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## **Software Engineering Group Project User Interface Specification Standards**

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# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Use case document</b>	<b>1</b>
2.1	Typical users . . . . .	1
2.2	Use cases . . . . .	1
2.2.1	Use Case 1, The home screen . . . . .	1
2.2.2	Use Case 2, The main board . . . . .	2
2.2.3	Use Case 3, The crew card menu . . . . .	3
2.2.4	Use Case 4, The chance card menu . . . . .	4
2.2.5	Use Case 5, The treasure card menu . . . . .	5
2.2.6	Use Case 6, The battle screen menu . . . . .	5
2.2.7	Use Case 7, The battle reward screens . . . . .	6
2.2.8	Use Case 8, The Trading screen . . . . .	7
2.2.9	Use Case 9, Treasure Gained screen . . . . .	8
2.2.10	Use Case 10, Victory Screen . . . . .	9
2.2.11	Use Case 11, Picking a player . . . . .	9
2.2.12	Use Case 12, Long John Silver . . . . .	9
2.2.13	Use Case 13, Special Trade Cards . . . . .	10
2.2.14	Use Case 14, Drawing a battle . . . . .	10
2.3	Error conditions . . . . .	10
2.3.1	Error conditions for the main page . . . . .	10
2.3.2	Error conditions for chance cards . . . . .	10
2.3.3	Error conditions for the map . . . . .	11
2.3.4	Error conditions for collecting rewards . . . . .	11
2.3.5	Error conditions for trading . . . . .	11
2.3.6	Error conditions for Given treasure . . . . .	11
<b>3</b>	<b>DOCUMENT HISTORY</b>	<b>11</b>

## 1 Introduction

This is the User interface documentation which will be going through all the possible use cases and what happens at each screen.<sup>1</sup> Some changes to the layout may be changed at a later date.<sup>2</sup>

