**EEE 11TH BATCH**

**SOFTWARE REQUIREMENTS SPECIFICATION**

**FOR**

**CAR RENTAL SYSTEM**

**Introduction**

**1.1Purpose:**

* **This document contains the software requirements for the Car Rental System CRS. The main purpose of a Car Rental System to be implemented is to manage information about Cars, Customers and the system users related to the company.**
* **This is the first version of the SRS document. The purpose of this document is to state all system requirements clearly for usage in the development stages ahead.**
* **This document is meant to be viewed by the project development team, users and the stakeholders. All requirements for the system have been stated clearly in the document and this is used to make sure that everyone related to the system directly or indirectly understands all requirements stated in this document**

**1.2. Scope:**

**This document covers the entire system and all its subparts. The purpose of this system is as follows:**

* **Efficiency: This system provides quick addition, deletion or search for various types of data which are a part of the system. This decreases the process time for employees and manual search work that could take hours can be done in just a few seconds or minutes.**
* **Accurate Records: There is no fear of manipulation of records by unauthorized personnel. All records stored in the system are protected. Files in storage may catch fire or be spoilt in water. But data storage in repositories reduces those risks.**
* **Accountability: Any transaction made through the system is kept track of and in case anything goes wrong with customer dealings, the fault can be traced back to the origin very easily.**
* **Generating Reports: The system is capable of producing weekly and monthly reports on cars, customers and system users.**

**1.3. References:**

* **Dean Leffingwell and Don Widring, “Managing Software Requirements: A Use Case Approach”, Addison-Wesley, 2004.**
* **Sommerville boo**

**1.4. Stakeholders**

**The primary stakeholders for the Car Rental System include:**

**• Customers: Individuals or organizations renting vehicles.**

**• Administrators: System administrators responsible for managing user accounts, system configuration, and overall system health.**

**• Staff: Employees responsible for handling reservations, vehicle maintenance, and customer interactions.**

**• Developers: The team responsible for designing, implementing, and maintaining the Car Rental System.**

**• Management: Business executives and decision-makers utilizing system reports for strategic planning and performance analysis.**

**1.5. Overview** :

**The Software Requirements Specification document will provide a detailed description of the functional and non-functional requirements, use cases, and system constraints. It will serve as a foundation for the design, development, testing, and maintenance phases of the Car Rental System.**

## **2. Overall Description**

**The main purpose of this document is to give details about what the user can expect from the Car Rental System (CRS). This document provides an important overview of the system according to the requirements that have been given to us during the requirement analysis for this Car Rental System (CRS).**

**In the next section, we introduce product perspective followed by description of product features and user requirements in section 2. User and user characteristic in section 3 followed by general constrains in section 4. In section 5 we have assumptions and dependencies.**

**i. Product Perspective**

**Our company has been handed over the task to carry out the requirements analysis to implement a Car Rental System (CRS). We want this software to completely be a front desk system and hence will only be used by the salespeople and an Branch manager and administrator. We have realized that there are three ways to implement the Car Rental System (CRS) and they are stated as follows -**

** The existing software at the company can be upgraded to form the new Car Rental System (CRS).**

** A new Car Rental System (CRS) can be created from scratch.**

** We can follow the Component based development technique to create the system from scratch.**

**We believe that the best way to implement the Car Rental System (CRS) is to create a new one. The reasons are as follows –**

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| **** | **In case we plan to upgrade the existing system, then we will have to work on integrating the system with a legacy system database. This might create problems for us since experts in the legacy system are not readily and cheaply available.** |
| **** | **We will be able to create a system of better quality. This will be possible if we review the faults in the old system and learn from the mistakes made during the various processes that were involved to create the old system.** |
| **** | **The new system will have better performance due to usage of new and time efficient data searching algorithms which will increase the efficiency of the workplace.** |
| **** | **The new system will provide a new user friendly Graphic User Interface (GUI) which will also help to increase the efficiency of the work place.** |
| **** | **The new system will be compatible with a new database that will be created along with it. A new database has to be created due to the increase in the amount and type of information that has to be stored.** |

** The new system will be able to undergo evolution in a much simpler way and will be more adaptable to the changing systems. The upcoming changes in the near future will be predicted and the system will be designed in a way to adapt to the changes that will occur over the years.**