White Box Testing

Test No.	Req. Ref.	Description	Method	Predicted Result	Actual Result	Pass?
1	**F2**	Does the player lose gold and points after losing combat?	Go into combat, fight until you lose. See if gold and point values are changed. Gold and point values can be initialised to differ from 0.	Gold should be divided by two, points should be reset to 0.	Gold divided by two, points reset to 0.	Pass
2	**F3**	Does ship movement work in sailing mode?	Press UP to begin sailing. Then, whilst sailing, press LEFT followed by RIGHT. Finally, press DOWN to stop.	Upon pressing W, the ship should start sailing and when S is pressed it should stop. A and D should turn left and right respectively whilst held.	The ship started moving after W was pressed, turned left and right whilst A and D were held and slowed down to a halt after S was pressed.	Pass
3	**F3**	Can you sail past the edge of the map?	Sail to each edge of the map, and test if you collide.	Ship should not be able to pass through edge of the map.	Ship could not pass through edge, however a new bug was discovered at edge of the world it displays messages on the screen.	Pass
4	**F3.2**	Are enemies encountered while travelling?	Sail around predefined enemy region to see if enemies are encountered, because the encounter is random messages can be printed to the console to keep track of the current random value.	Enemy should be encountered when random value is in a certain threshold.	Enemy encountered when random value is in a certain threshold	Pass
5	**F4**	Do the attack buttons work in combat?	Press the Broadside button. Then, next turn press the second attack button. Etc until all buttons pressed.	Buttons should perform the corresponding attacks/actions when pressed.	Buttons worked correctly.	Pass
6	**F4.6**	Does combat end when either side's health drops to 0 or player flees?	Go into combat, fight until either side lose. Restart the game, go into combat and try to flee until successful.	Combat screen should end.	Combat screen end.	Pass
7	**F6**	Does point increases	Start the game, move around. Go into	Point should increase over time	Point increases over time and after	Pass

		from winning combat and passage of time?	combat mode and defeat an enemy.	and should also increase after enemy defeated.	enemy defeated.	
8	F7	Do you win gold after defeating an enemy ship?	Go into combat, fight ship until you win. See if gold displayed has changed.	Gold should increase by 20.	Gold increased by 20.	Pass
9	F8	Can you capture a college after defeating it in combat	Go to Vanbrugh, fight the boss and win. Boss might be too hard so values can be tweaked to make the process less time consuming.	Vanbrugh should now become an ally, no longer spawn enemy and provide healing service.	Vanbrugh becomes an ally, no longer spawns enemy and provides healing service.	Pass
10	F8.5 F11	Can you repair your ship at a captured college?	Sail to James, fight the boss and win (by changing boss stats in program for easier win) then interact with the captured college.	Your ship should return to max health.	Ship has returned to max health.	Pass
11	F9.1 F11	Can you purchase an upgrade from the Physics department?	Sail to Physics with 10000 gold (enough to purchase upgrades), and test if you can purchase an upgrade.	You can purchase an item, and next time you sail into battle your ship should have a higher max health.	Ship did have a new maximum health, and money was taken from player. Your actual health did not increase with your upgrade.	Pass
12	F9.1 F11	Can you purchase an upgrade from the Chemistry department?	Sail to Chemistry with 10000 gold (enough to purchase upgrades), and test if you can purchase an upgrade.	You can purchase the upgrade, next time you sail into battle your attacks should do more damage.	Attacks did do more damage in next battle. However price displayed for upgrade was incorrect.	Pass Fail
13	F9	Can you attack a department?	Sail to each department and attempt to interact with it.	You should not be able to fight.	You can't fight or capture a department.	Pass
14	F11	Can you repair your ship at departments?	Sail to a department with a damaged ship and attempt to heal, then enter another fight.	Your ship should have returned to max health.	Ship had returned to max health. However price displayed for healing was incorrect.	Pass Fail
15	F11	Can you repair your ship at your starting college?	Sail to Derwent (starting college) with a damaged ship and attempt to heal your ship.	Your ship should have returned to max health.	Ship has returned to max health.	Pass

| 16 | NF2 | Does the game run on a university computer with good performance? | Open the game on a computer in the software lab. Play it for 20 minutes. | Game should run and performance should be consistent throughout gameplay. | Game runs and there is no drop in performance. | Pass |