



**ÇANKAYA UNIVERSITY
FACULTY OF ENGINEERING
COMPUTER ENGINEERING DEPARTMENT**

**Test Plan, Test Design Specifications and Test Cases
Version 1**

CENG 408

Innovative System Design and Development II

**Simulacrum: Simulated Virtual Reality for Emergency Medical
Intervention in Battle Field Conditions**

Mert Ali GÖZCÜ

201411405

Nesil MEŞURHAN

201211037

Sedanur DOĞAN

201211028

Advisor: *Assist. Prof. Dr. Murat YILMAZ*
Specialist Ulaş GÜLEÇ

Table of Contents

1. INTRODUCTION.....	1
1.1 Version Control.....	1
1.2 Overview.....	1
1.3 Scope.....	1
1.4 Terminology.....	1
2. FEATURES TO BE TESTED.....	1
2.1 Graphical User Interface (GUI).....	1
2.2 Training Mode.....	1
2.3 Battlefield Mode.....	2
3. ITEM PASS/FAIL CRITERIA.....	2
3.1 Exit Criteria.....	2
4. REFERENCES.....	2
5. TEST DESIGN SPECIFICATIONS.....	3
5.1 Graphical User Interface (GUI).....	3
5.1.1 Subfeatures to be tested.....	3
5.1.1.1 Start Button (GUI.STRT_BTN).....	3
5.1.1.2 Select Training & Battlefield Mode Button (GUI.STBM_BTN).....	3
5.1.1.3 Admin Login (GUI.ADLG).....	3
5.1.1.4 Exit Button (GUI.EXT_BTN).....	3
5.1.1.5 Pause Button (GUI.P_BTN).....	3
5.1.1.6 Continue Button (GUI.CNT_BTN).....	3
5.1.1.7 Change Volume Setting Button (GUI.CVS_BTN).....	3
5.1.1.8 Display Instruction Button (GUI.DINS_BTN).....	4
5.1.1.9 Select & Start Technique (GUI.SST).....	4
5.1.1.10 Display Score Panel (GUI.DS_PNL).....	4
5.1.1.11 Select Battlefield Scenario (GUI.SBS).....	4
5.1.1.12 Objective Panel (GUI.OP).....	4
5.1.1.13 Inventory Panel (GUI.IP).....	4
5.1.1.14 Admin Control Add Question (GUI.ADC_ADDQ).....	4
5.1.1.15 Admin Control Delete Question (GUI.ADC_DELQ).....	4
5.1.1.16 Admin Control Update Question (GUI.ADC_UPDQ).....	4
5.1.2 Test Cases.....	5
5.2 Training Mode (TM).....	8
5.2.1 Subfeatures to be tested.....	8
5.2.1.1 Attend Video (TM.AV).....	8
5.2.1.2 Take Quiz (TM.TQ).....	8
5.2.1.3 Attend Practice (TM.APRAC).....	8
5.2.1.4 Interact With the Scene (TM.INTWS).....	9
5.2.2 Test Cases.....	9
5.3 Battlefield Mode (BM).....	10
5.3.1 Subfeatures to be tested.....	10
5.3.1.1 Explore Scene (BM.ES).....	10

Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions

5.3.1.2	Watch Instructive Video (BM.WIV).....	10
5.3.2	Test Cases	10
6.	Detailed Test Cases.....	12
6.1	GULS_STRT_BTN.01.....	12
6.2	GULSTBM_BTN.01.....	12
6.3	GULSTBM_BTN.02.....	13
6.4	GULADLG.01	13
6.5	GULADLG.02	14
6.6	GULEXT_BTN.01.....	14
6.7	GULP_BTN.01	15
6.8	GULCNT_BTN.01.....	15
6.9	GULCVS_BTN.01.....	16
6.10	GULDINS_BTN.01.....	16
6.11	GULSST.01	17
6.12	GULSST.02.....	17
6.13	GULDS_PNL.01	18
6.14	GULDS_PNL.02	18
6.15	GULSBS.01.....	19
6.16	GULOP.01.....	19
6.17	GULIP.01	20
6.18	GULADC_ADDQ.01.....	20
6.19	GULADC_ADDQ.02.....	21
6.20	GULADC_ADDQ.03.....	21
6.21	GULADC_DELQ.01.....	22
6.22	GULADC_DELQ.02.....	22
6.23	GULADC_UPDQ.01.....	23
6.24	TM.AV.01	23
6.25	TM.AV.02	24
6.26	TM.TQ.01.....	24
6.27	TM.TQ.02.....	25
6.28	TM.TQ.03.....	25
6.29	TM.APRAC.01.....	26
6.30	TM.INTWS.01	26
6.31	TM.INTWS.02	27
6.32	BM.ES.01	27
6.33	BM.ES.02	28
6.34	BM.ES.03	28
6.35	BM.ES.04	29
6.36	BM.ES.05	29
6.37	BM.ES.06	30
6.38	BM.ES.07	30
6.39	BM.WIV.01.....	31

