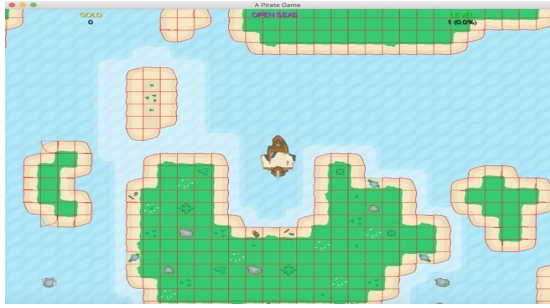# Black box Testing

The test ID which is highlighted in <mark>yellow</mark> is the test which is added in assessment 3.

Test ID	Description	Req ID	Expected result	Actual result	Status	Action taken
1	Click the .jar	3.1	Game should run	The game ran perfectly	Pass	None
2	Start screen loads correctly	3.1	When the player open the game, a start menu will load first.	The game loads straight into the gameplay as the menu has not yet been implemented - So screenshot same as above	Fail	Start menu needs to be implemented.
2.1	Start screen loads correctly.	3.1	When the player open the game, a start menu will load first.	When the player open the .exe, a menu screen will load first	Pass	The start menu now implemented.

| 3	Click the exit button	3.2	Game should close	Game closes correctly	Pass	None
4	Click the preferences button	3.2	Preferences window should open	Again this menu has not been implemented as we focused more on the gameplay of the game as this was most important	Fail	Implement this feature in a later update to our game.
Test 4 is no longer needed since we are not going to implement the music and sound in the game, so it is meaningless.						
5	Click the New Game button	3.2, 2.17	Game should start and load the tutorial set on a flooded university campus. An option to skip appears	Menu has not been implemented so the play button does not exist	Fail	Implement this feature in a later update to our game
5.1	Click the New Game button	3.2, 2.17	Game should start and load the tutorial set on a flooded university campus. An option to skip appears	The menu now implemented. Press the "New Game" button will start the new game.	Pass	None
6	Pressing 'Up'/'W'	2.2, 2.18	Player should start accelerating up	The player moves up as expected	Pass	None
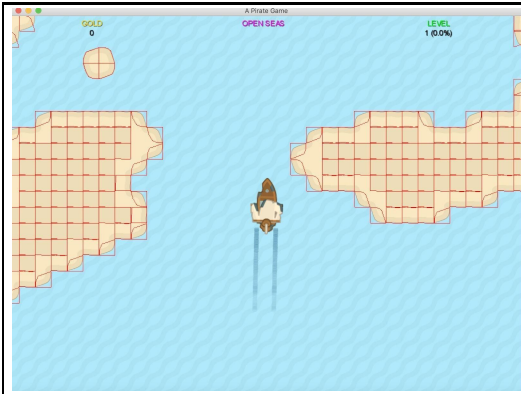
7						

