Mini Project 7

Due Nov 8, 2019 by 11:59pm **Points** 60 **Submitting** a text entry box or a file upload
File Types txt **Available** after Oct 30, 2019 at 12am

This project is on graph traversal. Start with a tilemap such that there are 20x20 = 400 grids on a 400x400 pixel canvas. A sample is given below. You are asked to:

. Create a 20 pixel x 20 pixel player character and two NPCs, also the same size.

. Place all three characters at valid positions inside the maze when the game starts.

. The player character is controlled with arrow keys.

. The NPCs should chase the player character smoothly using the A* search; that is, the NPCs should not get stuck at a wall while chasing the player character.

First few rows for a Sample Tilemap:
"wwwwwwwwwwwwwwwwwwww",
"w----------ww------w",
"w-wwwwwwww----w--www",
"w-wwww-----wwww wwww",

The above describes the minimal requirements. You may add additional features to make your game even more interesting. But you cannot simplify the maze to be an empty space.

Grading: Grading of this exercise will be based on the following:

. Total is 60 points
. Artistic and creative effort: 10 points
. Documentation: 5 points
. Completeness: 45 points
. If your program has syntax errors - the grade will be 0. This will be true for all future projects.
. 2 point penalty for each hour late on submission.

You may discuss among yourselves for this exercise. However, everyone must write his/her own program. You are allowed to exchange ideas, but NO PROGRAM SEGMENTS, PROCEDURES, FUNCTIONS MAY BE EXCHANGED OR COPIED from any source other than the code provided in the lectures.