

BCSE203E - Web Programming

Digital Assignment – I

Winter Semester 2023 – 2024

Topic: Develop Your Own JavaScript-Based Project

Registration Number – 22BCT0116

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Github Link - <https://github.com/Azsriel/Sudoku-Js>

Website Link - <https://azsriel.github.io/Sudoku-Js/>

Table of Contents

- Documentation
- Learning Reflections
- Features of the Sudoku App
- Screenshots

Documentation

Tools:

- VSCode as the code editor
- Word for the documentation
- Git for version control
- Additional resources from TheOdinProject and GeekForGeeks

Steps:

1. Color Scheme and layout are decided
2. The Sudoku game logic is implemented
3. Game and visuals are synced and full logic is implemented
4. Github repository is committed to after each important implementation

Challenges Faced:

Coming up with a color scheme and layout was difficult. It was also an interesting challenge to seamlessly synchronize the javascript arrays with the html data being shown

Learning Reflections

1. Understood basics of HTML and CSS.
2. Learnt the importance of Events and Event Handling
3. Learnt the basics of CSS Animations
4. Studied Javascript code and logics in depth
5. Learnt the basics of using version control using Git.
6. Learnt how to setup and use GitHub pages.
7. Learnt the importance of documentation in project management.
8. Learnt the importance of organizing code in larger projects.
9. Learnt how to use the Emmet tool in HTML development.
10. Learnt how to effectively research relevant materials online