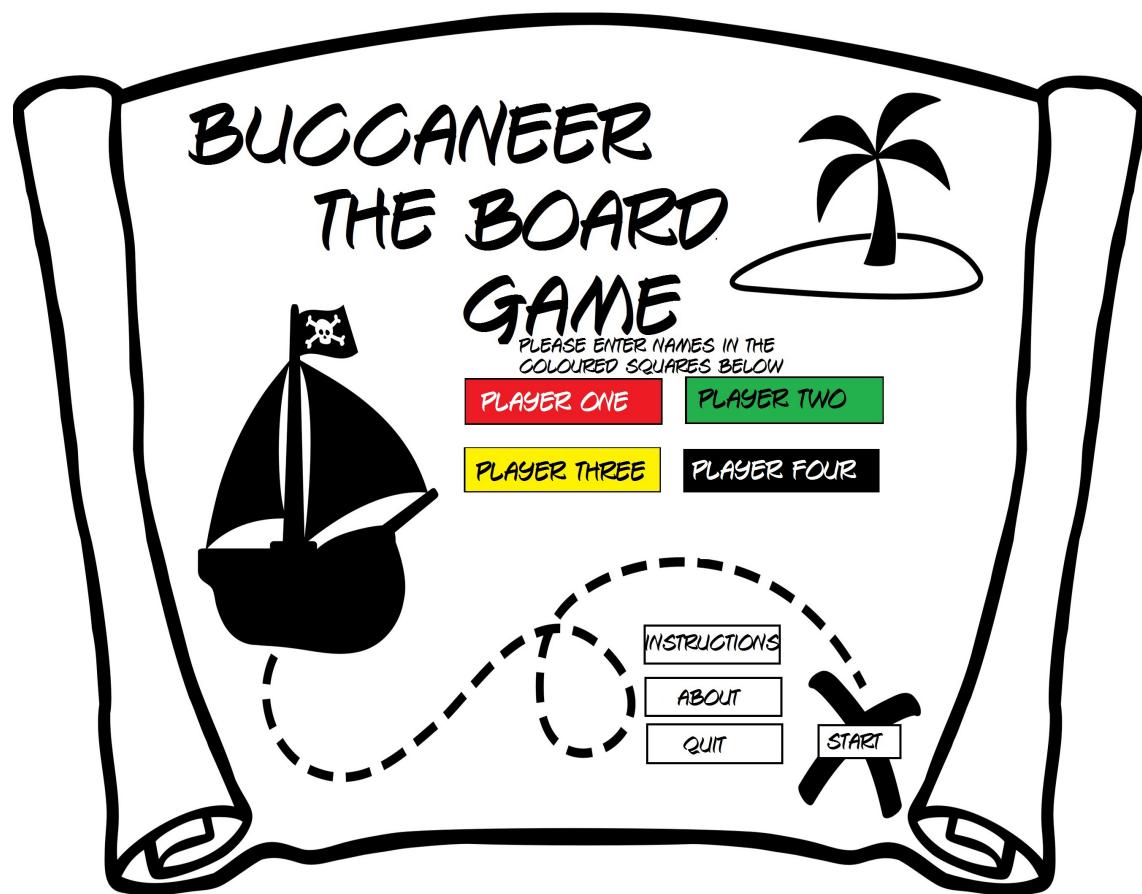
## 2 Use case document

### 2.1 Typical users

For the typical users we will need to design the game for all ages making sure the elderly to the young can understand how to play it whilst making it appealing. The buccaneer board game is based for 8 year olds and upwards. We will also need to consider the types of hardware that this game will be running, for example a cheap android tablet to a big gaming computer. We will be designing the game for the age group of 5 to 99 and the hardware of a standard family computer or laptop.

### 2.2 Use cases

#### 2.2.1 Use Case 1, The home screen



The home screen will allow the user to input 4 player names and have 4 buttons they can click (start, instructions, about and quit).

#### Inputting names and the start button

There will be 4 different colour boxes to input the user names, the colour representing the ship colour. If a user doesn't enter their name it will go to a default name as player 1 for an example. Once the user clicks start it will take the names and begin the game.

#### Instructions

This will bring up another menu with small boxes of each possible event the game will use, For example the chance card or when getting into battle.

#### About

The about page will have 3 sections;

Title: the title of the game(buccaneer).

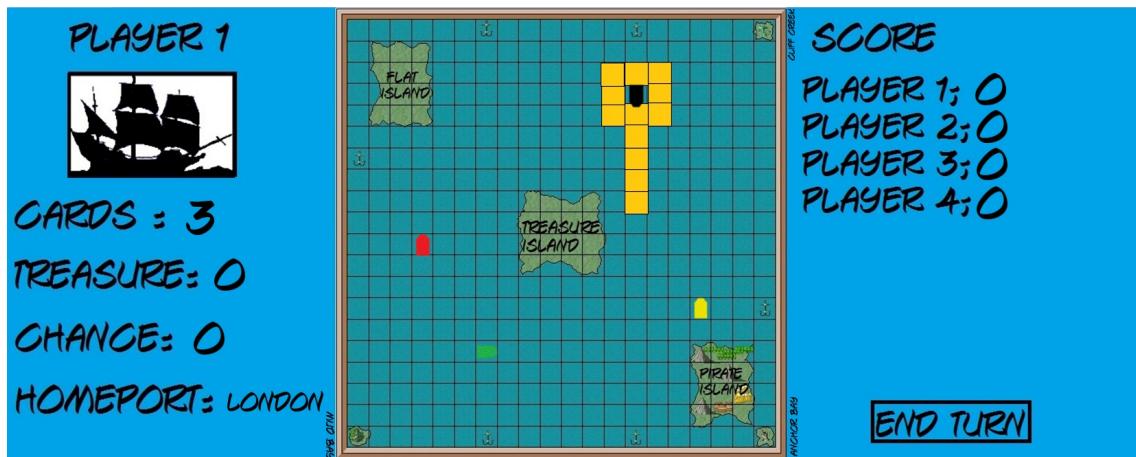
Creators: our group names.

Version: to keep up with the updates so we can refer to notes and see what has changed in each version. This will just display a number for example 3.2.

#### Quit

This button will exit the game and take the user back to the home screen. Before the application closes itself it will bring up a small menu to confirm that the user does want to quit.

### 2.2.2 Use Case 2, The main board



The main board will be where the users can see the board and choose what they do on their turn. This will display 3 clickable options that will bring up menus(cards (crew), chance and treasures). These clickable options will be discussed in more detail further into this document. This means there will be little explanation in this section. 2 options that will allow the user to change their boats position in the highlighted square. There will also be an end turn button.

#### Cards / chance / treasure

For the cards section the user can display all the users crew cards which will allow the user to know their battle strength and movement speed. If the user clicks on chance, the game will open a menu up showing the user all their chance cards from their inventory. For treasure another menu will pop

up displaying the treasure they are carrying on their ship.

