Software Engineering Group Project

|  |  |
| --- | --- |
| Author: | Alessandro Lewis [all49], Alvaro Fernandez de la Fuente [alf56] |
| Config Ref: | SE.G02.TestReport |
| Date: | 1st May 2022 |
| Version: | 0.2 |
| Status: | Release |

Department of Computer Science

Aberystwyth University

Aberystwyth

Ceredigion

SY23 3DB

Copyright © Aberystwyth University 2021

CONTENTS

[CONTENTS 2](#_Toc103089131)

[1. Introduction 3](#_Toc103089132)

[2. BODY OF DOCUMENT 3](#_Toc103089133)

[2.1 System Tests 3](#_Toc103089134)

[2.2 Equivalence Partitioning 5](#_Toc103089135)

[REFERENCES 5](#_Toc103089136)

[DOCUMENT HISTORY 6](#_Toc103089137)

# Introduction

This is the test report that holds all the tests specified in the Testing Specification document (TestSpecGO2 [1]) and whether they passed or failed with justification.

# BODY OF DOCUMENT

## System Tests

|  |  |  |  |
| --- | --- | --- | --- |
| Test Ref | Test Content | Pass or fail | Why it failed |
| SE-06-01 | On start-up check that the user is prompted for the names. | Pass |  |
| SE-06-02 | Check that the first character is alphanumeric. | Pass |  |
| SE-06-03 | Check that empty names are not allowed. | Pass |  |
| SE-06-04 | Check that repeated names are not allowed. | Pass |  |
| SE-06-05 | Check that expected input is stored correctly | Pass |  |
| SE-06-06 | Check that name lengths are limited. | Pass |  |
| SE-06-07 | Check that the port assignment works as intended. | Pass |  |
| SE-06-08 | Check that the number of each kind of crew card is correct. | Pass |  |
| SE-06-09 | Check that the cards are randomly sorted. | Pass |  |
| SE-06-10 | Check that cards are dealt from the top. | Pass |  |
| SE-06-11 | Check that cards are returned to the bottom. | Pass |  |
| SE-06-12 | Check that cards stored is exactly 28 cards, no more no less. | Pass |  |
| SE-06-13 | Ensure that all 28 cards are randomly sorted. | Pass |  |
| SE-06-14 | Ensure that the first card in the deck is drawn from the top and replaced if needed at the bottom. | Pass |  |
| SE-06-15 | Check that if a card is drawn and a user keeps it, that its noted. | Fail | Player holding cards was never implemented. |
| SE-06-16 | Check that in the game there is 20 pieces of treasure. | Pass |  |
| SE-06-17 | Check that there are 5 types of treasure. | Pass |  |
| SE-06-18 | Ensure that there are 4 pieces of each type of treasure. | Pass |  |
| SE-06-19 | Check that treasure has randomly been assigned on other islands. | Pass |  |
| SE-06-20 | Ensure that once all treasure has been assigned that any requests to obtain treasure from Treasure Island should be denied. | Pass |  |
| SE-06-21 | Maintain a count of cards in each player’s hand with their value. | Pass |  |
| SE-06-22 | Record the total available distance a player can move in one turn. | Pass |  |
| SE-06-23 | Calculate the fighting power of each player. | Pass |  |
| SE-06-24 | Record any chance cards that players may hold. | Fail | Player holding never implemented |
| SE-06-25 | Record the items of treasure on each player’s ship. | Pass |  |
| SE-06-26 | Check the location and orientation of the ship. | Pass |  |
| SE-06-27 | Note the players home port. | Pass |  |
| SE-06-28 | Check that the cards at each port are accurate. | Pass |  |
| SE-06-29 | Check that the treasures at each port are accurate. | Pass |  |
| SE-06-30 | Check that each of the four home ports has stored one player, and the two trading ports have not. | Pass |  |
| SE-06-31 | Check that flat island can store cards accurately. | Pass |  |
| SE-06-32 | Check that flat island can store treasure accurately. | Pass |  |
| SE-06-33 | Check that the 20x20 board is displayed properly. | Pass |  |
| SE-06-34 | Check that all the features in the board (ports, islands...) are displayed properly. | Pass |  |
| SE-06-35 | Check that each ship is displayed properly on the board. | Pass |  |
| SE-06-36 | Check that the info for each player is displayed properly. | Pass |  |
| SE-06-37 | Check that the info for each port is displayed properly. | Pass |  |
| SE-06-38 | Check that the info for flat island is displayed properly. | Pass |  |
| SE-06-39 | At the beginning of a game, after the first setup (i.e., player details recorded and home port set) player is dealt 5 cards. | Pass |  |
| SE-06-40 | Make sure that trading ports are dealt 2 cards. | Pass |  |
| SE-06-41 | Calculates the value of items for each port and ensures it adds up to 8. | Pass |  |
| SE-06-42 | Ships should be assigned to each player’s home ports. | Pass |  |
| SE-06-43 | Checking the order of player turns depending on home port location. | Pass |  |
| SE-06-44 | Make sure the ship cannot turn if in a port. | Pass |  |
| SE-06-45 | That a player cannot move any further than the permitted legal squares. | Pass |  |
| SE-06-46 | Players who are on the coast of Treasure Island or in a port are invulnerable. Making it illegal to attack. | Pass |  |
| SE-06-47 | If a player moves into a square already occupied and is legal, then the attack sequence starts. | Pass |  |
| SE-06-48 | As long as there has been no attack in the players turn nor are they in a port, after they move in their turn the game should ask if the player would like to turn their ship. | Pass |  |
| SE-06-49 | Game should compare fighting strengths if player attacks another player. Whoever has the higher strength wins the fight. | Pass |  |
| SE-06-50 | Loser of the fight gives up their treasure on the ship. | Pass |  |
| SE-06-51 | Make sure that no player can accommodate more than 2 pieces of treasure on their ship. | Pass |  |
| SE-06-52 | If a player defeats another and already has 2 pieces of treasure, system should place defeated players treasure back on treasure island. | Pass |  |
| SE-06-53 | If a player loses a fight but has no treasure. They hand over two of their lowest cards to the winner. | Pass |  |
| SE-06-54 | If a player loses a fight but has no treasure and only one card. They hand over that one card to the winner. | Pass |  |
| SE-06-55 | Loser must move at least one move. They can move up to the maximum legal squares available. | Pass |  |
| SE-06-56 | Losing player is allowed a change of direction after moving. | Pass |  |
| SE-06-57 | Winner stays in the direction they were moving/facing. | Pass |  |
| SE-06-58 | Player is next to Treasure Island, deal player top card of deck. | Pass |  |
| SE-06-59 | Game conducts what the chance card says. | Pass |  |
| SE-06-60 | Check that the chance cards from UC13 transfer crew cards properly | Pass |  |
| SE-06-61 | Check that the chance cards from UC14 transfer crew cards properly | Pass |  |
| SE-06-62 | Check that the chance cards from UC15 transfer treasure properly | Pass |  |
| SE-06-63 | Check that the chance cards from UC16 transfer treasure properly | Pass |  |
| SE-06-64 | Player is next to Flat Island, award player with treasure. | Pass |  |
| SE-06-65 | While holding a treasure, player is awarded the most valuable piece of treasure. | Pass |  |
| SE-06-66 | While having a full ship and being next to Flat Island, no treasure is given. | Pass |  |
| SE-06-67 | While next to Flat Island, award player cards from the island. | Pass |  |
| SE-06-68 | Check to see that there’s cards to be awarded to the player on Flat Island. | Pass |  |
| SE-06-69 | When a player arrives at their Home Port, any treasure in their ship is unloaded. | Pass |  |
| SE-06-70 | When arriving at another port, player should be shown the values of their treasure and cards as well as the available treasure and cards at the port. | Pass |  |
| SE-06-71 | Test to see if player can trade with a port that has available treasure and or cards. | Pass |  |
| SE-06-72 | Test to see if player can trade with a port that has no available treasure and or cards. | Pass |  |
| SE-06-73 | Player trades loot or cards with the port for items of the equivalent value. | Pass |  |
| SE-06-74 | If the port is Home to another player, then cards traded at the port must go into that other player’s hand. | Pass |  |
| SE-06-75 | Check that nothing happens if you do not have Kidd's chart. | Fail | Kidd’s Chart never implemented |
| SE-06-76 | Check that the game gives two pieces of treasure in anchor bay when possible if you have Kidd's chart. | Fail | Kidd’s Chart never implemented |
| SE-06-77 | Check that the game gives one piece of treasure in anchor bay when possible if you have Kidd's chart. | Fail | Kidd’s Chart never implemented |
| SE-06-78 | Check that the game does not give treasure to a full ship. | Pass |  |
| SE-06-79 | Check that the game does not give treasure if there is not any in treasure island. | Pass |  |
| SE-06-80 | Check that the game does not end with less than 20 treasure. | Pass |  |
| SE-06-81 | Check that the game ends with 20 treasures. | Pass |  |
| SE-06-82 | Check that the game ends with over 20 treasures. | Pass |  |
| SE-06-83 | Check that the game returns to the beginning if the players choose to play again. | Pass |  |