1. INTRODUCTION

1.1 Version Control

Version No	Description of Changes	Date
1.0	First Version	Apr 12, 2017

1.2 Overview

The use case of Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions' system users namely participant and admin which had been determined in SRS document will be tested.

1.3 Scope

This document encapsulates the test plan of the use cases, test design specifications and the test cases correspond to test plan.

1.4 Terminology

Acronym	Definition
GUI	Graphical User Interface (GUI)
TM	Training Mode
BM	Battlefield Mode

2. FEATURES TO BE TESTED

This section lists and gives a brief description of all the major features to be tested. For each major feature there will be a Test Design Specification added at the end of this document.

2.1 Graphical User Interface (GUI)

In project, graphical user interface components are used. The GUI part is divided into three parts which are Main Menu, Training and Battlefield. Every part of the GUI also includes smaller parts. GUI part includes testing of the functions of GUI components which are used in the project such as button, panel, text, etc.

2.2 Training Mode

This part includes test cases and test plan of Training Mode. Training Mode includes video panel, quiz panel and practice scene. An educative video shall be displayed to the participant and it will be expected from the participant to take a quiz and complete the objectives in the practice scene. Testing of the stated requirements will occur in this document.

2.3 Battlefield Mode

This part includes test cases and test plan of Battlefield Mode. In this mode, participant shall explore and interact with the virtual world. Also, the participant shall complete the objectives of the practice part in a different environment. The testing of these requirements will also occur in this document.

3. ITEM PASS/FAIL CRITERIA

3.1 Exit Criteria

- 100% of the test cases are executed
- 99.9% of the test cases passed
- All High and Medium Priority test cases passed

4. REFERENCES

[1] Group10_SRS_100, April 12, 2017

[2] Group10_SDD_100, April 12,2017

5. TEST DESIGN SPECIFICATIONS

5.1 Graphical User Interface (GUI)

5.1.1 Subfeatures to be tested

5.1.1.1 Start Button (GUI.STRT_BTN)

Participant can select a simulation mode with selecting “Start” button. After start button selected, a panel is displayed which includes two different simulation mode buttons.

5.1.1.2 Select Training & Battlefield Mode Button (GUI.STBM_BTN)

Participant can choose the simulation mode. If Training Mode is selected Select & Start Technique shall be displayed. If Battlefield Mode is selected Select Battlefield Scenario and Select & Start Technique shall be displayed.

5.1.1.3 Admin Login (GUI.ADLG)

Admin have to login to the system by entering password for being able to change question.

5.1.1.4 Exit Button (GUI.EXT_BTN)

Participant can close the application with selecting “Exit” button.

5.1.1.5 Pause Button (GUI.P_BTN)

Participant can pause simulation by selecting the “Pause” button.

5.1.1.6 Continue Button (GUI.CNT_BTN)

Participant can continue simulation by selecting the “Continue” button.

5.1.1.7 Change Volume Setting Button (GUI.CVS_BTN)

Participant can change volume by selecting the “Volume Setting” button.

5.1.1.8 Display Instruction Button (GUI.DINS_BTN)

Participant can gain information about how to use the simulation with selecting “Display Instruction” button. This button displays a panel which includes instructions about how to use the simulation.

5.1.1.9 Select & Start Technique (GUI.SST)

Participant can choose a technique to train by selecting it from the drop-down list and start the simulation by selecting “Start” button.