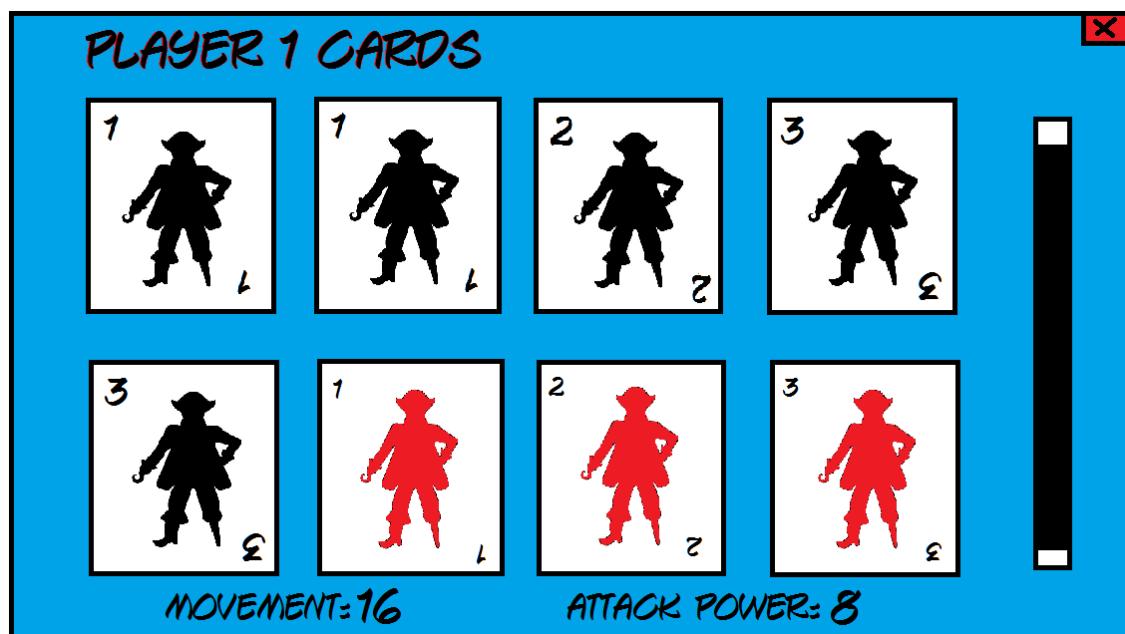
#### Moving and Changing directions

The user will be able to move their ship and then change direction or just change direction. Once the user clicks a highlighted square the ship will move to that square. After moving the ship can change direction. This will highlight the squares around the ship allowing the user to click to change direction. If a user clicks a non highlighted square an error message will pop up prompting the user to click a highlighted square.

#### End turn

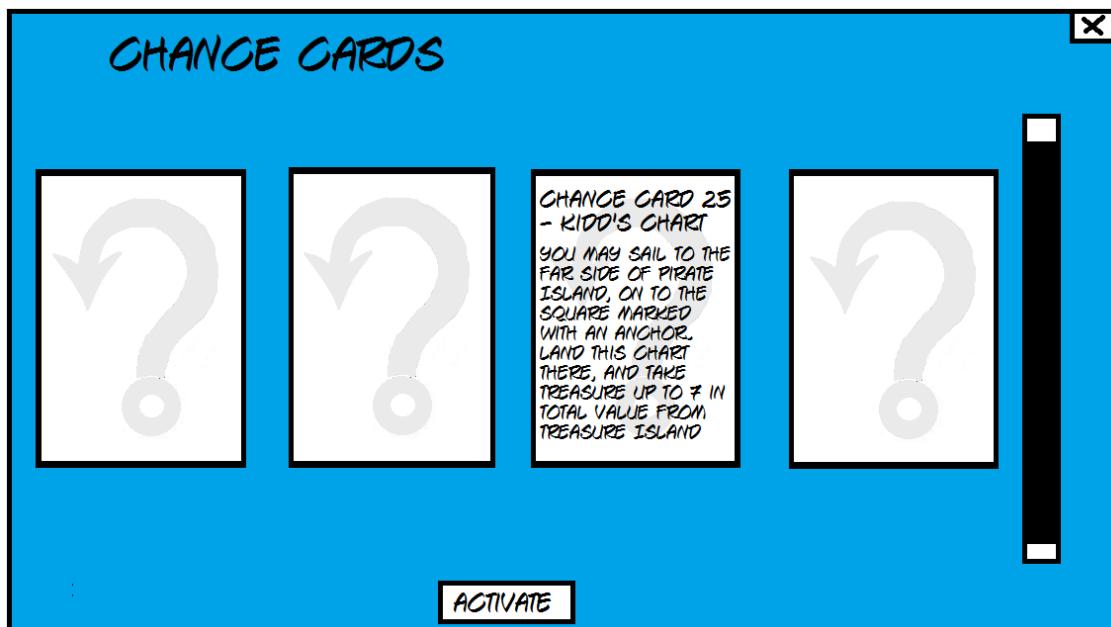
Once the user has ran out of things to do the user can click the end turn button allowing his turn to end and the next users turn to begin.

