

# Game Design Project

For the project, you will use Python's [Pygame](#) framework to design a game (Alternate frameworks and languages require TA approval). Create any game you like so long as it is reasonable for the allotted time (Ask the TAs if you're unsure).

Try to avoid ideas that require a large backend infrastructure like level design systems or networking. Some recommended game types include, but are not limited to, "high score", "time limit", "player vs player", "arcade", and "platformer".

Try to keep the game's front end (look and feel) simple. Use basic shapes and colors to depict your players and backgrounds. Don't worry about integrating any fancy graphics or media into your game, that is not the priority. and should only be considered if you have extra time. However, the basic game should be graphical (see examples here <http://pygame.org/tags/arcade>).

## To Do List:

	What you should do	What is due at the end of the week
<b>Week 1</b>	Brainstorm idea for game. Explore pygame. Get something really basic running in pygame.	Game Proposal.
<b>Week 2</b>	Work on and ideally finish your implementation for the game.	Progress report.
<b>Week 3</b>	Polish implementation and playtest. If you have time try integrating media into the game like sound and images.	Nothing, but be sure to push your code to your Github team.
<b>Week 4</b>	Finalize code, write report, and make video demo.	Code, report, video

## Github:

You will use your Github accounts to collaboratively edit your code. A new team in the CS1122 organization will be created for your project group. We will be looking at commit history to see that the work is being distributed fairly and that you used your time wisely, so be sure to commit regularly.

## Game Proposal:

1-2 paragraphs explaining on a high level what your planned game is, and its features. We will provide feedback to these reports telling you if your project is too easy or too hard.

## Progress Report:

3-5 paragraphs detailing what has been done so far, and how the work is being distributed. Include screenshots if you have any.

## Final Report:

Your report should consist of the following sections:

Introduction (At least 1 paragraph) - A brief summary of the game you made (include screenshots)

Background (2-4 paragraphs) - Any background knowledge about Pygame or game design in general that you relied on in your project. This includes an explanation on the type of game you were trying to make, and references to any games that inspired your work.

Implementation (4-6 paragraphs) - Give an overview of the project's overall structure on a code level. You can include any individual snippets of code you think are important.

Results (2-4 paragraphs) - Did your game work? Did you manage to implement everything that you wanted to? How did the playtests go? Did people like playing the game? Was it too easy, too hard? **Have 3 people playtest the game, and include their feedback in your report.**

Future Work (1 paragraph) - If you had more time to work on this project, what else would you add to make it better?

Link to Video Demo - A link to the Youtube video of your demo

### Video Demo (2-5 minutes):

This video should show a playthrough of your game, and note some of the features you mention in your report. Explain the basic controls and rules. You can also say anything you want us to know about that didn't quite fit in the report.

### Resources:

<http://www.pygame.org/wiki/tutorials>

<http://www.pygame.org/docs/tut/newbieguide.html>

<https://www.youtube.com/watch?v=h2Uhla6nLDU> (video that shows what pygame can do)

If you want feedback on your game, the NYU Game Center hosts a "Playtest Thursday" every Thursday in MAGNET that is open to everyone:

<http://gamecenter.nyu.edu/event/playtest-thursday-52/>