**Software Engineering Group Project**

Test Report

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| Author: | James Falkner [jaf43] |
| Config Ref: | SE.GP03.TEST\_REPORT |
| Date: | 10th May 2022 |
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| Test Ref | Test Content | Pass/Fail | Explanation |
| SE-01.001 | Check that software prompts user for names of exactly four players on start up | Pass |  |
| SE-01.002 | Check that blank inputs are rejected | Pass |  |
| SE-01.003 | Check that inputs containing non-letters are rejected | Pass |  |
| SE-01.004 | Check that names with over 20 letters are rejected | Pass |  |
| SE-01.004.1 | Check that names with characters 4-20 are accepted | Pass |  |
| SE-01.005 | Check that names are stored correctly | Pass |  |
| SE-01.006 | Check that game can handle multiple players with the same name |  |  |
| SE-01.007 | Check that users cannot choose the same colour ship | Pass |  |
| SE-02.001 | Check that each player is assigned a port | Pass |  |
| SE-02.002 | Check that ports are stored correctly | Pass |  |
| SE-02.003 | Check that port assignment is random | Pass |  |
| SE-03.001 | Check that pack contains 36 crew cards | Pass |  |
| SE-03.002 | Check that pack contains correct number of each card | Pass |  |
| SE-03.003 | Check that pack is randomly sorted | Pass |  |
| SE-03.004 | Check that cards are dealt from the top of the pack |  |  |
| SE-04.001 | Check that system maintains pack of 28 chance cards | Pass |  |
| SE-04.002 | Check that pack is randomly sorted | Pass |  |
| SE-05.001 | Check that game contains correct amount of treasure | Pass |  |
| SE-05.002 | All treasure starts on Treasure Island and is assigned elsewhere where appropriate. | Pass |  |
| SE-05.005 | Check that treasure can be stored on Flat Island. | Pass |  |
| SE-06.001 | Check that the game stores the number of cards in a user’s hand. | Pass |  |
| SE-06.002 | Check that the game correctly stores the value of each card. | Pass |  |
| SE-06.004 | Check that the game can correctly calculate the fighting strength of the player. | Pass |  |
| SE-10.001 | Check that the players are given 5 cards from the crew card pack | Pass |  |
| SE-10.002 | Check that each trading port is dealt two crew cards | Pass |  |
| SE-10.003 | Check that each trading port is dealt the correct piece of treasure | Pass |  |
| SE-10.004 | Check that the game assigns player’s ships to their home ports at the start of the game | Pass |  |
| SE-06.003 | Check that the game stores the total distance a player can move. | Pass |  |
| SE-06.005 | Check that the game can keep track of the chance cards in a player’s hand. | Pass |  |
| SE-06.006 | Check that the game can keep track of the treasure on a players ship | Pass |  |
| SE-06.007 | Check that a player’s ship can only contain a maximum of two pieces of treasure | Fail | Bug causing ships to be able to carry 2 of each type of treasure. Only present for some users. |
| SE-06.008 | Check that the game can store and monitor a player’s ship location and orientation. | Pass |  |
| SE-06.009 | Check that the game can store and monitor the correct information about the player’s home port. | Pass |  |
| SE-07.001 | Check that the program stores the number of cards at each port and their value | Pass |  |
| SE-07.002 | Check that the program keeps track of treasure stored at each port | Pass |  |
| SE-07.003 | Check that the program associates each port with its owner | Pass |  |
| SE-08.001 | Check that the program stores the number of cards at flat island and their value | Pass |  |
| SE-08.002 | Check that the program keeps track of treasure stored at flat island | Pass |  |
| SE-09.001 | Check that program displays a game board of the correct size | Pass |  |
| SE-09.002 | Check that program displays board features in the correct places | Pass |  |
| SE-09.003 | Check that the board features are clearly labelled | Pass |  |
| SE-09.004 | Check that the position and orientation of each players ship is displayed | Pass |  |
| SE-09.005 | Check that player information is correctly displayed | Pass |  |
| SE-09.006 | Check that port information is correctly displayed | Pass |  |
| SE-09.007 | Check that flat island information is correctly displayed | Pass |  |
| SE-03.005 | Check that cards are returned to the bottom of the pack |  |  |
| SE-03.006 | Check that cards cannot be dealt from an empty pack |  |  |
| SE-04.003 | Check that cards are drawn from the top of the pack | Pass |  |
| SE-04.004 | Allow a user to hold onto a chance card. | Pass |  |
| SE-04.005 | Allow the user to use a chance card in their hand | Pass |  |
| SE-04.006 | Check that chance cards that are not able to be held are executed immediately | Pass |  |
| SE-04.007 | Check that cards are returned to the bottom of the pack |  |  |
| SE-05.003 | Check that treasure can be assigned to ships. | Pass |  |
| SE-05.004 | Check that treasure can be assigned to ports. | Pass |  |
| SE-11.001 | Check that the player’s take their turn in order according to their home port | Pass |  |
| SE-11.002 | Check that a player can take the correct movement actions during their turn | Pass |  |
| SE-11.002.1 | Check that a player cannot move to an incorrect square during their turn | Pass |  |
| SE-11.003 | Check that the player cannot turn their ship within a port | Pass |  |
| SE-11.004 | Check that the game shows all legal movement squares during their turn | Pass |  |
| SE-11.005 | Check that the game does not allow the user to move beyond the edge of the board | Pass |  |
| SE-11.006 | Check that the game does not allow the user to move through islands | Pass |  |
