SOFTWARE REQUIREMENTS SPECIFICATION

for

Digital Diary

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version
Digital Diary	November 19, 2019	First	Release 1.0

1 Introduction

1.1 Purpose

Digital Diary is a online personal diary application where users can write diary and also modify it whenever required. It also includes a TODO section where user can list out their dialy goals and try to accomplish those goals.

1.2 Document Conventions

This document is prepared using Latex and has a font as 'Times New Roman'. The fixed font size that has been used in this document is 12 points with 1 line spacing. All pages are numbered and number appears on the bottom of the page. Standard IEEE template is the template used to organize the appearance of the document and its flow.

1.3 Intended Audience and Reading Suggestions

This document is intended for users who have a general habit of writing and maintaining diary. It will allow users to write the diary on an online platform and never worry about the privacy of the diary. It is also intended for users who maintain their TODO list for the day and work accordingly throughout the day.

The Organization of this document is as follows: Chapter 1 Introduction gives the introduction to this document; Chapter 2 Overall Description gives the high level explanation of the software, its functions and characteristics; Chapter 3 External Interface Requirements will give the information about various interfaces; Chapter 4 System Features will give detailed explanation of the features of the software; Chapter 5 Other Nonfunctional Requirements will give the overview of the Non functional requirements.

1.4 Project Scope

Digital Diary application will empower user to write diary on an online website. The application also allows the users to add the images to the daily diary content. Many users tends to forget about the task they wanted to do throughout the day so for those users it includes the feature to add a TODO list on a daily basis and which will helps the users to priortize their work based on the sequence of the todo list.

1.5 References

None

2 Overall Description

2.1 Product Perspective

Digital Diary application is new self-contained product and does not depend upon any existing software application. This will replace all the traditional and outdated means of maintaining diary.

2.2 Product Functions

The breif information of all the functionality present in the application are given below while the higher level view is provided in Chapter 4.

1. Login/Register the user
2. Write a new diary
3. Add images
4. Create a TODO task list

2.3 User Classes and Characteristics

2.3.1 Diary User

Diary user are the primary user of the application. They have the privilege to write the diary, add image and maintain TODO list for the day. They can also provide the feedback about the functionality of the website.

2.3.2 Admin

Admin maintain the website and bring out necessary update for the website. Admin also receives the feedback from the user.

2.4 Operating Environment

- **Operating System:** Windows XP,7,8,10
- **Browser:** Internet Explorer 8 and above, Google Chrome 10 and above and FireFox 4 and above.

- **Database:** MySQL
- **Web Server:** Apache

2.5 Design and Implementation Constraints

- The user must have proper internet connection to get access to the application.
- The user must have basic browser navigational skill so as to understand the basic functionality provided by the system.
- The system will be intended to run on Firefox 4 and above, Google Chrome 10 and above and Internet Explorer 8 and above.
- The user must have correct userid and password to enter into the application.
- The system should work on most home desktop and laptop computers which support JavaScript and HTML5.

2.6 User Documentation

A user manual will be provided with the Digital Diary software. It would contain detailed descriptions of the functionalities of the software, how the user would interact with the software.

2.7 Assumptions and Dependencies

- We have assumed that user have a basic understanding of the working of the computer.
- The user should have good internet connection.

3 External Interface Requirements

3.1 User Interfaces

Digital Diary's design is very simple and very interactive. The user is provided with the register page where he/she has to register and then it will direct the user to the home page. The Home page is provided with several tab for different purposes. There are special error messages displayed throughout the website to guide the user.

3.2 Hardware Interfaces

3.2.1 Client Side

- Operating System: Windows Xp,7,8,10
- Processor: Intel Celeron, I3 and above
- RAM: 256Mb and more

3.2.2 Server Side

- Operating System: Windows Xp,7,8,10
- Processor: Intel Celeron, I3 and above
- RAM: 256Mb and more
- Hard Drive: 1GB and more

3.3 Software Interfaces

We are using MYSQL 5.7 version for storing data into the database. PHP is used as server side language for processing all types of request by the user.

