Name: Marcel Pratikto

Project Title: AI Gamer

Team Members:

1. Marcel Pratikto

Overall Status: `Progress` `60%`

Number of hours worked since last update: 9

Number of hours worked on the project thus far: 90

Total number of hours anticipated for completion: 130

Accomplishments:

I completed the integration of my ML model to my program. My program is now an "AI" that can play Rocket League. It uses the random forest regressor model in order to predict which buttons will be pressed.

```python
# use the ml model to make predictions on what buttons on the gamepad are pressed & how intensely if possible
buttons = model.predict([[
    time_elapsed,
    ball_detected,
    ball_x,
    ball_y,
    ball_width
]])

joystick_x = buttons[0][0]
joystick_y = buttons[0][1]
RT_intensity = buttons[0][2]
LT_intensity = buttons[0][3]
btn_X = buttons[0][4]
btn_A = buttons[0][5]
btn_B = buttons[0][6]
reset = buttons[0][7]
```

Challenges:

- The AI still behaves in a very basic way. I will have to keep training the dataset in order to make it "smarter".

Plans / Goals for next week:

1. More dataset training.

Accountability plan: (What is your plan to keep yourself honest and follow through with the goals that you have outlined?)

I will have my roommate make sure that I work on this at least 2 hours per day when I am not busy working on my other classes

Other comments:

N/A