**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.

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 be able to change the board size so that the game will be repayable and unique every time. | 1 | 1 |
| 2 | Choose the game mode of a chosen board | As a player, I want to be able to choose the game mode of the board, so that the game will be repayable in a different style. | 2 | 1 |
| 3 | Start a new game of the chosen board size and game mode | As a player, I want to be able to start a new game with the chosen specifications of board size and game type, so that I can play the game. 1 | 3 | 1 |
| 4 | Make a move in a simple game | As a player, I want to be able to select the identifier I am going to place down and make a move in a simple game, so that I can earn the first point. | 4 | 1.5 |
| 5 | A simple game is over | As a player, when I make one SOS in a simple game I want the game to be over, so that I can win the game and start another. | 6 | 1 |
| 6 | Make a move in a general game | As a player, I want to be able to select the identifier I am going to place down and make a move in a general game, so I can start earning as many points as I can. | 5 | 1.5 |
| 7 | A general game is over | As a player I want the general game to be over when every spot on the board is filled with a letter, and the player with the highest number of points to be selected as winner, so that I can celebrate my win or start another game. | 7 | 2 |

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, inPprogress)** |
| 1. Choose a board size | 1.1 | AC 1.1 Choose a board size between 3 and 10  Given A user input of board size  When the board size is a number between or on 3 and 10  Then change the number of rows and columns to be equal to the number put in by the user | Complted |
| 1.2 | AC 1.2 A board size greater than 10 or less than 3  Given A user input of a board size  When the board size is a number less than 3 or greater than 10  Then display an error message saying the boards limits, and set the board size to be the closest number either 3 or 10. | Complted |
| … |  |  |
| 2. Choose the game mode of a chosen board | 2.1 | AC 2.1 Simple game  Given the game mode is set to simple  When the user selects the simple radio button  Then the game mode logic changes to be the simple game mode rules and logic. | toDo |
| 2.2 | AC 2.2 General Game  Given the game mode is set to general  When the user selects the general radio button  Then the game mod logic changes to be the general game mode rules and logic. | toDo |
| 3. Make a move in a simple game | 3.1 | AC 3.1 Move in a simple Game  Given the game mode is set to simple  When the user selects a button that is not claimed  Then the board will update to show the players S or O in it’s position, and check for a victory. | inProgress |
| 3.2 | AC 3.2 Invalid Move in a simple game  Given the game mode is set to simple  When the user selects a button that is claimed by either player  Then display an error message to the user saying that slot cannot be chosen, and let the same player choose an open slot. | inProgress |
| 4. Make a move in a general game | 4.1 | AC 4.1 Move in a general game  Given the game mode is set to general  When the user selects a button that is not claimed  Then the board will update to show the players S or O in its position and check to see if every slot on the board is filled up. | inProgress |
| 4.2 | AC 4.2 Invalid Move in a general game  Given the game mode is set to general  When the user selects a button that is claimed by either player  Then display an error message to the user saying that slot cannot be chosen, and let the same player choose an open slot. | inProgress |