Assoc. Prof. Dr. Rimon Elias DMET 502: Computer Graphics



Final project

Deadline: Tuesday 11th of December @11:59 PM

Project Guidelines:

The aim of the project is to implement a 3D game. This project contains several main requirements which have to be fully satisfied. These requirements are:

- Navigation through the game using the keyboard and mouse functions.
- Obstacles which require the implementation of obstacle avoidance or collision detection algorithms.
- Everything should be textured with exception for small objects.
- Generation of animations with every user interaction.
- The game must have two different scenes (two different levels). This means two different environments.
- Since it is a game, a main target is needed along with the calculation of a final score.
- Camera navigation through the game can be controlled using the keyboard or the mouse functions or both. Camera motions must include first person and third person perspective cameras (More on camera types using this link).
- Light effect is required: This includes different types of light as well as light animations.

Project Teams:

Working on this project is done in teams of three or four members; yet the work expected is that of four members. This means that if a team consists of three members, these three members will have to work slightly more to achieve the same results of a team containing four members.

German University in Cairo Department of Digital Media Engineering and Technology

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Project Proposal:

- Propose your own project that satisfies the requirements specified above. Your proposal must be submitted with the team members' info using the <u>following link</u>.
- Details must be included in your proposal (In other words, the proposal must not be a general idea). In case of general ideas, your proposal will be rejected and a new proposal must be submitted.
- You should get an approval on your proposal. Deadline for project proposals and forming teams: Saturday (17th of Nov.) at 11:59 PM.

Project Evaluation Schema:

The evaluation of the project will be conducted based on the approved points in the proposal; which means that a submission where the points satisfied are less than those approved will receive a deduction. On the other hand, a submission with more points than those approved will be granted a bonus up to 5%.

Video Recording:

You are asked to submit a video recording for your screen while you are playing the game. The video should follow the following regulations:

- 1. Your video should be from 2 5 minutes
- 2. Your video should have voice over explaining:
 - a. Description of the game
 - b. The aim of the game
 - c. How to play it.
- 3. The video must be arranged in the following sequence:
 - a. 2 seconds: University name & logo "provided in the attached templates"
 - b. 2 seconds: Course name and semester "provided in the attached templates"
 - c. 2 seconds: Project name.

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- d. 2 seconds: Students name.
- e. Rest of the video content.
- f. 2 seconds: Thank You "provided in the attached templates"
- 4. Finally, note that your video can be published online, so do a good job ©

Project Deadline:

- 1. The deadline for the project proposal is next Saturday (17th of Nov.) at 11:59 PM.
- 2. The last date to submit your project is on Tuesday 11th of Dec. @11:59 PM.
- 3. Evaluations will be held during the revision week.
- 4. Submission guidelines:
 - Submit your project files to graphics.dmet502@gmail.com
 - Only .h, .cpp and assets files should be submitted in a .zip archive.
 - Please keep the naming convention for all of your submitted files to easily reach them [Team name] [Project Title].
- 5. Kindly upload your video to any cloud storage like "Dropbox, Google drive, etc...." and submit your video link through this form.