Took	Man 1 Man 2	Man 2 Man	1 110	F N4	an C Man 7	Man 0	Man_9 Man_10	NA== 11	Man 12	Man 12	Man 14 Man 15	Man 10	Man 17 M	1an 10	NA0 10	Man 20	Ato 1	Auto 2 Auto 2	Auto 1	Auto F	Ato C	Ato 7	Auto 0
Test>	Man_1 Man_2	Man_3 Man	_4 IVIa	an_5 IVI	an_6 Ivian_7	ivian_8	Man_9 Man_10	ivian_11	ivian_12	ivian_13	Man_14 Man_15	ivian_16	Man_17 IV	ian_18	ivian_19	ivian_20	Auto_1	Auto_2 Auto_3	Auto_4	Auto_5	Auto_6	Auto_/	Auto_8
Requirement																							\vdash
UR_PLATFORM	X												X							-			\vdash
UR_GAME_INIT	х х																			1			
UR_SHIP_CONTROL		X																					\vdash
UR_COMPETING_COLLEGES					x																		
UR_LEARNING_CURVE																							
UR_GAME_DURATION																							
UR_GAME_OBSERVABILITY															х								
UR_FRIENDLY_SHIP_ENCOUNTER								v															
								^															
UR_HOSTILE_SHIP_ENCOUNTER																Х			Х	X	X	X	$\overline{}$
UR_FIRE_WEAPONS		l x																					\vdash
UR_BULLET_DODGE		X															X	X					
UR_FRIENDLY_BUILDING_INTERACT																							
ON_I WENDER_BOILDING_INTERNET																							
UR_HOSTILE_BUILDING_COMBAT																x			х	x	x	x	
UR_HOSTILE_COLLEGE_CAPTURE						Х																	
UR_EARN_MONEY						Х												х					
UR_EARN_POINTS						Х																	
UR_QUEST_PROGRESS						Х												х					
UR_GAME_WIN						х												x					
UR_GAME_LOSE						х	x												х	х	х		
UR_SHIP_COMBAT																х	х	x	х	х	х	х	
UR_OBSTACLE_ENCOUNTER			×																				
			^													v							
UR_WEATHER_ENCOUNTER													 			X							
UR_SPEND_MONEY											X		 									,	
UR_POWER_UPS										Х												X	X
FR_VIEWPORT_SCALING	X												-							-		 	$\overline{}$
FR_MIN_FPS													X							+			
FR_CROSS_PLATFORM_WIN													X							1			
FR_CROSS_PLATFORM_MAC													X										\vdash
FR_CROSS_PLATFORM_GNU_LINUX													X										\vdash
FR_GAME_RESET	Х								Х														
FR_SHIP_KB_INPUT		x x																					
FR_COLLEGE_ENTITY_TRACKING																Х							
FR_FRIENDLY_AI								х															
FR_FRIENDLY_INTERACT								х															
FR_HOSTILE_AI																х							
FR_PLAYER_FIRE		x															Х	х					
FR_PLAYER_AMMO		x										х					Х	х					
FR_BULLET_TRAVEL		x																					
FR_MONEY_TRACKING												х											
FR_MONEY_UPDATE						х																	
FR_POINTS_TRACKING						х						х											
FR_POINTS_UPDATE						х																	
FR_QUEST_TRACKING						х												х					
FR_QUEST_RANDOMISE						х																	
FR_QUEST_OBJECTIVE						х																	
FR_BOSS_UNLOCK_TRACKING						х																	
FR_BOSS_SPAWN																х							
FR_GAME_WIN							x											x					
FR_PLAYER_DEFEAT							x												х	x	x		
FR_SCENARIO_FAIL							x																
FR_GAME_DIFFICULTY											×												
FR_SAVE_POINT									x			<u> </u>											
NFR_SHIP_COLLISIONS					- 				1			<u> </u>	 							1			
NFR_WORLD_COLLISIONS	 																						
NFR_BULLET_COLLISIONS			X									 	+ +							1			\vdash
	 	x										-								1			\vdash
NFR_USER_INPUT_LAG	 											-	X										\vdash
NFR_AI_LAG			_									-	X							1			\vdash
NFR_RENDER_SMOOTHNESS	\vdash	 										-	X							1			\vdash
NFR_COLOURBLINDNESS	\vdash														Х								\vdash
NFR_EASE_OF_USE															Х					1			
NFR_GAME_DURATION						Х	х		1		х												
NFR_LARGE_ASSETS															х								
NFR_NO_FLASHING															х								

Manual Test Relation table for Traceability matrix

ID	Feature that relates tests	Manual Test IDs								
Man_1	Menu Buttons	1, 2								
Man_2	Screen Size	3, 4, 5, 6, 7								
Man_3	Movement	8, 9, 10, 11, 12, 13, 14, 15								
Man_4	Shooting	16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30								
Man_5	Collision	25								
Man_6	Quit	31, 32								
Man_7	Destruction	33								
Man_8	Objectives	34, 35, 36, 48, 84, 86, 88								
Man_9	Fail States	37								
Man_10	Health	38								
Man_11	Al	39, 90								
Man_12	Restart	40, 55, 56, 57, 85, 87								
Man_13	Powerups	41, 42, 43, 44, 45, 91, 92, 93								
Man_14	Shop	46, 47								
Man_15	Difficulty	49, 50, 51								
Man_16	Extreme Values	58, 59, 60, 61, 62, 63, 64								
Man_17	OS	65, 66, 67								
Man_18	Lag/Input Smoothness	68, 80								
Man_19	Accessibility	69, 70, 81, 82, 83								
Man_20	Combat	71, 72, 73, 74, 76, 77,78								

Tests were grouped together based on rough relations to prevent the travability matrix from being several hundred columns wide for tests that cover the same user requirements. The first column is the ID used in the matrix, the second is the category and the final column is what tests are associated with the category.

For Auto_1 through Auto_8 please refer to the automatic testing table and match the test numbers.