**SOFTWARE REQUIREMENT SPECIFICATION**

**PROJECT TITLE :**

**“Vehicle Showcase Augmented Reality Application With AI BOT”**

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**SOFTWARE REQUIREMENT SPECIFICATION**

**1. Introduction**

The SRS is produced at the culmination of the analysis task. The function and performance allocated to software as part of the system engineering and refined by establishing a complete information description, a detailed functional description, a representation of system behaviour, indication of performance requirements and design constrains, appropriate validation criteria and the other information related to requirements.

The SRS is technical specification of requirement of internal test paper by using scanned copy of answer sheet. This specification describes what the proposed system should do without describing how it will do it. It also describes complete external behaviour of proposed system.

**1.1. Purpose**

The main purpose of our AR App is to have realistic user experience anytime from anywhere with a detailed view. The concept of mobility is enhanced.

**1.2. Scope**

Other AR Applications are 2D based, Here we have expanded to next level of AR by implementing 3D visualization and ground plane detection.

**1.3. Definition, Acronyms, Abbreviations**

DFD : Data Flow Diagram

SRS : Software Requirement Specification.

AR : Augmented Reality

VR : Virtual Reality

**1.4. Reference**

1) C# - W3schools

2) Vuforia - Vuforia Docs

**1.5. Overview**

The overall aim of this project is to bring the real experience of visiting a vehicle showcase from user’s location. Since this is a mobile application easy to use anywhere. The AI bot that is integrated to guide user to make user to feel more user friendly. There is no restriction like login or registration this is open to all end user’s. User can also customize the vehicle like changing color, adding extra features etc …

**2. OVERALL DESCRIPTION**

**2.1. Product perspectives**

This project gives the user how particular vehicle works, Then its performance and also detailed view. Makes user experience is a efficient manner

**2.2. Product Function**

The App will have the following major function:-

1) AI Voice controlled Bot

2) Customization of Vehicle Model

3) Handy user friendly Optimization

4) Periodic Updating

This enables the AR App to keep the information in efficient manner. It reduces the time and work in an efficient way.

**2.3. User Characteristics**

This App is developed such that total appearance of the vehicles to be more user friendly. This is open to all end users there is no restrictions to use the app.

**2.4. General Constraints**

Any changes in the vehicle model will be updated periodically.

**2.5. Assumption and Dependencies:**

All the data’s, designs and models will be correct and up to date. So that there will no difference in actual model and 3D model.

**3. SPECIFIC REQUIREMENTS**

It describes all the details that the AR android application developer need to know for designing and developing the system. This is typically the largest and most important part of the document.

**3.1. External Interface Requirements**

**3.1.1. User Interface**

User Interface is designed in a user friendly manner, As user will get real experience like visiting a Vehicle Showcase.

**3.1.2. Hardware Interface**

Processor : Intel®core™i3-5005U CPU 2.50GHZ

Memory : 4 GB RAM

Storage : 100 GB

GPU : Graphics card with DX10 (shader model 4.0)

USB Drive : 2.0

**3.1.3. Software Interface**

Operating System : Windows 7/ 8/ 8.1/ 10

Coding Language : C#

IDE : Unity 3D, Visual Studio

Front End : 3D Graphic Design, C#

Back End : Vuforia SDK

**3.1.4. Communication Interface**

Android Interface

**3.2. Performance Requirements**

The performance depends on the Android Smart phone specs. The good responsiveness is the main factor for the android application.

**3.3. Design Constraints**

The End users can have the explore the vehicle in the application anytime from anywhere. Periodic updating will be done so that the designs and model would be more realistic.