CSc 337 Final Project Specification

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Project Idea: Sudoku

To Be Completed Over 3 Weeks Using HTML, PHP, CSS (no internal styling allowed), JS, and SQL

* Must have database with at least 2 tables and one database join
  + One table Users
    - id
    - Username
    - Salted and hashed passwords
    - Number of puzzles completed
    - Your personal best time FOR EACH PUZZLE
  + One table Puzzles
    - Puzzle name
    - Initial version of the puzzle
    - Completed version of the puzzle
    - Fastest time completed
    - Who completed it in the fastest time
* When logged in, additional features must become available
  + You must be logged in to play more than the first puzzle
  + You must be logged in to have your high-scores recorded

Project Summary:

In this project, there will be a single Classic 9x9 Sudoku puzzle with normal Sudoku rules. However, once logged in, the user may also navigate to other puzzles for added variety and challenge. Each puzzle will record the fastest time it has been completed in and who that time belonged to, but this is only possible for logged-in users. The databases will thus be to hold user accounts, and to hold high-score times. The game will not check every move live, but rather will have a single ‘submit’ button that sends in the whole game board and tells the user whether the game was a win or loss. The game could also support hints that reveal a next move or give general advice messages somewhere on the page using AJAX. The game would also check for valid input, so that only numbers in a valid range are entered in a cell (so 25 cannot be entered, only 1 – 9 can).