5.1.1.10 Display Score Panel (GUI.DS_PNL)

Participant can display the score which is related to selected mode.

5.1.1.11 Select Battlefield Scenario (GUI.SBS)

Participant can choose the battlefield environment from the drop-down list.

5.1.1.12 Objective Panel (GUI.OP)

Participant can display Objective Panel by selecting the “Arrow Button” on the right side of the screen.

5.1.1.13 Inventory Panel (GUI.IP)

Participant can display Inventory Panel by selecting the “Arrow Button” on the top of the screen.

5.1.1.14 Admin Control Add Question (GUI.ADC_ADDQ)

Admins can enter question to the system by entering the content of the question, choices which are A, B, C, D.

5.1.1.15 Admin Control Delete Question (GUI.ADC_DELQ)

Admins can delete question from the system by entering the ID of the information from the information list.

5.1.1.16 Admin Control Update Question (GUI.ADC_UPDQ)

Admins can update question from the system by entering the ID of the information from the information list

5.1.2 Test Cases

TC ID	Requirements	Priority	Scenario Description
GUI.S_STRT_BTN.01	3.2.1	H	Select “START” button. After selecting, mode selection panel will be displayed.

TC ID	Requirements	Priority	Scenario Description
GUI.STBM_BTN.01	3.2.1	H	Select “Battlefield Mode” button. After selecting, “Select Battlefield Scenario” and “Select & Start Technique” panels will be displayed.
GUI.STBM_BTN.02	3.2.1	H	Select “Training Mode” button. After selecting, “Select & Start Technique” panel will be displayed.

TC ID	Requirements	Priority	Scenario Description
GUI.ADLG.01	3.2.1	L	Enter a valid password.
GUI.ADLG.02	3.2.1	L	Enter an invalid password.

TC ID	Requirements	Priority	Scenario Description
GUI.EXT_BTN.01	3.2.1	M	Select “Exit” button. After selecting, the application will be closed.

Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions

TC ID	Requirements	Priority	Scenario Description
GUI.P_BTN.01	3.2.2	L	Select “Pause” button. After selecting, the simulation will be stopped.

TC ID	Requirements	Priority	Scenario Description
GUI.CNT_BTN	3.2.2	L	Select “Continue” button. After selecting, the simulation will continue.

TC ID	Requirements	Priority	Scenario Description
GUI.CVS_BTN	3.2.2	L	Select “Change Volume Setting”. After selecting, the volume of the application can be changed.

TC ID	Requirements	Priority	Scenario Description
GUI.DINS_BTN	3.2.2	L	Select “Display Instructions” button. After selecting, the panel which explains how to use the simulation.

TC ID	Requirements	Priority	Scenario Description
GUL.SST.01	3.2.3	H	Select a technique from drop-down list.
GUL.SST.02	3.2.3	H	Select “Start” button. After selecting, the simulation will be started.

Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions

TC ID	Requirements	Priority	Scenario Description
GUI.DS_PNL.01	3.2.3	M	If the selected mode is “Training Mode”, then display quiz score.
GUI.DS_PNL.02	3.2.3	M	If the selected mode is “Battlefield Mode”, then display practice score.

TC ID	Requirements	Priority	Scenario Description
GUI.SBS.01	3.2.4	H	Select a battlefield scenario from drop-downlist. After selecting, “Select and Start Technique” panel will be displayed.

TC ID	Requirements	Priority	Scenario Description
GUI.OP.01	3.2.4	H	Select “Arrow” button from the right side of the screen. After selecting, a panel which displays all the objectives of the technique will be displayed.

TC ID	Requirements	Priority	Scenario Description
GUI.IP.01	3.2.4	H	Select “Arrow” button from the top of the screen. After selecting, a panel which displays all the items which the participant possess will be displayed.

TC ID	Requirements	Priority	Scenario Description
GUI.ADC_ADD Q.01	3.2.3	M	Enter content, A, B, C, D choices.
GUI.ADC_ADD Q.02	3.2.3	M	Enter content as blank, A, B, C, D choices .

Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions

GUI.ADC_ADD Q.03	3.2.3	M	Enter content, one of the A, B, C, D choices as blank.
GUI.ADC_DEL Q.01	3.2.3	M	Delete one of the question by entering a valid ID.
GUI.ADC_DEL Q.02	3.2.3	M	Delete one of the question by entering an invalid ID.
GUI.ADC_UPD Q.01	3.2.3	M	Update the content, A,B,C,D choices by entering a valid ID.

5.2 Training Mode (TM)

5.2.1 Subfeatures to be tested

5.2.1.1 Attend Video (TM.AV)

After the Training Mode is started, the video panel which includes a video that is related with the selected technique shall be displayed.

5.2.1.2 Take Quiz (TM.TQ)

After the video ends, the video panel shall be removed and the quiz panel shall be displayed. The quiz panel will include questions and choices that are related with the selected technique. The participant shall try to choose the correct answers for each question.

5.2.1.3 Attend Practice (TM.APRAC)

After participant gets a satisfactory result from the quiz, the quiz panel shall be removed and the practice part shall begin. When the practice part begins, “Arrow” buttons which is on the top and the right side of the screen will be displayed. Interaction with these buttons shall allow user to display and remove inventory and objective panels.

5.2.1.4 Interact With the Scene (TM.INTWS)

The participant can select an item from the inventory list by selecting a button from the panel. After a button is selected, 3D representation of the item will be displayed on the screen and the participant shall use this item to interact with the objects in the scene.

5.2.2 Test Cases

TC ID	Requirements	Priority	Scenario Description
TM.AV.01	3.2.3	L	After selecting Training Mode, the video panel will be displayed.
TM.AV.02	3.2.3	L	The video panel will be closed before the video has ended if the participant decides to skip.

TC ID	Requirements	Priority	Scenario Description
TM.TQ.01	3.2.3	L	Answer correctly all of the questions before the time is up.
TM.TQ.02	3.2.3	L	Answer incorrectly some of the questions before the time is up.
TM.TQ.03	3.2.3	L	Do not answer a question in time.

TC ID	Requirements	Priority	Scenario Description
TM.APRAC.01	3.2.3	M	After the participant receives a satisfactory result from the quiz panel, the practice part shall be started.

TC ID	Requirements	Priority	Scenario Description
TM.INTWS.01	3.2.3-3.2.4	H	The participant shall select an item from the inventory list. After selecting, the 3D model of the item will be given to the participant. (Hold Object)
TM.INTWS.02	3.2.3-3.2.4	H	Participant can remove the 3D model of the item. (Drop Objects)

5.3 Battlefield Mode (BM)

5.3.1 Subfeatures to be tested

5.3.1.1 Explore Scene (BM.ES)

User can explore the scene and move on scene. User can walk, jump, sprint and turn.

5.3.1.2 Watch Instructive Video (BM.WIV)

After selecting help button, instructive video will occur in the right-down side of the screen. This video will give information about selected medical intervention technique.

5.3.2 Test Cases

TC ID	Requirements	Priority	Scenario Description
BM.ES.01	3.2.4	H	Press “w” button to move forward.
BM.ES.02	3.2.4	H	Press “s” button to move backward.

Simulacrum: Simulated Virtual Reality for Emergency Medical Intervention in Battle Field Conditions

BM.ES.03	3.2.4	H	Press “d” button to move to right.
BM.ES.04	3.2.4	H	Press “a” button to move to left.
BM.ES.05	3.2.4	H	Press “shift” button to sprint.
BM.ES.06	3.2.4	M	Press space button to jump.
BM.ES.07	3.2.4	H	Use the mouse to turn.

TC ID	Requirements	Priority	Scenario Description
BM.WIV.01	3.2.4	H	After selecting “Help ” button, video occurs on right side of the screen.

6. Detailed Test Cases

6.1 GUI.S_STRT_BTN.01

TC_ID	GUI.S_STRT_BTN.01
Purpose	Starts mode selection panel correctly.
Requirements	3.2.1
Priority	High
Estimated Time Needed	1 Minutes
Dependency	The simulation is executed.
Setup	The simulation should install on the computer.
Procedure	[A01] Select “Start” button from main menu.
	[V01] Mode selection panel will be displayed on the screen.
Cleanup	Go back to previous page.

