Software Requirements Specification

For CRUD Registration form

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1. Introduction

This document lays out a project plan for the development of a Registration form to Create, Read, Update and Delete (CRUD) using Laravel fame work Xampp software server and phpMyAdmin to execute and store the database.

Laravel makes interacting with databases extremely simple across a variety of supported databases using raw SQL. Currently, Laravel provides first-party support for five databases. The configuration for Laravel's database services is located in the application's config/database.php configuration file. phpMyAdmin is an open-source software tool written in PHP(Hypertext Preprocessor). Basically, it is a third-party tool to manage the tables and data inside the database. phpMyAdmin supports various type of operations on MariaDB and MySQL. The main purpose of phpMyAdmin is to handle the administration of MySQL over the web. XAMPP is a free and open-source cross-platform web server. It is simply a local host or server that is used to test clients or websites before publishing them to a remote web server. The XAMPP server software on a local computer provides an appropriate environment for testing MYSQL, PHP, Apache, and Perl projects.

1.1 Purpose

The purpose of this SRS document is to build an online database system as CRUD operations are used in persistent storage applications, meaning these applications will keep their data even after the system powers down. These are different from operations on data stored in volatile storage, like Random Access Memory or cache files. The CREATE operation adds one or more new records with distinct field values in a table. READ returns records (or documents or items) from a database table (or collection or bucket) based on some search criteria. UPDATE is used to modify existing records in the database. DELETE operations allow the user to remove records from the database.

1.2 Intended audience

Anyone and everyone can use this application, ranging from a child to an old-age person. As long as they have access to the internet. Through the Chrome browser specifically. This has been implemented under guidance of facilitators and many web developers.

1.3 Scope

The development of this application is to ease the pressure of having to store keep hardcopy pages of every new information, whether at school, work, supermarkets etc. The database system will store and save every information entered for as long as it is needed. This will make it convenient for everyone.

1.4 References

These are the sources used in writing the SRS.

https://www.altexsoft.com/blog/business/functional-and-non-functional-requirements-specification-and-types/#functional-vs-nonfunctional-requirements

https://krazytech.com/projects

https://www.crowdstrike.com/cybersecurity-101/observability/crud/

Ecommerce Websites: What They Are + How To Build A Working One (ecommerceceo.com)

