CSC 220 Object-Oriented Multimedia Programming, Fall 2021

Dr. Dale E. Parson, Assignment 5, interactive and automatic 2D maze construction.
This assignment is due via **D2L Dropbox** **Assignment 5** due by **11:59 PM on Friday December 10**.
10% penalty for each day it is late.

The starting point code is in the page entitled **CSC220Fall2020Final5Maze.txt** linked to the course page. Copy & paste it into **Processing** and **Save As CSC220Fall2021Final5Maze**. Proceed according to the instructions embedded in **STUDENT** comments embedded in the code.

https://faculty.kutztown.edu/parson/fall2020/CSC220Fall2020Final5Maze.txt

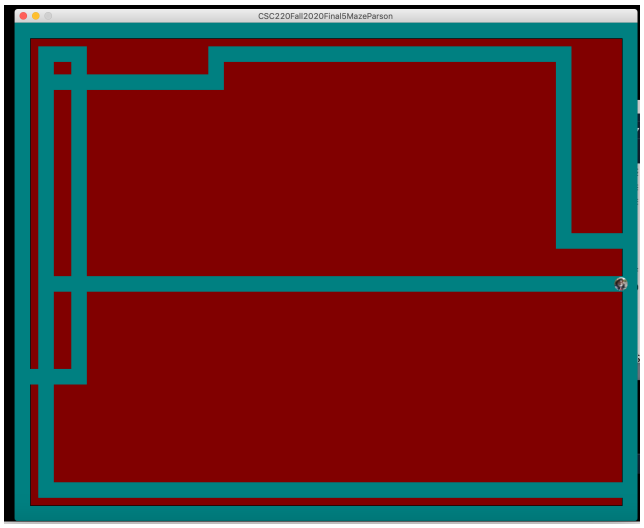
Save your sketch as **CSC220Fall2021Final5Maze**.

Make sure to turn in your excavator image file along with the CSC220Fall2020Final5Maze.pde file, along with any optional files it may load. Turn them in to D2L as usual.

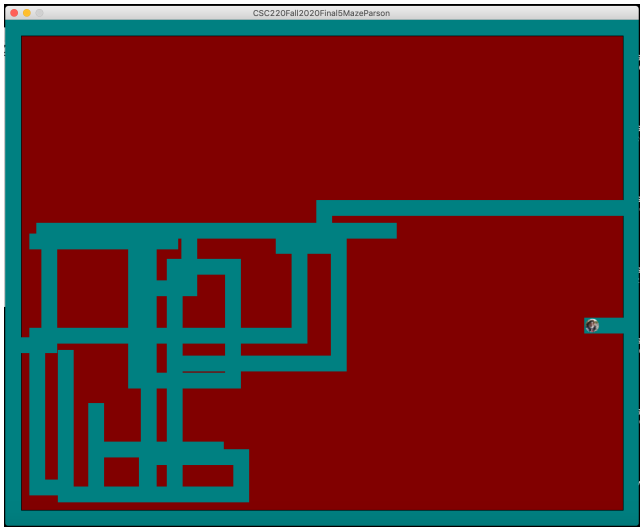
I will test for the following conditions:

1. Neither arrow-driven manual maze construction nor automated maze construction can penetrate the left open space after tunneling into the maze. They can penetrate the right open space. That is how to complete the maze through the area.
2. Neither arrow-driven manual maze construction nor automated maze construction can penetrate the upper or lower open spaces after tunneling into the maze.
3. Neither arrow-driven manual maze construction nor automated maze construction can go fully off display.
4. The arrow-driven manual maze construction is disabled during automated tunnel construction.
5. Hitting the 'a' key during automated tunnel construction does not start new tunnel construction.
6. No diagonal lines.
7. Automated maze construction does not hang.
8. The sketch does not crash.
9. You have completed all STUDENT steps specified in code comments.

See the next page for screen shots.



A manually constructed maze using the RIGHT, UP, DOWN, and LEFT ARROW KEYS.



An automatically constructed maze using the ‘a’ key many times.

You can combine them, but not at the same instant in time.