# **Software Requirements Specification**

for

# Parking Management System

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25-August-2010

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SRS for PMS (Parking Management System):

- **1. GENERAL DESCRIPTION** PMS is Parking Management System for managing the records of the incoming and outgoing vechiles in an parking house.
- **1.1 Purpose** The purpose for developing this type of software or introducing this PMS is to facilitate everyone who is concerned with the parking house.
  - **1.2 Project Scope** Parking Management System (PMS) is a small system that can be easily transferred from computer to computer by a simple USB stick. Its purpose is to solve a problem that really bothers many vendors today for managing of parking slots inside a parking storey. So it provides you a very simplistic solution of managing parking slots which provides you with making an entry of incoming and outgoing vehicles'. Parking Management System beside managing slots also provides you with several functionalities in order to keep your database up to date. Those are analyzed in the following pages.
  - **1.3 Document Conventions -** When writing this document it was inherited that all requirements have the same priority. First there is presented an overall view about PMS and then all features and functions are analyzed in detail.
  - **1.4 Intended Audience and Reading Suggestions -** This requirement document contains general information about PMS, functions, features and special technologies. It describes in detail all that PMS needs to work properly and with safety.

#### This document is intended for

**Developers**: in order to be sure they are developing the right project that fulfills requirements provided in this document.

**Testers**: in order to have an exact list of the features and functions that have to respond according to requirements and provided diagrams.

**Users**: in order to get familiar with the idea of the project and suggest other features that would make it even more functional.

- **1.5 Abbreviation** PMS Parking Management System
- **1.6 Overview** As the PMS is able to have a user interface. It should have a drop down boxes and if we click mouse on any control at our welcome screen action regarding that the control should be displayed. Help menu should be there. As a employee it should provide them to generate reports of the salries of employees. As a developer it should make a user interface which is user friendly. He should make the PMS as simple as he can. Backup at the main server should be made.

#### 2. OVERALL DESCRIPTION

- **2.1 Product Perspective** product i.e. PMS should be able to provide a basic and easy interchange of information i.e. it should be able to remove the communication gaps between a employee and the customer. It should be compatible with all the operating systems.
- **2.2 Product Functions** The following are the product functions of the PMS:

- The PMS login box should on the intranet.
- The password field should be secured.
- By clicking on the dropdown box of the options the employee should be able to view reports and available slots.
- Employee should be able to change the passwords.
- **2.3 User Characteristics** A user can only have his/her employee ID number as username so if he joins the parking house then only he can login. This prevents misuse, unauthorized access and hacking of the product.
- **2.4 General Constraints** Server capacity is how many users can access or can be online at once. More is the number of users more will be the network traffic and hence the server comes in a down state. Personal firewall and updating is a tough task, it should be such that it should not block the network traffic, making the system slower.
- **2.5 Assumptions and Dependencies** PMS should work even at when the network traffic is high. Server should have a power backup as well as a database backup. The PMS should be compatible with most of the operating systems i.e. previous and latest ones.

#### 3. SPECIFIC REQUIREMENTS

#### 3.1 External Interface Required

- **3.1.1 User Interfaces** The external users are the employees of the parking house. The employees can have an access to their accounts. The administrators have also an account to generate reports and manage payments of employees.
- **3.1.2 Hardware Interfaces** The external hardware interface used for accessing the PMS is the personal computers of the employees.
- **3.1.3 Software Interfaces** The Operating Systems can be any version of Windows, Linux, Unix or Mac which supports TCP/IP protocols.
- **3.1.4 Communication Interfaces** The communication interface is a local area network through Ethernet.
- **3.2 Performance Requirements** The PCs used must be at least Pentium 4 machines so that they can give optimum performance of the product.
- **3.3 Design Constraints** The constraints at the designing time are that the needs of the employees and the administrators may keep on changing so the designers must keep this in view and design the product in this way that it is easily updatable.
- **3.4 Attributes** The following are the attributes of the product PMS:
  - It should be equipped with current and archive database.

- All records can easily be updated.
- It should have its personal firewall.
- **3.5 Other Requirements** The software is such that as the time goes by the need of the Parking management, employees may keep on changing thus it is made to change from time to time.