

Sudoku

By the Bros:

Mark, Jan, Johnathan

Sudoku Game

00:00:00

Stop

Difficulty: Easy

Puzzle Size: 4x4

Dark Mode

Mistakes: 0/3

| | | | |
|---|---|---|---|
| 4 | | | 1 |
| | 2 | 3 | |
| | | 1 | |
| 2 | | | 3 |
| 1 | 2 | 3 | 4 |

Create New Game

Get Specific Hint

Undo

Set Note

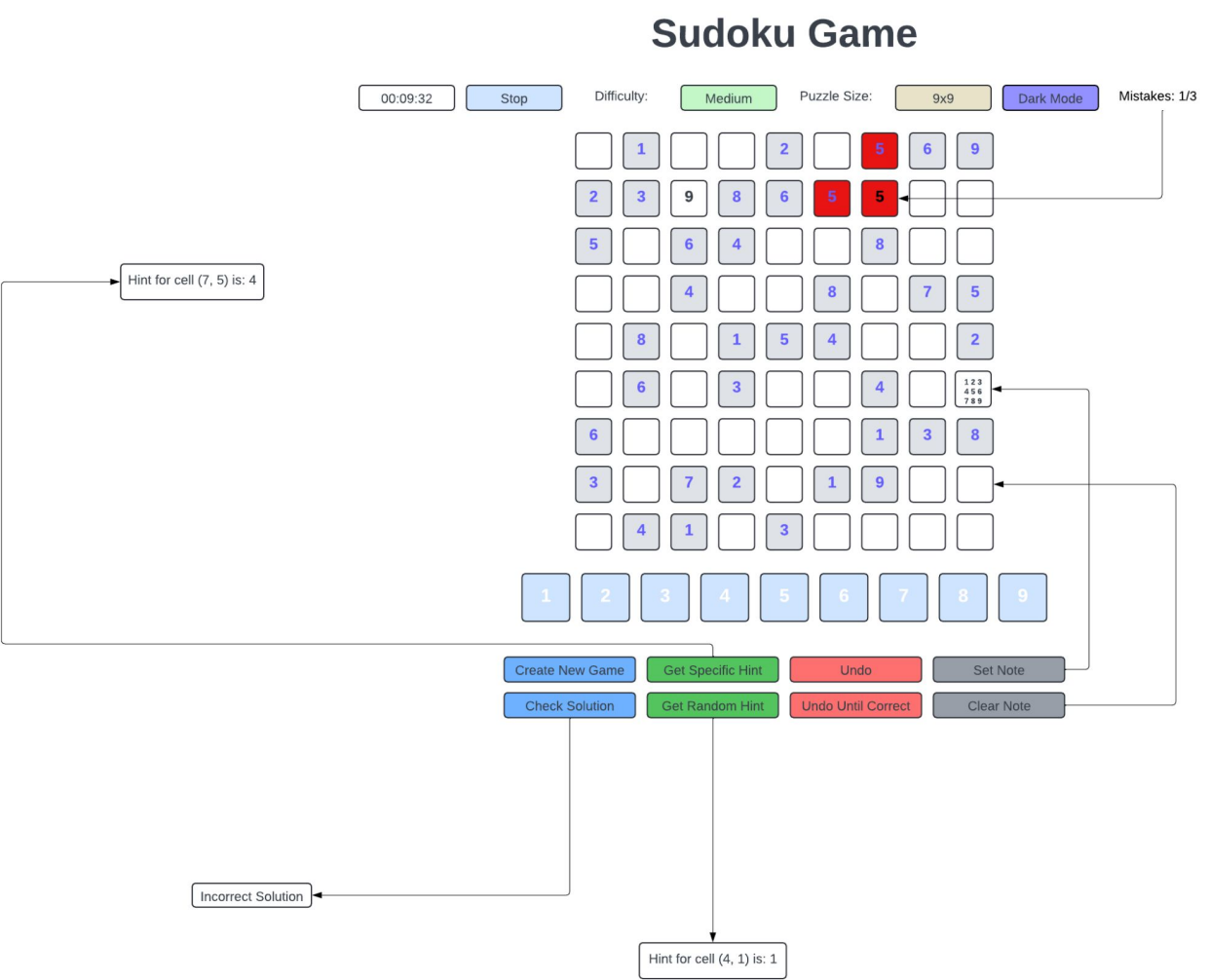
Check Solution

Get Random Hint

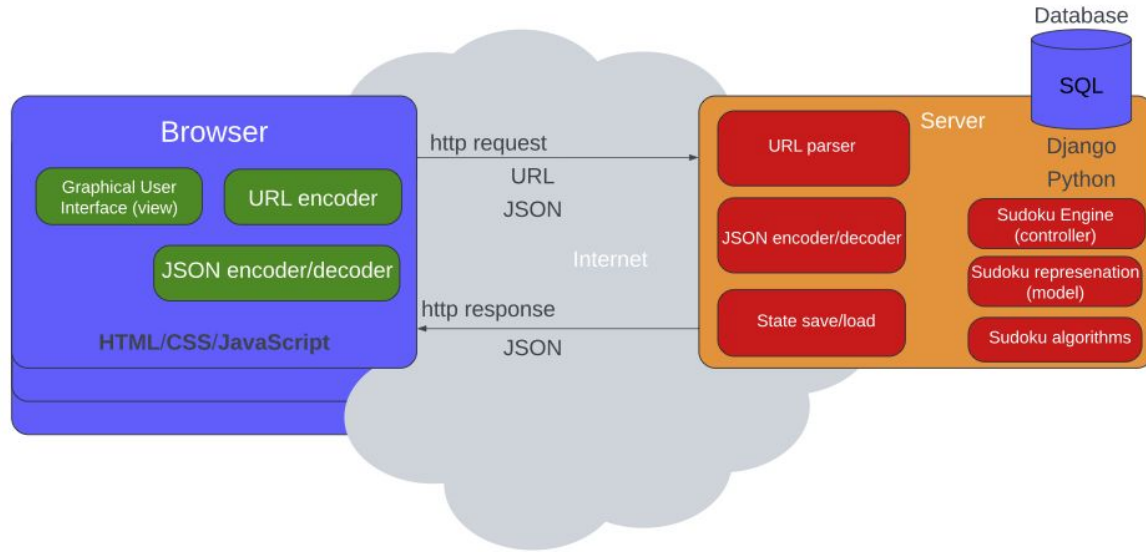
Undo Until Correct

Clear Note

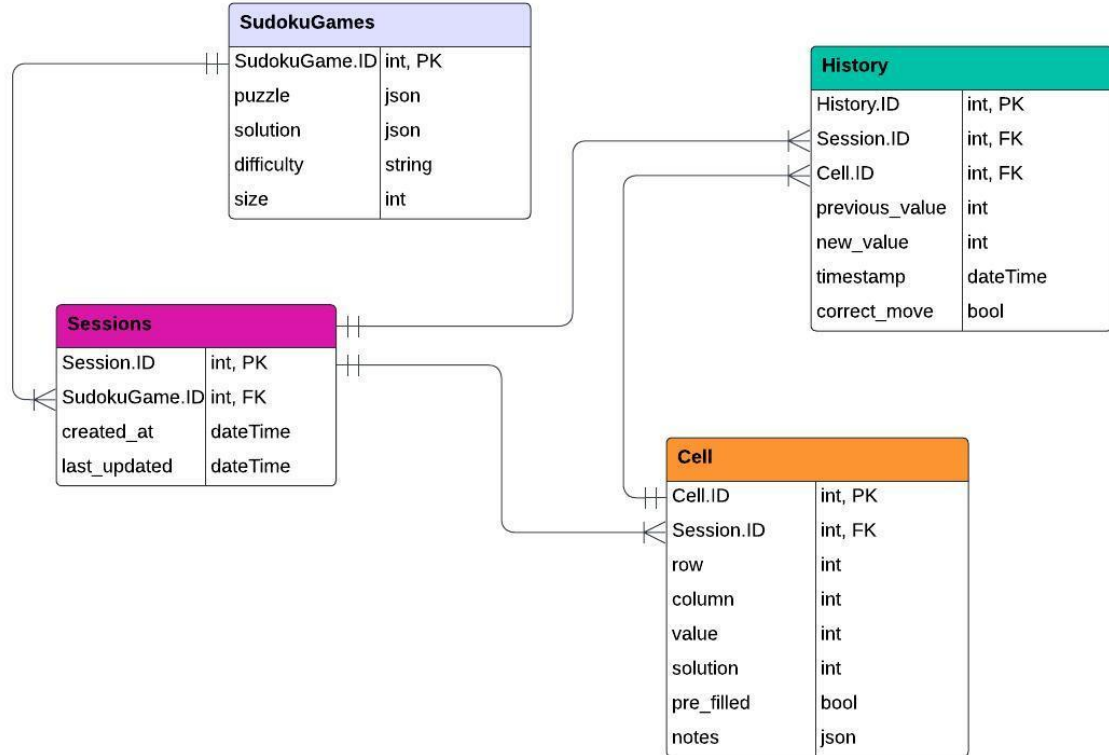
Storyboard Cont.



