



MazeController: The master object that controls the generator, solver, and animation

MazeGenerator: Generates a Maze object based on a specific algorithm set by the controller. Will give a list of animations to display as well.

DFSGenerator: Takes a Maze object from the MazeController and generates a maze with DFS generation.

PrimGenerator: Takes a Maze object from the MazeController and generates a maze with Prim's algorithm.

KruskalGenerator: Takes a Maze object from the MazeController and generates a maze with Kruskal's algorithm.

Maze: The maze object generated by the generator that will be sent to the solver to be solved.

Cell: The locations in the maze. Each will have 4 walls (most walls will be duplicated amongst adjacent cells).

MazeSolver: Solves the maze using a specified algorithm. Will give a list of animations to display as well.

MouseSolver: Takes a Maze object from the MazeController and solves the maze with a random mouse moving around the maze.

MouseThreadSolver: Takes a Maze object from the MazeController and solves the maze with creating many threads randomly progressing through the maze.

MouseThread: A thread which can spawn other threads of the same type, each moving through the maze. Once one thread finds the end, all threads are killed.

WallSolver: Takes a Maze object from the MazeController and solves the maze with following the left wall of the maze.

WallThreadSolver: Takes a Maze object from the MazeController and solves the maze with two wall-solvers, each starting at difference ends of the maze.

WallThread: A thread only created by the solver which end their execution on their own.

Will attempt to solve the maze by following the left wall until it encounters the work of the other thread

PledgeSolver: Takes a Maze object from the MazeController and solves the maze with using the Pledge algorithm.

AStarSolver: Takes a Maze object from the MazeController and solves the maze with using the A* algorithm.

AnimationList: An ordered collection of events to apply to the screen, displaying the order of events that happened in the generator and solver after the maze has been both generated and solved.

GraphicalMaze: The object being displayed to the screen that will be manipulated by the animations.