6.2 GUI.STBM_BTN.01

TC_ID	GUI.STBM_BTN.01
Purpose	Starts battlefield mode.
Requirements	3.2.1
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Selecting “Start” button which occurs in main menu.
Setup	Battlefield scenario selection panel is prepared.
Procedure	[A01] Select “Battlefield” button from the panel.
	[V01] Select Battlefield Scenario Panel will be displayed on the screen.
Cleanup	Go back to previous page.

6.3 GUI.STBM_BTN.02

TC_ID	GUI.STBM_BTN.02
Purpose	Starts training mode.
Requirements	3.2.1
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Selecting “Start” button which occurs in main menu.
Setup	Training scenario selection panel is prepared.
Procedure	[A01] Select “Training” button from the panel.
	[V01] Start & Select Technique panel will be displayed on the screen.
Cleanup	Go back to previous page.

6.4 GUI.ADLG.01

TC_ID	GUI.ADLG.01
Purpose	Enter a valid password.
Requirements	3.2.1
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	-
Setup	An admin user should be created.
Procedure	[A01] Go to login page.
	[A02] Enter the valid password for the admin.
	[A03] Click on the “Login” button.
	[V01] Observe that the login is successful and the admin page appears.
Cleanup	Exit

6.5 GUI.ADLG.02

TC_ID	GUI.ADLG.02
Purpose	Enter an invalid password.
Requirements	3.2.1
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	-
Setup	An admin user should be created.
Procedure	[A01] Go to login page.
	[A02] Enter the invalid password for the admin.
	[A03] Click on the “Login” button.
	[V01] Observe that “Password is invalid” error message is displayed.
Cleanup	Close admin page.

6.6 GUI.EXT_BTN.01

TC_ID	GUI.EXT_BTN.01
Purpose	Exit from the simulation.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	Battlefield mode should be started.
Setup	Exit button is scripted.
Procedure	[A01] Select “Options” button in the battlefield mode.
	[A02] Select “Exit” button.
	[V01] Verify that program is closed.
	[A03] Start application again.
	[A04] Select “Exit” button from the main menu.
	[V02] Verify that program is closed.
Cleanup	-

6.7 GUI.P_BTN.01

TC_ID	GUI.P_BTN.01
Purpose	Pause the simulation.
Requirements	3.2.2
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	Battlefield mode should be started.
Setup	The simulation should be started and pause button is scripted.
Procedure	[A01] Select "Options" button.
	[A02] Select "Pause" button.
	[V01] Observe that simulation is paused.
Cleanup	Close options menu.

6.8 GUI.CNT_BTN.01

TC_ID	GUI.CNT_BTN.01
Purpose	Continue the simulation.
Requirements	3.2.2
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	The simulation is in battlefield mode and should be paused.
Setup	The simulation should be started and continue button is scripted.
Procedure	[A01] Select "Options" button.
	[A02] Select "Continue" button.
	[V01] Observe that simulation is continued.
Cleanup	Close options menu.

6.9 GUI.CVS_BTN.01

TC_ID	GUI.CVS_BTN.01
Purpose	Changing the volume setting.
Requirements	3.2.2
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	Battlefield mode should be started.
Setup	The simulation should be started and changing volume is scripted.
Procedure	[A01] Select “Options” button.
	[A02] Select “Change Volume Setting” button.
	[A03] Change the slider position to minimum level.
	[V01] Notice that simulation sound is decreased.
Cleanup	Close options menu.

6.10 GUI.DINS_BTN.01

TC_ID	GUI.DINS_BTN.01
Purpose	Display the instruction panel.
Requirements	3.2.2
Priority	Low
Estimated Time Needed	2 Minutes
Dependency	Battlefield mode should be started.
Setup	The simulation should be started and instruction panel is scripted.
Procedure	[A01] Select “Options” button.
	[A02] Select “Display Instruction” button.
	[V01] Instruction panel occurs in the screen.
Cleanup	Go back to previous page.

6.11 GUI.SST.01

TC_ID	GUI.SST.01
Purpose	Select proper medical intervention technique.
Requirements	3.2.3
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Select Training & Battlefield Mode Button cases should pass.
Setup	Select technique is scripted.
Procedure	[A01] Select a technique in drop-down list.
	[V01] “Start” button should be visible.
Cleanup	Go back to previous page.

