Test Plans

Project Title: Maze solving App

Team Members: Ethan, Surya, Kyle, Tommy, Benjamin

Feature 1: Algorithm Successfully Finds Solution

User Story: User should be able to expect the algorithm to arrive at the specified endpoint of the maze as long as a route is possible

Test Detailing: With an endpoint bound to a specific point in the 2D array, we would be able to run a test at the termination of the algorithm to see the final point in the array that was analyzed before termination

Acceptance Criteria: If this point matches the end goal, the maze algorithm has navigated the maze successfully.

` Failure Criteria: If this final point does not match the end goal, the algorithm terminated prematurely

Feature 2: User account creation

User story: Users should be able to create a unique login and password.
Acceptance criteria: When a user creates a login ID the application should ensure that the ID is unique and the password meets the password requirements before passing that information to the database.
Failure Criteria: A non unique ID is able to be created. A password not meeting the password requirements is able to be created. A good login ID and password is unable to be saved in the database.

Feature 3: Maze saved to database

User story: Users should be able to save generated mazes into the application's database.

Acceptance Criteria: Given that a valid maze has been generated, when the save button is clicked, a 2d array of size greater that accurately represents the maze layout will be stored in the user’s database:

Failure Criteria: No 2d array or a 2d array that is not representative of the maze is saved.

Individual Contributions:

- Each individuals contribution
    - Ethan: Has begun stitching the html pages and algorithm together in preparation of the presentation; Test Criteria 1.
    - Surya: Finished tweaking the basic maze drawing ui elements. Also implemented the first maze solving algorithm, a breadth first search which is able to solve and visualize the solution to any maze in the grid..
    - Kyle: Started development of login page; Test criteria 3.
    - Tommy: Worked on the maze management page.
    - Benjamin: has been building and updating the project management board, setting up a roadmap and researching backend solutions for the project; Test Criteria 2.
- Link to latest git commit for each individual (can be anything, wireframe pics, etc.)
    - Ethan: https://github.com/CSCI-3308-CU-Boulder/3308SP21_021_3/tree/master/CODE/MainPage
    - Surya: 3308SP21_021_3/CODE/Maze at master · CSCI-3308-CU-Boulder/3308SP21_021_3 (github.com)
    - Kyle: https://github.com/CSCI-3308-CU-Boulder/3308SP21_021_3/blob/master/architecture_diagram.png
    - Tommy:https://github.com/CSCI-3308-CU-Boulder/3308SP21_021_3/tree/master/CODE/management%20page
    - Benjamin:https://github.com/CSCI-3308-CU-Boulder/3308SP21_021_3/blob/master/MISC/database_demo_Milestone_4.PNG