

NTUST: 2020 Advanced Computer Graphics

Midterm Project : Write a program to read OBJ and Text (.xyz) files, then make specific animation by openGL

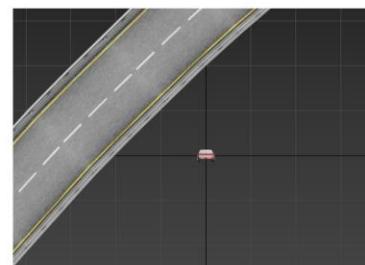
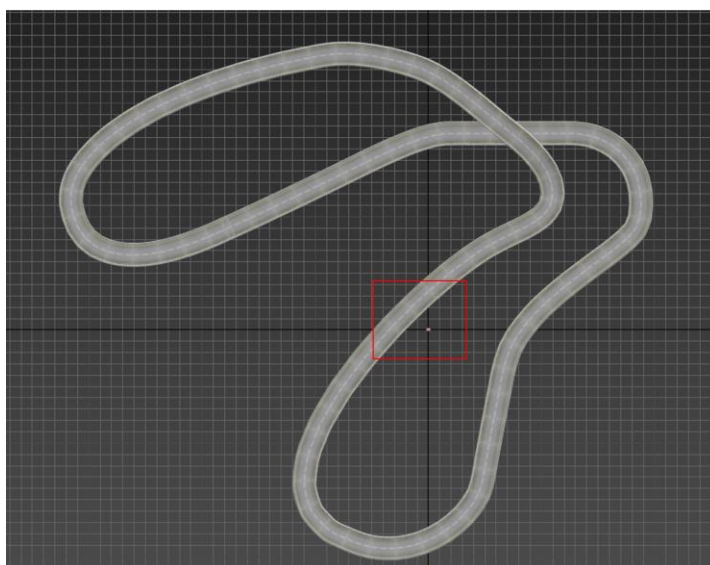
Date Due : 2020. Nov. 20th Fri. PM11:55, and upload to Moodle. (around 2.5 weeks)

Description :

1. Write a program (prefer python, other languages C/C++ are acceptable) to read two OBJ files and one Text file. The function of each model is
Car model: Chevrolet_Camaro_SS_Low.obj
Racing Track: FullTrack.obj
Centroid Line of route: Path.xyz
2. Draw and animate the “Car” on the **right lane** of the racing track. Carefully deal with the transformation matrix for “Ca” to have a correct animation.
3. You need to hand in 3 items, (1). Source code in python (or C/C++), and execute file (including all necessary dynamic link files), (2). One-page statement to describe how you archive this scenario.
4. Reference grade: Make the animation (60%). The program can perform correct or reasonable animation (40%). Extra grade: Putting camera on the car and having correct animation (10%)

Hint:

- This project will be **25%** of the final grade in this semester. Please accomplish all necessary requirements as possible.
- Please refer python openGL sample codes in lectures.
- The initial statuses for all components are shown in the 3DSMax file.



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