Course COMP-3520 Mar. 22, 2020

Instructor Dr. B. Boufama Project worth 10%

Due date Apr. 10, 11.59pm

Using C/C++ language and OpenGL, design a program for 3D environment with the following requirements:

- A small street with possibly some simple buildings (optional simple trees and grass).
- A vehicle (car, bus or a truck) that drives on the street, a menu where the user can (1) drive, (2) stop and speed-up/down the vehicle should be available.
- A simple pedestrian model should be crossing from time to time (at randon times).
- There should be a camera viewing the whole scene from above the street.
- Shading, lighting and some simple texture(optional) should be added.

In addition to the above requirements, the vehicle should automatically slowdown and break to stop for the case of a crossing pedestrian. In other words, the vehicle should always check whether the street is free or not while driving.