Detailed Test Plan for PortableHUD

Project Team: Amina Qurban
Anastasia Suprun
Pak Lun Hoi
Qing Zhuang
Yifeng Xie
Xuemeng Monica Li

Contact Person: Xuemeng Monica Li
xmli@sfu.ca

Submitted to: Dr. Andrew Rawicz – ENSC 440
Steve Whitmore – ENSC 305
School of Engineering Science
Simon Fraser University

Issue date: March 28, 2016

Revision: 1.2

SafeVision Test Case Sheet 1			
Test Case Number:1	Test Case: Temperature Measurement	Test Date:	Reviewed By:
Scenario:	User would like to know the current temperature of the environment. Temperature should be between -40 °C and 40 °C		
Steps:	1) User would select the appropriate menu to display temperature 2) User would simply look at the LCD Display for the temperature		
Input:	N/A		
Expected Output:	The temperature displayed should match the temperature of the surrounding environment which is verified using a thermometer.		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐

Test Case Number:2	Test Case: Current Speed	Test Date:	Reviewed By:
Scenario:	User would be moving at a specific speed User would like to know whether they are over speeding		
Steps:	1) User would select the appropriate menu to display speed 2) User would simply look at the LCD Display for the speed		
Input:	N/A		
Expected Output:	The speed showed in the LCD should match the speed shown by the speedometer		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐

SafeVision Test Case Sheet 2			
Test Case Number: 3	Test Case: Location	Test Date:	Reviewed By:
Scenario:	User would be standing in a location that GPS module could detect satellites (e.g. Outdoor soccer field)		
Steps:	1) User would select the appropriate menu to display location 2) User would simply look at the LCD Display for the longitude and latitude		
Input:	N/A		
Expected Output:	GPS coordinates should match with the current location of user (with an error of a few meters)		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐

Test Case Number:4	Test Case: Real Time	Test Date:	Reviewed By:
Scenario:	User would be needing to look at the time and date		
Steps:	1) User would select the appropriate menu to display date and time 2) User would simply look at the LCD Display for the time and date		
Input:	N/A		
Expected Output:	The time and date shown on the LCD should match the current time and date		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐

SafeVision Test Case Sheet 3			
Test Case Number:5	Test Case: RF Communication	Test Date:	Reviewed By:
Scenario:	User would like to communicate with his/her friend at a distance using the RF Communication device. The channel used to communicate must be the same		
Steps:	1) User would press the button located at the side of the helmet to talk		
Input:	N/A		
Expected Output:	The voice of the user should be broadcasted to the another *PortableHUD* device or a radio communication device with the same frequency channel.		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐

Test Case Number:6	Test Case: Mechanical Design	Test Date:	Reviewed By:
Scenario:	User would like to mount the device on the helmet and position it to his/hers preference.		
Steps:	1) User mounts the device on a helmet 2) User positions screen for his/hers preference		
Input:	N/A		
Expected Output:	The device holds its extendable position that the user sets		
Actual Output:			
Comments:			
Results:	**Approved** ☐	**Conditionally Approved** ☐	**Not Approved** ☐