**Group 14 – Project Test Report**

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1. **TEST RESULT TABLE**
   1. Project Tests

Here is a table showing the results of the tests that are described in the Test Specification [1] that show what parts of the program are working as planned:

|  |  |  |  |
| --- | --- | --- | --- |
| Test Number | Test Description | Test Result | Explanation Of Failure |
| SE-F-001 | Test that system can request 4 name inputs | Pass |  |
| SE-F-002  (UI TEST) | Test that system only accepts player names shorter than 10 characters being only letters, and does not allow blank names or duplicate names | Pass |  |
| SE-F-003 | Test if system can assign ports to users | Pass |  |
| SE-F-004 | Test if only one unique port is assigned to each user | Pass |  |
| SE-F-005 | Test if there are 36 Crew Cards in the game | Pass |  |
| SE-F-006 | Test if correct Crew Cards are stored | Pass |  |
| SE-F-007 | Test if game stores the Crew Cards randomly | Pass |  |
| SE-F-008 | Test if card returned to deck is stored at bottom of the deck | Pass |  |
| SE-F-009 | Test if card drawn is from the top of the deck | Pass |  |
| SE-F-010 | Test if retrieved card is not present in the deck | Pass |  |
| SE-F-011 | Test if there are 28 Chance Cards in the deck at the beginning of the game | Pass |  |
| SE-F-012 | Test if the game sorts the cards randomly at the beginning of each game | Pass |  |
| SE-F-013 | Test if the game correctly puts chance cards at the bottom of the pile | Pass |  |
| SE-F-014 | Test if the game assigns the cards that are meant to be kept by the players | Pass |  |
| SE-F-015– (UI TEST) | Test if the game removes the assignable crew cards from the deck when they are assigned to a player | Pass |  |
| SE-F-016– (UI TEST) | Test that the assignable crew cards are returned to the bottom of the pack after they have been used | Pass |  |
| SE-F-017 | Test if the Treasure Island stores 4 diamonds at the beginning of the game | Pass |  |
| SE-F-018 | Test if the Treasure Island stores 4 rubies at the beginning of the game | Pass |  |
| SE-F-019 | Test if the Treasure Island stores 4 gold bars at the beginning of the game | Pass |  |
| SE-F-020 | Test if the Treasure Island stores 4 pearls at the beginning of the game | Pass |  |
| SE-F-021 | Check that the number of diamonds in the game is equal to 4 | Fail | When all the tests are run at the same time, the number of Diamonds is incorrect. This test passes when run on its own. |
| SE-F-022 | Check that the number of rubies in the game is equal to 4 | Fail | When all the tests are run at the same time, the number of Rubies is incorrect. This test passes when run on its own. |
| SE-F-023 | Check that the number of gold bars in the game is equal to 4 | Fail | When all the tests are run at the same time, the number of Gold Bars is incorrect. This test passes when run on its own. |
| SE-F-024 | Check that the number of pearls in the game is equal to 4 | Fail | When all the tests are run at the same time, the number of Pearls is incorrect. This test passes when run on its own. |
| SE-F-025 | Check that the number of barrels of rum in the game is equal to 4 | Fail | When all the tests are run at the same time, the number of Barrels of Rum is incorrect. This test passes when run on its own. |
| SE-F-026 | Test that a request to obtain a treasure that has been assigned elsewhere form the Treasure Island should be refuser | Pass |  |
| SE-F-027 | Test if the value of Diamonds is stored correctly | Pass |  |
| SE-F-028 | Test if the value of Rubies s is stored correctly | Pass |  |
| SE-F-029 | Test if the value of Gold Bars is stored correctly | Pass |  |
| SE-F-030 | Test if the value of Pearls is stored correctly | Pass |  |
| SE-F-031 | Test if the value of Barrels of Rum is stored correctly | Pass |  |
| SE-F-032 | Test if the value of Crew Cards is stored correctly | Pass |  |
| SE-F-033 | Test if the value of Crew Cards is stored correctly | Pass |  |
| SE-F-034 | Test if the value of Crew Cards is stored correctly | Pass |  |
| SE-F-035 | Test if the player’s combat value is calculated correctly | Pass |  |
| SE-F-036 | Test if game can correctly keep track of the nr of cards at Port London | Pass |  |
| SE-F-037 | Test if game can correctly keep track of the nr of cards at Port Marseilles | Pass |  |
| SE-F-038 | Test if game can correctly keep track of the nr of cards at Port Cadiz | Pass |  |
| SE-F-039 | Test if game can correctly keep track of the nr of cards at Port Genoa | Pass |  |
| SE-F-040 | Test if the game stores the value of cards correctly | Pass |  |
| SE-F-041 | Test if the game correctly keeps track of the cards after a card is removed | Pass |  |
| SE-F-042 | Test if the game correctly keeps track of the treasure at the port London | Pass |  |
