

# Micromouse-Maze : Assignment Report

**Title:** Micromouse Maze Game

**Objective:** To design and implement an interactive maze game using HTML, CSS, and JavaScript, showcasing the BFS algorithm for pathfinding within a grid-based maze.

**Key Features:**

- **Custom Maze Design:** Users can add or remove obstacles.
- **Interactive Controls:** Define start and destination points, visualize the shortest path.
- **Algorithm Support:** Implements Breadth-First Search (BFS) for pathfinding.
- **Responsive Design:** Fully functional on both desktop and mobile browsers.

**Technologies Used:**

- **HTML:** Structuring the grid and controls.
- **CSS:** Styling the grid and responsive layout.
- **JavaScript:** Game logic, BFS algorithm, and animations.

**Learning Outcomes:**

- Practical understanding of the BFS algorithm.
- Real-time user interaction with grid-based applications.
- Debugging and optimizing JavaScript applications.

**Live Demo Links:** [https://sp201004.github.io/Micromouse\\_Maze/](https://sp201004.github.io/Micromouse_Maze/)

🌐 sp201004 - Overview