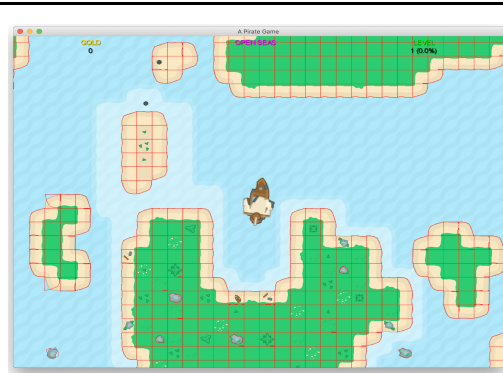| 7	Pressing 'Down'/'S'	2.2. 2.18	The player should start decelerating	The player does decelerate as expected (Can be seen by the small water trails in the screenshot)	Pass	None
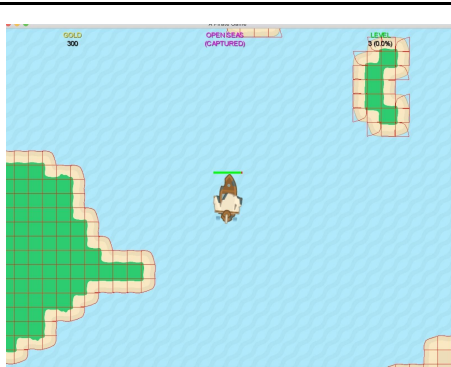
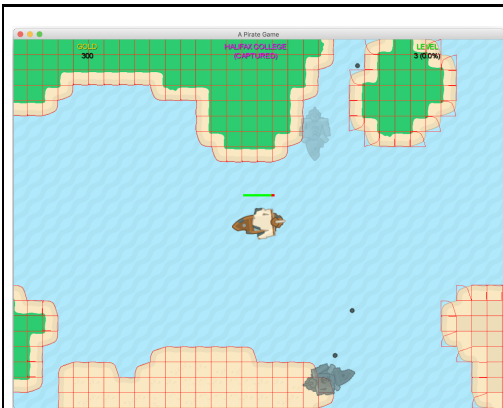| 8	Pressing 'Right'/'D'	2.2, 2.18	The player should start turning clockwise	Worked as we expected	Pass	None
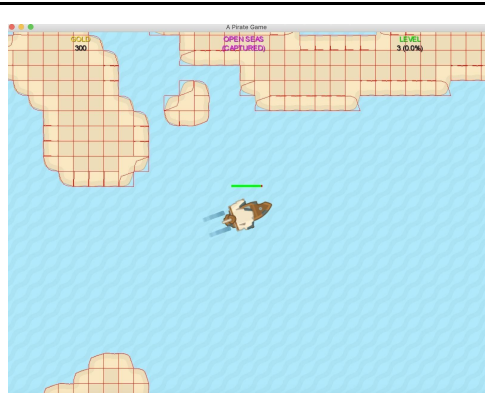
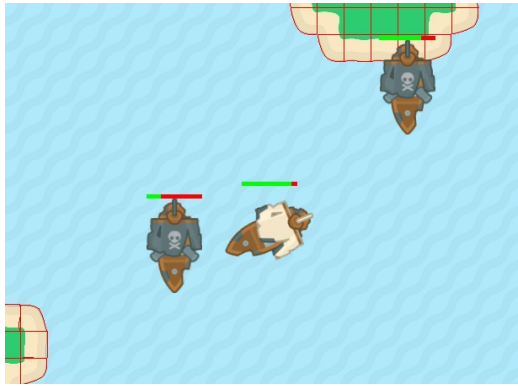| 9	Pressing 'Left'/'A'	2.2, 2.18	The player should start turning anticlockwise	Worked as we expected	Pass	None

10	Left click mouse while still	2.3	The player should shoot in the direction of the cursor	The player shoots and in the direction of the cursor	Pass	None

| 11 | Left click mouse while moving | 2.3, 2.18 | The speed of the cannonball should vary depending on speed and the direction of the shot and should still shoot in the direction of the cursor | The cannonball's speed does change depending on the speed and direction so works as expected | Pass | None |

| 12 | Shot hitting enemy | 2.3 | Enemy should take damage when hit | Enemy's do take damage when hit | Pass | None |

