

Self-Reflection Report – Game Engine Architecture Compulsory 3

The project I am creating is a traffic simulation where the player learns the basics on how to drive. I am the sole programmer and developer of this project. I am also no artist, and thus depend on Unity Assets Store, or alike, to find the assets I use.

Project Overview

In the traffic simulation the player must driving according to the traffic rules. If the player breaks any traffic rules during the simulation, they will be forced to restart. Currently this project is only a draft of the full project. In this draft I have programmed the physics for the car the player is driving and created a small scene with a road layout.

Here is a list of things I would like to add to the project:

- Traffic lights that switch between red, yellow, and green. If the traffic light is red the simulation restarts.
- Speedometer which keeps track of the player's speed in a certain area. The simulation will restart if the player is over the speed limit when passing the speedometer.
- Other vehicles on the road (both moving and stationary) that the player must avoid. If the player makes, contact with the other vehicles the simulation restarts.
- A reverse camera that makes sure the player can look behind while reversing the car.

Problem Solving

When trying to import assets from the Unity Assets Store, I had a problem with the materials. They would all be pink colored. I found out the reason for that was that I was using Unity's Universal Render Pipeline, which some of the assets did were not compatible with. To fix this issue I had to go into the Settings of the Universal Render Pipeline and upgrade the project materials to UniversalRP Materials.

What I've Learned

In this project I have learned better how to simulate a car's movement, and I have learned how to properly import and use assets from the Unity Assets Store.

Conclusion

This project has improved my ability to simulate realistic car movement and master the use of external assets. I will use this knowledge to expand further on this draft for the folder.