Beautiful Men

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Minesweeper
White Hat Edition

OVERVIEW

We will be making the classic minesweeper game with a computer virus theme. There will be a board of computers with viruses scattered among them. As the player, the goal is to place anti-hacks in the computer with viruses, and clear the computer without them. If the player clears a computer with a virus, the player will get his Roblox account hacked. Once the player completes the board, he wins the game.

GOALS

1. Create a parody of the minesweeper game.
2. Create a login/register page.
3. Create different difficulties.
4. Create a leaderboard based on win streak.

PROGRAM COMPONENTS

The site will be running on a Flask server. For the frontend, we will be using HTML, CSS, and Javascript. We will be using Bootstrap since it will provide a lot of useful components that are already developed. We will then create an algorithm to create a random minesweeper game. Then using that data, we will create a hacking themed minesweeper board with computer icons as the cells. If the player wins, the data will be stored in a SQLite3 database. The data will be retrieved from the database to be displayed to show on the leaderboard.

SITE MAP

NavBar

Having the navbar allows the user to travel the website with minimal effort.

Home (/home)

Homepage for users that are not logged in. Contains information about the project.

Menu (/menu)

Homepage for users that are logged in. Contains information about the project.

Game (/gamepage)

Contains the minesweeper game. If the user wins the game, it will be recorded in the database to display their win streak. If the user loses, their win streak will be reset. Win streaks will be displayed on the leaderboard. There will be 2 difficulty levels: Script Kiddie (easy) and Code Monkey (hard). The harder the difficulty, the larger the minesweeper grid is and the more frequently bombs will be placed.

Login/Register (/register and /login)

Allows the user to create or login to a user.

Settings (/settings)

Allows the user to change the difficulty and toggle dark mode. The user's preferences will be recorded in the database.

Leaderboard (/leaderboard)

Displays the win streaks of all users in two separate leaderboards, one for each difficulty.

Error Page (/error)

Standard error page to catch exceptions raised by our backend.
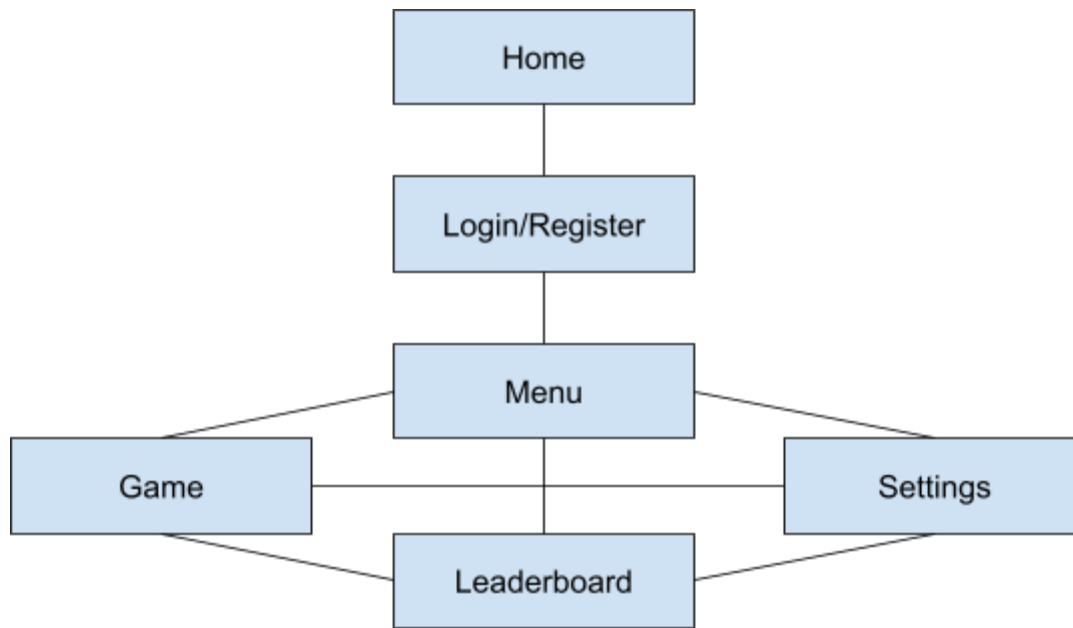
DATABASES

User DB

User ID	Username	Password	Mode	Difficulty	Monkey Win Streak	Kiddy Win Streak

For the database, we will be using relational databases to link the player with the user in the database.

APIs

At this time, we do not see the need to use any APIs.

ROLES

Ivan (PM) - Establish the database needed and help develop the game algorithm

Alejandro - Develop Back-End of Minesweeper game

Theo - Create Front-End game using JS

Sadid - Bootstrap and frontend work