13	Shot hitting player	2.3	Players health should deplete	The players health does deplete	Pass	None

14	Enemy's health reaching 0	2.3, 2.10,2.11, 2.6	Enemy should explode and leave behind some loot + XP	The enemy does explode and disappear but the gold and xp are automatically given to the player instead	Pass - as this is how we decided to do it	None
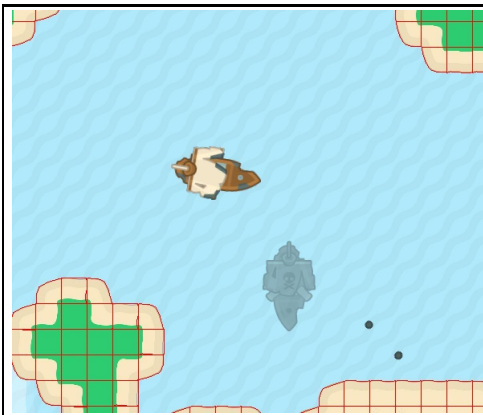
15	Players health reaches 0	2.3, 2.6	Player should explode and game should restart	When the player dies they don't explode and they remain in the game	Fail	The code will be updated to fix this issue
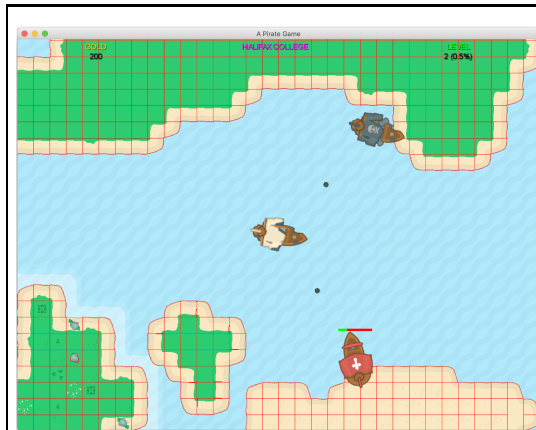
| 15.1	Players health reaches 0	2.3, 2.6	Player should explode and game should restart	Player dies and the game reset	Pass	
16	The player moves into close proximity of the enemy ship	2.3, 2.19	Enemy ship should start moving alongside the player and engaging in combat	The enemy engage in combat as we expected	Pass	None
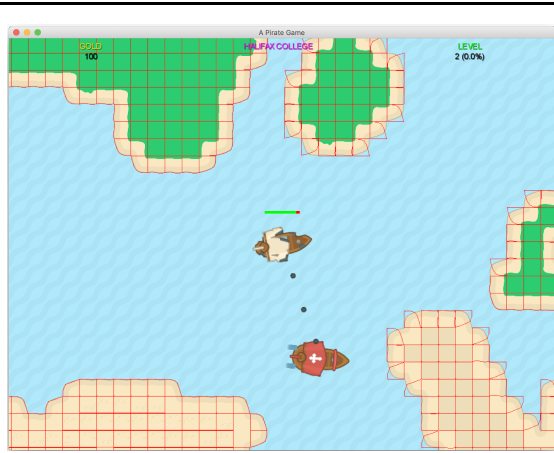
17	AI tracks the player	2.19	When outside the 'radius' the AI should head towards the player then when in this range the AI should travel alongside the player	The AI does move closer to the player and starts attacking	Pass	None
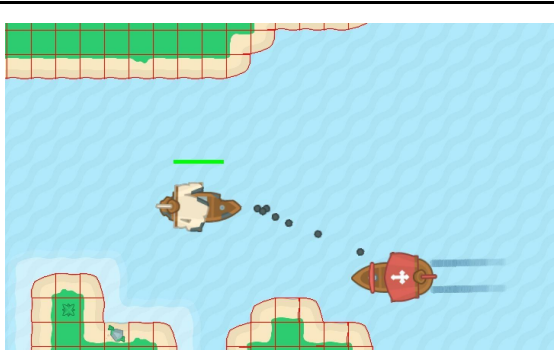
| 18	Enemy and player collide	2.18	Both the player and enemy should take damage and be stopped	Collisions have not yet been implemented so the boats currently move through each other	Fail	The collisions will be updated to the different ships do collide
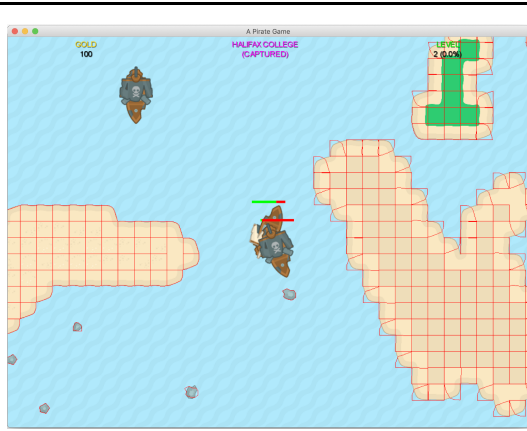
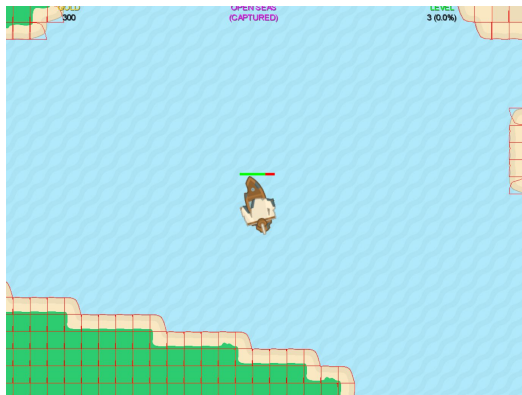| 18.1	Enemy and player collide	2.18	Both the player and enemy should take damage and be stopped	Boats bounce in opposite directions and take damage	Pass	
19	Reaching map boundary	2.18	Player is stopped and not allowed to proceed further	The player can escape the boundary and get out of the map	Fail	Again, the collision issues will be fixed prior to the deadline
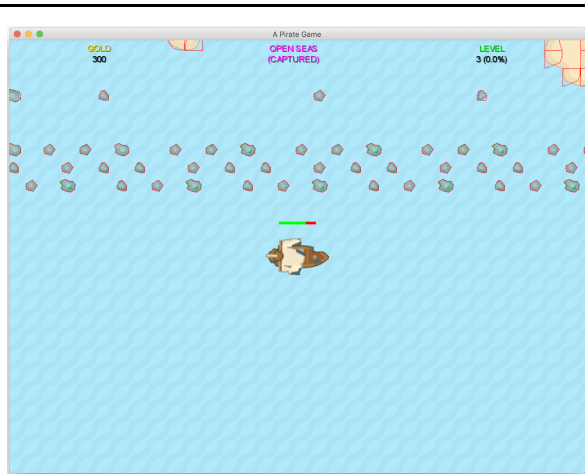
19.1	Reaching map boundary	2.18	Player is stopped and not allowed to proceed further	Player bounces off rocks on edge of map making it impossible to proceed	Pass	Again, the collision issues will be fixed prior to the deadline

