Project Brief

Project Name:

In-gaming Self-driving AI

Group Member:

Hongming Yu

Michael Liu

Pierre Laurent Paul Colin

Group 11 on Canvas

Project Description:

Using machine learning to implement a self-driving mechanism in Racing or Open-world games.

Project Component:

- 1. Deep learning model, using reinforcement learning, to find the relationship between traffic condition and action to take.
- 2. A computer vision mechanism, capturing game frames in a rate around 10fps, and optimize the frames with OpenCV to feed the learning model.
- 3. An operation simulating mechanism, simulating key stroke to control vehicles in games, in order to actualize the Al's output.
- 4. (Optional) A visualizer to present the state of AI, the relationship it learned, reinforced, reduced.