System Requirement Specification (SRS)

Software Requirement specifications (SRS) is the starting point of the software developing activity. As system grew more complex it became evident that the goal of the entire system cannot be easier comprehended. Hence the need for the requirement phase arose. The software project is initiated by the client needs. The SRS is the means of translating the ideas of the minds of clients (the input) into a formal document (the output of the requirement phase.)

Role of SRS:

The purpose of the Software Requirement Specification is to reduce the communication gap between the clients and the developers. Software Requirement Specification is the medium through which the client and user needs are accurately specified. It forms the basis of software development. A good SRS should satisfy all the parties involved in the system Requirement Specifications: The focus is on specifying what has been found giving analysis such as representation, specification languages and tools and checking the specifications are addressed during this activity. The Requirement phase terminates with the production of the validate SRS document. Producing the SRS document is the basic goal of this phase.

Hardware Requirements:

• i3 Processor

• 2 GB Ram

• 50 GB Hard disk

Software Requirements:

• Operating System: Windows 8.1 or above

• Front End: PHP and HTML

• Back End: MySQL

Overview of the Front end:

PHP

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely- used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.PHP is a server-side scripting language designed primarily for web development but it is also used as a general-purpose programming language. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications. The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as Ade facto standard. Since 2014 work has gone on to create a formal PHP specification. The fact that PHP lacked an original overall design but instead developed organically has led to inconsistent naming of functions and inconsistent ordering of their parameters.]In some cases, the function names were chosen to match the lower-level libraries which PHP was "wrapping", while in some very early versions of PHP the length of the function names was used internally as a hash function, so names were chosen to improve the distribution of hash values.

HyperText Markup Language (HTML)

Hyper Text Markup language is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS), and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects, such as interactive forms may be embedded into the rendered page. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML can embed programs written in a scripting language such as JavaScript which affect the behavior and content of web pages. Instead of lots of commands to output HTML (as seen in C or Perl), PHP pages contain HTML with embedded code. The PHP code is enclosed in special start and end processing instruction <? php and ?> that allow you to jump into and out of "PHP mode". What distinguishes PHP from something like client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client. The client would receive the result of running that script, but would not know what the underlying code was. The best thing in using PHP are that it is extremely simple for a newcomer, but offers many advanced features for a professional programmer. Although PHP’s development is focused on server-side scripting, we can do much more with it.

• Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus the link available on a webpage are called Hypertext.

• As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

Overview of the Back end:

MYSQL

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius’s daughter, and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality. MySQL is a central component of the LAMP open-source web application software stack.

The MySQL server software itself and the client libraries use dual-licensing distribution. They are offered under GPL version 2, beginning from 28 June 2000 (which in 2009 has been extended with a FLOSS License Exception) or to use a proprietary license.

Support can be obtained from the official manual. Free support additionally is available in different IRC channels and forums. Oracle offers paid support via its MySQL Enterprise products. They differ in the scope of services and in price. Additionally, a number of third party organizations exist to provide support and services, including MariaDBand Percona.

MySQL has received positive reviews, and reviewers noticed it "performs extremely well in the average case". And that the "developer interfaces are there, and the documentation (not to mention feedback in the real world via Web sites and the like) is very, very good".] It has also been tested to be a "fast, stable and true multi-user, multi-threaded sql database server".

Functional Requirements

1. The web application displays the availability of parking lot

2.The web application enables employees to set the reaching date and time for the car also the departure date and time.

3.The web application enables employees to cancel a parking place.

4.The web application enables drivers to book parking place.

Non Functional requirements

1. The designed system should have little or no down time. It should always be up and running.

2. The system should have a fast response time. System should not take more than 30 seconds minus loading

3. The system should be secure. User should fill in his/her email address and password so as to be authenticated to the system.

4. The system Should allow the customer to park without making a reservation.

5. The system should be scalable. Even with an increasing number of users, system should be able to perform effectively.

6. The system should be user friendly with ability to show users where they are in the system and guide them on some processes through programmed controls.

7. The system should be reliable. In case of system failure, the system should be able to recover quickly and continue working normally