Game Project Proposal Guidelines

COMP4451, Spring 2015, HKUST

Updated on February 9, 2015

Your game proposal should be a text document with the sections outlined below. You may include images, graphs or figures in any section if it helps clarify your description. While there is no fixed minimum or maximum length for the proposal, we expect your proposals to have around 500-750 words in order to clearly convey your objectives and goals (that is approximately the number of words in this page).

1 Group Composition (0.5 points)

This section should contain the name of the students and one or two sentences on their graphics programming background (e.g., John Smith has worked on a few simple 3D rendering projects in OpenGL and developed a small game using a game engine).

2 Title and Description (2 points)

This section should include the name of your game (be creative!) and a description. The description should mention the objective of the game and how it is played. Also state what is the type of game (e.g., action, adventure, RPG, simulation, strategy, sports).

3 Novelty (2 points)

Describe what is new and exciting about this particular game. What does it have to offer that is different that existing games of this type? Why do you think this game will be fun to play? You should include references to related games.

4 Challenges (5.5 points)

Graphics You should describe the graphics-related challenges that you expect to face when implementing your game. A good game is about both good game play and cool graphics. The game can be 2D or 3D, partly depending on your game content. A game with 2D graphics and fantastic game play would be more impressive than an average 3D game, even though the trend is that 3D games are becoming much more popular today.

You are encouraged to use existing graphics engines, such as three.js, however upon completion of the project, you should be clear about what you leveraged from the engine and what effects you implemented yourselves. Note that there should be enough interesting technical components implemented by yourselves (either in graphics, the game logic, or the other areas below).

Other If you plan to have any of the following components in your game, please describe them as well:

- Artificial intelligence (AI): AI plays a large role in game play. Depending on your game type you can have AI for NPCs (non-player characters).

- Sound: Background music and special effects. You should describe them if they play some special role in your game.

- Networking: For local game networking, TCP protocol is usually used for data transmission. Depending on the importance of the data transmitted, you can use TCP or UDP, where UDP is used more in FPS games with real-time interactions.

- Physics: Physics makes the game more realistic. Basic collision detection and physics is usually required in an action/adventure game.

- If you can think of other important challenges, please outline them here as well.

Submission

Your game proposal must be submitted using the CASS system by the deadline and it must be in PDF format. In order to generate a PDF file for a text editor in some versions of MS Windows, you may install a PDF printer (e.g. from http://www.cutepdf.com/). If you write the proposal using Latex, you may compile with the pdflatex command.