**Project Name:**

Puzzle Explorer

**Objective:** To build a website that let users choose and design the puzzle and the algo will traverse and find the end.

Functional Scope:

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| --- | --- |
| Functional Scope No. | Description |
| FSN-01 | User will be able to choose dimension of a puzzle |
| FSN-02 | User will be able to design the puzzle   * Ability to mark start * Ability to mark end * Ability to mark walls |
| FSN-03 | Start button will initiate the puzzle solving |
| FSN-04 | The following buttons “Start”, “End” and “Wall” set the modes of what will be plotted in the Maze. |
| FSN-05 | Dropdown to choose the dimension of the Maze  10 x 10  20 x 20  30 x 30  40 x 40  50 x 50 |

Technology requirements:

ReactJs for frontend framework

Bootstrap (latest)

**Maze**

The maze is represented by grid of flat clickable buttons that will be represented by a 2d array when coded with the frontend framework.

**Maze Dimension**

The maze dropdown will control the dimension of the maze.

**Plot Modes**

Start will mark the beginning of the puzzle.

End will mark the goal of the puzzle. Both Start and End button can only be plotted once.

Wall can be plotted as many as the user desires and as long as the Maze can accommodate.

**Page Design**

A screenshot of a cell phone

Description automatically generated