**Final Project Requirements - Sudoku Application**

**Abel Tabor, Thomas Edwards, Brian Jefferson**

**CMSC 495**

**Section 7384**

**Group 5**

**5/10/2022**

**Professor Dao**

**Revision Table**

|  |  |  |
| --- | --- | --- |
| **Name** | **Date** | **Description** |
| Abel Tabor | 3/26/2022 | Created initial requirements |
| Abel Tabor | 5/4/2022 | Adjusted Requirements to better represent changes with the project |
| Thomas Edwards | 5/7/2022 | Final revision and GitHub upload |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **Unique ID** | **Requirements** | **Specification** |
| 01 | Sudoku Generator | The sudoku generator shall take an empty board and randomly generate a fully solved sudoku board and a board with a specified amount of cells without numbers. |
| 02 | Game GUI | The GUI shall display a number of given numbers in non-interactive manner and the unknown numbers in an interactable manner. The GUI shall allow the user to interact with the puzzle in order to solve it and submit it. |
| 03 | Game Time & Game Score | The program shall track the amount of time the user spends on any given puzzle and keeps track of their total score and submitted name. |
| 04 | Database | A database shall be incorporated into the application in order to store and display usernames, scores, and times. |
| 05 | Leaderboard GUI | A leaderboard GUI shall display a ranked list of previous users with their time and score. |
| 06 | Menu GUI | The program shall open with a menu GUI that allows the user to select two options between starting a new game and viewing the leaderboards. |