SRS Document

**1. INTRODUCTION**

1.1  PURPOSE

The purpose of this document is to provide the software requirement specification report for the Email Newsletter Web Application.

1.2  DOCUMENT CONVENTIONS

|  |  |
| --- | --- |
| DB | Data base |
| ER | Entity relationship |

1.3  INTENDED AUDIENCE AND READING SUGGESTIONS

This project is the college level project and is implementing under the guidance of college professors. Email newsletters are a form of direct mail sent by an organization on a regular or semi-regular basis. An email newsletter may include updates on an organization, tips and interesting facts about the industry, or savings and special offers.

1.4  PROJECT SCOPE

The purpose of the email newsletter is to push intended users to find out more about new topics found on an organisation’s website, blogs, etc. The system is based on a relational database. We will have a database supporting admin panel functions and the user side functions as well.

1.5 REFRENCES

* fundamental of database systems by ramez elmarsi and shamkant b.navathe

**2. OVERALL DESCRIPTION**

2.1  PRODUCT PERSPECTIVE

Our database System stores the following information as shown below .

* THE SUBSCRIBER DETAILS:  
  It includes the name and email of the subscriber. This information is used to send periodic email newsletters.
* THE ADMIN DETAILS:  
  It includes userId, password and email of the admin for the website. This information is used to perform security checks at the backend.
* THE TOUR DETAILS:  
  It includes all the relevant information regarding various Tour’s provided by our website like name of tour, description, duration, etc.

2.2 USER CLASS AND CHARACTERISTICS

2.2.1 VISITOR/SUBSCRIBER

A person visiting our website should be able to subscribe to our newsletter. The registered user then gets an email for confirmation. The visitor should be  able to do the following functions:

* Subscribe to the newsletter
* Unsubscribe the newsletter

2.2.2 ADMINISTRATOR

The administrator of the website should be able to do the following functions:

* Add/Delete a tour
* Create newsletters
* View subscribed users

2.3   OPERATING ENVIRONMENT

Operating environment for the EMAIL NEWSLETTER DATABASE is as listed below

* client/server system
* operating system : Windows 8
* database: MySQL Community Server
* platform: PHP, JavaScript

**3. SYSTEM FEATURES**

* DESCRIPTION AND PRIORITY

The email newsletter web application lets an organisation send periodic updates to interested audience at regular intervals. The system maintains information on subscribed users.

* STIMULUS/RESPONSE SEQUENCES
  + Browse the content of the website
  + Subscribe to the newsletter of the website
  + Receive confirmation email
  + Start receiving periodic newsletter
  + Unsubscribe to the newsletter
* CLIENT/SERVER SYSTEM

A client/server system is a distributed system in which,

(a) some sites are client sites and others are server sites.

(b) all data resides at the server sites.

(c) all applications execute at the client sites.

The term client/server refers primarily to an architecture, or logical division of responsibilities , the client is the application (also known as the front-end), and the server is the DBMS (also known as the back-end).

**4. EXTERNAL INTERFACE REQUIREMENTS**

4.1 USER INTERFACES

* Front-end software:     HTML, JavaScript, CSS
* Back-end software:       PHP, MySQL

4.2 HARDWARE INTERFACES

* Windows 8.
* Browser which supports HTML & Javascript.

4.3 SOFTWARE INTERFACES

|  |  |
| --- | --- |
| Softwares used | description |
| Operating  system | We have chosen Windows 8 operating system for its best support. |
| Database | We have chosen MySQL database. |

4.4 COMMUNICATION INTERFACES

This project supports all types of web browsers.

**5.  OTHER  NONFUNCTIONAL  REQUIREMENTS**

**5.1 PERFORMANCE REQUIREMENTS**

The steps involved to perform the implementation of email newsletter data base are as listed below.

**A)E-R DIAGRAM**

E-R Diagram constitutes a technique for representing the logical structure of a database in a pictorial manner. This analysis is then used to organize data as a relation, normalizing relation and finally obtaining a relation database.

Visitor

Newsletter

Subscribes

Send updates

Unsubscribe

Administrator

Creates

**B) NORMALIZATION :**

The basic objective of normalization is to be reduce redundancy which means that information is to be stored only once. Storing information several times leads to wastage of storage space and increase in the total size of the data stored.

If a Database is not properly designed it can gives rise to modification anomalies. Modification anomalies arise when data is added to, changed or deleted from a database table. Similarly, in traditional databases as well as improperly designed relational databases, data redundancy can be a problem. These can be eliminated by normalizing a database.

Normalization is the process of breaking down a table into smaller tables. So that each table deals with a single theme. There are three different kinds of modifications of anomalies and formulated the first, second and third normal forms (3NF) is considered sufficient for most practical purposes. It should be considered only after a thorough analysis and complete understanding of its implications.

5.2 SAFETY REQUIREMENTS

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

5.3 SECURITY REQUIREMENTS

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.

5.4 SOFTWARE QUALITY ATTRIBUTES

* AVAILABILITY:  The website should be accessible to all the users at all the times. Any user should be able to subscribe/unsubscribe to the E-newsletter.
* CORRECTNESS:  The E-newsletter should only be sent to subscribed users at the correct periodic intervals.
* MAINTAINABILITY: The administrators should maintain correct schedules of sending newsletters and also update its body periodically.
* USABILITY: The E-newsletter’s content and frequency should satisfy maximum number of customers needs.