

Assignment 1: Project Proposal

Handed out Thu, Sep 6. Your write-up must be submitted by Tue, Sep 11 (any time up to midnight). Submissions should be emailed as an attachment to me mount@cs.umd.edu. Here is the late policy: up to 12 hours late: 5% off, up to 24 hours late: 10% off, and 20% for every additional 24 hours late.

Overview. The goal of this assignment is to produce a high-level proposal for a computer game for your final project. Later we will have people vote for their favorites, and pare the list down about 4 group projects, with roughly 3–4 people per group. Everyone is required to submit a proposal, but only the most popular will be selected.

For consistency, the best format for your proposal write-up is Microsoft Word with embedded images or sketches. (If this is a problem, we can accept other formats, html for example.) After receiving your submissions, we will post them on a web page and provide a discussion board for people to exchange questions and ideas. After roughly a week, we will ask people to vote on their favorites.

Constraints. There are no official constraints. You are free to propose any general structure you like (2-d/3-d, single/multi-player, online). The only pragmatic constraints are that your fellow students may not want to join you in a group that involves a project that is either excessively boring or excessively ambitious. You will need to be able to demo your program in class or in my office, so it should run on a laptop (and the computers of your group members). Also, you need to consider the available tools at your disposal (which are largely limited to freely available libraries and software systems). See the course resource web page for some ideas.

Proposal Elements. Please submit a short document (1–2 pages of text) along with any artwork you would like to include with a rough sketch of your game proposal. This write-up is targeted towards your fellow students. It needs to provide sufficient detail for them to understand your ideas, but if it is too long they will not read it. At this stage the emphasis should be on the broad outlines and ideas. The components of your game proposal:

Your name: If you are shy and would prefer that your proposal be posted anonymously, please let me know and I will remove your name before posting.

Game Title: Propose a short title for your game. This is so that people will have something to call it in later discussions and votes.

Description of the Game: This is the main part of the proposal. Describe the game at a high level. How many players will play? What will the players see and how will play proceed? Provide sketches of sample screens. (I can provide help in scanning documents.)

Assessment: What do you view as the main strengths of the game you propose. (That is, What do you see as being the cool elements?)

Development Resources: To the best of your ability, indicate what tools (graphics, modeling, physics, audio) that do you anticipate needing in order to complete the project?

Words for the Wise. Consider what you can achieve in a semester, given your limited tools and resources.

Think Small: Most of the games you buy in the store involve six to twelve months of work by twenty to one hundred trained professionals involving full-time programmers, artists, and sound designers. Keep your design simple, but allow scalability if time permits.

Do One Thing Well: Doing a good job on one or two aspects will get you a better grade than doing a mediocre job on a lot of things.

Understand the Limits of Your Chosen Tools: The tools that are available for game development have different strengths and weaknesses. Take this into consideration in your design.

Plan in Layers: You can't accurately anticipate how long each step in your project is going to take. Consider your *functional minimum*, your *low-target*, and your *high-target*. Plan to develop each before moving on to the next phase. Plan how to partition the work so that team members can coordinate their work harmoniously.