Testing Evidence:

Black box testing:

Test ID	Related Requirement	Description	Pass/ Fail	Additional info
1	A1.1	When a player defeats a ship they are rewarded	P	With gold and points
2	A1.2	The player has encounters in sailing mode	P	
~~3~~	~~A1.3~~	~~There is a reasonable cost to travelling~~	~~P~~	~~It takes supplies, but not so much they instantly lose or that travelling becomes trivial~~
4	A2.1	The player can spend resources	P	They can buy upgrades with gold, these upgrade the ship's stats.
5	A2.2	There is a main objective	P	~~To complete all the tasks given by the college~~ Complete all the levels and hence defeat all the colleges.
6	A2.3	There is a playable minigame	P	The minigame can be played at departments and involves matching 2 cards
7	A2.4	There is a way to lose the game	P	Running out of ~~supplies or~~ health
8	A2.5	The player can attack land bound objects like colleges ~~or departments~~	P	The aim of each level is to defeat the college
9	A2.6	There are at least 5 colleges and 3 departments	P	~~There are only 2 departments and 3 colleges, the rest aren't yet implemented~~
10	A2.7	The player can earn points	P	By defeating ships and completing tasks (encounters)
11	A2.8	There is both a sailing and combat mode	P	Sailing mode is travelling through the nodes and these can lead to battles
12	A3.1	The player does not have the final objective available to them immediately	P	~~A final objective has not yet been implemented.~~ The game has levels in which the final objective is on the final level so it will not be available to them
13	A4.1	The game must be enjoyable for the user (enjoyment survey given to new players)	P	~~6.6/10 avg score for enjoyability, which is better than halfway though not amazing. So this is a Pass, but with room for improvement.~~ Through user testing the group has found the

				game enjoyable to play
14	A4.2	Game session should last a reasonable amount of time, 5 minutes <= game time <= 30 minutes, assuming no failures	P	~~Out of the 5 players we tested, 3 took less than 5 minutes to finish the game. But much of the game has not yet been implemented~~ Our game has multiple levels causing the complete game to last a reasonable amount of time for the user
15	A4.3	Game must be intuitive to use (is the user frequently confused or does the wrong action?)	P	~~⅓ players tested had a confusion, but as they were relatively minor, singular occurrences and quickly over we decided it does not count as 'frequently confused'~~ The game tells you what to do with self explanatory steps so we decided to give this a pass
16	B1.1	There is a way to guide the player	P	
17	B1.2	Engaging in combat switches to combat mode	P	
18	B1.3	Moving uses resources	P	We went with the alternative which is encounters are challenging enough to be a cost
19	B1.4	Colleges and departments are given a location on the map when the game starts	P	
20	B1.5	The game ends when the players health is 0	P	
21	B1.6	The shop displays contents and allows purchases	P	These are departments which you can purchase cards and ship upgrades from
22	B1.7	Successful encounters give the player gold and points	P	
23	B1.8	When the player runs out of resources to travel the game ends	F	We chose the alternative so this is no longer applicable
24	B2.1	The game includes a virtual currency (gold)	P	
25	B2.2	Access to final boss location is blocked before criteria have been reached		Final boss ~~and final boss location have not yet been implemented~~ on each level and the final game boss with be on the final level
26	B2.3	There is a minigame which rewards the player	P	~~The minigame has not yet been implemented~~ 100 gold for winning

27	B2.4	The game should always display ship statistics such as health, while in the main game	P	
28	B3.1	The player cannot spend more money/resources than they have	P	
29	B4.1	There are responsive controls (no more than 0.5 seconds between an input and response)	P	
30	B4.2	The user interface is intuitive (The user is able to play the game without making the wrong move)	P	~~Of those we observed playing the game, none we saw made wrong moves~~
31	B4.3	It is appropriate to play on open games (There is no visible violence and no negative reference to the university or university staff)	P	
32	C1	The game must be completed and delivered by 1/5/2018 and has milestones at 21/1/2019 and 18/2/2019	P	~~The 2nd assessment is handed in before the 21/1/2019 but it is impossible to say whether future milestones will be reached~~ Everything for the 3rd assessment is on track. The project looks like it will be completed in the given amount of time but still impossible to tell
33	C2	The game must not crash during any more than 1 in every 15 instances	P	We have played the game to completion more than 15 times and it has not crashed once
34	C3	The game must run on windows	P	
35	C4	The game must not contain copyrighted material	P	
36		Scroll up when the up arrow is pressed and stop when it reaches the top	P	
37		Scroll down when the down arrow is pressed and stop when it reaches the bottom	P	
38		When level is completed, player moves onto the next level	P	A new map is drawn and the player carries on with the more difficult level
39		Gold given when the minigame is completed	P	
40		Nothing given if you lose the minigame	P	
41		Only allowed to visit the next node	P	

		along the given path		
42		The difficulty for each level should increase slightly each time	P	
43		Battle mode balancing	F	Make sure the battles are hard enough to enjoy but not too difficult, we feel like the battling can be slightly improved

Unit Tests:

Test ID	Test Name	Description	Pass/ Fail	Additional Info
U1	testShipConstr	Tests that the Ship object can be initialized correctly.	P	
U2	testShipMana	Test that mana can be correctly changed when in a battle	P	
U3	testShipDamage	Test that when the ship takes damage the values are all correct	P	
U4	testShipHeal	Test that the ship health default is working	P	
U5	generateNodeMapTest	Test that when the node map is created it is created according to the restrictions	P	