

Background

This is a take home coding project based on the game of Sudoku.

Goals

- Application generates a random Sudoku solution when webpage is opened
- Generates a new solution when 'reload' button is pressed
- Supports user interaction (lockable cells)

Scope

The scope of this project contains the creation of a web application which generates a randomized Sudoku solution. Beyond the MVP, user interactivity may be in scope depending on time and resources.

Project Milestones

- Project setup (npm, nodeJs)
- Write backend code + tests to return randomized Sudoku solutions
- Simple UX design of SPA
- Create a SPA to display Sudoku solutions
- Add 'reload' functionality to SPA
- Add interactivity to SPA

Deliverable

A GitHub repository with all the code to run the application locally.

Build Steps

To install everything:

- 1) **npm install**
- 2) **cd client && npm install**

To run tests and start application:

- 3) **cd .. && npm run-script build**

To run tests separately:

npm test

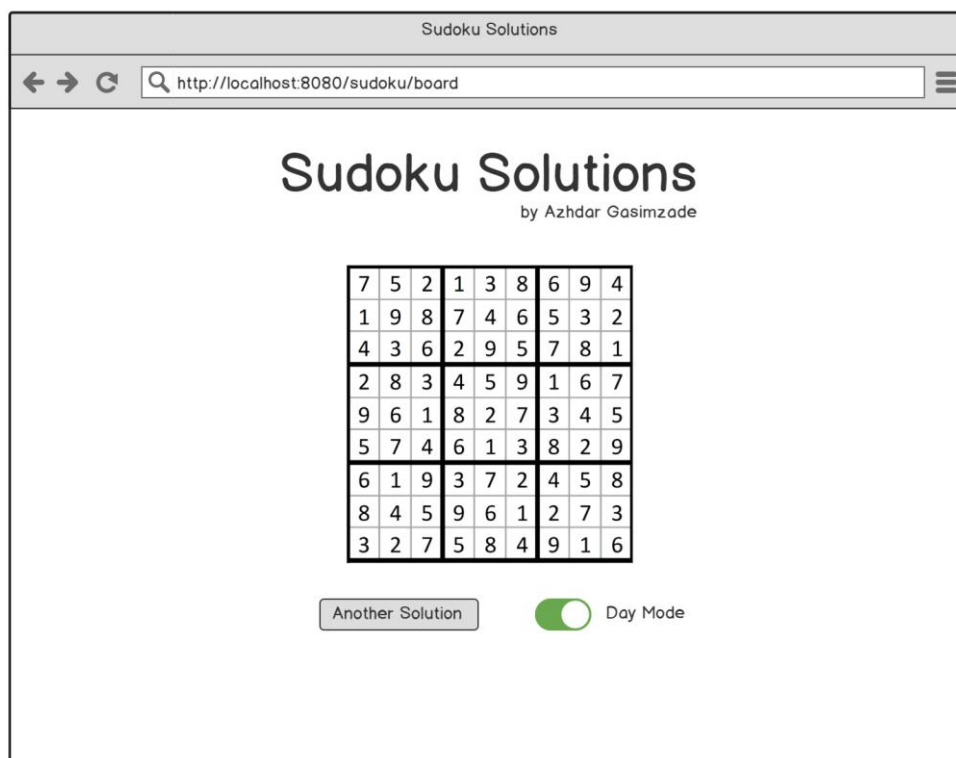
Constraints, Assumptions, Risks and Dependencies

A Linux environment is assumed.

Also assuming npm is installed on device.

Program must execute in under 500ms

UX Design



Unlocked Cell



Locked Cell

