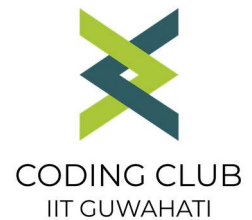**CODING CLUB
DIY PROJECTS SUMMER 2021**

CODING CLUB
IIT GUWAHATI

AI Trained Games

Expected Time To Finish: 2 Days
By Pranav Garg

INTRODUCTION

In this DIY project, you would train your Artificial Intelligence model to learn and play the Flappy bird game that you created in one of the game development projects. If you have not done the task, don't worry. The resources to create the game are given in this tutorial too!

TECHNOLOGIES USED

1. **Python**
2. **Pygame**
3. **NEAT-Python**

RESOURCES

Setting up python environment

Option 1 : Anaconda

https://www.youtube.com/watch?v=uOwCiZKj2rg
Follow this video to setup anaconda , and use the jupyter notebook to do the project.

https://www.youtube.com/watch?v=fiQTb7-rCPo
Follow this video to familiarise with jupyter notebook

Option 2 : Python with VSCode(or some other IDE of your choice)

https://www.youtube.com/watch?v=AKVRkB0fot0
Follow this video (or the vscode documentation) to setup python in VSCode (or some other IDE like Atom etc)

Getting familiar with Pygame and training AI to play
https://www.youtube.com/watch?v=MMxFDaIOHsE&list=PLzMcBGfZo4-lwGZWXz5Qgta_YNX3_vLS2&index=1
This playlist will ensure that you learn as well as complete your project along with it.

PS: Don't just follow the tutorial videos blindly copying the code, try to understand the basics behind performing each operation. It's a short term DIY project and you're supposed to finish it by yourself.

The resources provided may not be enough and you may face issues ; since this is a self learning project , it is highly recommended to refer to documentation , stackoverflow , youtube tutorials(other than the ones mentioned) etc.