**Project Sprint #1**

The SOS game is described in CS449HomeworkOverview.docx. You should read the description very carefully.

In this assignment, you aim to specify the requirements (i.e., user stories and acceptance criteria) of the target software that allows a human player to play a simple or general SOS game against a human opponent. These requirements will be fully implemented by the end of sprint 3. The minimum features include **choosing the board size,** **choosing the game mode (simple or general)**, **starting a new game**, **making a move (in a simple or general game)**, **determining if a simple or general game is over**. The following is a sample GUI layout.

|  |  |  |
| --- | --- | --- |
| SOS Icon  Description automatically generated Simple game Icon  Description automatically generated General game Board size  8 | | |
| Blue player  Icon  Description automatically generated S  Icon  Description automatically generated O | Chart, line chart  Description automatically generated | Red player  Icon  Description automatically generated S  Icon  Description automatically generated O |
|  | Current turn: blue (or red) | New Game |

Figure 1. Sample GUI layout of the first working program by the end of Sprint 3

Use the following tables to document your user stories and acceptance criteria.

You are required to use the free ChatGPT or another LLM to complete 2 user stories and 2 of their respective acceptance criteria. You must ensure that the generated user stories are correct and fix them if not. At the end of the submission, provide screenshots of your LLM prompts and answers, along with the description of errors the LLM made that you had to correct. Points will be deducted if no screenshots/description are provided.

1. **User Stories (3 points)**

* **User Story Template**: As a <role>, I want <goal> [so that <benefit>]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **User Story Name** | **User Story Description** | **Priority** | **Estimated effort (hours)** |
| 1 | Choose a board size | As a player, I want to select an 8x8 game board, so that I can play on the standard grid. | High | 1 |
| 2 | Choose the game mode of a chosen board | As a player, I want to choose between a Simple Game and a General Game on the 8x8 board, so that I can play by the rules that I want. | High | 2 |
| 3 | Start a new game of the chosen board size and game mode | As a player, I want to start a new game with my chosen game mode and player types either Human or Computer, so that I can begin playing. | High | 2 |
| 4 | Make a move in a simple game | As a player in a simple game, I want to place my letter S or O on an empty square during my turn, so that I can try to form the first SOS and win the game. | High | 6 |
| 5 | A simple game is over | As a player, I want the simple game to end as soon as the first SOS is created or if the board is completely full, so that we have a clear winner or a tie. | High | 10 |
| 6 | Make a move in a general game | As a player in a general game, I want to place my letter S or O on an empty square during my turn, so that I can score points by forming SOS’s and fill the board. | Medium | 10 |
| 7 | A general game is over | As a player, I want the general game to end only when the board is full and the winner to be the one with the most SOSs, | Medium | 5 |
| 8 | Choose player type | As a player, I want to set each player to be either Human or Computer for the simple or general game, so that I can play against another player or against the computer. | Medium | 10 |

1. **Acceptance Criteria (AC) (12 points): Add/delete rows as needed.**

|  |  |  |  |
| --- | --- | --- | --- |
| **User Story ID and Name** | **AC**  **ID** | **Description of Acceptance Criterion** | **Status (completed, toDo, inProgress)** |
| 1. Choose a board size | 1.1 | AC 1.1 Game Launch  Given the game application is launched  When I am on the main screen  Then I should see the board size at 8x8 | toDo |
| 1.2 | AC 1.2 Selected size of board  Given the board size is set to 8x8  When I start a new game  Then the game board is drawn as a 8x8 grid  And displays 64 empty clickable squares | toDo |
| 2. Choose the game mode of a chosen board | 2.1 | AC 2.1 Simple game or General game  Given I am on the main screen of the game with 8x8 grid  When I see the game mode options  Then I see two separate options, Simple Game and General Game | toDo |
| 2.2 | AC 2.2 After selection of game mode  Given I have selected a game mode  When I start a new game  Then the chosen game mode follows all rules set for either or | toDo |
| 3. Start a new game of the chosen board size and game mode | 3.1  3.2 | AC 3.1 New game selected  Given I have selected the game mode and player types for the board  When I click the New Game button  Then a new 8x8 game starts with an empty board  And zero scores  And the correct player types active  AC 3.2 Player presses New Game during game  Given a game is in progress  When I click New Game  Then the current game is reset  And a new game begins with last settings | toDo |
| 4. Make a move in a simple game | 4.1  4.2 | AC 4.1 Player makes a move in simple game  Given it is my turn in a simple game  When I select a letter S/O and click on an empty square  Then the letter is placed in the square  And game check if SOS has been formed  AC 4.2 Computer makes a moves  Given it is the computer’s turn in a simple game  When the turn starts  Then the computer places a letter on an empty square | toDo |
| 5. A simple game is over | 5.1  5.2 | AC 5.1 Player ends a simple game  Given a player completes an SOS  When the game state is confirmed  Then the game is immediately declared over  And the winning player is displayed  And all SOS sequences are in players color red or blue  AC 5.2 Players fill up board in simple game  Given all squares on 8x8 board are filled and no SoS has been made  When last square is taken up  Then the game displays as a tie | toDo |
| 6. Make a move in a general game | 6.1  6.2 | AC 6.1 Player makes an unsuccessful move in a general game  Given it is my turn in a general game  And I have not formed an SOS  When I place a letter on an empty spot  Then it’s the other players turn  AC 6.2 Player make a successful move in a general game  Given it is my turn in a general game  When I place a letter  And it forms into an SOS  Then my score increases  And I am given a new turn | toDo |
| 7. Make a move in a general game | 7.1  7.2 | AC 7.1 Player fills last square in general game  Given the whole board is filled with a letter in each box  When the final move is made  Then the game is over  And the player with the most SOS’s is displayed as the winner  AC 7.2 Player fills last square in general game and SOS’s are tie  Given the whole board is filled with a letter in each box and SOS’s are tied  When the final count is found  Then the game is declared a draw | toDo |
| 8. Choose player type | 8.1  8.2 | AC 8.1 Player decides on Human or Computer  Given I am on the main screen of the game  When I view player settings  Then I can see separate controls for Human or Computer  AC 8.2 Computer moves  Given a player is set to computer  When it is that players turn  Then game quickly makes a valid move for that computer player | toDo |

A screenshot of a computer

AI-generated content may be incorrect.A screenshot of a computer screen

AI-generated content may be incorrect.

This is my ChatGPT screenshot I changed the acceptance criteria slightly and tweaked the user story, but overall, the generated answer wasn’t completely off.