3.4 Communications Interfaces

Digital Diary doesnot require any communication interface for its working.

4 System Features

4.1 User Registration

4.1.1 Description and Priority

If new user wanted to use the application then he/she must register to the application. The user must provide the necessary details for registering into the application. This step is of upmost priority in the application as this is related to the security of the application.

4.1.2 Stimulus/Response Sequences

This is the basic step for using the application. Every individual must register to enter into the application. Every individual is initially opens this page.

4.1.3 Functional Requirements

1. Display the Registration(signup) page to the user.
2. Enter the Details.
3. Check if username is unique or not from the database.
4. If unique, display the home page otherwise display error message.

4.2 User Login

4.2.1 Description and Priority

The already existing user must use their userId and password to login into the Digital Diary. If the user enters the invalid userid/password then he/she would not be allowed to enter into the application.

4.2.2 Stimulus/Response Sequences

For already existing users this feature is used to again enter into the application after successful logout.

4.2.3 Functional Requirements

1. Login page is displayed to the user.
2. User enters the userId and Password.
3. The Hash of the password is matched with the corresponding userID stored in the database.
4. If matched then directed to home page otherwise failure message.

4.3 New Diary Entry

4.3.1 Description and Priority

In this feature, User can daily write a diary and select a category corresponding to the type of event happened in the day.

4.3.2 Stimulus/Response Sequences

At the Home page, the user is provided with Diary tab. If the user select this tab then he/she would be able to add new Diary entry for the day.

4.3.3 Functional Requirements

1. Select the Diary tab.
2. Enter the Diary title, select the category and write the content for the diary.
3. Send all the information to the database.
4. User is directed to the page where all the diary entry are displayed.

4.4 Add Image

4.4.1 Description and Priority

Image also be added through Digital Diary.

4.4.2 Stimulus/Response Sequences

At the Home page, the user is provided with Images tab. If the user select this tab then he/she would be able to add new image.

4.4.3 Functional Requirements

1. Select the Images tab.
2. Choose the image from the device.
3. Send the encrypted form of image to the database.
4. User is directed to the page where all the images entry are displayed.

4.5 TODO Task

4.5.1 Description and Priority

In this feature, all the daily schedule with the priority are stored.

4.5.2 Stimulus/Response Sequences

At the Home page, the user is provided with TODO tab. If the user select this tab then he/she would be able to add new task for the day.

4.5.3 Functional Requirements

1. Select the TODO tab.
2. Enter the new task.
3. Send the task to the database.
4. User is directed to the page where all the task are displayed.
5. User can also delete the task with the cross button provided besides the task, whenever, the task is completed.

5 Other Nonfunctional Requirements

5.1 Performance Requirements

The software should have high performance and low failure rates. The software should be able to transmit/receive data from databases with high baud rates, ranging from Mbps to Gbps. Machines should have all recent Windows updates installed, and have their security not compromised by viruses. Machines must have firewalls installed and active virus scanning software in usage.

5.2 Safety Requirements

The user should keep their userid and password safely to ensure complete secrecy of their diary data and images. The user should not reveal any personal information while submitting their feedback. The user should regularly change their password so to have complete security.

5.3 Security Requirements

All the data should be transmitted through a secure channel which has higher encryption with it. In addition to this, all computers must have firewalls, and be operating on a LAN internet connection, not a WiFi connection. Moreover, all computers must have all recent Windows updates installed, and must have solid anti-virus software.

5.4 Software Quality Attributes

- **Reliability:** The reliability of the overall program depends on the reliability of the separate components.
- **Availability:** The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs.
- **Maintainability:** MySQL is used for maintaining the database and the Apache server takes care of the site. In case of a failure, a re-initialization of the program is recommended.
- **Portability:** The application is portable on different platform. The application will work on different browsers based on above mentioned requirement.

5.5 Business Rules

6 Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

6.1 Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

6.2 Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

6.3 Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>