How to write a good SRS for your Project - GeeksforGeeks

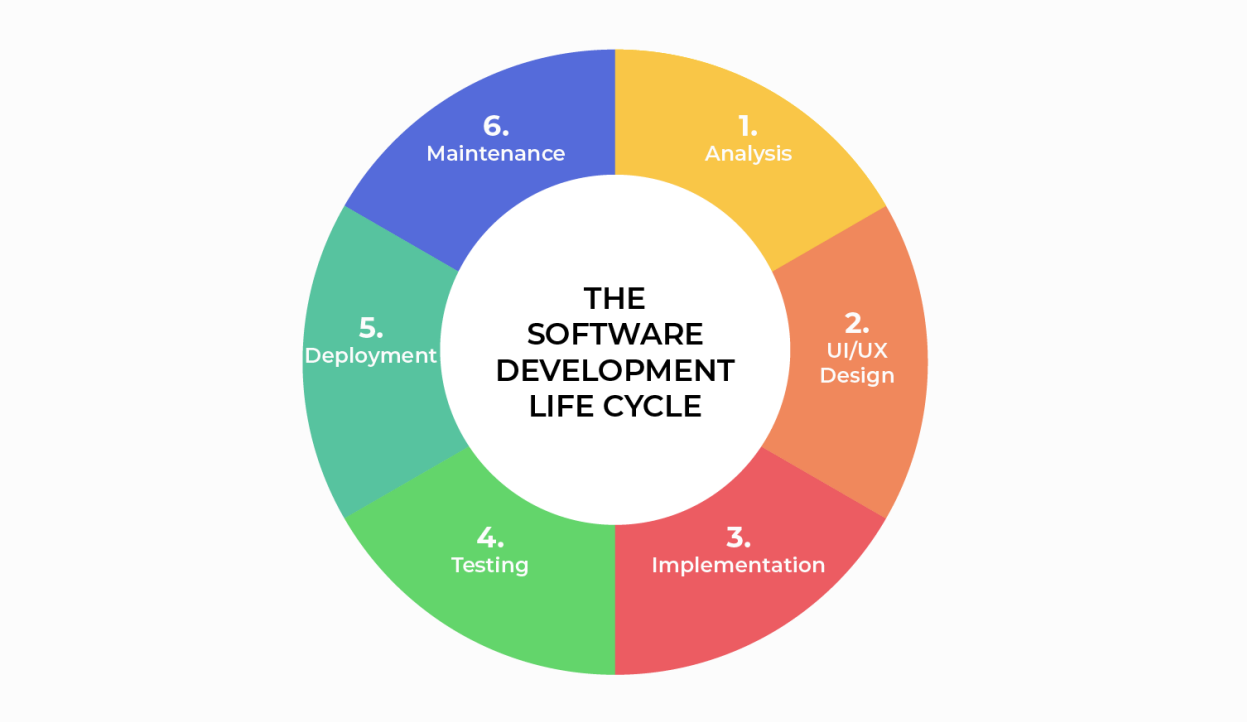
1.5 Overview

This SRS document will show in detail the properties of the application. The objective of the application is more emphasized and in great detail.

2. The Overall Description

In this section, I will describe the general factors that affect the product and its requirements. This section does not state specific requirements. Instead, it provides a background for those requirements, which are defined.

The website is developed according to the current need in this particular field. The rise of social media platforms (SMPs) has increased information exchange, which can influence social consumer fashion brand engagement (SCFBE). Although there is evidence that SMPs increase online purchasing, there is limited understanding regarding how the internet affect social fashion engagement, fashion brand relevance, and buying decisions. The internet has provided new ways to exchange brand-related information and influence the purchase decision making of customers which has increased the importance of SMPs for brands, marketers, businesses, and consumers. Thus, the use of this clothing website will help users be in style with just a press on a button.



2.1 Software Development

After all requirements analysis and design choices are already defined, the actual coding starts.

2.2 Product Functions

- Users should be able to enter onto the website through any browser (preferably Chrome).
- The user will then come across a Registration form with six (required) fields to fill in
- User will have to enter details on fields: Name, Surname, Email, Gender, Weaknesses and Strengths.
- The user should be able to submit the information added on the Submit button provided at the bottom of the page.
- The page will be directed to phpMyAdmin where you will see the details entered on the form.
- On phpMyAdmin the user will be able to create, read, update and delete information on the database.
- The database can be printed out, exported, and more data can be imported.

3. External Interface Requirements

3.1 System Interfaces

Visual Studio Code editor for coding;

- HTML, CSS, PHP programming languages
- Laravel frame work
- Google Chrome to execute the code
- Xampp server software

