Kennesaw State University

Department of Computer Science

Object Oriented Modeling and Simulation CS4491 Section 2

Project: Object Oriented Traffic Simulation

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The Project:

The project in question was to create an accurate traffic-based simulation involving intersections, roads, and points of interest. Anyone that has ever drove, or most likely rode, in a car or bus or any other road vehicle will likely have a certain degree of knowledge of how traffic works. For me and Nick, we needed to think harder about the overall traffic problem that most other people. At first I thought that we were going to do this project in OOSimL, but then Nick showed me a program someone made that felt a lot like a basic 3D video game simulation along the lines of the Sim City games (or many Sim City influenced games). Now the whole project ended up moving from discrete event simulation to process based simulation, and rather than the more complex 3D video game simulation that was demonstrated, we were going to create a basic and simple 2D game where users could construct a road, intersections, and points of interest, then run the simulation as see how it would work. To accomplish the development process, we had to draw models and outlines of how real traffic works, and instead of OOSimL, the program was written in C# and a game engine called Unity 3D Personal Edition. It seemed like a long drive for us to get this project done, so we are going to explain how the project was done step by step.

The Modeling:

Before making deployment for our classes, we first had to