Final Project

What is a game?

1. What Makes Games FUN (Psychology in Gaming)- What are the game patterns for your game?
    a. https://www.youtube.com/watch?v=lkatr_a1OMQ
2. So, You Wanna Make Games?? Opposition-Fairness-luck/skill
    a. https://www.youtube.com/watch?v=yYYtBFSxoCg
3. Basic Principles of Game Design – What is the Goal? How are you communicating it during the game?
    a. https://www.youtube.com/watch?v=G8AT01tuyrk

Where do I get the idea of a game?

Create a python game – here are your options.

a Adapt a python game from here (you need to use turtle graphics or pygame) https://inventwithpython.com/invent4thed/ (game should be from a chapter after chapter 17. Chapter 17 is Pygame introduction)

b Pygame based games with installation, https://inventwithpython.com/pygame/

c http://www.grantjenks.com/docs/freegames/ . This requires installation of freegames. You need to explain the codes in the modules you are importing from freegames. Or what you could do instead is pick the game from here and then find other websites online that have the source code of the game.

2. Adapt a Pygame or turtle graphics game from any other site.
3. Create your own game using Pygame or turtle graphics.

If you use an existing game, you will make modifications and list those modifications in the comments section in the game.

Groups

You need to work in a group for this project. If you do not have a group or the members are not responding reach out to me.

Presentation

Face to face classes will make a presentation in class while web classes will submit a video presentation.

Documentation

1. Introduction to Docstrings https://www.youtube.com/watch?v=R6diu-uMUi4
2. See guidelines below for writing docstrings https://www.programiz.com/python-programming/docstrings

Write documentation using docstrings. Make sure docstrings are present for each function, class, and module (if you have modules). Print the docstrings for each function and class out and insert them in a word document.

Project Report

Submit a 1-page report describing your game and answering how it meets the principles of game design based on the videos above. What is the goal of the game? What are the steps to achieve the goal? How do you communicate these steps with the player of the game? Is the game about luck or skill or both? What game patterns does the game use? In the videos listed above on game design, you can see which video covers these topics.

Project Rubric

- Game (40 points). Make sure to have a separate file with screenshots of code and output
- Changes made and changes included in comments: you should include the word change in the change comment as in (20 points)
    - #change 1: changed the color of tiles
- docstrings (15 points)
- One page project report explaining game design (10 points)
- Video presentation (for online class) or class presentation. Presentation length 3-5 minutes – explain code and what the game does. All members need to participate in the video and screenshare. If you cannot get the schedules to align you can combine separate video files. (15 points). Focus presentation on what the game does, what changes to the code you made, what was the most challenging part and what you learnt.

Deliverables

2, 3 and 4 can be in the same file, make sure it is outside the zipped folder. Do not forget to include the names of all the team members in every document that you submit.

1. Python file for the game: if there are multiple files submit a zipped folder. I should be able to unzip the project and click on the file.
2. docstrings file
3. Screenshot of output
4. project report
5. Video file (for online class) or in class presentation