#### 2.2.3 Use Case 3, The crew card menu



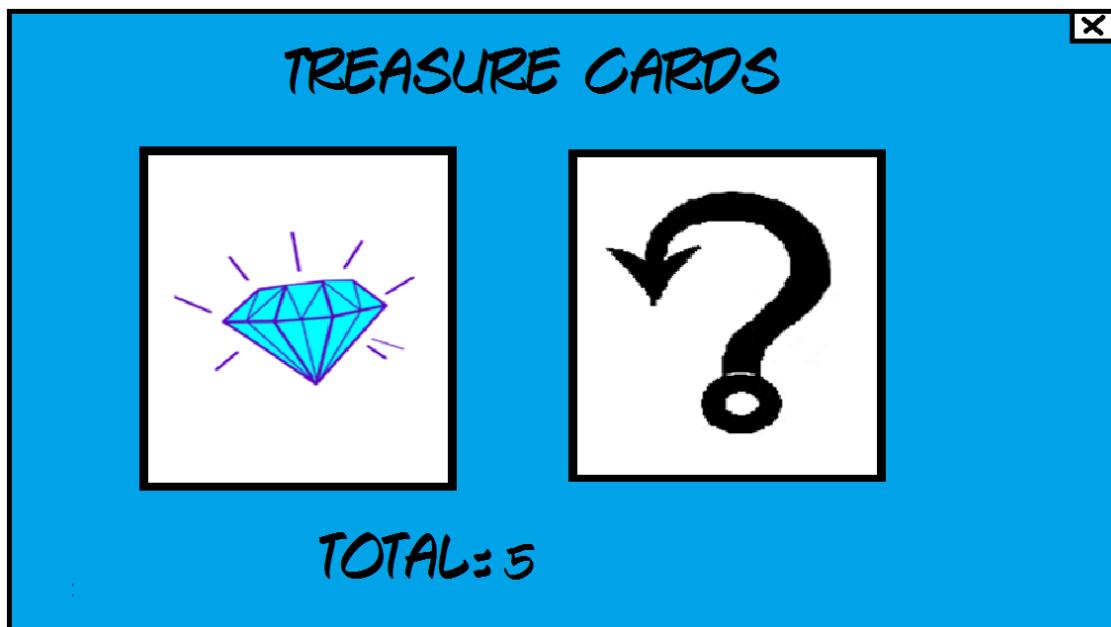
The crew card menu will allow the user to see how many of each colour card they have. The application will calculate the movement and the attack power of the users ship. if the user gets more than 8 cards the user will be able to use the scroll bar to see the rest of their cards. once the user is satisfied they can use the x in the top right corner to close the menu and get back to the main board.

#### 2.2.4 Use Case 4, The chance card menu



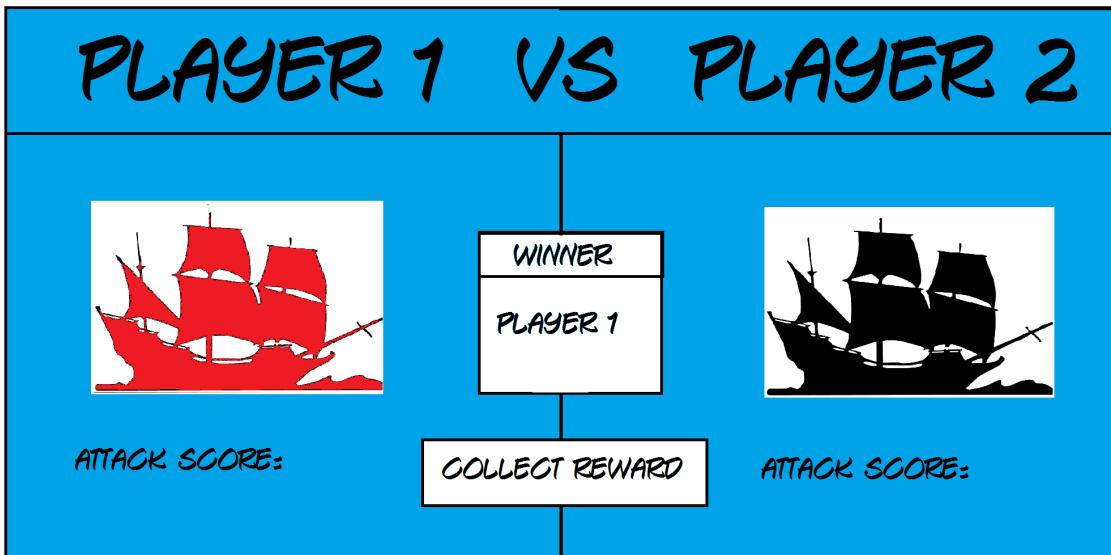
The chance card menu will allow the user to see all their chance cards they have stored in their inventory. If a player would like to activate a card the user would click the card they would like to use then click activate. This will take them back to the board screen with the chance card activated. If the user would like to exit they would click the x in the top corner and that will take them back to the main board to continue their turn.

