Week 14 Progress Report (05/12)
+ *Full Name*: Fariha Ahmed
+ *Project Title*: Digit-Sum-Graphs
+ *Course*: CS 161 Section 01
+ *Date*: 5/12/24

Final Status:
+ *Finished Features:*
    - Landing page
    - Navigation menu
    - Login/signup modal
    - Password hashing
    - User authentication/sessions
    - Logout functionality
    - Graph game menu page
    - Graph game page
    - 'Get Solution' functionality
    - 'Submit Solution' functionality
    - Graph game end modal
    - User dashboard
    - User gameplays
    - Admin dashboard
    - Admin functionalities for user accounts (edit password, delete account)
    - Account settings on dashboards

+ *Unfinished Features:*
    - Hints mechanism
    - User leaderboard
    - Game statistics

Deployed Link: https://digit-sum-graphs.vercel.app/

Feedback From Others:
+ *Feedback from Gargi Tawde*
    - Add a description of the game on the landing page (I implemented in my project)
    - Incentivize users to sign up on the landing page rather than only giving options to play with no account/play as a user
    - Consider a universal navbar across the site instead of having navbar options separately on different pages (I implemented in my project)

+ *Feedback from Areebah Iqbal*
    - Prevent an admin account from deleting other admin accounts (I implemented in my project)
    - Put a range on the numbers so that users don't put extremely huge/small values

Future Enhancements:

+ *Add more puzzles*: Add more puzzles to the database for users to have a wider variety of puzzles to solve from. Potentially, have puzzles be computer generated so that users have an endless supply of puzzles to solve.
    - Since I had to create and design each puzzle page by hand, I was not able to add many different puzzles, so as of now, users have a limited selection of puzzles they can actually play.
    - Adding more different, varied puzzles will encourage users to visit the site more than once and keep them engaged.

+ *Hints mechanism when submitting solution*: When users submit their solution and it is incorrect, they can click a previously disabled 'Hint' button that highlights which of their nodes is leading to an incorrect solution.
    - This would allow users to specifically see what they got incorrect and allow them to build off their previous answer instead of having to start from scratch if they still want to try solving the puzzle.

+ *Limit when a user can click 'Get Solution' on the game page*: User can't click 'Get Solution' until a certain time interval (~5 mins) have passed
    - This would encourage users to actually try to solve the puzzle for themselves before they resort to getting the solution.

+ *User leaderboard on the game menu page*: Users can see a table on the game menu page that lists all the available puzzles, the shortest time each puzzle has been solved in, and the username of the user who accomplished each puzzle's best time.
    - This would introduce some competitiveness among users and give users an incentive to try and complete their puzzles faster.

+ *Dashboard UI fixes*: The gameplay/user tables displayed on the user/admin dashboard should be scrollable in place instead of the user having to scroll down the page to see more of the table.
    - This would make the UI even more appealing to the user.

+ *Game statistics on dashboard*: Users can see the statistics of the game's they've played on their user dashboard, such as the average time taken to solve a puzzle. Admin can see statistics of all the games played on the site, such as the most popular puzzle or the average time taken to solve a puzzle.
    - This would be a feature that could draw in users to signup for an account on the website. It also allows them to monitor their progress, which could encourage them to keep on playing.