3.2 Interfaces

- HTML

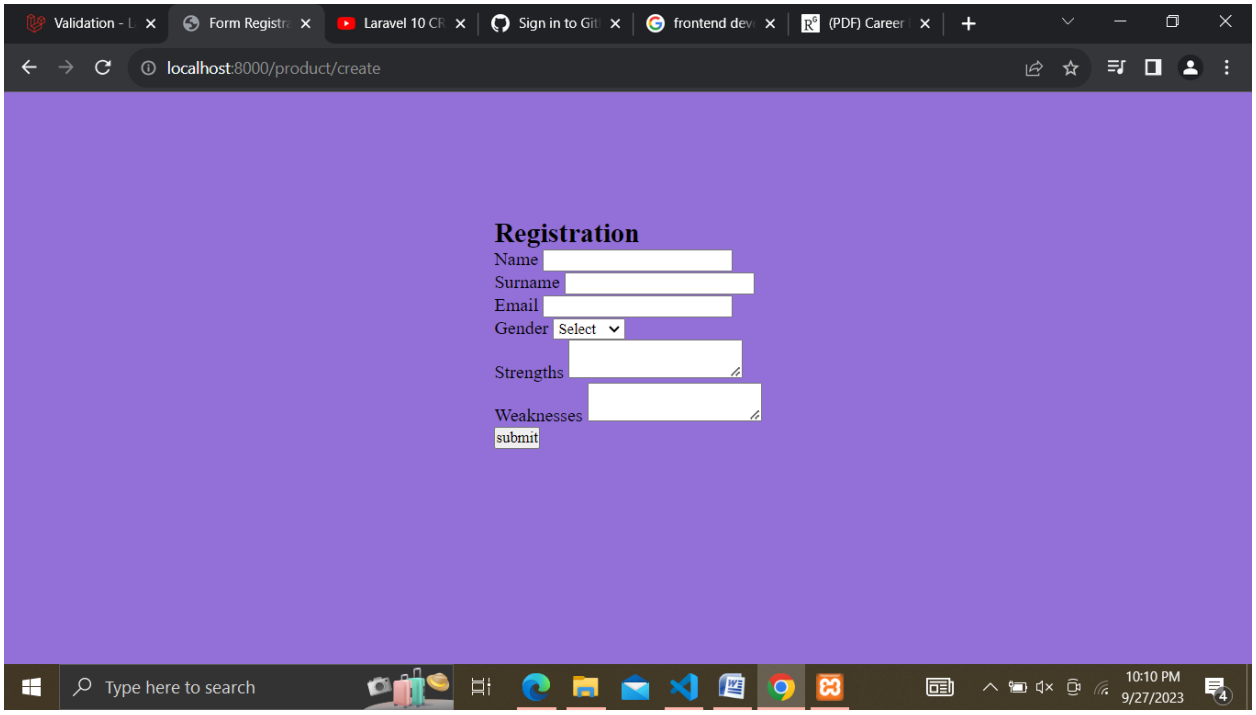
HTML is a Hyper Text Markup Language, it is a programming language of the web. It describes the structure of the Webpage. creating web pages and web applications. With Cascading Style Sheets (CSS), it forms a triad of cornerstone technologies for the World Wide Web.

- Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML. Thus, on my website, I have used CSS to add colour to my pages, decorate fonts and buttons, and style my pages to look attractive and appealing to the user.