#### 2.2.5 Use Case 5, The treasure card menu



The treasure card menu will display the treasure you have in your ship. This will display 2 images giving you the value of points on per image. The application will also add them up if possible and display them as the total. Once the user is ready they can click the x in the top corner to close the application. If the user only has 1 or even no treasures the unnecessary squares will display a hooked question mark.

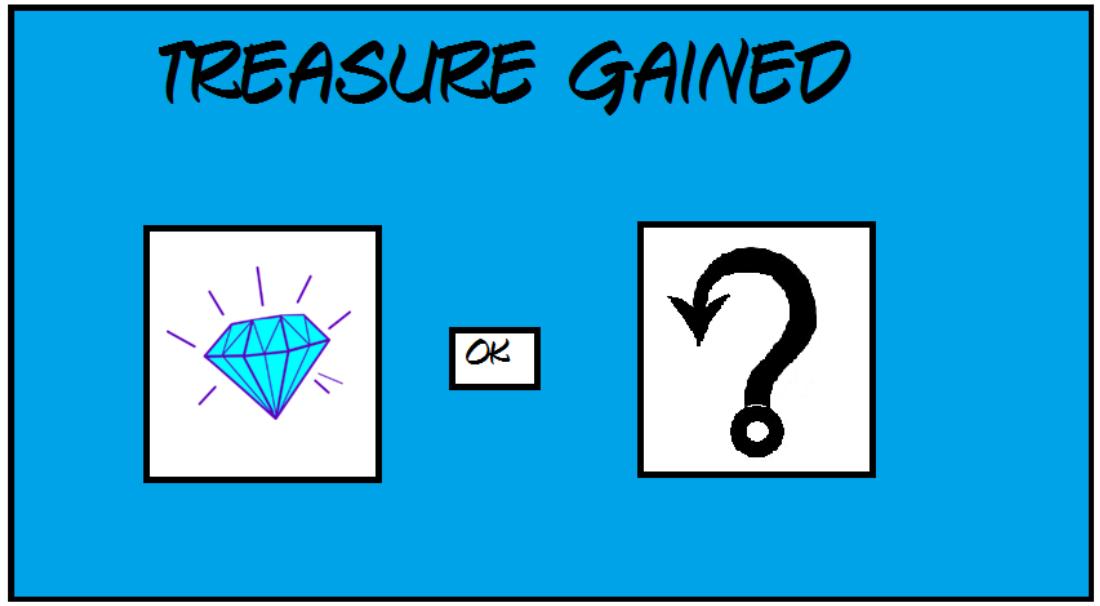
#### 2.2.6 Use Case 6, The battle screen menu



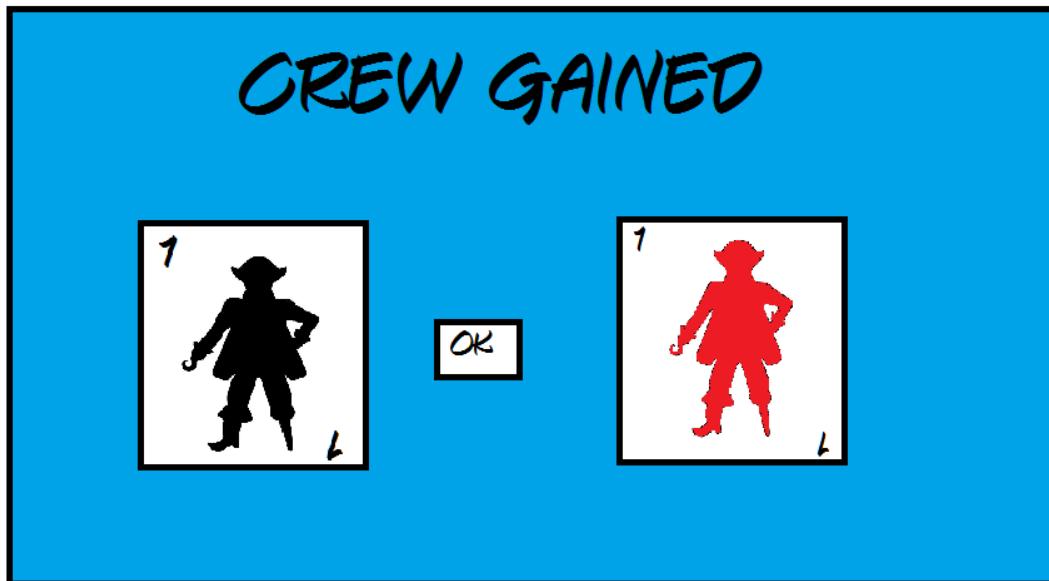
When a player moves their ship to a square that's occupied by another players ship, they will enter into the battle phase. This will cause the battle window to pop out and display the following information. The two users names, the display picture of there coloured boat, the attack power, the winners users name in the winner box, and a collect reward box allowing the user to collect their reward.