| SE-F-043 | Test if the game correctly keeps track of the treasure at the port Marseilles | Pass |  |
| SE-F-044 | Test if the game correctly keeps track of the treasure at the port Cadiz | Pass |  |
| SE-F-045 | Test if the game correctly keeps track of the treasure at the port Genoa | Pass |  |
| SE-F-046 | Test if the game correctly keeps track of treasure once removed | Pass |  |
| SE-F-047 | Test if the game correctly keeps track of treasure once removed | Pass |  |
| SE-F-048 | Test if the game correctly keeps track of treasure once multiple treasure is removed | Pass |  |
| SE-F-049 | Test if the game correctly keeps track of treasure once more than stored removed is removed | Pass |  |
| SE-F-050 | Test if the ports have players assigned to them | Pass |  |
| SE-F-051 | Test if the ports have players assigned to them | Pass |  |
| SE-F-052 | Test if the ports have players assigned to them | Pass |  |
| SE-F-053 | Test if the ports have players assigned to them | Pass |  |
| SE-F-054 | Test if the game can correctly keep track of the nr of cards at Flat Island when cards are added | Pass |  |
| SE-F-055 | Test if the game can correctly keep track of the nr of cards at Flat Island when cards are removed | Pass |  |
| SE-F-056 | Test if the game can correctly keep track of the nr of cards at Flat Island when more cards are removed than available | Pass |  |
| SE-F-057 | Test if the game can correctly keep track of the nr of treasure at Flat Island when treasure is added | Pass |  |
| SE-F-058 | Test if the game can correctly keep track of the nr of treasure at Flat Island when treasure is removed | Pass |  |
| SE-F-059 | Test if the game can correctly keep track of the nr of treasure at Flat Island when more treasure is removed than available | Fail | When all the tests are run at the same time, the treasures are not removed correctly. This test passes when run on its own. |
| SE-F-060 | Test if port London is at the correct coordinates | Pass |  |
| SE-F-061 | Test if port Cadiz is at the correct coordinates | Pass |  |
| SE-F-062 | Test if port Marseilles is at the correct coordinates | Pass |  |
| SE-F-063 | Test if port Genoa is at the correct coordinates | Pass |  |
| SE-F-064 | Test if Mud Bay is at the correct coordinates | Pass |  |
| SE-F-065 | Test if Anchor Bay is at the correct coordinates | Pass |  |
| SE-F-066 | Test if Cliff Creek is at the correct coordinates | Pass |  |
| SE-F-067– (UI TEST) | Test if Flat Island is at the correct coordinates | Pass |  |
| SE-F-068– (UI TEST) | Test if Pirate Island is at the correct coordinates | Pass |  |
| SE-F-069– (UI TEST) | Test if Treasure Island is at the correct coordinates | Pass |  |
| SE-F-070 | Test if each player is dealt 5 Crew Cards from the pack | Pass |  |
| SE-F-071 | Test if all the Trading Ports are dealt 2 crew cards | Pass |  |
| SE-F-072 | Test if for all Trading Ports the sum of crew cards and treasure is equal to 8 at the beginning of the game | Fail | Error in the test function. This functionality has been tested later and works correctly. |
| SE-F-073 | Test if all the players get a unique home port at the beginning of the game | Pass |  |
| SE-F-074 | Test if the start position for each ship is their Home Port | Pass |  |
| SE-F-075 | Test that the order of the players in a turn is as specified (London, Genoa, Marseilles, Cadiz) | Pass |  |
| SE-F-076 | Check if the player can choose to either turn or move their ship | Pass |  |
| SE-F-077  (UI TEST) | Test that the player’s decision for change of direction is represented in the game | Pass |  |
| SE-F-078  (UI TEST) | Test that the player can’t move more squares than the sum of his crew cards | Pass |  |
| SE-F-079  (UI TEST) | Test that that the player must move their ship when it’s in a port | Pass |  |
| SE-F-080  (UI TEST) | Test if the legal squares are shown to the player | Pass |  |
| SE-F-081  (UI TEST) | Test if the player can move to a square withing his legal range | Pass |  |
| SE-F-082  (UI TEST) | Test that the player cannot move to a square outside of his legal range | Pass |  |
| SE-F-083  (UI TEST) | Test that the player can move only in the direction he’s facing | Pass |  |
| SE-F-084  (UI TEST) | Test that the player can only move in a straight line when leaving port | Pass |  |
| SE-F-085  (UI TEST) | Test that it's refused when the player tries to move more squares than his legal range (when in the port) | Pass |  |
| SE-F-086  (UI TEST) | Test that it's refused when the player tries to move outside of the board | Pass |  |
| SE-F-087  (UI TEST) | Test that the player can’t move on the squares occupied by the Islands (refer to Appendix for coordinates) | Pass |  |
| SE-F-088  (UI TEST) | Test that after making a move the player can choose a direction to turn | Pass |  |