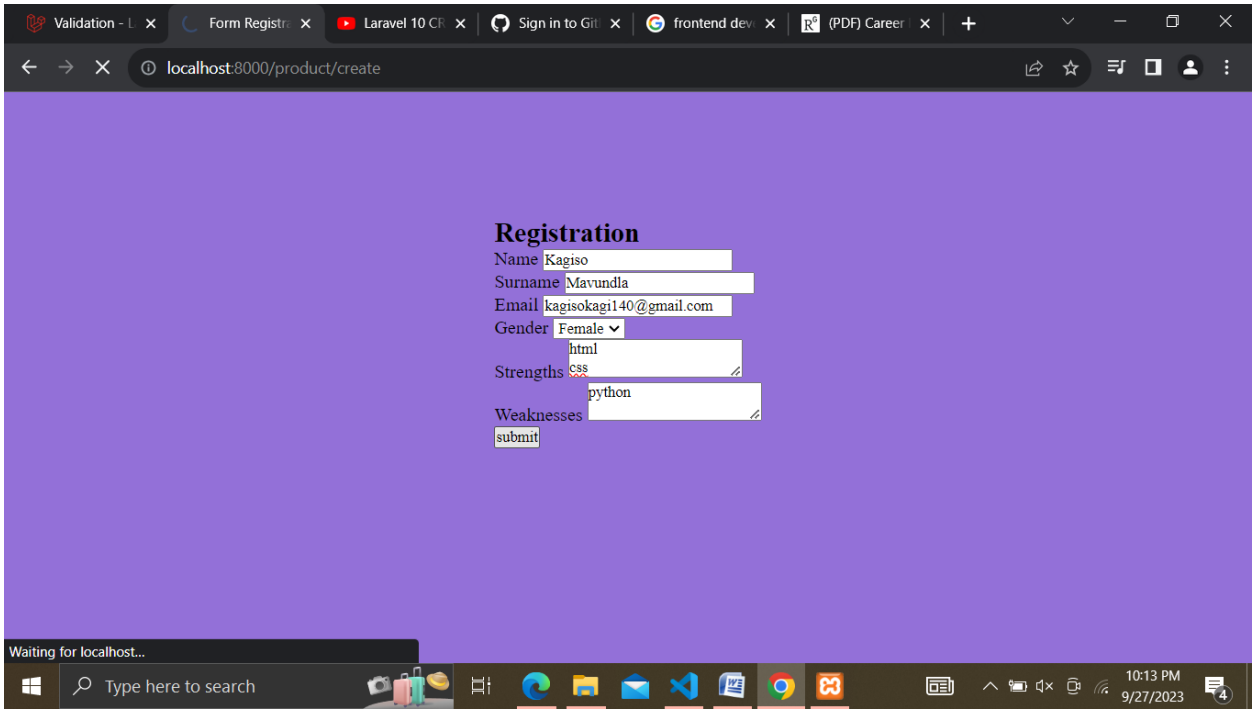
3.3 Wireframes

User interfaces

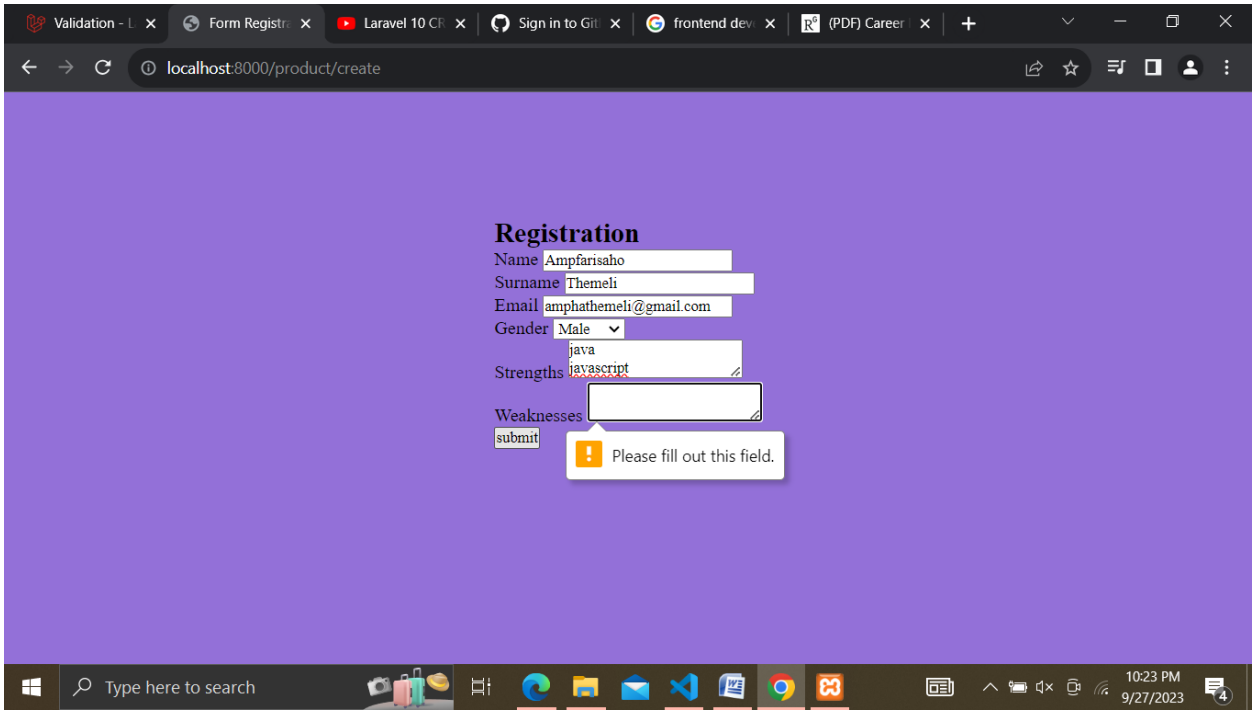
This is the registration form where the user will be able to enter their personal details.



