# User acceptance testing

This test plan will reference requirements stated in another document. The document with these requirements will be provided to the client before acceptance testing begins. Requirements not tested will be stated alongside the acknowledgement from the client that these requirements should not be tested.

| Requirements tested: | Actions taken: | This requirement has been met: | | Comments: |
|---|---|---|---|---|
| | | Agree | Disagree | |
| FR1, SR18 and ER1 | 1. Guide a plane to the DHB airport<br>2. Ensure that the plane is at its minimum altitude and speed.<br>3. Land the plane.<br>4. Verify that the plane lands successfully. | ✓ | | |
| FR1, SR18 and ER1 | 1. Guide a plane to the BHD airport.<br>2. Ensure that the plane is at its minimum altitude and speed.<br>3. Land the plane.<br>4. Verify that the plane lands successfully | ✓ | | |
| FR1, SR19 and ER2 | 1. Wait for a plane to appear at the DHB airport. | | | |

| | | | | |
|---|---|---|---|---|
| | 2. Take off the plane.<br>3. Verify that the plane takes off successfully. | ✓ | | |
| FR1, SR19 and ER2 | 1. Wait for a plane to appear at the BHD airport.<br>2. Take off the plane.<br>3. Verify that the plane takes off successfully. | ✓ | | |
| FR2.1 and SR7 | 1. Verify that in versus mode, there are two separate score counters which can be seen and update appropriately. | ✓ | | |
| FR2.2, SR18 and ER1 | 1. Verify that there is a control for the red player to land a plane. | ✓ | | |
| FR2.2, SR18 and ER1 | 1. Verify that there is a control for the blue player to land a plane. | ✓ | | Perhaps could be a bit more obvious when conditions to land are satisfied; Shouldn't land off the runway. |
| FR2.2, SR19 and ER2 | 1. Verify that there is a control for the red player to take off a plane. | ✓ | | |
| FR2.2, SR19 and ER2 | 1. Verify that there is a control for the blue player to take off a plane. | ✓ | | |

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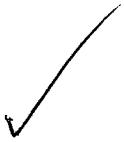
|---|---|---|---|---|
| FR2.2 and SR17 | 1. Verify that there are controls for the red player to adjust the altitude of a flight. |  | | |
| FR2.2 and SR17 | 1. Verify that there are controls for the blue player to adjust the altitude of a flight. | | | |
| FR2.2, SR16 and SR20 | 1. Verify that there are controls for the red player to adjust the bearing of a flight. | | | |
| FR2.2, SR16 and SR20 | 1. Verify that there are controls for the blue player to adjust the bearing of a flight. | | | |
| FR2.2 | 1. Verify that there are controls for the red player to adjust the speed of a flight | | | |
| FR2.2 | 1. Verify that there are controls for the blue player to adjust the speed of a flight. | | | |
| FR2.2 | 1. Verify that there are | | | |

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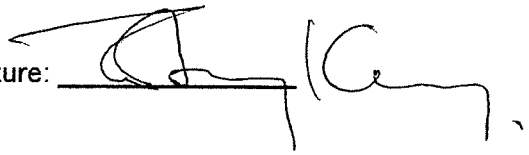
| | controls for the red player to change which of their flights is currently selected. | ✓ | | |
| FR2.2 | 1. Verify that there are controls for the blue player to change which of their flights is currently selected. | ✓ | | |
| FR2.3 | 1. Verify that the planes in versus mode can appear in two different colours. | ✓ | | |
| FR2.4 | 1. Verify that the red planes are controlled by the red player and the blue planes are controlled by the blue player. | ✓ | | |
| FR3 | 1. Verify that there is a control to hand a plane from the red player to the blue player. | ✓ | | |
| FR3 | 1. Verify that there is a control to hand a plane from the blue player to the red player. | ✓ | | |

| Requirement not tested: | Reason for not testing: | The reason for not testing is valid: | | Comments: |
|---|---|---|---|---|
| | | Agree | Disagree | |
| SR1-9 | These were already tested and implemented by the previous team. | | ✓ | But same changes to implementation for SR8 too. |
| SR10-11, ER7-8 | These requirements were to create a list of high scores, but this is not required in assessment 4 and thus not essential so, due to time constraints, the team decided against implementing it. | ✓ | | |
| SR12-15, SR21-23 | These were already tested and implemented by the previous team. | | ✓ | SR15 NotMet. |
| SR24-25, SR27 | The "bad weather" and "equipment failure" constraints were not required for assessment 4 and thus non-essential so, due to time constraints, the team decided against implementing these features. | ✓ | | |
| SR26, SR28-29 | These were already tested and implemented by the previous team. | ✓ | | |
| SR30 | The fuel gauge was not required for assessment 4 and therefore non-essential so, due to time constraints, the team decided against implementing these features. | ✓ | | |