| SE-F-089  (UI TEST) | Test that the player cannot turn in a direction in which they can’t move at least one square | Fail | The player can turn in a direction they cannot move  Was not implemented. |
| SE-F-090  (UI TEST) | Test that when a player moves to a square adjacent to the Treasure Island the correct sequence is followed | Pass |  |
| SE-F-091 | Test that when a player moves to a square adjacent to the Flat Island the correct sequence is followed | Pass |  |
| SE-F-092 | Test that when a player moves to a square representing a port the correct sequence is followed | Pass |  |
| SE-F-093 | Test if the fighting strength of the ships is calculated correctly | Pass |  |
| SE-F-094 | Check that the winner is announced correctly | Pass |  |
| SE-F-095 | Test if when the losing ship has treasure, the winner takes its treasure | Pass |  |
| SE-F-096 | Test if when the winner cannot accommodate the treasure, it is returned to the Treasure Island | Pass |  |
| SE-F-097 | Test if when the loser doesn’t have treasure, the lowest crew cards are given to the winner | Pass |  |
| SE-F-098 – (UI TEST) | Test if when the loser doesn’t have treasure and has only one crew card it is given to the winner | Pass |  |
| SE-F-099– (UI TEST) | Test that after the attack the loser is asked what direction they want to turn | Pass |  |
| SE-F-100– (UI TEST) | Test that the above decision is represented in the game | Pass |  |
| SE-F-101– (UI TEST) | Test that the loser must move at least one square | Pass |  |
| SE-F-102– (UI TEST) | Test that the winner is facing the same direction as they were before the attack | Pass |  |
| SE-F-103– (UI TEST) | Test if a player is given a chance card when adjacent to Treasure Island at the end of their turn from the top of the deck. | Pass |  |
| SE-F-104– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-105– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-106– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-107– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-108– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-109– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-110– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-111– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-112– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-113– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-114– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-115– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-116– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-117– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-118– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-119– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-120– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-121– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-122– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-123– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-124– (UI TEST) | Test if given Chance card is executed correctly | Pass (simple implementation) |  |
| SE-F-125– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-126– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-127– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-128– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-129– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-130– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-131– (UI TEST) | Test if given Chance card is executed correctly | Pass |  |
| SE-F-132– (UI TEST) | Test if treasure is given when player is adjacent to Flat Island | Pass |  |
| SE-F-133– (UI TEST) | Test if 1 treasure is awarded when player only has 1 space on ship, treasure given is highest value | Pass |  |
| SE-F-134– (UI TEST) | Test if player is assigned any cards from Flat Island | Pass |  |
| SE-F-135– (UI TEST) | Test if ships are unloaded when reaching ports | Pass |  |
| SE-F-136– (UI TEST) | Test if players can trade in ports | Pass |  |
| SE-F-137– (UI TEST) | Tests if Ports accept chance cards to trade | Pass |  |
| SE-F-138– (UI TEST) | Test if when a player that holds Chance Card 25 gets to the Anchor Bay the correct sequence is followed | Pass |  |
| SE-F-139– (UI TEST) | Test if when a player that holds Chance Card 26 gets to the Anchor Bay the correct sequence is followed | Pass |  |
| SE-F-140– (UI TEST) | Test if the game finishes when one of the players has a total of 20 points worth of treasure in the ports and the ship as they enter the port | Pass |  |
| SE-F-141– (UI TEST) | Test if the winner is announced by the game | Pass |  |
| SE-F-142– (UI TEST) | Test if at the end of a game the program gives a possibility to either start a new game or terminate | Fail | No restart button implemented but termination is allowed, game can be restarted if ran again |