### 2.2.7 Use Case 7, The battle reward screens

When you have won a battle there are 2 possible rewards. These are the treasure reward and the crew reward. If a user beats the ship in battle they get to take their treasure. If the ship that lost contains no treasure the user will be given 2 of the other ships lowest crew automatically. If the ship has treasure but the victorious ship has full treasure the loser's treasure goes to treasure island where a pop up will pop out telling the users the treasure has been returned to treasure island.

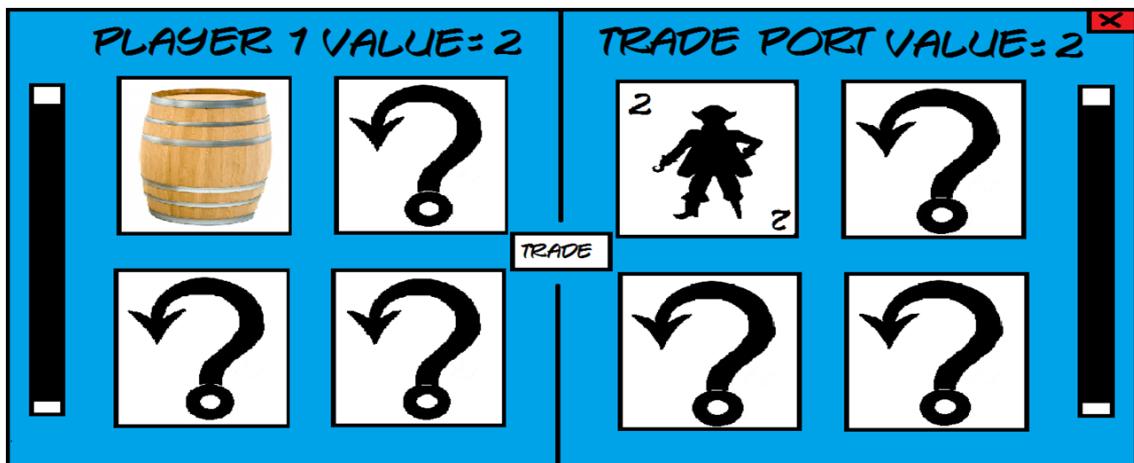


For the treasure reward if the victorious player already has a treasure then one of the boxes would become a hooked question mark. Once the box has been clicked the user will select the treasure they are after from the opponent. Once the user is happy with the selection, the user can click the ok button to gain the selected treasure. This will take them back to the main board.



For the crew reward the application will select the 2 lowest crew members from the loser's inventory. once you have seen what crew you have gained the user can click the ok button. This will take the user to the board screen and transfer the crew cards.