| | | | | |
|---|---|---|---|---|
| ER3, ER5-6, ER9 | These were already tested and implemented by the previous team. | ✓ | | |
| ER4 | The constraints on numbers of flights taking off and landing at an airport have been relaxed (apart from ensuring that one plane does not spawn on top of another). It is not something which is specifically required for assessment 4 so the team decided against enforcing this constraint | ✓ | | But shame that no track is kept of the planes when landed. |

By signing below, you are verifying that the tests above took place and the results are valid.

Client's Signature: 

Team member in charge of acceptance testing signature:

Team BHD assessment 4 requirements list

From assessments 1 and 2 (system requirements and additional requirements):

SR1 - Have a main menu - the easiest and most common way for interfacing between the player and the game prior to the launch of a game session
SR2 - Have a help/instructions screen - in direct relation to UR1
SR3 - Have a "start" button for the user to start the game - in direct relation to UR2
SR4 Generate an airspace - without having the system create a random or predefined airspace, no gameplay can be conducted
SR5 - Simulate airspace graphically - the best and most engaging way to present the game to the players
SR6 - Populate the airspace with flights - without flights, the game will be exempt of gameplay
SR7 - Have a GUI with a score and a timer - a GUI allows for easy and engaging control of the game by the user
SR8 - Have varied characteristics for flights - variety is a great way to improve the player experience
SR9 - Display score - in direct relation to UR8
~~SR10 - Save score - in direct relation to UR9~~
~~SR11 - Upload score to a master repository - in direct relation to UR9~~
SR12 - Monitor separation rules - separation rules are an authentic way to provide a challenge for the players and challenge is very important, as previously stated
SR13 - Generate and remove flights from the airspace via entry and exit points - the game must persistently give the player flights to manipulate
SR14 - Pre-set a flight plan - when flights come into the airspace they should have a sensible flight plan
SR15 - Alter a flight plan - players should be able to manipulate the flights in the airspace
SR16 - Change course - in direct relation to UR4
SR17 - Change altitude - in direct relation to UR4
SR18 - Land at airport - in direct relation to UR6
SR19 - Take off from airport - in direct relation to UR6
SR20 - Turn left or right by particular degree - in direct relation to UR4
SR21 - Display updates regularly - if updates are not regular enough, the game will feel unresponsive and "stutter"-y, which will decrease player immersion and enjoyment
SR22 - Have waypoints - in direct relation to UR5
SR23 - Occasionally set flights on crash course/near miss - without this feature, the game will mostly lack challenge
~~SR24 - Simulate bad weather - a feature that will provide greater challenge to players~~
~~SR25 - Simulate equipment failures - a feature providing greater challenge to players~~
SR26 - Have a quit button - the player must be able to exit the game seamlessly
~~SR27 - Game becomes harder as the timer goes up - to provide an increasing~~ challenge arc and keep the player engaged
SR28 - Have a pause /resume functionality

SR29 (or AR1) - The next waypoint on the flight plan should be highlighted
SR30 (or AR2) - planes should have a fuel amount and the game shall end if the fuel for a plane runs out

From assessment 3 (extension requirements):

ER1 - An aircraft can land at an airport
ER2 - An aircraft can take off from an airport
ER3 - Airports must exist and be visible to the user
ER4 - There must be constraints on how many aircraft can land or take off at any one time
ER5 - Flight plans must be able to enter and land at an airport or take off from an airport and exit
ER6 - The score must be displayed for a particular game while it is being played
~~ER7 - When a game has finished, the score should be added to a list of high scores~~
~~ER8 - The list of high scores should be available for the user to see~~
ER9 - At least ten flights should be allowed in the airspace at any one time

From assessment 4 (further requirements):

FR1 - there must be at least two landing and takeoff options (such as airports) for the airspace
FR2 - there must be a game mode where at least two people can play at the same time
    2.1 - there must be a score for each player
    2.2 - there must be a full set* of separate keyboard controls for each player
    2.3 - there must be indication of which plane/s are controlled by which player
    2.4 - each plane must be assigned to a player
FR3 - there must be a facility in the game when at least two people are playing such that control of a flight can be handed over from one player to another

*A full set of controls allows the player to select a plane, land, take off and adjust the altitude, speed and heading of a flight.