**Software Requirements Specification**

1. **Introduction:**

This document is the Software Requirements Specifications for e-Post office web application. The following document which provides the complete Software Requirements Specification (SRS) of “**e-Post Office**”.

* 1. **Purpose:**

The existing system is the manual system only the post office management has full rights to access the website. The existing system is not user-friendly for customers. Each and every time the customer has to visit the post office to make money order payment, insurance payment, etc. This method is very tedious process, we need to provide online system to customers.

The main purpose of e-Post Office system is to develop a web based application for post office which helps post office management and their customers. It handles all types of transaction details of the post office and this project will reduce the clerical work as most of the work done by computer and customers can directly view all transaction details without visiting post office.

* 1. **Document Conventions:**

The following conventions have been followed while writing this document:

* Font :- Times New Roman
* Size 16 for Main Headings
* Size 14 for Sub Headings
* Size 12 for the rest of the document.
* Words in Bold are important terms, and have been formatted to grab the attention of the reader.  
  1. **Intended audience and Reading suggestions:**

This document is for post office Administrator, employees and customers. This document aims at explaining in an easy manner, the basic idea behind e-Post Office. This document helps developers to easy to understand. Future development objectives are also discussed in this document.

* 1. **Scope of the development project:**

This project has following features:

* All transactions are carried out online. Able to login, view balance, account statement and perform transaction.
* The management can add or update transaction details of SB, RD, TD, SSA account. The system calculates interest rates automatically.
* This site enables the customers to perform the basic transactions by sitting at their office or at homes through PC or laptop.
* Customer can view their account and transaction details through online by entering login id and password. Customer can view updated balance anytime.
* Post office management can add payment details of electricity bill payment, Telephone bill payment, money order, etc.
* Customer can track delivered and pending status of register letter and speed post letter by entering tracking Id.
* Customer can view insurance scheme details, paid amount and due date. Even they can download receipt of latest transaction.
  1. **Definitions, Acronyms and Abbrevations:**
* E-PostOffice – Online Post office management system
* SRS – Software Requirements Specification
* HTML – Hyper text markup Language
* PHP – PHP: Hypertext pre-processor
  1. **References:**
* www.w3schools.com
* Software engineering by Pankaj Jalote
* Learning PHP, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites by Robin Nixon

1. **Overview of document**

The following subsections provide complete overview of the SRS documentation for the product “e-Post Office”. For the rest of the document, we first define the overall product. Then, we give the external interface requirements, followed by a brief description of the product components and features. In the last section, we have provided the non functional requirements of the product.

* 1. **Product perspective:**

It is a web based system implementing client-server model. The e-PostOffice provides simple mechanism for users to share and acquire knowledge.

The following are the main features that are included in e-PostOffice:

* Cross platform support: Offers operating support for most of the known and commercial operating systems.
* User account: The system allows the user to create their accounts in the system and provide features of updating and viewing profiles.
* Number of users being supported by the system: Though the number is precisely not mentioned but the system is able to support a large number of online users at a time.
* Search: search is simply local search engine based on key words.
* FAQs section: Frequently asked section contains answer of problem which post office customers frequently faced.
  1. **Product functions:**

The product has following functions:

* The product works online with help of internet connection.
* The website is secure because user must enter login details to access the website.
* Reports can be viewed as and when needed from internet.
* Consumption of time while generating report is less
  1. **User classes and Characteristics:**

The major user classes that are expected to use this product are as follows:

* **Administrator**: Admin is the main user of the website who controls complete website with full authority.
* **Employees**: Employees are the branch managers, staff of the post office.
* **Customers:** Customers can register online and they can create all types of accounts through online. Customers can make any types of major transactions through online.   
  1. **Operating environment:**

The server needs following tools to run the website:

* Apache Server
* MySQL Server  
  1. **Design and implementation constraints:**

In order to create good software, design constraints and other contingencies need to be addressed. In this section we will enumerate any and all considerations that must be made when creating this project.

