Week 2 Progress Report (2/4)

Project Title: Digit Sums and Graphs
In each diagram, fill in the circle with positive whole numbers in such a way that each circle's number is the sum of the digits of all the numbers connected to it.

Github Repository Link: https://github.com/fahmed0710/161-Individual-Project

Milestones with Deadlines:
2/6 - 2/16: Learn Flask basics, set up Github repository, finalize technologies, finalize algorithms, finalize features and design
2/16 - 2/21: Set up initial DBs and backend
2/21 - 2/25: Design initial UI
2/25 -3/1: Login/registration, account management
3/1 - 3/30: Implement game functionality and algorithm
3/30 - 4/5: Design functionality for user to view data from previous games
4/5 - 4/16: Testing

Initial Technology Stack:
-Frontend: HTML, CSS, JS, Node
-Backend: Flask

Algorithms/AI schemes used in the core engine:
- Generating answers algorithm: backtracking algorithm that adds up the digits connected to a node and determines if it's correct, meant to find all possible answers
- Hint algorithm: user gets up to 3 hints, each time the user guesses incorrectly after the hint is given, the time until the user can access the next hint is increased

Market Space the application is related to and Product Selling Points:
- The game is geared towards people of all ages. Math-oriented people are more likely to consistently engage with the game.
- The game is simple in the sense that the directions are very straightforward, but still challenging enough for users to be engaged.

Github Account: https://github.com/fahmed0710