| SE-F-143– (UI TEST) | Test if play button works | Pass |  |
| SE-F-144– (UI TEST) | Test if instructions button works | Pass |  |
| SE-F-145– (UI TEST) | Test if we can input names | Pass |  |
| SE-F-146– (UI TEST) | Test if the game assigns random ports to random players | Pass |  |

|  |  |  |
| --- | --- | --- |
| Test Number | UI Test Proof | Passed description |
| SE-F-002 | Graphical user interface, website  Description automatically generatedGraphical user interface, website  Description automatically generatedGraphical user interface, website  Description automatically generated | The game only accepts names with less than 10 characters being only letters, does not allow duplicate names and names with less than 3 characters. |
| SE-F-015 | A picture containing qr code  Description automatically generatedText  Description automatically generated | Here you can see the assignable crew cards in a player’s ship/inventory, when tested with only one card in the deck and once that card is removed, we should get an error simply because there are no cards left, which is as expected in the second image, this is an impossible scenario in the game even then it does not crash the game, the deck just stays empty until cards are returned. |
| SE-F-016 | Graphical user interface  Description automatically generatedQr code  Description automatically generated with low confidence | Once a holdable chance card is executed it is returned to the deck, you can see from being executed on player four, it is now executed on player two (see second imaged inventory box). |
| SE-F-067 |  | Flat Island is in the correct place. |
| SE-F-068 |  | Pirate Island is in the correct place. |
| SE-F-069 |  | Treasure island is in the correct place. |
| SE-F-077 |  | Player’s chance of direction is presented visually, see red ship in first image where it is facing North, see second image where it is facing South after the S – to change direction to South is chosen from the Move tab on the right side (highlighted letter showing the direction chosen). |
| SE-F-078 |  | At the start player two has 5 cards and is shown to be able to move 5 spaces only (represented by shadow ships), second image shows the furthest it was able to move. |
| SE-F-079 |  | At the start of the game a player must move their ship, this image shows the game outlining where the ship can go and nothing else. |
| SE-F-080 |  | This image shows the legal squares the ship can move, legal squares relate to the amount of crew cards. |
| SE-F-081 |  | Plyer has 5 crew cards, meaning they can move up to a maximum of 5 places, the second image highlights legal squares and last one shows the 4th (one less than max in this case) place the ship moved to. |
| SE-F-082 |  | First image shows the player possible movement range, second image shows all ranges, this is equal to 5 meaning the player cannot move more than crew card total value. |
| SE-F-083 |  | Legal squares only in the direction of the player are shown, player cannot move in any other direction so no legal potential moves are shown (even when clicking outside the legal squares trying to move it will not move the ship). |
| SE-F-084 |  | The player can move in a straight line in any direction when in their port. |
| SE-F-085 |  | Even when player is in port only the legal number of moves are show correlating to crew card total value, last image shows the furthest it can travel (in this case 5 moves because the player only has 5 crew cards). |
| SE-F-086 |  | When at the edge of the map (player four) they are only shown legal moves up to the border and not further. |
| SE-F-087 |  | When docking islands player cannot move onto the island regardless of having enough crew cards to go on top, instead they are show no legal moves and just sit facing the island. |
| SE-F-088 |  | Player can change direction after moving, if you see first/second image the player moves North and their direction is still North, but after choosing West from the Menu their new direction matches the inputted West (see last image). |
| SE-F-089 |  | The player can turn in a direction they cannot move  Was not implemented. |
| SE-F-090 |  | Player moves to treasure Island and is given a chance card; in this case it allows for a choice between treasure or crew cards |
| SE-F-091 |  |  |
| SE-F-098, SE-F-099, SE-F-100, SE-F-101, SE-F-102 |  | When attacking if the loser only has one card it is lost and given to the winner, you can see in image 7 that the inventory of player three is empty, and afterwards the winning ship is still facing the direction they were traveling (see image 6), and the loser is given an option to move at least one direction away (see image 5). |
