Table 8.2.1. Test Suite TS-001: Scenario Interaction

TS-001: Scenario Interaction

Test Case ID	Test Stage	Test Case Description
TC-002	System	Scenario Triggers
TC-004	Unit	Camera Rotation
TC-006	System	Bad Scenario Outcomes

Table 8.2.2. Test Suite TS-002: Environment Interaction

TS-002: Environment Interaction

Test Case ID	Test Stage	Test Case Description
TC-001	Unit	Camera Recentering
TC-005	Integration	Environment Interaction
TC-009	Acceptance	AI Driver Actions

Table 8.2.3. Test Suite TS-003: System Performance

TS-003: System Performance

Test Case ID	Test Stage	Test Case Description
TC-010	Acceptance	Hardware Validation
TC-011	Acceptance	Double Image VR Display
TC-012	Acceptance	System Frame Rate

Table 8.2.4. Test Case TC-001

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-002: Environment Interaction	
Test Case ID	TC-001 (Unit Test)	
What To Test	Camera Recentering	
Test Data Input	Google Cardboard Input Button 2x	
Expected Result	Camera resets to the default view looking out of the windshield of the vehicle upon two rapid clicks of the input button.	
Traceability	Relevant User Req.(s)	UF-B
	Relevant System Req.(s)	SF-B-03
	Relevant Use Case(s)	UC-002
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.5. Test Case TC-004

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-001: Scenario Interaction	
Test Case ID	TC-004 (Unit Test)	
What To Test	Camera Rotation	
Test Data Input	Moving Google Cardboard	
Expected Result	Rotating the phone moves the camera in the experience.	
Traceability	Relevant User Req.(s)	UF-B
	Relevant System Req.(s)	SF-B-01
	Relevant Use Case(s)	UC-002
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.6. Test Case TC-005

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-002: Environment Interaction	
Test Case ID	TC-005 (Integration Test)	
What To Test	Environment Interaction	
Test Data Input	Google Cardboard Input Button	
Expected Result	Tapping the input button on environment objects will allow the user to interact with them in some way.	
Traceability	Relevant User Req.(s)	UF-B
	Relevant System Req.(s)	SF-B-02
	Relevant Use Case(s)	UC-002,UC-003
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.7. Test Case TC-002

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-001: Scenario Interaction	
Test Case ID	TC-002 (System Test)	
What To Test	Scenario Triggers	
Test Data Input	Google Cardboard	
Expected Result	A scenario is presented to the user upon reaching a trigger in the environment.	
Traceability	Relevant User Req.(s)	UF-A
	Relevant System Req.(s)	SF-A-02
	Relevant Use Case(s)	UC-002,UC-003
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.8. Test Case TC-006

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-001: Scenario Interaction	
Test Case ID	TC-006 (System Test)	
What To Test	Bad Scenario Outcomes	
Test Data Input		
Expected Result	Failing to prevent the driver from texting during a scenario will lead to the failure of that scenario.	
Traceability	Relevant User Req.(s)	UF-C
	Relevant System Req.(s)	SF-C-01
	Relevant Use Case(s)	UC-003
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.9. Test Case TC-009

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-002: Environment Interaction	
Test Case ID	TC-009 (Acceptance Test)	
What To Test	AI Driver Actions	
Test Data Input	Google Cardboard	
Expected Result	The AI driver drives and gets distracted when scenarios are triggered through texting/not paying attention to the road.	
Traceability	Relevant User Req.(s)	UF-F
	Relevant System Req.(s)	SF-F-01
	Relevant Use Case(s)	UC-002
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.10. Test Case TC-010

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-003: System Performance	
Test Case ID	TC-010 (Acceptance Test)	
What To Test	Hardware Validation	
Test Data Input		
Expected Result	The system runs smoothly on hardware specifications of the Samsung S5 and up.	
Traceability	Relevant User Req.(s)	UO-01
	Relevant System Req.(s)	SO-01-01
	Relevant Use Case(s)	
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.11. Test Case TC-011

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-003: System Performance	
Test Case ID	TC-011 (Acceptance Test)	
What To Test	Double Image VR Display	
Test Data Input	Test Data Input	
Expected Result	Two images should be displayed for use with the Google Cardboard.	
Traceability	Relevant User Req.(s)	UO-02
	Relevant System Req.(s)	SO-02-01
	Relevant Use Case(s)	
Acknowledgment: Generated from the CapStone process management system ©2015		

Table 8.2.12. Test Case TC-012

Project Name:	Virtual Reality---Texting While Driving	
Test Suite	TS-003: System Performance	
Test Case ID	TC-012 (Acceptance Test)	
What To Test	System Frame Rate	
Test Data Input	The app	
Expected Result	The system runs at or above 30 frames per second when viewed through on a mobile device through a Google Cardboard.	
Traceability	Relevant User Req.(s)	UP-01
	Relevant System Req.(s)	SP-01-01
	Relevant Use Case(s)	
Acknowledgment: Generated from the CapStone process management system ©2015		