Group Project 11

Test Specification

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| --- | --- |
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# Introduction

## Purpose of this Document

This document is to present Test Specification document.

## Scope

This document specifies all tests for each functional requirements that the program should contain for proper functioning.

## Objectives

The objective of this document is to show what elements need to be checked while the program is running for its proper functioning.

# BODY OF DOCUMENT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | Test Content | Input | Output | Pass Criteria |
| SE-F-000 |  | Check that when program starts, we see [1] start page | -- | Correct start page of buccaneer game | Data is stored correctly |
| SE-F-001 | FR1 | Check that system can create four players | Press “Enter” to create four players (Tom, Bob, Steve, John). | New players show on the screen | Data is created correctly |
| SE-F-002 | FR1 | Check that user can assign names to each of the four players | Enter a name in the pop-up window and hit enter | List of names which are assigned to an appropriate player | Data is assigned correctly |
| SE-F-003 | FR2 | Check that system can randomly assign and set exactly one port as a Home Port to each player | Start a program and let the system assign ports 10 times | List of 4 players with randomly assigned ports | Data is assigned correctly |
| SE-F-004 | FR3 | Check that system can store pack of 36 crew cards | Enter pack of 36 cards and hit enter (you are able to see all of them in the command line) | List of all crew cards (you are able to see all of them in the command line) | Data is stored correctly |
| SE-F-005 | FR5 | Check that system contains 5 treasure types of 4 each | ----- | List of 4 diamonds, 4 rubies, 4 gold bars, 4 pearls and 4 barrels of rum | Data is stored correctly |
| SE-F-006 | FR5 | Check that Diamond is worth 5 points | Diamond | Number of points (5) | Data is stored correctly |
| SE-F-007 | FR5 | Check that Ruby is worth 5 points | Ruby | Number of points (5) | Data is stored correctly |
| SE-F-008 | FR5 | Check that Gold bar is worth 4 points | Gold bar | Number of points (4) | Data is stored correctly |
| SE-F-009 | FR5 | Check that Pearl is worth 3 points | Pearl | Number of points (3) | Data is stored correctly |
| SE-F-010 | FR5 | Check that Barrel od rum is worth 2 points | Barrel of rum | Number of points (2) | Data is stored correctly |
| SE-F-011 | FR5 | Check that treasures are assigned only to ships, to ports and to Flat Island | All treasures that the system contains | Locations of every treasure (Ships, ports and Flat Island) | Data is stored correctly |
| SE-F-012 | FR6 | Check that the number of cards in the player’s hand and the value of each card are correct | Specific player’s name | The number of his cards and value of each card | Data is stored correctly |
| SE-F-013 | FR6 | Check that the total distance (3) the player can move in a single turn is correct (player has 1 black crew card and 2 red crew cards) | Specific player’s name | The total distance (3) the player can move in a single turn | Data is stored correctly |
| SE-F-014 | FR6 | Check that the fighting strength (1) of the player is correct (player has 3 red crew cards and 2 black crew cards) | Specific player’s name | The fighting strength (1) of the player | Data is stored correctly |
| SE-F-015 | FR6 | Check that the items of treasure (2) in the player’s ship are correct (player has 1 diamond and 1 gold bar) | Specific player’s name | The items of treasure (2) in the player’s hand | Data is stored correctly |
| SE-F-016 | FR6 | Check that the location and orientation of the player’s ship are correct | Specific player’s name | The location and orientation of the player’s ship | Data is stored correctly |
| SE-F-017 | FR6 | Check that the player’s Home Port is correct | Specific player’s name | The player’s Home Port | Data is stored correctly |
| SE-F-018 | FR7 | Check that system can store and track number of cards at the port | Enter pack of cards and make the next moves to simulate the course of the game | Number of cards at the port | Data is stored and tracked correctly |
| SE-F-019 | FR7 | Check that system can store and track value of each card | Enter pack of cards and make the next moves to simulate the course of the game | Value of each card at the port | Data is stored and tracked correctly |
| SE-F-020 | FR7 | Check that system can store and track items of treasure at the port | Enter specified treasure items and make the next moves to simulate the course of the game | Number of items of treasure at the port | Data is stored and tracked correctly |
| SE-F-021 | FR7 | Check that system can track players for whom this is the Home port | Create players and assign them to different ports | Player and port paired up | Data is assigned correctly |