6.12 GUI.SST.02

TC_ID	GUI.SST.02
Purpose	Start simulation correctly.
Requirements	3.2.3
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Select & Start Technique test case 1 should pass.
Setup	Start button is scripted.
Procedure	[A01] Select “Start” button.
	[V01] Simulation should be started according to selection of mode different simulation will start.
Cleanup	Exit the simulation.

6.13 GUI.DS_PNL.01

TC_ID	GUI.DS_PNL.01
Purpose	Display quiz score in training mode.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Training mode should be started and video should be finished.
Setup	Quiz question should be loaded the program from txt file.
Procedure	[A01] Answer all of the question.
	[V01] Result of the score should be displayed on the screen.
Cleanup	Pass the practice part.

6.14 GUI.DS_PNL.02

TC_ID	GUI.DS_PNL.02
Purpose	Display medical intervention score in battlefield mode.
Requirements	3.2.3
Priority	Medium.
Estimated Time Needed	5 Minutes
Dependency	Treatment should be started in battlefield mode.
Setup	Battlefield mode should be started.
Procedure	[A01] Attend the treatment.
	[A02] Complete treatment according to objective panel.
	[V01] Result of the score of treatment should be displayed on the screen.
Cleanup	Exit.

6.15 GUI.SBS.01

TC_ID	GUI.SBS.01
Purpose	Select proper battlefield scenario.
Requirements	3.2.3
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	Selecting Battlefield mode is done.
Setup	Select battlefield scenario is scripted.
Procedure	[A01] Select a scenario in drop-down list.
	[V01] Start & Select Technique panel will be displayed on the screen.
Cleanup	Go back to previous page.

6.16 GUI.OP.01

TC_ID	GUI.OP.01
Purpose	Display all objectives in the both of modes.
Requirements	3.2.4
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Simulation should be started.
Setup	Objective panel is scripted.
Procedure	[A01] Attend treatment in battlefield mode.
	[A02] Select “Arrow” button from the right side of the screen during the simulation start.
	[V01] Objective panel is displayed on the right side of the screen.
Cleanup	Close objective panel

6.17 GUI.IP.01

TC_ID	GUI.IP.01
Purpose	Display inventory panel in the both of modes.
Requirements	3.2.4
Priority	High
Estimated Time Needed	1 Minutes
Dependency	Simulation should be started.
Setup	Inventory panel is scripted.
Procedure	[A01] Attend treatment in battlefield mode.
	[A02] Select “Arrow” button from the top of the screen during the simulation start.
	[V01] Inventory panel is displayed on the top of the screen.
Cleanup	Close inventory panel

6.18 GUI.ADC_ADDQ.01

TC_ID	GUI.ADC_ADDQ.01
Purpose	Enter content, A, B, C, D choices.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should be passed.
Setup	Login to the system as admin.
Procedure	[A01] Click “Add Question” button from the admin page.
	[V01] Observe that the question page is opened.
	[A02] Enter content.
	[A03] Enter A,B,C and D choices.
	[V02] Observe that “The question saved successfully.” message is displayed.
Cleanup	Close question page

6.19 GUI.ADC_ADDQ.02

TC_ID	GUI.ADC_ADDQ.02
Purpose	Enter content as blank, A, B, C, D choices.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should pass.
Setup	Login to the system as admin.
Procedure	[A01] Click “Add Question” button from the admin page.
	[V01] Observe that the question page is opened.
	[A02] Not enter content.
	[A03] Enter A,B,C and D choices.
	[V02] Observe that “Content is required!” message is displayed.
Cleanup	Close question page

6.20 GUI.ADC_ADDQ.03

TC_ID	GUI.ADC_ADDQ.03
Purpose	Enter content, one of the A, B, C, D choices as blank.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should pass.
Setup	Login to the system as admin.
Procedure	[A01] Click “Add Question” button from the admin page.
	[V01] Observe that the question page is opened.
	[A02] Enter content.
	[A03] Not enter one of the A,B,C, D choices.
	[V02] Observe that “Please enter all the choices!” message is displayed.
Cleanup	Close question page

