Requirements Document

1 Introduction

* 1. Purpose

This document describes the software functional and nonfunctional requirements for the version 1.0 of the Simulator Car System (SCS). This document is intended to be used by the members of the project team that will implement and verify the correct functioning of the system. Unless otherwise noted, all requirements specified here are high priority and committed for version1.0.

* 1. Project features

The Simulator Car System will permit an opportunity to view the behavior of the car model and the possibility of driving a car in a virtual world.

2 User Requirements

2.1 Software Interfaces

SI-1 : C#.

SI-2 : Unity3d.

2.2 User Interfaces

UI-1 : The Simulator Car System will interact with the user through a graphical interface.

UI-2 : The product shall provide a help page to explain how to use this system.

UI-3 : The Simulator shall permit complete interaction using the keyboard alone, in addition to using mouse.

2.3 User Characteristics

SCS user : A user who wants to drive a car in a virtual world for entertainment, or something else. Users of the system may have a higher education, special and secondary education degree. Experience of using such systems like this is optional. User requirements for technical competence - user PC.

2.4 Assumptions and Dependencies

AS-1 : User must take part in driving a car in virtual world.

DE-1 : The behavior of the Simulator Car System depends on what actions a user will take.

3 System Requirements

3.1 Functional Requirements

SR-FR-1 : The Simulator Car System (SCS) should have the welcome page.

SR-FR-2 : SCS should have the start page.

SR-FR-3 : SCS should be able to start drive session from start page, should be able to exit from the SCS from start page.

SR-FR-4 : SCS should have the help page and about page.

SR-FR-5: User should have possibility to drive the car by using keys on keyboard according to help page.

3.2 Non-Functional Requirements

3.2.1 SAFETY REQUIREMENTS

No safety requirements have been identified.

3.2.2 SECURITY REQUIREMENTS

No security requirements have been identified.

3.2.3 SYSTEM REQUIREMENTS

It should be running on desktop with following requirements:

OS: Windows 7,8,10.

Graphics card: DX9 (shader model 3.0) or DX11 with feature level 9.3 capabilities.

CPU: SSE2 instruction set support.

3.2.4 SOFTWARE QUALITY ATTRIBUTES

Application should not use more than 2GB of RAM.

Application should not take more than 4GB of disk space.

MOCKUP