| SE-F-022 | FR8 | Check that system can track and store the number of cards at Flat Island | Enter pack of cards and make the next moves to simulate the course of the game | Number of cards at Flat Island | Data is stored and tracked correctly |
| SE-F-023 | FR8 | Check that system can track and store the value of each card at Flat Island | Enter pack of cards and make the next moves to simulate the course of the game | Value of each card at the port | Data is stored and tracked correctly |
| SE-F-024 | FR8 | Check that system can track and store items of treasure at Flat Island | Enter specified treasure items and make the next moves to simulate the course of the game | Number of items of treasure at the port | Data is stored and tracked correctly |
| SE-F-025 | FR9 | Check that system can display a 20 by 20 square board on screen | Start game with entering names of the players | A 20 by 20 square board appears on a screen | System displays game board |
| SE-F-026 | FR9 | Check that system can display board with the following notable features [1] (look below table) | Start game with entering names of the players | A board has notable features on a given squares | System displays game board with coordinates |
| SE-F-027 | FR9 | Check that system can indicate each ship and port in a clear way | Start game with entering names of the players | A board has 4 coloured ships with 4 coloured Home ports. This shows which ship belongs to which port | System displays data on game board correctly |
| SE-F-028 | FR9 | Check that system can display total distance the player can move in single turn | Start game with entering names of the players | A board shows where player can move | System displays possible moves to the player |
| SE-F-029 | FR9 | Check that system can display items of treasure in the player’s ship | Start game with entering names of the players | Number of items of treasure in the player’s ship | System displays data on the board |
| SE-F-030 | FR9 | Check that system can display location and orientation of the player’s ship | Start game with entering names of the players | A board shows location of the player’s | System displays data on the board |
| SE-F-031 | FR9 | Check that system can display name of the player’s Home Port | Start game with entering names of the players | A board shows player’s Home Port | System displays data on the board |
| SE-F-032 | FR9 | Check that system can display items of treasure in the port | Start game with entering names of the players | A board shows items of treasure in the port | System displays data on the board |
| SE-F-033 | FR9 | Check that system can display number of each card at the port | Start game with entering names of the players | A board shows number of cards at the specific port | System displays data on the board |
| SE-F-034 | FR9 | Check that system can display value of each card at the port | Start game with entering names of the players | A board shows value of each card at the specific port | System displays data on the board |
| SE-F-035 | FR12 | Check that system compares players’ strength appropriately | Fighting strength of both players | Player that has greater fighting strength | Data is stored correctly |
| SE-F-036 | FR14 | Check that system can award appropriate player with treasures | Make a move on Flat Island and wait for a treasure | Treasure appears in the ship of a player | Data is stored correctly |
| SE-F-037 | FR14 | Check that system can add cards on Flat Island in player’s hand | Make a move on Flat Island and wait for cards | Cards appear on player’s hand | Data is assigned and stored correctly |
| SE-F-038 | FR15 | Check that system can add treasure from ship to Home Port | Reach your Home Port when you have treasures in your ship | Treasures are unloaded to the Home Port | Data is stored correctly |
| SE-F-039 | FR15 | Check that system can display appropriate info during trade | Start a trade | Trade window appears with specific information | System displays data |
| SE-F-040 | FR15 | Check that system can block trade with equivalent treasure value on each side | Start a trade | Trade is blocked | System displays “Error” message |
| SE-F-041 | FR15 | Check that system can allow players to use cards in their hands | Start a trade | User is able to use cards | System allows for data usage |

[1]

Port of Venice at (1,7)

Port of London at (1,14)

Port of Cadiz at (14,20)

Port of Amsterdam at (20, 14)

Port of Marseilles at (20,7)

Port of Genoa at (7,1)

Mud Bay at (1,1)

Anchor Bay at (20,1)

Cliff Creek at (20,20)

Flat Island occupies a rectangle with corners (2,16) and (4,19)

Pirate Island occupies a rectangle with corners (17,2) and (19,5)

Treasure Island occupies a rectangle with corners (9,9) and (12,12)

REFERENCES

[1] Slide number 2 in UI Mockups.pptx

DOCUMENT HISTORY

| *Version* | *Issue No.* | *Date* | *Changes made to document* | *Changed by* |
| --- | --- | --- | --- | --- |
| 1.0 | N/A | 08/03/2022 | N/A - original version | MAM148, MAT78 |
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