| SE-F-103 |  | The first image shows the order of cards shuffled at the start of a game. The second screenshot shows that the card given to the player is the card from the top of the deck. |
| SE-F-104 | Qr code, square  Description automatically generatedA picture containing qr code  Description automatically generatedQr code, square  Description automatically generated | Purple ship is moved to adjacent to Flat Island, chance card 1 is executed and player in this case is blown diagonally 5 spaces, in this case it is 1 extra due to the fifth location already being occupied. The change direction menu is popped up and the player can change the direction in this case to SE. |
| SE-F-105 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedQr code  Description automatically generated with low confidenceA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing graphical user interface  Description automatically generated | First two pictures show both player’s inventory, then the chance card 2 is executed where the player is given a choice from a menu from which other player to get three chance cards from. Afterwards you can see players twos inventory where three cards are missing, which are now found in player fours inventory. The last two pictures show other player getting the same chance card afterwards, meaning it is returned to the deck (Normally it will be returned to the bottom of the deck but to purely test the return to deck function it is returned to the top). |
| SE-F-106 | Qr code, square  Description automatically generatedQr code, square  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First two images show the player being blown to mud bay after chance card 3 is executed, third image shows a player’s inventory before being blow to mud bay. Fourth image shows the player is blown to mud bay with the updated inventory. |
| SE-F-107 | A picture containing qr code  Description automatically generated | First image shows the players inventory with low number of cards then Chance card 4 is executed and they are blown to Cliff Creek, because they also had less than 3 Crew Cards, they are given 4 Crew Cards more in this case. |
| SE-F-108 |  | First image shows the inventory of player 3, upon execution of chance card 5 they are blow to their home port and given 4 crew cards because they have less than or equal to 3 crew cards (the missing gold is not related to this test or missing because of this test, it was used for another test). |
| SE-F-109 | A picture containing qr code  Description automatically generated | First image shows the direction and inventory of player four, after chance card 6 is executed, they are blown to the nearest port they are heading to and given more crew cards because they have less than or equal to 3 crew cards. |
| SE-F-110 |  | First image shows the inventory of player four and the location of two other ships which are equidistance from four, then chance card 7 is executed and due to both other ships being equidistance the action is ignored (see inventory of four in second image).  Third image shows ship one being closer and the inventory of four, four has lost 2 cards and ship one has gained them (see image 4, ship one’s inventory). Ship three’s inventory is also shown at the end to show only one ship got the cards and there is no duplication or undefined behaviour. |
| SE-F-111 |  | First 2 images show the first part of chance card 8 being executed where treasure is lost from ship four, last 2 images show the second part of chance card 8, where crew cards were taken due to there being no treasure in ship four’s inventory and ship four now has only 3 crew cards (see last image). |
| SE-F-112 |  | First image shows ship four with different valued treasure and once chance card 9 is executed the most valued treasure is lost (see second image), if there is no treasure the highest valued crew card is taken instead (see treasure values from second and last image). |
| SE-F-113 |  | First images show ship one’s inventory with one highest valued crew card (3), second image shows the updated inventory once chance card 10 is executed and removes the highest valued (in this case the red 3) crew card. |
| SE-F-114 |  | First image shows the inventory of ship two, once chance card 11 is executed they are given a choice of crew cards or treasure to choose from, third image shows updated inventory once crew card is chosen, fourth/fifth image shows the treasure menu once the treasure option is chosen and the amount/cost of each treasure and how much they can currently carry with the last image showing the updated inventory with the chosen treasure. |
| SE-F-115 |  | First image shows the inventory of ship one, once chance card 12 is executed they are given a choice of crew cards or treasure to choose from, third image shows updated inventory once crew card is chosen, fourth/fifth image shows the treasure menu once the treasure option is chosen and the amount/cost of each treasure and how much they can currently carry with the last image showing the updated inventory with the chosen treasure. |