20	Player collides with land	2.18	Player is stopped and rebounded whilst taking damage	Sometimes the player is rebounded but most of the time the player can get through the land	Fail	Collision issues will be fixed prior to the deadline
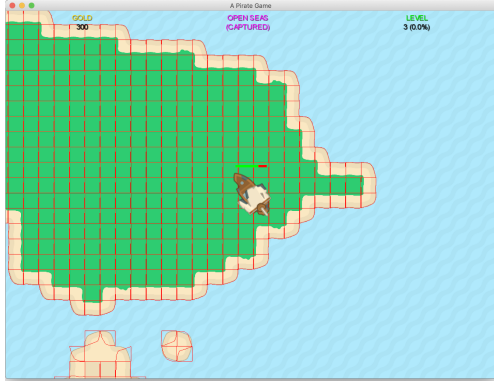
20.1	Player collides with land	2.18	Player is stopped and rebounded whilst taking damage	Boat is rebounded back from the land	Pass	

21	The player should always be visible on the screen	3.2	Overhead camera follows the player's movement	Wherever you go the player is always in the centre of the screen and viewed from the top	Pass	None

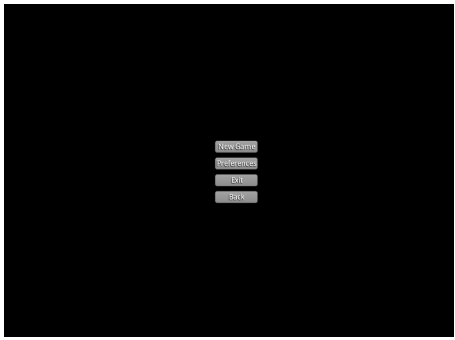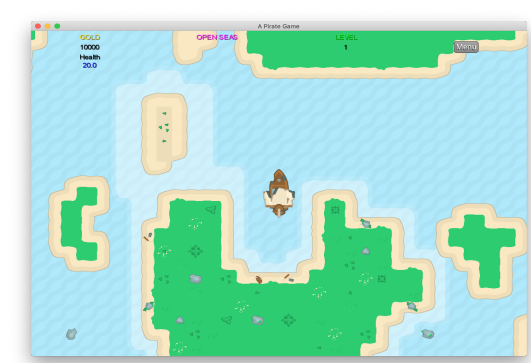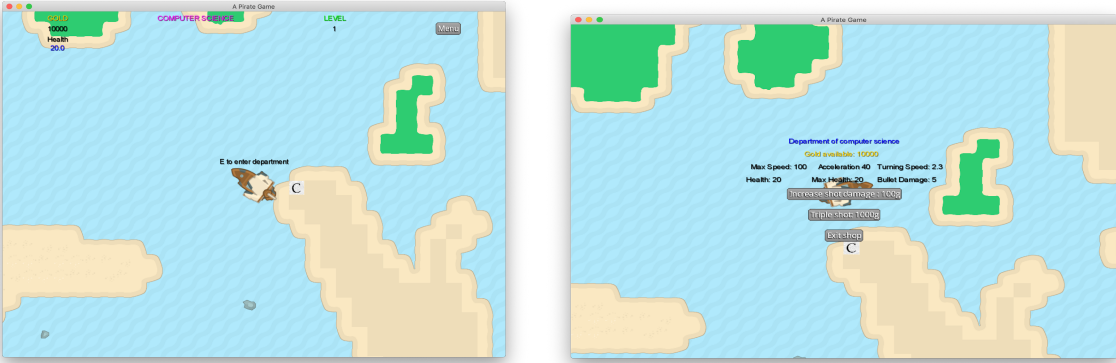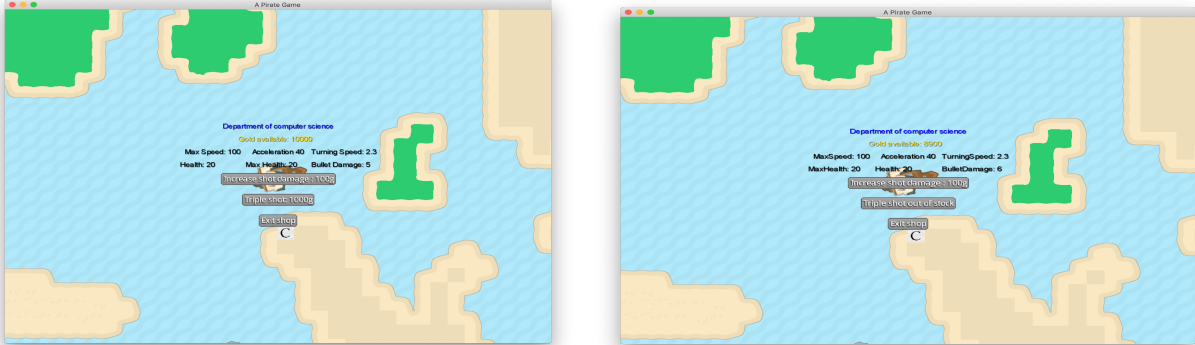| 22	Pressing the 'Q'' key	2.15	The game should zoom out to reveal a full view of the map	The view is zoomed out as expected	Pass	None
23	The player defeats all members of the enemy college	2,5, 2.12	All enemies in that college should become friendly and nonaggressive	Also not been implemented into our game	Fail	Implement this feature in a later update to our game.
23.1	The player defeats all members of the enemy college	2,5, 2.12	All 5 colleges are implemented and work well.	All 5 colleges has been implemented now and the player can defeat all 5 college to end the game.	Pass	NO
The test 24 is no longer need to be tested. Since we have deleted these feature from the requirement						
24	The player encounters a friendly NPC	2.8	The NPC should not attack the player and a dialog should begin.	NPC's have not been implemented therefore they can't be tested	Fail	Implement this feature in a later update to our game

25	The player opens the shop to purchase upgrades	2.13	A menu should open detailing the possible upgrades to the players ship	Shop and menu not yet in the game	Fail	Implement this feature in a later update to our game
