

CPSC 427 - Video Game Programming

Winter 21/22

Game Proposal, Due January 24, 2022

Background Material & Examples: Check out the advice in the following links: http://www.gamasutra.com/view/feature/130848/how_to_prototype_a_game_in_under_7_.php and <https://www.youtube.com/watch?v=UvCri1tqIxQ>. A couple of example proposals from previous offerings are provided here https://www.cs.ubc.ca/~sheffa/games_course/Vsep19/examples/proposals.zip.

Content: Produce a detailed design document for your team's game. The document should include a compelling story, describe the technical elements and a development plan aligned with the course project milestones. The proposal should include the following sections:

- *Game title:* Aim for a title that is catchy, self-explanatory, and has no unexpected negative connotations.
- *Story and gameplay:* Define the genre of the game, the theme, and the most basic game mechanics. Write down the background story; list major levels, game rules, and player goals. Based on these definitions, give a detailed design of a minimum scene of the game (e.g. a "screenshot" of the first level or map) with information about possible player operations, possible interactions with the scene and the UI, one example enemy, and other items you think necessary. You can combine the description with the concept art visuals (the next item). The level of details should be enough for the reader to play the simplest version of the game in one's mind.
- *Concepts:* Produce basic, yet descriptive sketches of the major game states (screens). These should be consistent with the game design elements and help you assess the amount of work to be done.
- *Core technical game elements:* Identify how the game satisfies the core technical requirements: rendering, assets (geometry, sprites, audio, etc.), 2D geometry manipulation (transformation, collisions, etc.), gameplay logic/AI, physics.
- *Advanced technical game elements:* List advanced and additional technical elements you intend to include in the game prioritized based on likelihood of inclusion. Describe the impact on the gameplay in the event of skipping each of the features and propose an alternative.

- *Devices*: Explain which input devices you plan on supporting and how they map to in-game controls.

- *Tools*: Specify and motivate the libraries and tools that you plan on using except for C/C++ and OpenGL.

- *Team management*: Identify how you will assign and track tasks, and describe the internal deadlines and policies you will use to meet the goals of each milestone.

- *Development plan*: Provide a list of tasks that your team will work on *for each of the milestones*. Account for some testing time and potential delays, as well as describing alternative options (plan B). Include all the major features you plan on implementing (no code). These should be consistent with the course milestones but can pre-empt those.

Template: A minimal template is provided here

https://www.cs.ubc.ca/~sheffa/games_course/Vjan22/ProposalTemplate.docx.

Team: Each proposal should be submitted by a team of *six* students. Having a team with more or less students requires pre-approval by the instructor.

Submission: Please format your proposals as PDF documents and use 'handin' to submit them. If you include a short video as part of the proposal, submit it together with the written proposal (a zip file).

Note: The proposal is **NOT** a contract but rather a roadmap, you can change the different parts at any point in time during the course. We thus encourage you to refine the design as you progress. *However* you need to specifically note this in your reporting, and submit an updated proposal when this happens.