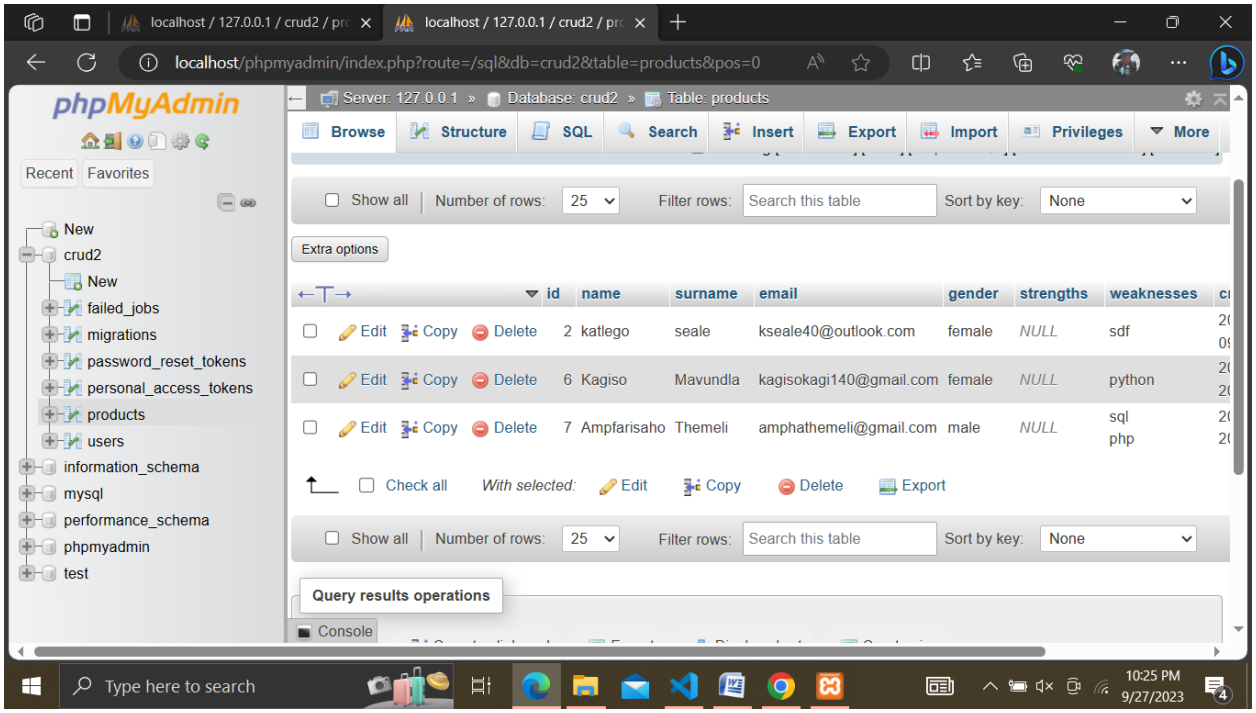
The user will enter personal details on the required fields provided



Since the fields are required, the user will not be able to submit when the text field empty. Each text field needs to be filled in.