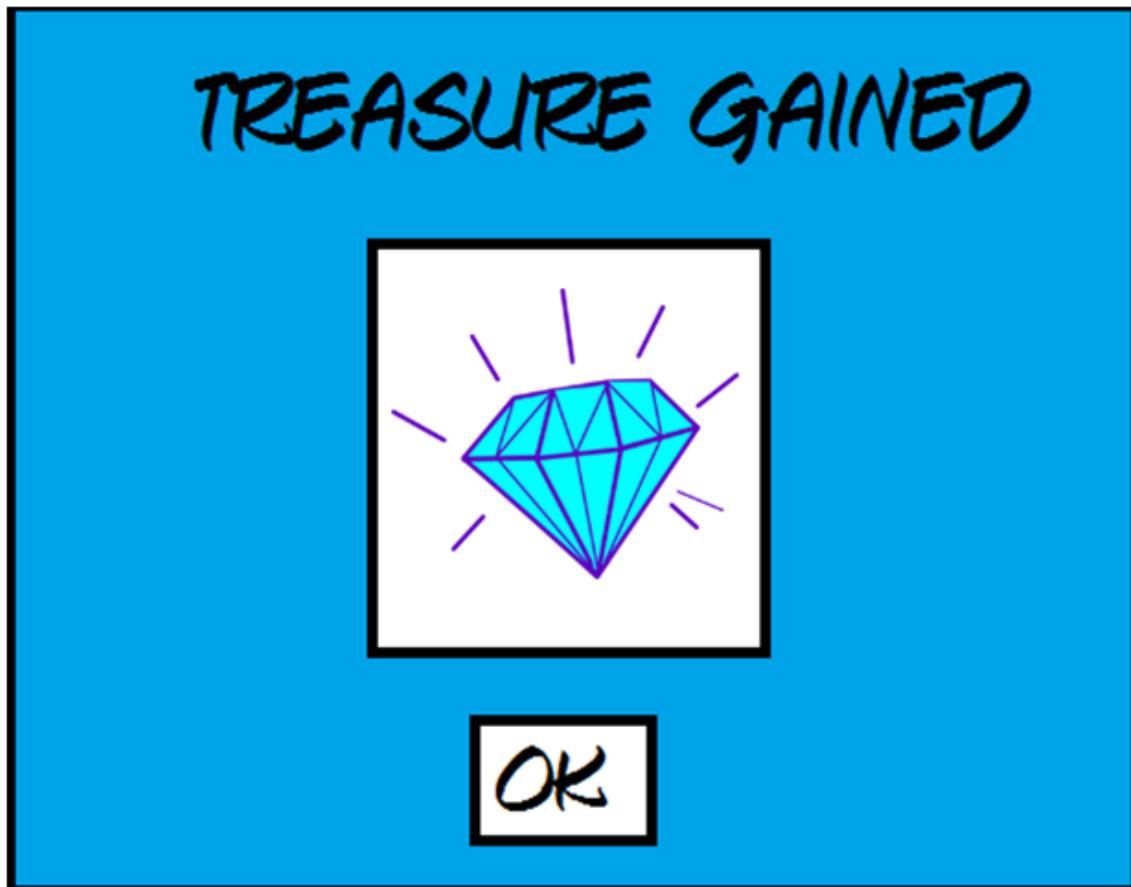
#### 2.2.8 Use Case 8, The Trading screen



When a player moves to a trade port they can trade. Once the ship is on the trade port square a window will pop out. The window will be split in two, one side displaying the users treasure and crew cards and the other displaying the ports treasure and crew. Each side will have a scroll bar to be able to scroll up and down and view all of the cards if there is too many to fit on the screen. There will be 2 values located above the two lists. This is to showing the value of the treasure and crew cards selected from each side. This should help the user see what values of the cards they've picked to swap. There will be a button in the middle of these 2 sides, which will be the accept trade

button. When the two values match the trade button will be clickable. Once this button is clicked the window will close and the trade will have happened.

#### 2.2.9 Use Case 9, Treasure Gained screen



When the player gains a treasure a window will pop out. This window will have a picture of the treasure the player has gained. If the user can pick the treasure the trade menu will pop out giving the user an automatic value of the maximum treasure they can get. The number of treasure that the user can pick is the amount of space they have left in their ship or the limit on the chance card. When the treasure is under the maximum value the trade button will still be clickable. Once clicked the window will close and the treasure will be awarded to the player. For cases when taking crew cards is an option as well a menu will pop up asking the user if they want to take the users treasure of crew.

### 2.2.10 Use Case 10, Victory Screen



When a player wins (gets 20 or more points) the main board window will change to a victory window. On this window there will be the name of the player who won, a picture of the players ship and 2 buttons, one if the users would like to play again and one for close. The background of this window will have fireworks. If the play again button is clicked then the game resets and returns to the home screen (see use case "1"). If the close button is clicked then the program stops and closes.

### 2.2.11 Use Case 11, Picking a player

When the game requires a player to pick another player for an action to happen against a window will pop out. It will have a picture of other players boat and their name underneath the boat. When a player clicks a player they will be highlighted and an accept button will be allowed to be clicked in the bottom left. When the accept button is clicked the window closes and the action happens to that player.