Features of the Sudoku App

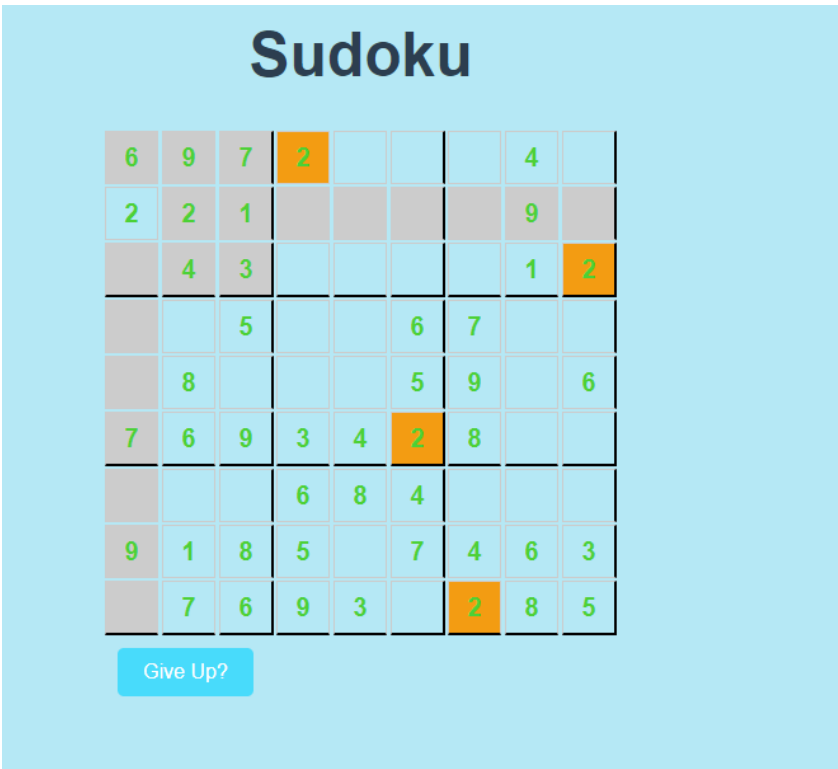
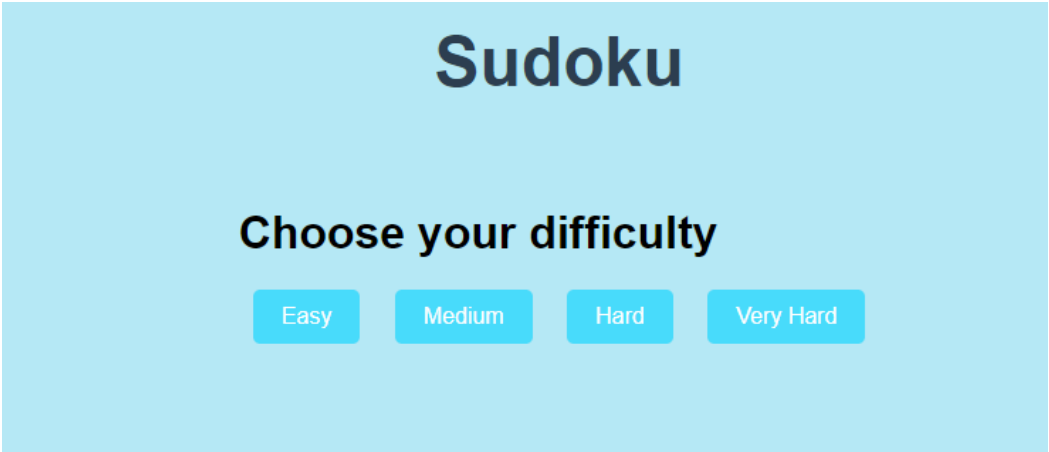
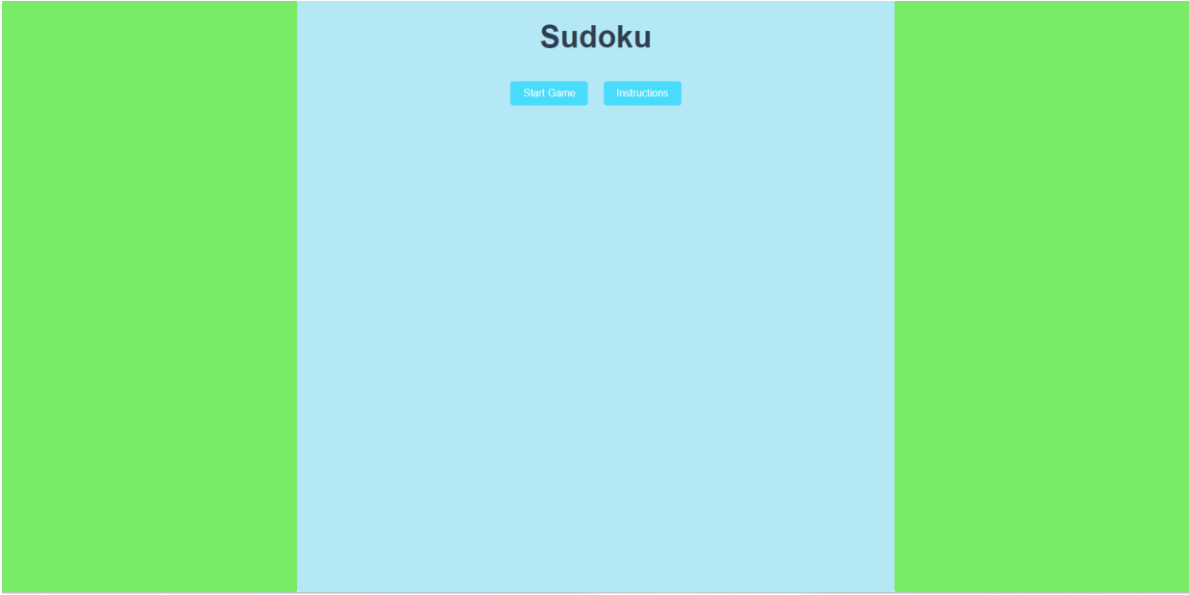
This Sudoku app has 4 difficulties which are decided by the number of empty cells in each game. Games are completely randomized and the chances of getting the same board twice is negligible

There is an option for replayability. There is an indication for highlighting rows, columns boxes and same numbers for convenience during the game.

Once all occurrences of a number are filled in the board, they are clearly highlighted in green. If a number is placed in the wrong location in the board, it is highlighted with red

There is also an option to give up, which immediately fills the entire board with the correct solution

Screenshots



You Win!!!

Play Again?