

CS 320 Course Project Final Report

for

Maze Web Application

Prepared by

Group Name: *Team 19*

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| Date: | 2020-12-16 |
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# Introduction

*<TO DO: Please provide a brief introduction to your project.>*

## Project Overview

Our project is a web application that allows a user to play through randomly generated mazes. These mazes are then accessible by others through a global leaderboard. Section 2 outlines use cases for the website. Section 3 outlines the class structure of the website. Section 4 outlines both state and sequence diagrams for aspects of the website. Appendix A is a record of all meeting information for the project group.

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| **Term** | **Definition** |
| DB | Database |
| Score | The time taken by a user to complete a maze |
| Seed | A number used by the website to generate a maze. |
| Username | A unique identifier for a user. |

## References and Acknowledgments

<List any other documents or Web addresses to which this document refers. These may include user interface style guides, contracts, standards, system requirements specifications, use case documents, or a vision and scope document.

TO DO: Use the standard IEEE citation guide for this section.>

# Design

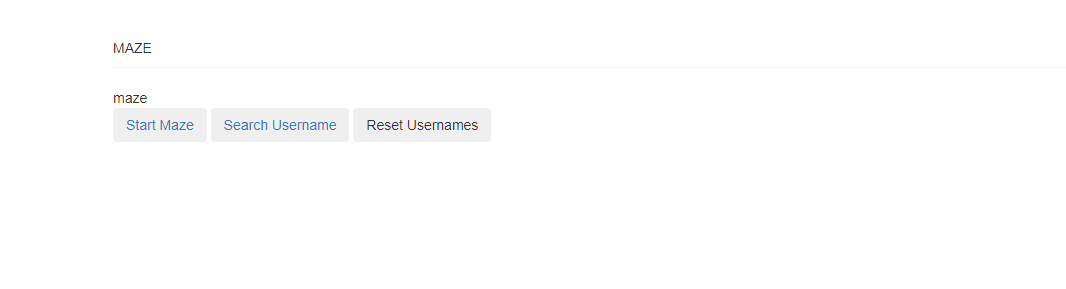
## System Modeling

Our implementation strictly follows the design document (milestone 2)

## Interface Design

Following are the interfaces of each web page

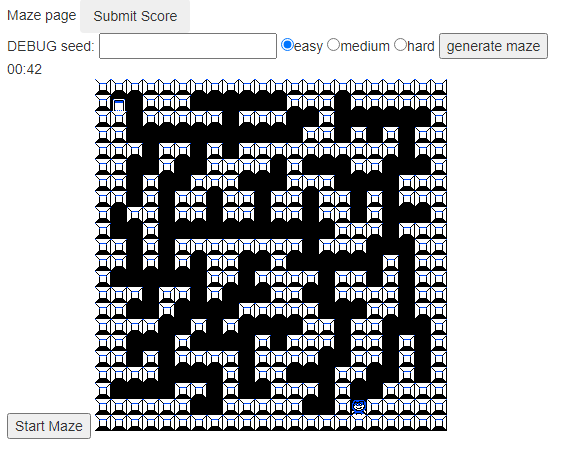
Home Page:



Difficulty Select Page:



Maze Page:



# Implementation

## Development Environment

Languages that we have used in our project are

* HTML
* JavaScript

IDE Tools:

* Visual Code

## Task Distribution

Timer Functionality and Difficulty Select Page is done by Daniyal Abbas

## Challenges

*<This section is optional. Describe the challenges in the implementation, if there are any, and how you dealt with them.*

*TO DO: If you don’t have anything to fill in, just leave this section blank.>*

# Testing

## <*This section is a summary of your testing report>*

## Testing Plan

<Describe your testing plan for the project.

TODO: Give a list of items or functions you want to test, and also a schedule for performing the testing. >

## Tests for Functional Requirements

<Describe your test results for the functional requirements.

TODO: Provide a list of use cases or functions you have tested, as well as the testing results (whether or not the system passed the tests).>

## Tests for Non-functional Requirements

<Similar to the Section 4.2, but this section is for the non-functional requirements. >

## Hardware and Software Requirements

<Describe the hardware and software requirements for performing the tests. >

# Analysis

<In this Section you need to analyze the effort that has been put on this project.

TODO: Describe how many hours (approximately) each team member spent on the project, for each milestone, which milestone took the most effort and why. >

# Conclusion

<Conclude the document with what you have learned through working on the project.>

Appendix A - Group Log

< Describe how frequently the group members meet during the semester, and how effective the communication is. This is optional for one-person projects.>

Our group usually met at least once a week throughout the semester.

|  |  |
| --- | --- |
| Date & Time | Subject |
| *2020-10-05 (3:00 - 3:45)* | *Brainstorming and deliberation of the project idea. Many ideas were proposed, but a vote favored the maze idea. We fleshed out aspects of the maze and all functionality it had.* |
| *2020-10-19 (3:30 - 4:15)* | *Delegation of tasks for the SRS document. Each member was given a section to complete: Section 1 - Matthew, 2 - Patric, 3 - Andrew, 4 - Daniyal. The SRS Github repo was created for us to commit to.* |
| *2020-10-26 (3:00 - 3:15)* | *A quick check-in between all members to determine progress and any challenges. Section 2 was completed and work on the other sections had begun.* |
| *2020-11-02 (3:00 - 4:00)* | *We discussed what we had each written and disputed any differences of opinion. We still had some things to complete, which were added by the due date.* |
| *2020-11-09 (6:30-6:45)* | *We created the main project repo and discussed implementation details.* |
| *2020-11-16 (3:00 - 4:00)* | *Delegation of tasks for the software design document. Each member was given a section to complete: Section 1 & 4 - Matthew, 2 - Andrew, 3 - Patric & Daniyal.* |
| *2020-11-30 (3:00 - 3:30)* | *We discussed possible implementation paths and set out exactly what we wanted the website to look like.* |
| *2020-12-07 (3:00 - 4:15)* | *We delegated tasks to certain members in the group and created a to-do list that broke down what was needed to complete the project into manageable steps.* |