Project Proposal

## What is turned in:

1. A pdf of a slide deck
2. A link to a video
   1. This can either be a zoom link OR a link to a file in a google drive

# Prompt

The first project for this course is the creation and presentation of a working game demo.

Answer this question: What problem is the game addressing?

The problem can be something societal, environmental, or educational.   
E.g. Project New-Leaf addressed perceptions and treatment of individuals based on their gender identity. VATS addresses issues facing the ocean such as pollution etc.

An educational game might be a simulator to teach people how to assemble computers or fix a sink[[1]](#footnote-0).

Create and present a 10 minute presentation to pitch a game idea. The goal of this presentation is to secure 'funding'[[2]](#footnote-1) and develop public interest in the project. Based on this presentation I will decide which games get the green light and which don't. Part of my decision will be based on student interest, so make it compelling!

## Prohibited topics

No horror games!

I want little to no violence. No more than Super Mario Bros. level of violence.

I know this makes this difficult, that is the point. I want technically challenging implementations to help gain some cachet in the CS department.

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# Presentation Grading Requirements

* The presentation must be recorded and submitted to ilearn
  + If I can't access the file, you will get a 0. Make sure you provide any needed passwords or anything else.
* The presentations must address the [presentation topics discussed below](#_pxfurxu6kq2a)
* Presentation should be no more than 10 minutes

## Presentation Requirements

1. Include your name and the working title of your game on the **first** and **last** slide.
2. Game description in general terms.
   1. Something like: This game is like a mix of Castlevania and No Man's Sky. You fly around the universe hunting down procedurally generated vampires.[[3]](#footnote-2)
3. What problem is the game solving?
4. What is the overall design of the game?
   1. This follows the terms discussed in [chapter 2 of 'Game Design and Play'](https://learning.oreilly.com/library/view/games-design-and/9780134392233/ch02.html#ch02)
   2. Discuss constraints, actions, goals, etc. (basically read the chapter 02 summary)
5. Which four of the specific outcomes of the course will the game address?
   1. Procedural content generation **MUST** be one of these.
   2. This may change over the development of the game. That is fine so long as 4 of the outcomes are specifically addressed and one of them is procedurally generated content.
6. Technical Challenge
   1. Each game must address some computer science based technical challenge.
      1. Something like creating an AI, simulating a system, using machine learning, etc.
   2. Use the [specific outcomes](#_3oyhrrw2agrk) for this course as a guideline here
7. Basic game play example
   1. This is a schematic similar to what is discussed in [chapter 7 of 'Game Design and Play'](https://learning.oreilly.com/library/view/games-design-and/9780134392233/ch07.html#ch07)
   2. This does not have to be (and probably should not be) a game demo.

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## The specific outcomes for this course are:

* Procedurally generate cities, landscapes, forests, caves as well as quests and puzzles
* Procedurally generate animations from input data, motion captures, or image data
* Model behaviour of non-player characters including:
  + Navigation
  + Intelligent reactions to events
* Model player and apply it to game difficulty management
* Dynamic programming (machine learning) techniques
* Physics-based lighting models and physics-based simulations

1. Plumbing Simulator is a good idea for a game. [↑](#footnote-ref-0)
2. No actual money will be provided. Funding is the go-ahead to work on the project. Funding will be decided by the instructor. Student ratings will be taken into account as well. [↑](#footnote-ref-1)
3. Dibs on this idea. Though this idea would not be allowed for this class. [↑](#footnote-ref-2)