6.21 GUI.ADC_DELQ.01

TC_ID	GUI.ADC_DELQ.01
Purpose	Delete one of the question by entering a valid ID.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should pass.
Setup	Login to the system as admin.
Procedure	[A01] Click “Delete Question” button from the admin page.
	[V01] Observe that the list of all question is displayed.
	[A02] Enter a valid question ID.
	[V02] Observe that “Your question is deleted.” message is displayed.
	[V03] Observe that the ID that is chosen is not in the list.
Cleanup	Close delete question page

6.22 GUI.ADC_DELQ.02

TC_ID	GUI.ADC_DELQ.02
Purpose	Delete one of the question by entering an invalid ID.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should pass.
Setup	Login to the system as admin.
Procedure	[A01] Click “Delete Question” button from the admin page.
	[V01] Observe that the list of all questions is displayed.
	[A02] Enter an invalid question ID.
	[V02] Observe that “Your question ID is invalid!” message is displayed.
Cleanup	Close delete question page

6.23 GUI.ADC_UPDQ.01

TC_ID	GUI.ADC_UPDQ.01
Purpose	Update one of the question by entering an valid ID.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	5 Minutes
Dependency	Admin login test cases should pass.
Setup	Login to the system as admin.
Procedure	[A01] Click “Update Question” button from the admin page.
	[V01] Observe that the list of all questions is displayed.
	[A02] Enter an valid question ID.
	[A03] Enter content.
	[A04] Enter A,B,C and D choices.
	[V02] Observe that “Your question is updated” message is displayed.
Cleanup	Close update question page

6.24 TM.AV.01

TC_ID	TM.AV.01
Purpose	Video panel should be displayed after selecting Training Mode.
Requirements	3.2.3
Priority	Low
Estimated Time Needed	1 Minutes
Dependency	Select & Start Technique test cases should be passed.
Setup	Start training mode.
Procedure	[A01] Start training mode.
	[V01] Observe that video panel is displayed.
Cleanup	Exit

6.25 TM.AV.02

TC_ID	TM.AV.02
Purpose	Video panel should be skipped.
Requirements	3.2.3
Priority	Low
Estimated Time Needed	1 Minutes
Dependency	Video test 1 case should be passed.
Setup	Start training mode.
Procedure	[A01] Press “ESC” button during video played.
	[V01] Observe that video is skipped.
Cleanup	Exit

6.26 TM.TQ.01

TC_ID	TM.TQ.01
Purpose	Answer correctly all of the questions before the time is up.
Requirements	3.2.3
Priority	Low
Estimated Time Needed	5 Minutes
Dependency	Video test cases should be passed.
Setup	Find the answer of the question from the text file.
Procedure	[A01] Select the correct answer by clicking on it before the time is up.
	[V01] Observe that result panel shows final score of quiz.
Cleanup	Close the question window

6.27 TM.TQ.02

TC_ID	TM.TQ.02
Purpose	Answer incorrectly some of the questions before the time is up.
Requirements	3.2.3
Priority	Low
Estimated Time Needed	5 Minutes
Dependency	Video test cases should be passed.
Setup	Find the answer of the question from the text file.
Procedure	[A01] Select the incorrect answer by clicking on it before the time is up.
	[V01] Observe that result panel shows final score of quiz.
Cleanup	Close the question window

6.28 TM.TQ.03

TC_ID	TM.TQ.03
Purpose	Do not answer questions in time.
Requirements	3.2.3
Priority	Low
Estimated Time Needed	5 Minutes
Dependency	Video test cases should be passed.
Setup	Find the answer of the question from the text file.
Procedure	[A01] Do not select one of the answers by clicking on it before the time is up.
	[V01] Observe that result panel shows final score of quiz.
Cleanup	Close the question window

6.29 TM.APRAC.01

TC_ID	TM.APRAC.01
Purpose	Start practice in training mode.
Requirements	3.2.3
Priority	Medium
Estimated Time Needed	3 Minutes
Dependency	Take quiz test case 1 should be passed.
Setup	-
Procedure	[A01] Select “proceed” button which is placed into display quiz score panel.
	[V01] Observe that inventory panel, objective panel and wounded person in the middle of the screen appears.
Cleanup	Exit

