

Functional Requirements					
ID	N/A	UR ID	Description	Priority	Risk ID
FR_JAVA	---	UR_JAVA_GAME	Programming language should be Java	1	NULL
FR_WIN_NOT_OBJ	---	UR_WIN	A game should never be completed via winning when the objective is not completed	1	R7
FR_WIN_ZERO_HP	---	UR_LOSE	A game should never be completed via winning when the player's ship has zero health	1	R7
FR_SCALING	---	UR_CON_GRAPHICS	Graphics must scale to the size of the screen without pixelation or distortion.	2	R4
FR_WASD	---	NULL	WASD controls should control the ship's movement	1	NULL
FR_ATTACK	---	NULL	LEFT CLICK should allow the ship to shoot a cannon ball and be aimed with the mouse.	1	NULL
FR_NEW_GAME	---	NULL	A new game should start shortly after a previous is completed	2	NULL
FR_SHIP	---	NULL	Ship class updates health attribute in real-time	2	R8
FR_COLLEGE	---	NULL	College class updates health attribute in real-time	2	R8
FR_AI_ATTACK	---	UR_ATTACK UR_BOAT_SHOOT	Colleges should be able to track and shoot at the player's ship	2	R9
FR_UI	---	UR_PLUNDER_AQ UR_POINTS_AQ	A user interface should display the users current amount of points and plunder; continuing to update them in real-time	3	R10
FR_ATTACK_SUCCESS	---	UR_PLUNDER_AQ	The user will receive plunder and XP upon defeating a college.	3	R16
FR_ATTACK_FAIL	---	UR_PLUNDER_AQ	On a failed attack the player will not receive plunder but may still gain XP.	3	R16
FR_ACCESS_OPTION	---	NULL	The user should have clear visible access to a button to enable or disable accessibility features.	1	NULL
FR_COMBAT	---	NULL	Upon attacking a college the enemy should engage the user in battle.	1	R11
New Requirements:					
ID	Test File Name(s)	UR ID	Description	Priority	Risk ID
FR_PLAYER_SPAWN	test_FR_PLAYER_SPAWN	NULL	Ship spawns on the map	1	
FR_WASD	test_FR_W.test_FR_A.test_FR_S.test_FR_D	NULL	Ship moves at the correct speed and direction on button presses	1	
FR_PLAYER_SHOOT	test_FR_PLAYER_SHOOT	UR_COMBAT	Ship shoots out cannonballs when the mouse is clicked	1	
FR_PLAYER_DAMAGE	test_FR_PLAYER_DAMAGE	UR_COMBAT	Ship's health goes down when a cannonball hits it	1	
FR_PLAYER_DIE	test_FR_PLAYER_DIE	NULL	Ship dies when health reaches the bottom	1	
FR_SHIP_COLLIDE	test_FR_SHIP_COLLIDE	NULL	Ship cannot go on land	2	
FR_POWERUP_SPAWN	test_FR_POWERUP_SPAWN	UR_POWERUPS	Powerups spawn on the map	2	
FR_POWERUP_FUNCTION	test_FR_POWERUP_FUNCTION	UR_POWERUPS	Powerups carry out desired effect	2	
FR_SHOP_FUNCTION	test_FR_SHOP_FUNCTION	UR_PLUNDER_SPEND	Shop allows user to purchase powerups	2	
FR_POWERUP_DISPLAY	test_FR_POWERUP_DISPLAY	NULL	Powerups being used are displayed and show how many/ how long is remaining	3	
FR_BOSS_SPAWN	test_FR_BOSS_SPAWN	NULL	Pirate boss spawns	2	
FR_BOSS_DAMAGE	test_FR_BOSS_DAMAGE	UR_COMBAT	Pirate boss health goes down when shot at	2	
FR_BOSS_TRIPLE_SHOT	test_FR_BOSS_TRIPLE_SHOT	UR_COMBAT	Pirate boss can do triple shots	2	
FR_PIRATE_SPAWN	test_FR_PIRATE_SPAWN	NULL	Pirates spawn	1	
FR_PIRATE_MOVE	test_FR_PIRATE_MOVE	NULL	Pirates move in random ways	2	
FR_PIRATE_SHOOT	test_FR_PIRATE_SHOOT	UR_COMBAT	Pirates shoot at player when nearby	2	
FR_PIRATE_DIE	test_FR_PIRATE_DIE	UR_COMBAT	Pirates die when shot at	2	
FR_PIRATE_COLLIDE	test_FR_PIRATE_COLLIDE	NULL	Pirates cannot go on land	2	
FR_COLLEGE_SPAWN	test_FR_COLLEGE_SPAWN	NULL	Colleges spawn	1	
FR_COLLEGE_SHOOT	test_FR_COLLEGE_SHOOT	UR_COMBAT	Colleges shoot at player when nearby	1	
FR_COLLEGE_DAMAGE	test_FR_COLLEGE_DAMAGE	UR_COMBAT	Colleges lose health when shot at	2	
FR_COLLEGE_DIE	test_FR_COLLEGE_DIE	UR_COMBAT	Colleges die when health reaches zero	2	
FR_WHIRLPOOL_SPAWNING	test_FR_WHIRLPOOL_SPAWNING	UR_OBSTACLES	Whirlpool spawns	2	
FR_WHIRLPOOL_MOVEMENT	test_FR_WHIRLPOOL_SPAWNING	UR_OBSTACLES	Whirlpool despawns after 30 seconds and reappears 10 seconds later	3	
FR_WHIRLPOOL_EFFECT	test_FR_WHIRLPOOL_EFFECT	UR_OBSTACLES	Whirlpool pulls ships in	2	
FR_CHEST_SPAWN	test_FR_CHEST_SPAWN	NULL	Chests spawn	1	
FR_CHEST_OPEN	test_FR_CHEST_OPEN	NULL	Chests open once collided with	2	
FR_BULLET_SPAWN	test_FR_BULLET_SPAWN	NULL	Bullets spawn once mouse is clicked	1	
FR_CHEST_SLOW	test_FR_CHEST_SLOW	NULL	Bullets slow down after certain time	2	
FR_CHEST_DESPAWN	test_FR_CHEST_DESPAWN	NULL	Bullets despawn on collision or after a time	1	
FR_SAVE	test_FR_SAVE_LOAD	UR_SAVE	Tests the ability to save data to a file	1	
FR_LOAD	test_FR_SAVE_LOAD	UR_SAVE	Tests the ability to load data from a file into the game	1	