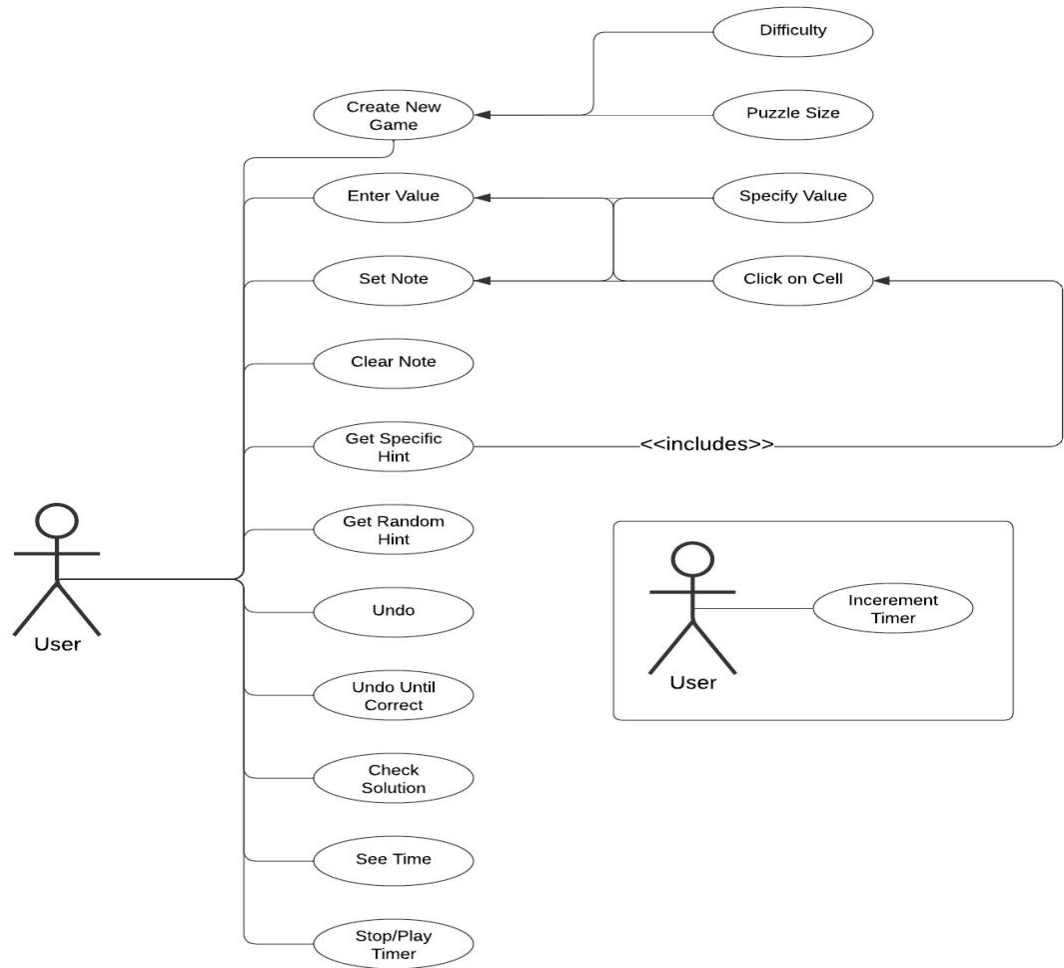
Framework: Flask/Django



Database Schema



Use Case Diagram (High Level)



Project Plan

- Original Project Plan

Project Plan after adjustments

- Adjusted Project Plan

Task Separation

Mark

1. Formated the database (change from json to SQLite)
2. Implementing functions that obtain desired Backend results for each game

Jan

1. Initializing the project in json, Flask, and Django
2. Implementing Frontend functions communicating with the Backend to display on the screen

Jonathan

1. Helped refactor the Database and code when json to SQLite was made
2. Altered functions in both Backend and Frontend once database change was done

Refactoring

Code went through many phases:

1. Set up
2. Most functions work but no unique session
3. Once unique sessions were set up we updated the Database
4. Updating the database meant fixing functions that were previously written

Takeaways & Next Steps

Takeaways

1. All functionality works
2. Can still make it more “aesthetic” by adding to the UI

Next Steps

1. Can create a login system for users to keep track of what games they played and have them saved on their dashboard
2. Can create a multiplayer version where two people solving the same puzzle have to solve it in the least amount of time to win

Lessons Learned

1. Software Engineering is a process
2. Diagrams and initial thoughts are subject to change
3. Code may need to be refactored if there is an error that needs to be addressed
4. Working in a team helps complete the project within the assigned time frame
5. Project Plans can be subject to change

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