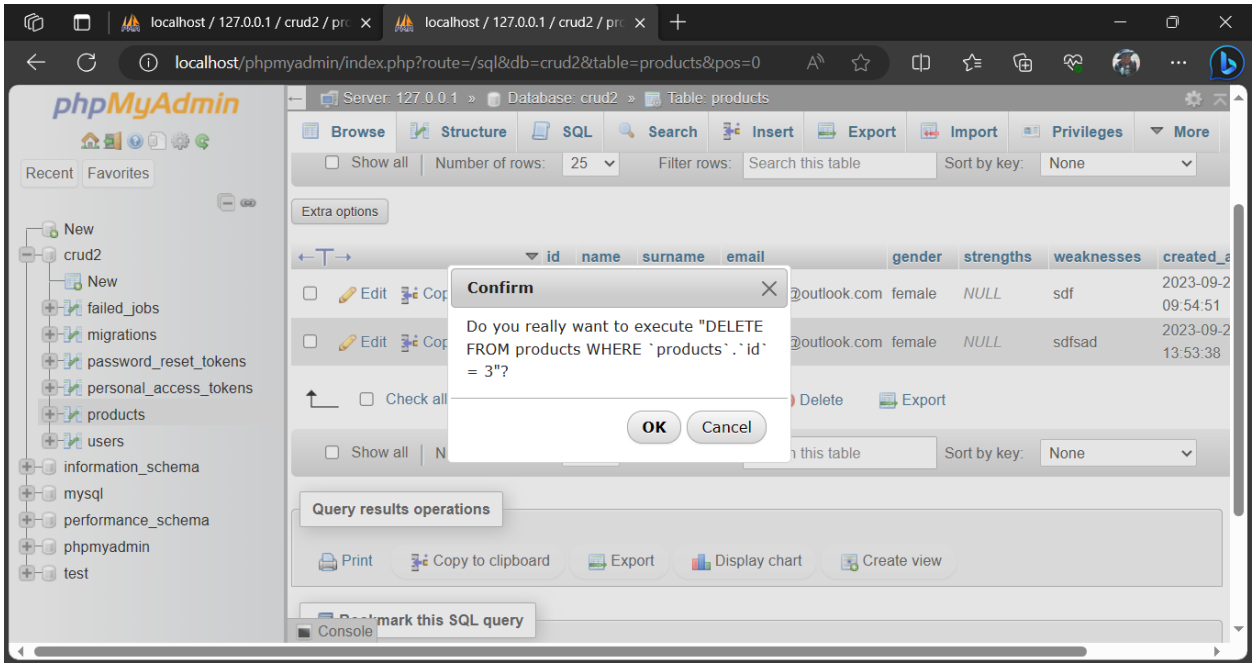


Data has been added on the database

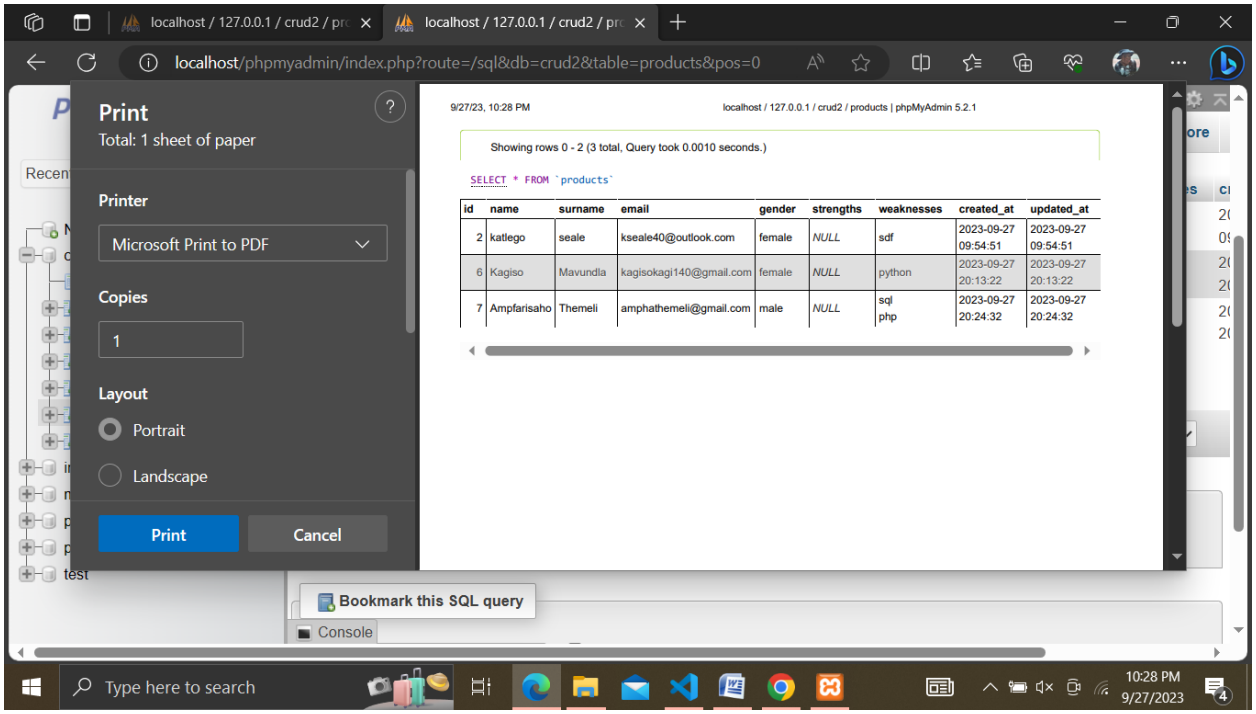


Personal details entered on the registration form are stored on the database above

A row/column can be deleted from the database



Database can be printed out as a document



4. Non-Functional Requirements

The steps involved to perform the implementation of the website are listed below.

a) Reliability

The database update process must roll back all related updates when any update fails.

