Project Sprint #1

https://github.com/rilesc555/sos_game

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.
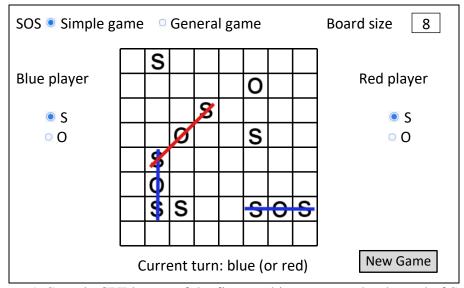

Figure 1. Sample GUI layout of the first working program by the end of Sprint 3

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

I.   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 choose the board so size I can start a game	High	1
2	Choose the game mode of a chosen board	As a player, I want to choose whether the game will be simple or general in order to start the game	High	1
3	Start a new game of the chosen board size and game mode	As player, I need to be able to press a button to start a game with the settings I chose.	High	1
4	Make a move in a simple game	As a blue or red player, I need to be able to put an S or an O in an empty space when it's my turn	High	1
5	A simple game is over	As a blue or red player, I need the game to be over when an SOS sequence is completed	High	1
6	Make a move in a general game	As a blue or red player, I need to be able to put an S or an O in an empty space when it's my turn	High	1

| 7 | A general game is over | As a blue or red player, I need the game to be over when there are no more empty spaces | High | 1 |

II.   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 Valid board change Given *the board is empty* And *a new game has not started* When *the user enters a valid board size* Then *the board changes to that size*	toDo
	1.2	AC 1.2 Invalid board change Given *the board is empty* And *a new game has not started* When *the user enters an invalid board size* Then *the board does not change to that size* And *an error message tells the user to choose a different board size*	toDo
	1.3	AC 1.3 Changing board size in game Given *the start button has been pressed* When *the user tries to enter a board size* Then *the board size field should be greyed-out* And *the board size field should not accept entry* And *the board size field should show the current size*	toDo
2. Choose the game mode of a chosen board	2.1	AC 2.1 Default Game Mode Given *the board is empty* And *a new game has not started* When *the user starts the program* Then *simple mode should be selected by default*	toDo
	2.2	AC 2.2 Switch Game Mode Given *the board is empty* And *a new game has not started* When *the user selects the unselected game mode* Then *the game mode switches to the new game mode*	toDo
	2.3	AC 2.3 Don't Switch Game Mode Given *the board is empty* And *the game hasn't started yet* When *the user selects the currently selected game mode* Then *nothing should happen*	
3. Start a new game of the chosen board size and game mode	3.1	AC 3.1 Start New Game Given *the board is empty* And *the game hasn't started yet* When *the user hits the start game button* Then *it is the user's turn* And *the game starts* And *the settings can no longer be changed* And *the Start button becomes a New Game button*	toDo
4. Make a move in a simple game	4.1	AC 4.1 Make a Valid Move Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an empty board space* Then *a corresponding S or O appears in that space* And *it becomes the other player's or the computer's turn*	

	4.2	AC 4.2 Make an Invalid move Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an occupied board space* Then *nothing happens*	
5. Endgame conditions for simple game	5.1	AC 5.1 Simple Game Over with Winner Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an occupied board space* And *an SOS sequence is made* Then *the player who made the last move is the winner* And *the game is over* And *popup appears saying that the game is over and giving options to quit, replay, or go to settings to create new game*	
	5.2	AC 5.2 Simple Game Over without Winner Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an occupied board space* And *no SOS sequence is made* And *the board is full* Then *the game is a tie* And *the game is over* And *popup appears saying that the game is over and giving options to quit, replay, or go to settings to create new game*	
6. General Game Moves	6.1	AC 6.1 General Game Move without making SOS Given *it is a red or blue player's turn*, And *it is a general game* When *the player selects S or O* And *clicks an empty board space* And *no SOS sequence is made* And *the board is not filled up* Then *a corresponding S or O appears in that space* And *it becomes the other player's or the computer's turn*	
		AC 6.2 General Game Move making SOS Given *it is a red or blue player's turn*, And *it is a general game* When *the player selects S or O* And *clicks an empty board space* And *an SOS sequence is made* And *the board is not filled up* Then *a corresponding S or O appears in that space* And *the player who made the move gets a point* And *it becomes the other player's or the computer's turn*	
7. General Game Endgame Conditions	7.1	AC 7.1 Simple Game Over with Winner Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an occupied board space* And *the board is full* Then *the player who completed the most SOS sequences is the winner* And *the game is over*	

		And *popup appears saying that the game is over and giving options to quit, replay, or go to settings to create new game*	
	7.2	AC 7.2 Simple Game Over without Winner Given *it is a red or blue player's turn*, And *it is a simple game* When *the player selects S or O* And *clicks an occupied board space* And *the board is full* And *the players have made the same amount of SOS sequences* Then *the game is a tie* And *the game is over* And *popup appears saying that the game is over and giving options to quit, replay, or go to settings to create new game*	