

CS19929 Creating Computer Games for Learning

Project Milestone #2 - Basic Game Design

In this milestone, you will define major game elements of your educational game. You must take into account different “player types.” You do not need to have a “perfect” game at this stage.

The purpose of the document you are going to turn in is to describe the game well and **describe how your knowledge of the game design elements in this course were used to influence the design of your game**. Most answers, especially those in the middle, should be several paragraphs, not just a few sentences. By the time I finish reading the document, I should be able to have a full picture of what your game actually is.

***Note:** This is **not** a short document. It needs to illustrate that you have put substantial thought into how to make an engaging game for the educational content you are going to teach. Specifically, any quiz-style games, memory-style games, or other simplistic games (e.g., Pong, Flappy Bird) will **not** be acceptable for a passing grade.*

Below are the required sections of this document.

Revised milestone #1 If you decide to make any revisions to the content of your first milestone (Target Users and Learning Content), add it at the end of this document.

Game Design - Mechanics and premise, narrative, etc.

Assume that you have a full design team. Do not take into account the 3-week time constraint, small team, and resource constraint to affect your design. Design without such constraints.

First summarize the game type, placing it into a genre. What is a well-known game that most closely resembles your game? And what are the major differences between yours and that game?

Then, describe in **one** sentence, what is the premise of the game?

Next, what character is the player, and what is their ultimate goal? What are some of their intermediate outcomes to that goal? This is all answered from the player's perspective - what are different actions they are taking to get themselves towards their goal (not from a game mechanics perspective but from a fictional action perspective).

Finally, what are the game mechanics? What types of in-game actions can the player make? Do they navigate in a 2-D space, with a platformer? If there are different mini-games, describe each mini-game. This should include not only basic game play, but also additional

complexities (“bells and whistles”) put into the game that are justified by motivational theory and learning theory.

Game Design - Justifying design decisions (at least 1 page)

This section need not be organized exactly as described below, but you need to include all of the elements, and you need to use organization (subheaders, bold, italics) to make it clear when you are discussing the different parts.

Describe how the motivation theories and learning theories justify the decisions described above in the "bells and whistles" of your game play (beyond the basic gameplay). Explicitly tie the theories to the design, such as goals, rewards, and feedback.

Describe how different "player types" will find something that engages them.

Describe how your game premise, characters, etc. are appealing to the mythical users that you created last project, and how you took their interests / knowledge into account as you designed the game

Game Design - Increasing complexity (approximately 1 page)

Describe how your game makes the user progress through the different elements in the learning trajectory you produced. How do you teach different elements and how do you gradually increase the difficulty and/or complexity as users progress through the levels?

****Since we're not learning about inclusive design until Wednesday (July 15th) you are not expected to integrate design for cultures or learning disabilities at this time - that will be in the next milestone.****