* Must be coded efficiently enough to run well on provided server hardware.
* Client side code and/or web pages must be able to run efficiently on low end hardware.
* The database will be created and maintained in a way that makes it of reasonable and manageable size.
  1. **User documentation:**

FAQ and Online user documentation will be provided with screenshots and video tutorials.

* 1. **Assumptions and dependencies:**
* Authentication is provided for this application only registered Users can access.
* Every user must enter valid login id and password to use this web application.
* It can be accessed over the Internet.
  1. **Overview of data requirements:**
* The customer profile data added by admin or employees.
* The settings and master data added by admin.
* The system must has at least one user record.

* 1. **General constraints, Assumptions, Dependencies, guidelines**

This product is a web based application meant due to which a major constraint on the performance will be due to the bandwidth of the web connection on both sides. A faster bandwidth will result in smaller time lags. It also depends on web server. So, if due to some reason web server goes down, the e-Post Office project will stop working.

1. **External Interface requirements:**
   1. **User Interface:**

The software provides mainly two user interfaces, one pertaining to employees and other for customers.

* 1. **Hardware interface:**
* **Operating system:** Windows XP
* **Hard disk:** 40 GB hard disk
* **RAM :** 1 GB RAM
* **Peripheral devices**
* **Processor:** Intel Pentium or above  
  1. **Software interface:**
* Server : Apache Server 2.4.7
* Language Used : PHP 5.4
* Database : My SQL 5.5
* User Interface Design : HTML, AJAX, Javascript
* Web Browser : Mozilla, Google Chrome, Internet Explorer
* IDE : Adobe Dreamweaver CS6  
  1. **Communication Interfaces:**

The project shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite.

1. **Specific requirements:**
   1. **Functional requirements:**

* **Login module:**

This module allows post office management and customers to login to the system by entering login id and password.

* **Deposit module:**

In this module management can update transaction details of SB, RD, TD, SSA. Customer can view account details and transaction details.

* **Bill Payment module:**

In this module management can update Telephone and Electricity bill paid by customers. The system generates bill receipt after the bill payment.

* **Money order payment module:**

In this module management can update money order payment details paid by customers. The system calculates commission and tax automatically and after the confirmation the system generates bill receipt. It provides facility to track the status of Money order details.

* **Track consignments module:**

This is the online consignment tracking facility which allows customer to track speed post, or registered letter information by entering consignment number. Even the customer will receive a message after the item delivery.

* **Insurance module:**

Insurance module which displays different insurance schemes for customers in the website. The main purpose of insurance module is any customer can view insurance detail in the website at any time without going to the post office. The customer can check the policy details, paid and pending premium payments, etc.

* **Dashboard module:**

This module is for post office management where they can login and update transaction details, Electricity and Telephone bill payment, money order records, Register and speed post records, and insurance details.

* 1. **Performance Requirements:**

This section lists the performance requirements expected from the e-Post Office Project.

* The users shall be able to add any records fewer than 5 seconds.
* The users shall be able to view any records fewer than 10 seconds.
* The users shall be able to download videos within 20 -40 seconds.
* The navigation between pages shall take fewer than 5 seconds.
* The application shall be able to do a validation check on the information provided in the user-authentication form and the place-order form to avoid false or incomplete information.
  1. **Design Constraint:**

This section lists the design requirements for the e-Post Office project. The user interface (UI) must have specific fonts and font sizes. The system shall match the fonts and font sizes used for all the pages of the application.

* 1. **Software system quality attributes:**

**Integrity :**

* The authorized user shall be allowed to access the e-Post Office Project application.
* Based on the user type, the e-Post Office shall provide a users specific interface.

**Correctness:**

* The assigned project modules should be received by the specified user.

**Availability:**

The system shall be made available to the employees, customers and administrator year round.

**Robustness:**

The system shall be able to save and view all the records in the fraction of seconds.

1. **Other non functional requirements:**

**Installation:**

A Readme for installation instructions and required dependencies will be provided with the software. An user friendly installer script will also be provided.