6.30 TM.INTWS.01

TC_ID	TM.INTWS.01
Purpose	Holding object.
Requirements	3.2.3-3.2.4
Priority	High
Estimated Time Needed	5 Minutes
Dependency	Practice of a first-aid technique should be started.
Setup	Simulation should be started.
Procedure	[A01] Select an item from inventory panel.
	[V01] Observe that 3D model of the item is created.
Cleanup	Exit

6.31 TM.INTWS.02

TC_ID	TM.INTWS.02
Purpose	Holding object.
Requirements	3.2.3-3.2.4
Priority	High
Estimated Time Needed	5 Minutes
Dependency	Practice of a first-aid technique should be started.
Setup	Simulation should be started.
Procedure	[A01] Drop an item by pressing “ESC” button.
	[V01] Observe that 3D model of the item is removed.
Cleanup	Exit

6.32 BM.ES.01

TC_ID	BM.ES.01
Purpose	Move first person to forward.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select “Battlefield Scenario”.
	[A02] Select “Medical Intervention Technique”.
	[V01] Observe that “Start” button is visible.
	[A04] Select “Start” button.
	[A04] Press “w” button.
	[V01] Verify that the first person is moved forward.
Cleanup	Exit

6.33 BM.ES.02

TC_ID	BM.ES.02
Purpose	Move first person to backward.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select “Battlefield Scenario”.
	[A02] Select “Medical Intervention Technique”.
	[V01] Observe that “Start” button is visible.
	[A04] Select “Start” button.
	[A04] Press “s” button.
	[V01] Verify that the first person is moved backward.
Cleanup	Exit

6.34 BM.ES.03

TC_ID	BM.ES.01
Purpose	Move first person to move right.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select “Battlefield Scenario”.
	[A02] Select “Medical Intervention Technique”.
	[V01] Observe that “Start” button is visible.
	[A04] Select “Start” button.
	[A04] Press “d” button.
	[V01] Verify that the first person is moved right.
Cleanup	Exit

6.35 BM.ES.04

TC_ID	BM.ES.04
Purpose	Move first person to move left.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select "Battlefield Scenario".
	[A02] Select "Medical Intervention Technique".
	[V01] Observe that "Start" button is visible.
	[A04] Select "Start" button.
	[A04] Press "a" button.
	[V01] Verify that the first person is moved left.
Cleanup	Exit

6.36 BM.ES.05

TC_ID	BM.ES.05
Purpose	Accelerate first person.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select "Battlefield Scenario".
	[A02] Select "Medical Intervention Technique".
	[V01] Observe that "Start" button is visible.
	[A04] Select "Start" button.
	[A04] Press "Shift" button.
	[V01] Verify that the first person is accelerated.
Cleanup	Exit

6.37 BM.ES.06

TC_ID	BM.ES.06
Purpose	Jump the first person.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select "Battlefield Scenario".
	[A02] Select "Medical Intervention Technique".
	[V01] Observe that "Start" button is visible.
	[A04] Select "Start" button.
	[A04] Press "space" button.
	[V01] Verify that the first person is jumped.
Cleanup	Exit

6.38 BM.ES.07

TC_ID	BM.ES.07
Purpose	Turn the screen with using mouse.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Movement of first person is scripted.
Procedure	[A01] Select "Battlefield Scenario".
	[A02] Select "Medical Intervention Technique".
	[V01] Observe that "Start" button is visible.
	[A04] Select "Start" button.
	[A04] Move the mouse
	[V01] Verify that the screen is turned by rotating direction.
Cleanup	Exit

6.39 BM.WIV.01

TC_ID	BM.WIV.01
Purpose	Open the instructive video.
Requirements	3.2.4
Priority	High
Estimated Time Needed	3 Minutes
Dependency	Battlefield mode should be started.
Setup	Instructive video should be loaded the application.
Procedure	[A01] Select "Battlefield Scenario".
	[A02] Select "Medical Intervention Technique".
	[V01] Observe that "Start" button is visible.
	[A04] Select "Start" button.
	[A04] Press "Help" button.
	[V01] Observe that a video is displayed on the right side of the screen.
Cleanup	Exit