| SE-F-116 |  | First image shows the inventory of ship one, once chance card 13 is executed they are given a choice of crew cards or treasure to choose from, third image shows updated inventory once crew card is chosen, fourth/fifth image shows the treasure menu once the treasure option is chosen and the amount/cost of each treasure and how much they can currently carry with the last image showing the updated inventory with the chosen treasure. |
| SE-F-117 |  | First image shows the inventory of ship two, once chance card 14 is executed they are given a choice of crew cards or treasure to choose from, second image shows updated inventory once crew card is chosen, third/fourth image shows the treasure menu once the treasure option is chosen and the amount/cost of each treasure and how much they can currently carry with the last image showing the updated inventory with the chosen treasure. |
| SE-F-118 |  | First image shows the inventory of player three before chance card 15 is executed and they are given 2 crew cards (see second image inventory). |
| SE-F-119 | A picture containing diagram  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First three images show player one’s inventory with 11 cards, before chance card 16 is executed, they are given a choice to choose treasure totalling 7 in value (see fourth/fifth image) and must reduce the crew card inventory to 10 (see last two images with the reduced inventory and the chosen treasure). |
| SE-F-120 |  | First three images show player one’s inventory with 17 cards, before chance card 17 is executed, they are given a choice to choose treasure totalling 6 in value (see fifth/sixth image) and must reduce the crew card inventory to 11 (see last three images with the reduced inventory and the chosen treasure). |
| SE-F-121 |  | Once chance card 18 is executed the player is allowed to choose to treasure up to 4 in total value and in this case receives 2 crew cards because they have less than 7 crew cards, see last image which contains the updated inventory with additional cards and the chosen treasure. |
| SE-F-122 |  | First image shows player four’s starting hand, after chance card 19 is executed, their hand is refreshed with all their cards lost and swapped with the same number of random cards (see second image). |
| SE-F-123 |  | First image shows chance card 20 being executed on player four when there are no ships anchored at treasure island, they simply lose two cards. Second image shows payer three’s inventory before chance card 20 is executed, they in this case swap 2 of their crew cards with the anchored player four (see last image, player three has lost black 1, red 2 and has instead now got two black 3, first image shows player four having at least the two black 3). |
| SE-F-124 |  | First image shows player two having the chance card 21 in their inventory as this is a holdable card, second image shows them at a port with that card showing that it is moved with the player the player does hold it as a commodity, this card only allows crew cards to be traded which prevents treasure trades using this card (see third image where treasure and chance card 21 is selected for trade, red box shows this action cannot be done). Last set of images show the card being successfully traded for crew cards as the button this time is green. Second last shows the port from another players perspective, you can see the traded crew cards are missing from the port. We implemented the simple function, so the card is returned to deck, last image shows player four at treasure island with the same card in their inventory. |
| SE-F-125 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First four images show two players with more than 7 cards (10 cards) before chance card 22 is executed, last 4 images show the updated inventories where the players have lost 3 cards and are reduced to a total crew card of 7. (Text box in first set of images were part of another card which was used to add cards to allow testing) |
| SE-F-126 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing calendar  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows chance card 23 in player three’s inventory, this card allows for treasure and crew card trades which is shown in the third image where a piece of treasure and a crew card is selected for trading, the fourth image shows the updated inventory of player three, which now contain the chosen treasure/crew traded. This card is sent back to the deck which is shown in the last image in another player’s inventory when they docked treasure island. |