b) Availability

New module deployment mustn't impact front page, product pages, and check out pages availability and mustn't take longer than one hour.

c) Performance

The front-page load time must be no more than 2 seconds for users that access the form using an LTE mobile connection.

d) Scalability

The data limit must be scalable enough to support 500 users at a time.

e) System Context Model

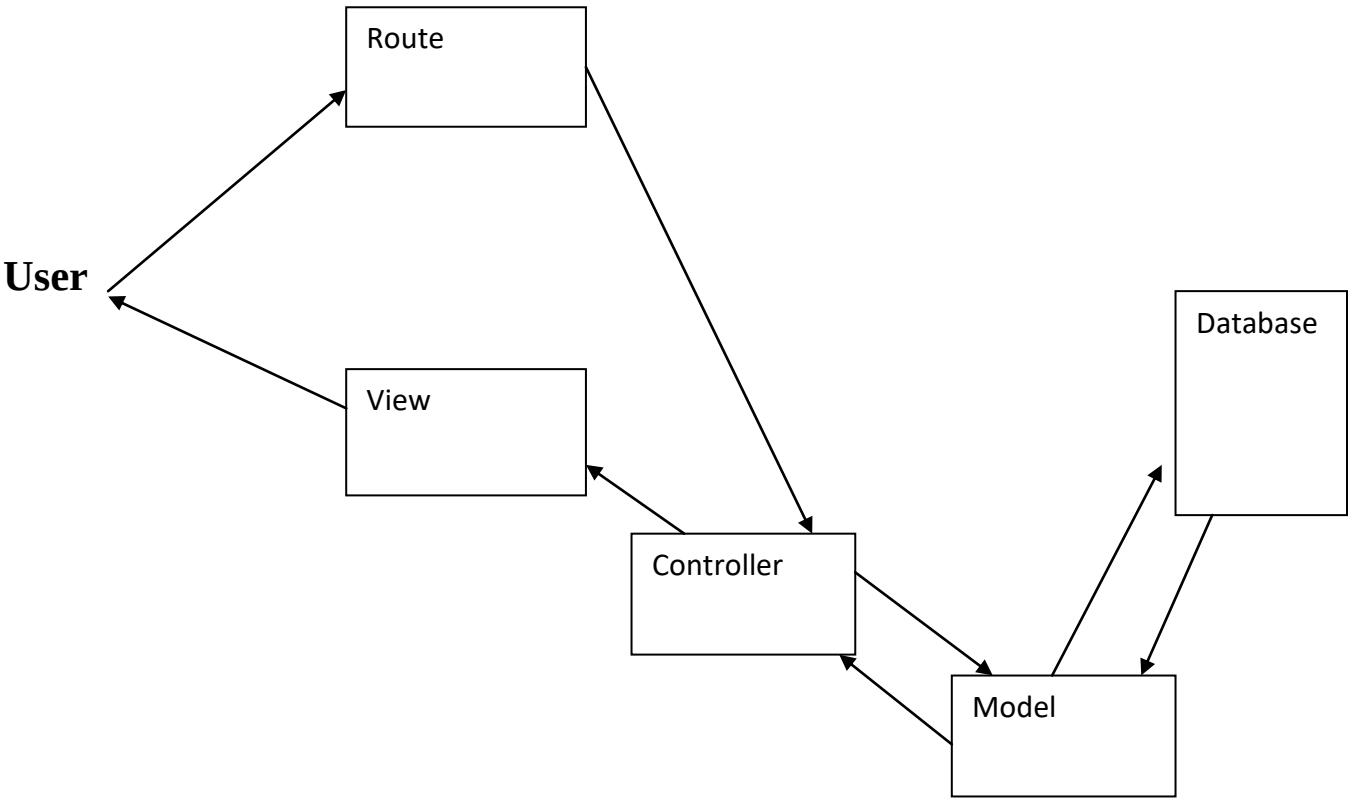


Figure: System Context Model

5. Conclusion

In conclusion, CRUD operations are fundamental to working with databases and understanding how they are implemented in different databases is crucial for efficient and secure data manipulation in applications. By following best practices and understanding the specific implementation of CRUD operations in the database being used, developers can effectively design and develop database-driven applications.