25.1	The player opens the shop to purchase upgrades	2.13	The player can update their ship in department shop.	The detail shop can be seen in Test 31-34.	Pass	the shop has now been implemented.

26	The player purchases an upgrade	2.13	The players stats are altered and money is taken from the player	Upgrades not yet in our version of the game	Fail	Implement this feature in a later update to our game
26.1	The player purchases an upgrade	2.13	The player can update their ship in department shop.	The detail shop can be seen in Test 31-34.	Pass	the shop has now been implemented.
27	The player enters the gambling area	2.14	A menu should open giving the player the opportunity to gamble their gold	Not yet implemented	Fail	Implement this feature in a later update to our game
The minigame testing will be taken below.						
The test 28 and 29 is no longer need to be tested. Since we have deleted these feature from the requirement						
28	The player picks up an item	2.16	The item should be equipped and the players stats should be altered	Not yet implemented	Fail	Implement this feature in a later update to our game
29	The player picks up gold	2.11	The Gold should disappear from the ground and be added to the players total	Not yet implemented	Fail	Implement this feature in a later update to our game
30	AI shoots at the player	2.19	The player should lose health as a result of being hit and the AI should shoot in the direction of the player	Ai accurately shoots at the player when in contact and player takes damage	Pass	
31	A menu button will show on the right-top of screen while the game is running	3.1	The player can restart the game and go back to the game or open the minigame through the menu.	When the game start, the menu button is always there and work as we planned.	Pass	No