| SE-F-127 | A picture containing qr code  Description automatically generatedA picture containing diagram  Description automatically generatedA picture containing diagram  Description automatically generatedA picture containing diagram  Description automatically generatedA picture containing diagram  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows chance card 24 in player four’s inventory, this card allows for treasure and crew card trades which is shown in the third/fourth image where a piece of treasure and a crew card is selected for trading (green button indicates legal action), the fifth image shows the updated inventory of player four and the port, which now contain the chosen (in this case) crew traded. This card is sent back to the deck which is shown in the last image in another player’s inventory when they docked treasure island. |
| SE-F-128 | A picture containing qr code  Description automatically generatedGraphical user interface, qr code  Description automatically generatedGraphical user interface, qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows the player holding chance card 25, once they travel to Anchor Bay, they are allowed to take treasure totalling value 7, second image shows treasure option provided once they are at anchor bay. Last image shows the updated inventory with the players chosen type of treasure |
| SE-F-129 | A picture containing qr code  Description automatically generatedGraphical user interface  Description automatically generated with medium confidenceGraphical user interface, qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows the player holding chance card 26, once they travel to Anchor Bay, they are allowed to take treasure totalling value 7, second image shows treasure option provided once they are at anchor bay. Last image shows the updated inventory with the players chosen type of treasure |
| SE-F-130 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing graphical user interface  Description automatically generatedA picture containing graphical user interface  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows player two’s inventory before chance card 27 is executed, they are given an option to chosen between crew or treasure (see second image). Third and fourth image shows player being allowed to choose the type of treasure and last image shows the updated inventory (showing the treasure selected and more crew cards if that was chosen). |
| SE-F-131 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows player three’s inventory before chance card 28 is executed, second image shows the updated inventory with addition card. |
| SE-F-132 | Qr code  Description automatically generated with medium confidenceA picture containing graphical user interface  Description automatically generated | First image shows player two’s inventory before they arrive a Flat Island, in the second image you can see they are given a treasure upon arrival. |
| SE-F-133 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows the inventory of player four, they already have one piece of treasure, once they are given multiple treasures (image two/three) consisting of a barrel and gold, only 1 highest valued treasure (in this case gold rather than barrel) is given because there is only one space. |
| SE-F-134 | Qr code  Description automatically generatedA picture containing qr code  Description automatically generated | First image shows player one’s inventory before they arrive a Flat Island, in the second image you can see they are given crew cards upon arrival. |
| SE-F-135 | A picture containing qr code  Description automatically generatedA picture containing diagram  Description automatically generated | First image shows player fours inventory before they dock, second image shows after docking the ship is unloaded and the treasure is now in the port |
| SE-F-136 | A picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedA picture containing qr code  Description automatically generatedQr code  Description automatically generated with low confidence | Images show player two docked at a port where there is treasure available for trading, second image shows the value of chosen treasure (in this case it is 2) in the red box (negative + red box means not equal amount of cards chosen for trade), third image shows the button go green once appropriate value is chosen for trading and the last image shows the now traded treasure in two’s inventory and the traded card in port Amsterdam’s inventory. |