### 2.2.12 Use Case 12, Long John Silver

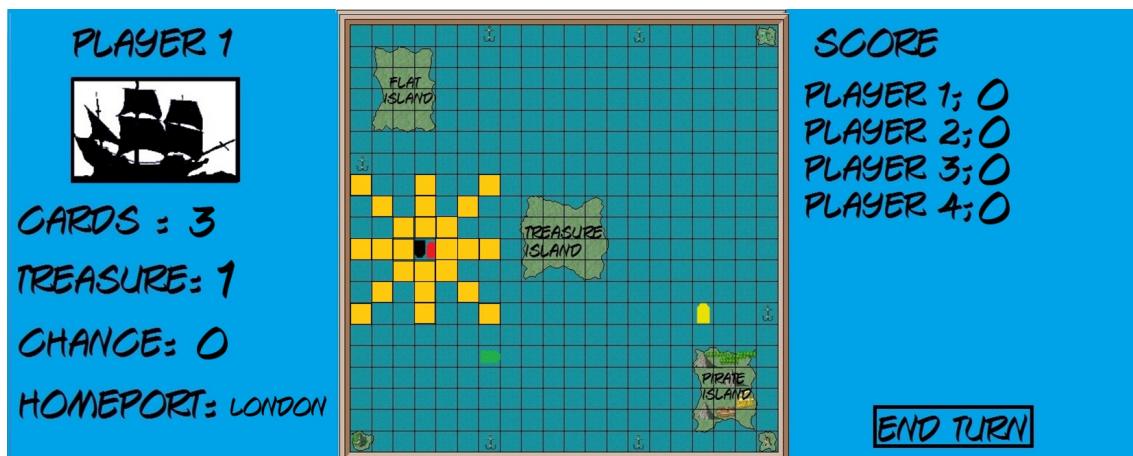
When a player with the chance card long john silver sails into a trade port a window will pop out that looks identical to use case 9 except the user will not be presented with treasure but rather crew cards and the value at the top will measure the value of the crew cards they have picked. When a player enters a port where Long John Silver and have treasure to be able to trade a window will pop out asking if they want to trade a treasure for the chance card. A button for no and yes will on this window if no is clicked then the player keeps there treasure and the chance card stays in the

port if yes is clicked then the trade for the chance card happens. The window closes after each of these options are clicked.

#### 2.2.13 Use Case 13, Special Trade Cards

When a player has a chance card such as number 23 or 24 in the requirements specification and enters a trade port a window the same as use case 12 will pop out. If yes is selected this window closes and a window the same as use case 9 this will display the crew cards and the treasure that the port has. The player will then be able to click treasure or crew (but not both) and the value at the top will increase by the value of the crew or treasure that was chosen. When the player has selected treasure (that they can hold) or crew cards under the set value the accept button can be clicked and when it is the window will close and the treasure or crew are assigned to the player.

#### 2.2.14 Use Case 14, Drawing a battle



When two players go into battle and the attack power is the same, the players draw the battle. This means no treasure or crew cards are lost as a result of the battle, however the attacking ship gets to make a free move away where they have to move atleast one square.

### 2.3 Error conditions

Error conditions are small error boxes that pop up giving the user a brief description of what has gone wrong when a user uses the application incorrectly.

#### 2.3.1 Error conditions for the main page

Table 1: Main menu		
Player name too long or short	Please type a name that is between 3 - 10 characters long.	
No player name was entered in a field	Please make sure all 4 players name boxes are filled out.	
Character for user name not applicable	Please make sure you use English letters only and no special characters	

#### 2.3.2 Error conditions for chance cards

Table 2: Chance cards	
If there is a requirement and can't use the card	Please read the card and activate when applicable

### 2.3.3 Error conditions for the map

Table 3: Map

The user is selecting movement boxes that are not highlighted Please click on a valid highlighted square

### 2.3.4 Error conditions for collecting rewards

Table 4: collecting rewards

The user hasn't picked a treasure You haven't picked any treasure please select a treasure

### 2.3.5 Error conditions for trading

Table 5: trading

The values of the trade are different Sorry the trade values you have selected don't match  
 Trying to carry more than two treasure Sorry you can't carry that much treasure

### 2.3.6 Error conditions for Given treasure

Table 6: Given treasure

Selecting treasure that is more than the limit Sorry you've selected treasure that is too valuable.  
 Not picking enough or any treasure You haven't picked any treasure please select a treasure  
 Trying to carry more than 2 treasure Sorry you can't carry that much treasure

## 3 DOCUMENT HISTORY

Version	Changes made to Document	Changed by
0.1	Initial creation and latex layout	jor51
0.2	Front page, content page and introduction	jor51
1.0	User cases 1-9 complete	jor51
1.1	Pictures added	jor51
1.2	User cases 10-13 complete	adl12
1.3	Error conditions	adl12
2.0	Pictures changed or improved	jor51
2.1	Checks and few errors corrected	jor51
2.2	Final checks	wgf