32	Press the New Game button while the game already started	3.1	The game will restart when the player pressed the New Game button in the menu screen.	The player will restart the game and will back to the original place.	Pass	NO

33	The player can back to the Game Screen when he/she press the Back button.	3.1	The player will back to the game and continue the game.	The player can back to the original status and continue the game.	Pass	NO

34	When the boat near the Department, the player can get into the department shop	2.5	When the boat near the department, a label will show on the screen to help the player to know that he/she can press E to	Press E when the label shows, the player can go into the shop successfully.	Pass	NO

	by pressing the E button		go into the department shop.			

35	The player can buy triple shoot and upgrade the bullet damage by using the gold in the Computer Science Department.	2.5 2.13	The player can choose to buy the triple shoot and increase shot damage by pressing each button and exit the shop by press the Exit Shop button. the table above can show the status.	When pressing the button, the label will show that the bullet damage is increased.	Pass	NO

36	The player can increase the max health and get healed in the Biology Department.	2.5 2.13	The player can go to the Biology Department to get healed and add the maximum health by using the gold. He/she can exit the shop.	When pressing the "Full Health" button the value of health will increase to its maximum.When pressing the "Increase Max Heath" button, both health and Max health will updated.	Pass	NO

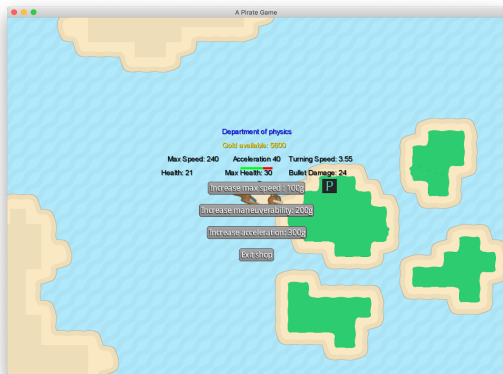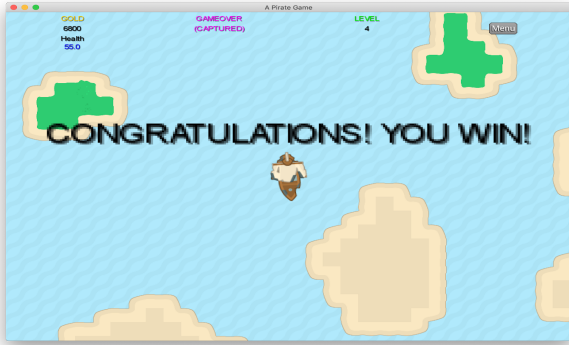|						
37	The player can add max speed and turning speed in the Physics Department.	2.5 2.13	The player can go to the Physics Department to increase the turning speed, maximum speed and acceleration by using the gold. He/she can exit the shop.	When pressing the "Increase the max speed" button the value of maximum speed will increase. When pressing the "Increase maneuverability" button, the turning speed will be updated.	Pass	NO
38	If the player defeats the last boss (Derwent College), a label will show that the game end.	2.12	When the player defeats the last college(Derwent College), he/she will know that the game ends.	When the player defeats the main ship of Derwent College, a congratulation label will show on the screen and the player now	Pass	NO

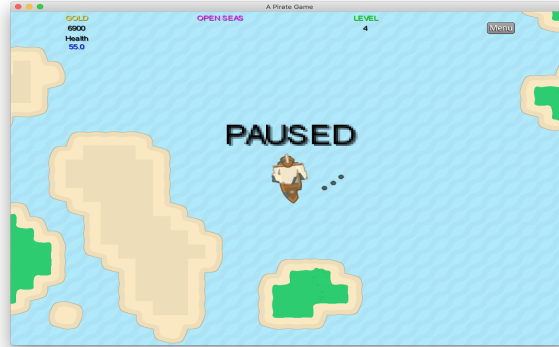|						
				can only choose to click the menu button to exit or start a new game.		