| SE-F-137 |  | First image shows player two having the chance card 21 in their inventory as this is a holdable card, second image shows them at a port with that card showing that it is moved with the player the player does hold it as a commodity, this card only allows crew cards to be traded which prevents treasure trades using this card (see third image where treasure and chance card 21 is selected for trade, red box shows this action cannot be done). Last set of images show the card being successfully traded for crew cards as the button this time is green. Second last shows the port from another players perspective, you can see the traded crew cards are missing from the port. |
| SE-F-138 | See SE-F-128 | See SE-F-128 |
| SE-F-139 | See SE- F-129 | See SE-F-129 |
| SE-F-140 | Qr code, square  Description automatically generatedGraphical user interface  Description automatically generated | Once a ship docks back with the winning game condition (player two), the game ends and recognises they have won. |
| SE-F-141 | Graphical user interface  Description automatically generated | Winning player is announced by the game |
| SE-F-142 | Graphical user interface  Description automatically generatedA picture containing calendar  Description automatically generated | Once the game is finished the game does provide a play again button which the user can click but it takes us back to the main menu instead of directly into another game, and when that new game is loaded it has trouble assigning commodities to islands. |
| SE-F-143 | A picture containing calendar  Description automatically generatedA picture containing calendar  Description automatically generatedGraphical user interface  Description automatically generated with medium confidence | These set of images show us the play button working, once it is hovered the colour changes showing the user it is interactable, and once it is clicked, we are presented with the option to input name. |
| SE-F-144 | A picture containing calendar  Description automatically generatedA picture containing calendar  Description automatically generatedText, letter  Description automatically generated | These set of images show us the instructions button working, once it is hovered the colour changes showing the user it is interactable, and once it is clicked, we are presented with the instructions page. |
| SE-F-145 | Graphical user interface  Description automatically generated with medium confidenceA picture containing graphical user interface  Description automatically generated | When first starting the game, the names are empty, and are allowed to be filled in by the user. |
| SE-F-146 | A picture containing graphical user interface  Description automatically generatedShape, qr code, square  Description automatically generatedQr code, square  Description automatically generatedShape, qr code, square  Description automatically generated | We can see the first time we run the game the starting names are input as in image one, the starting port has the name Bob, when restarted and tried for a second time, the starting name now is Jay, and then restarted again it is now Hassan (each time the names were input in the same order) showing random assigned names. |

* 1. Acceptance Tests

|  |  |  |  |
| --- | --- | --- | --- |
| Test Number | Test Functionality | Test Result | Explanation Of Failure |
| Test 1 | Test if the project can start a new buccaneer game (FR1, FR2 and FR9) | Pass |  |
| Test 2 | Test if the game works with functionality of taking turns (FR3, FR4, FR5, FR11, FR13, FR15) | Pass |  |
| Test 3 | Test that the attacking stage works fully (FR11, FR12) | Pass |  |
| Test 4 | Test that the game knows when to end (FR17) | Pass |  |
| Test 5 | Test that player information can be displayed (FR9) | Pass |  |
| Test 6 | Test that port trading works (FR7, FR15) | Pass |  |
| Test 7 | Test if the program can save current state of the game | Pass |  |

1. **REFERENCES**

[1] SE.GP14.TestSpec - Test Specification

1. **DOCUMENT CHANGE HISTORY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Issue No. | Date | Changes made to document | Changed by |
| 0.1 | N/A | 02/05/22 | Made a skeleton document for the Project Test Report | JAL74 |
| 0.2 | N/A | 03/05/22 | Filled in the test number and functionality columns | JAL74 |
| 0.3 | N/A | 02/05/22 | Added some of UI test proof | HAF22 |
| 0.4 | N/A | 03/05/22 | Added proof descriptions for UI tests | HAF22 |
| 0.5 | N/A | 04/05/22 | Cleaned up document and reviewed tests | KAP48 |
| 0.6 | N/A | 04/05/22 | Marked failed and passed tests | HAF22 |
| 0.7 | N/A | 05/05/22 | Finished all chance card tests | HAF22 |
| 0.8 | N/A | 06/05/22 | Cleaned up tables and formatting and finished explanations of failed test and proofs of UI tests. | HAF22 |
| 0.8.1 | N/A | 09/05/22 | Added further UI tests | KAP48 |
| 0.8.2 | N/A | 10/05/22 | Updated test results | KAP48 |
| 0.9 | N/A | 10/05/22 | Added indicator to distinguish between UI and tests and unit tests. | HAF22 |
| 1.0 | N/A | 11/05/22 | Final changes before release | KAP48 |