| SE-11.007 | Check that a player fights another player if they move to a space occupied by that player. | Pass |  |
| SE-11.008 | Check that the game doesn’t allow a player to attack another player at a port | Pass |  |
| SE-11.009 | Check that the game doesn’t allow the user to attack another player at the coast of Treasure Island | Pass |  |
| SE-11.010 | Check that the game gives the opportunity for a player to attack a ship moving through the square they are occupying | Pass | Ships given chance to attack if another ship is in possible movement area |
| SE-11.011 | Check that once a stationary player has attacked a moving player, the moving player stops their movement and the attack begins | Pass | Ship given chance to attack if in another ship’s possible movement area |
| SE-11.011 | Check that if a draw occurs the defender is the winner | Pass |  |
| SE-11.012 | Check that after a move not involving an attack and whilst not in a port, they should be asked which direction they would like to turn to. | Pass |  |
| SE-11.013 | Check that the user isn’t allowed to turn their ship at the end of a turn where they are in a port | Pass |  |
| SE-11.014 | Check that the user isn’t allowed to turn their ship at the end of a turn where they have attacked someone or been attacked | Pass |  |
| SE-11.015 | Check that the user cannot make an illegal rotation | Pass |  |
| SE-11.016 | Check that the correct procedures are followed if the player ends their movement in a special position | Pass |  |
| SE-12.001 | Check that the game correctly decides who wins in a fight | Pass |  |
| SE-12.002 | Check that the winner gets the loser’s treasure from their ship given they have any treasure | Pass |  |
| SE-12.003 | Check that any excess treasure from the loser’s ship is returned to Treasure Island | Pass |  |
| SE-12.004 | Check that if the loser does not have treasure but does have more than 1 card, then the two lowest value cards should be given to the winner | Pass |  |
| SE-12.005 | Check that if the loser does not have treasure and has only 1 card in their hand that the winner is given that one card | Pass |  |
| SE-12.006 | Check that after the cards/treasures have been allocated, the loser is able to make a movement in any direction followed by a change of direction | Pass |  |
| SE-12.007 | Check that the loser cannot move into a port | Pass |  |
| SE-12.008 | Check that the winner remains facing the direction they were moving/facing | Pass |  |
| SE-13.001 | Check that card is drawn from top of deck when player arrives at treasure island |  |  |
| SE-13.002.1 | Check the player gains treasure from chance cards providing there is space on their ship | Pass |  |
| SE-13.002.2 | Check the player can choose between crew or treasure for a chance card | Pass |  |
| SE-13.002.3 | Check the player can gain treasure but lose crew from a chance card | Pass |  |
| SE-13.002.4 | Check the player can gain treasure and crew from a chance card | Pass |  |
| SE-13.002.5 | Check the player can exchange crew cards with another player due to a chance card | Pass |  |
| SE-13.002.6 | Check the player can send crew to pirate island due to a chance card | Pass |  |
| SE-13.002.7 | Check the player gets moved to a bay if “blown to bay” is picked up | Pass |  |
| SE-13.002.8 | Check the player gets moved 5 squares towards the nearest port if they pick up “5 leagues off” | Pass |  |
| SE-13.002.9 | Check the player can hold “Kidd’s Chart” in their hand | Pass |  |
| SE-13.002.10 | Check the player can activate “Kidd’s Chart” upon entering the anchor bay | Pass |  |
| SE-14.001 | Check that player is given crew cards upon reaching flat island | Pass |  |
| SE-14.002 | Check that player is awarded treasure upon reaching flat island | Pass |  |
| SE-14.003 | Check that player with room for only one piece of treasure is awarded highest-value treasure on flat island | Pass |  |
| SE-14.004 | Check that player with full ship is not awarded treasure | Pass |  |
| SE-15.001 | Check that whenever a player arrives at their home port, all treasure is unloaded | Pass |  |
| SE-15.002 | Check that when a player arrives at another port, they can trade with the port if there are any treasures in the port to be traded | Pass | The trade port are unable to trade crew cards |
| SE-15.003 | Check that players can choose items to trade | Pass |  |
| SE-15.004 | Check that players can cancel their trade after choosing cards | Pass |  |
| SE-15.005 | Check that once a trade is requested, the cards have equivalent value | Pass |  |
| SE-15.006 | Check that a trade cannot be completed if cards are of inequivalent value | Pass |  |
| SE-15.007 | Check that a player cannot trade for more treasure than their ship can carry | Pass |  |
| SE-15.008 | Check that once a trade is completed, cards traded to another player’s home port are put in that player’s hand | Pass |  |
| SE-15.009 | Check that if certain chance cards are implemented, a player should be able to use a Chance card when the trade completed | Fail | No mechanism for trading chance card |
| SE-16.001 | If chance cards 25 and 26 are implemented, then the game needs to recognise when Anchor Bay is reached, if the player holds one of the relevant cards, they should exchange it for treasure | Pass |  |
| SE-17.001 | Check that when a player enters their home port and the total value of treasure in the port (including the ones just added) totals at least 20 points, the game is finished and that player wins the game | Pass |  |

| *Version* | *Issue No.* | *Date* | *Changes made to document* | *Changed by* |
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DOCUMENT HISTORY