| 39 | The player will not able to encounter the Derwent College before defeating the other 4 colleges. | 2.12 | If the player tries to encounter the Derwent College before defeating the other 4 colleges, a label will be shown on the screen to remind the player to defeat the other 4 colleges first. | When the player goes into the area of the Derwent College without defeating the other 4 colleges, the player will back to the initial place and will be reminded that he/she should capture the other 4 colleges first. | Pass | NO |

| 40 | Pause the game by pressing the space button. | New function in assess | The game will pause when pressing the space button and can continue the game by pressing the space button again. | All the enemy boots, the player's boat and the bullets will freeze. In the paused status, menu | Pass | NO |

					button can still be clicked, and can continue the game by press the space button again		
		ment 3.					

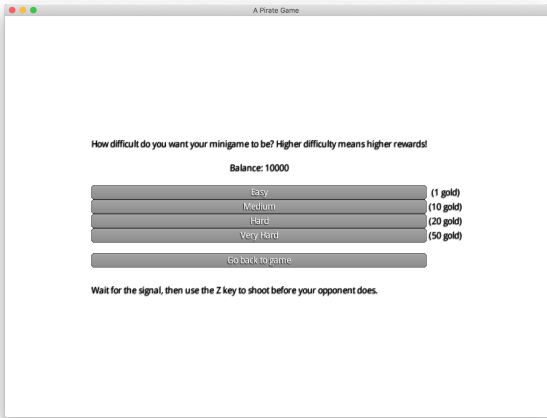| **41**	There is a minigame area in the map.	2.14	There is a minigame and the player can win gold from it.	There is a area where the player can press E to enter the minigame.	Pass	NO
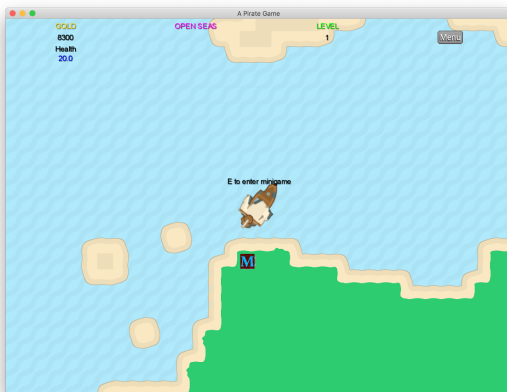
42	There is a minigame menu.	2.14	In the minigame menu, the player can choose the complexity of the game or exit the menu.	All the button is clickable and can choose the difficulty.	Pass	No
43	The player can win the minigame or lose.	2.14	The screen will show that if the player win or not.	When the player win, the enemy die and the player will win the gold. Otherwise, will not. Press space will back to the minigame menu.	Pass	NO
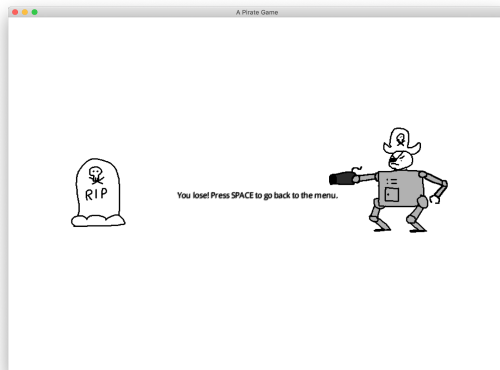
44	the boss spawns after defeating a set amount of ships in a college	2.20	the boss spawns	boss spawned	Pass	
45	defeating the boss unlocks a new crew member	2.20	new crew member unlocked	crew member was added to the ship	Pass	
46	unlocking a new crew member lets the player switch weapons	2.20	pressing 1-6 switches between the available weapons	pressing 2 switches to the newly unlocked weapon	Pass	
47	kraken spawns	2.21	kraken should randomly spawn in ocean	kraken spawned randomly whilst moving around	Pass	
48	shoot the kraken	2.21	shooting the kraken shouldn't damage it	shooting the kraken does no damage. has no health bar	Pass	
49	kraken attacks ship	2.22	player should take damage	player takes damage	Pass	