## Equivalence Partitioning

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Ref | Invalid | Valid | | Invalid |
| SE-06-06 | 0 | 1 | 15 | 16 |
|  | Partition 1 | Partition 2 | | Partition 3 |
|  | -1 | 8 | | 20 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Ref | Invalid | Valid | | Invalid |
| SE-06-16 | 0 | 1 | 20 | 21 |
|  | Partition 1 | Partition 2 | | Partition 3 |
|  | -1 | 20 | | 30 |

REFERENCES

[1] TestSpecG02 Alessandro Lewis [all49], Alvaro Fernandez de la Fuente [alf56], SE.G02.TestSpec, 1.2 Release

DOCUMENT HISTORY

| *Version* | *Issue No.* | *Date* | *Changes made to document* | *Changed by* |
| --- | --- | --- | --- | --- |
| 0.1 | N/A | 01/05/2022 | N/A - original version, just a template. | alf56 |
| 0.2 | N/A | 02/05/2022 | Partly populated test table | all49 |
| 0.3 | N/A | 05/05/2022 | Finished Populating | all49 |
| 0.4 | N/A | 06/05/2022 | Added Test Results | all49 |
| 0.5 | N/A | 10/05/2022 | Added Equivalence Partitioning | All49 |
|  |  |  |  |  |
|  |  |  |  |  |