

## **Project Description [2.5 pts]:**

Name: Escape

Player's character will have to try to make it through as many rooms (or levels) without dying. Ghosts will approach the player and each time the player gets caught by a ghost, they lose a life. To kill ghosts, the player must type the proper spell (located above the ghost's head). In order to escape a room and move onto the level, the player must collect enough points (they look like floating orbs).

## **Competitive Analysis [2.5 pts]:**

Escape is based off of the Google doodle game from Halloween 2016. The similarities that my game shares with the google game are that there are ghosts that approach the player and the player loses a life if they get caught, and the goal is to make it through all the levels. However, the games are different: in my game, the player must type the correct phrase to get rid of the ghosts instead of drawing the correct shape like in the google game, the player is also allowed to move to try and escape the ghosts in my game instead of being stationary like in the google game, in order to move onto the next level the player must collect enough points in my game instead of staying alive long enough like in google's game.

Because the player can move around, must avoid obstacles in the map, must collect points, and must avoid ghosts, it is also similar to pacman.

**Structural Plan [2.5 pts]:** A structural plan for how the finalized project will be organized in different functions, files and/or objects.

- 
- Will use OOP; so a class for the player, each ghost. Will organize things based on the type it is in animation (so initialization will be broken up, then drawing will be broken up and key pressed will be broken up and then there are other functions to make things easier, like backtracking).

- 
- **Algorithmic Plan [2.5 pts]:** A detailed algorithmic plan for how you will approach the trickiest part of the project. Be sure to clearly highlight which part(s) of your project are algorithmically most complex, and include details of the algorithm(s) you are using in those cases.

- 
- I think the tracking bit of the ghosts tracking the player and is hard... will use the stuff in game ai.
- Used backtracking for the maze/obstacle placement

■

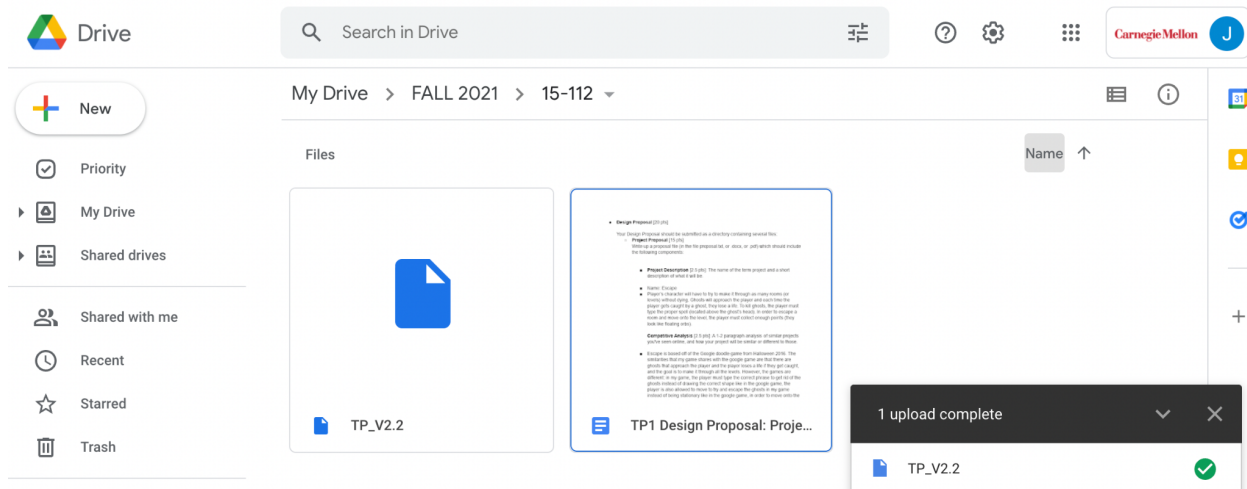
■

**Timeline Plan [2.5 pts]:** A timeline for when you intend to complete the major features of the project.

- TP1:
  - Figure out obstacles
  - At least one ghost class (figure out the tracking thing)
  - Start level generator function
- TP2:

- Add different levels (so like how to continue on to a level and make the level progressively harder)
- Add home screen and directions screen
- Start animations/sprites/backgrounds and images
- TP3:
  - Clean it up
  - Add more levels potentially

**Version Control Plan [1.5 pts]:** Save each TP checkpoint and any other versions I want to a google drive folder.



**Module List [1 pts]:** I'm not planning on using any additional modules.

- **Storyboard [5 pts]**  
Generate a storyboard that demonstrates how a user would interact with your finished project. Your storyboard should have at least six panels, and at least three of those should demonstrate features within the project. You may scan or take a picture of your storyboard and include it in the directory as the file storyboard.png (other acceptable filetypes include .gif, .jpg, and .pdf).