recording duration 30 secs
 - Added delay of 2 secs
 - Saved
 - Gave a proper pose for jump and didn't jump classes.

5. Uploaded the images dataset.
 - **Jump** dataset:
 - Drive
 - File
 - **Don't Jump** dataset:
 - Drive
 - File
6. We trained the model.
7. Tested the model for the classes.
8. Exported the model.
9. Uploaded the model to the cloud.
10. Copied the model link.
11. Saved the link on your device (notepad)

Activity 2: Deploy the model

Task: Deployed the model in the pictoblox dirt game project.

Steps:

1. Opened the **pictoblox** application.
2. **Clicked File**→ **Clicked Open**→ **Clicked Open from computer**→ **Selected our previous dirt bike game (.sb3 file).**
3. Clicked on the **Add extension button.**
4. Selected **Machine learning extension**
5. Clicked the **load model option.**
6. Choose a **pose model.**
7. Copied the **link** that we received from the teachable machine.

Type the link if you are using macOS.

8. Added an open **recognition window** block after the repositioning statement of the biker.
9. Added an **if-else block** in the forever loop of the event.
10. **IF;**
 - The class identified is **Jump.**
 - Broadcasted the message **"Jump."**
11. **Else;**
 - **Glide back** to the position **-134 and -120**
 - **Switch** the costume back to **atv.**
12. Added an **event** to **receive Jump** as a message.
13. Dragged all the blocks under the event **"When space key pressed."**

14. To the event **When I receive Jump**
15. **Test run** the project.
16. Added an **if-block**
17. Got the **Not condition block** from the **operators**.
18. Got the **equal to block** and **snapped inside the Not block**.
19. To the left, we needed the name of the costume.
20. Got the **Costume name block** from **looks**.
21. To the right, we needed text "**motocross**" (this is the name of the costume)
22. Ensured all the statements should be inside the **if-block**.
23. Test the **Project again**.

What's NEXT?

In the next class, we will learn about more deployments and projects in pictoblox.