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Scholarship Scheme Management Web Application

Software Requirement Specification

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1. Introduction

1.1 Purpose

The purpose of this document is to define the requirements for developing a web application focused on providing information about scholarship schemes, facilitating document uploads, and enabling document verification.

1.2 Scope

The web application will allow users to access information about various scholarship schemes based on their state and caste selections. Users can upload required documents and track the verification status. The application also includes a University Side server for document verification.

1.3 Definitions, Acronyms, and Abbreviations

- SRS: Software Requirements Specification
- UI: User Interface
- API: Application Programming Interface
- DB: Database

1.4 References

- <https://react.dev/learn>
- <https://developer.mozilla.org/en-US/>
- <https://github.com/>
- <https://www.npmjs.com/>
- <https://www.netlify.com/>

1.5 Overview

This document covers the detailed requirements for the web application, including functionality, user interfaces, external interfaces, performance, security, and design constraints.

2. General Description

2.1 Product Perspective

The web application is positioned as a user-centric platform that bridges the gap between scholarship seekers and providers. It provides an intuitive and interactive interface for users to explore available scholarship schemes, understand their eligibility criteria, and seamlessly navigate the document upload and verification processes.

2.2 Product Functions

The core functions of the web application revolve around information dissemination, user interaction, and backend integration. It enables users to access detailed information about scholarship schemes, including eligibility criteria and required documents. The application also allows for secure document uploads and provides real-time status updates on document verification. Furthermore, it incorporates user authentication and authorization mechanisms to ensure data privacy and security.

Additional Features

In addition to the core functions mentioned above, the web application includes the following features:

- **Search Functionality:** Users can search for specific scholarship schemes based on keywords, categories, or other criteria, enhancing accessibility and usability.
- **Notification System:** The application provides notifications to users regarding upcoming deadlines, document verification updates, and other relevant information, keeping them informed and engaged.
- **Document Management:** Users can manage their uploaded documents, including editing, deleting, and resubmitting as necessary, improving document organization and user control.
- **Feedback Mechanism:** The application allows users to provide feedback, suggestions, or complaints, fostering user engagement and continuous improvement.

- **Multi-Language Support:** Support for multiple languages to cater to a diverse user base, enhancing inclusivity and accessibility.
- **Analytics Dashboard:** Administrators have access to an analytics dashboard with insights into user behavior, document verification trends, and system performance metrics, facilitating data-driven decision-making and optimization.

2.3 User Characteristics

The user base of the web application comprises diverse stakeholders, including students seeking scholarship opportunities and universities responsible for verifying uploaded documents. Understanding the varying needs and preferences of these users is crucial in designing an inclusive and user-friendly interface.

2.4 General Constraints

The development process is governed by certain constraints, including compliance with data privacy regulations, adherence to specified technologies such as ReactJS, CSS, and JavaScript for frontend development, and seamless integration with the University Side server for efficient document verification.

2.5 Assumptions and Dependencies

Assumptions are made regarding the availability of Internet connectivity for users and the functionality of the University Side server for document verification. These assumptions form the basis for the smooth functioning of the web application and its integrated systems.

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

The application will have intuitive user interfaces for:

- Viewing scholarship schemes and eligibility criteria.
- Uploading documents with status tracking.

- Login and signup functionalities using mobile numbers.

3.1.2 Hardware Interfaces

No specific hardware interfaces are required.

3.1.3 Software Interfaces

Integration with the University Side server for document verification via APIs.

3.1.4 Communications Interfaces

APIs for communication between frontend and backend systems.

3.2 Functional Requirements

3.2.1 Scholarship Information Display

- Display scholarship schemes based on user selections.
- Provide detailed information about eligibility criteria and required documents.

3.2.2 Document Upload and Verification

- Allow users to upload documents securely.
- Track document verification status (pending, verified, not verified).

3.5 Non-Functional Requirements

3.5.1 Performance

- Fast loading times for UI components.
- Scalability to handle multiple user requests concurrently.

3.5.2 Reliability

- Ensure system availability with minimal downtime.

3.5.3 Availability

- High availability of services to users.

3.5.4 Security

- Secure data transmission and storage.
- Authentication and authorization mechanisms for user access.

3.5.5 Maintainability

- Well-documented codebase for easy maintenance.
- Modular architecture for scalability and updates.

3.5.6 Portability

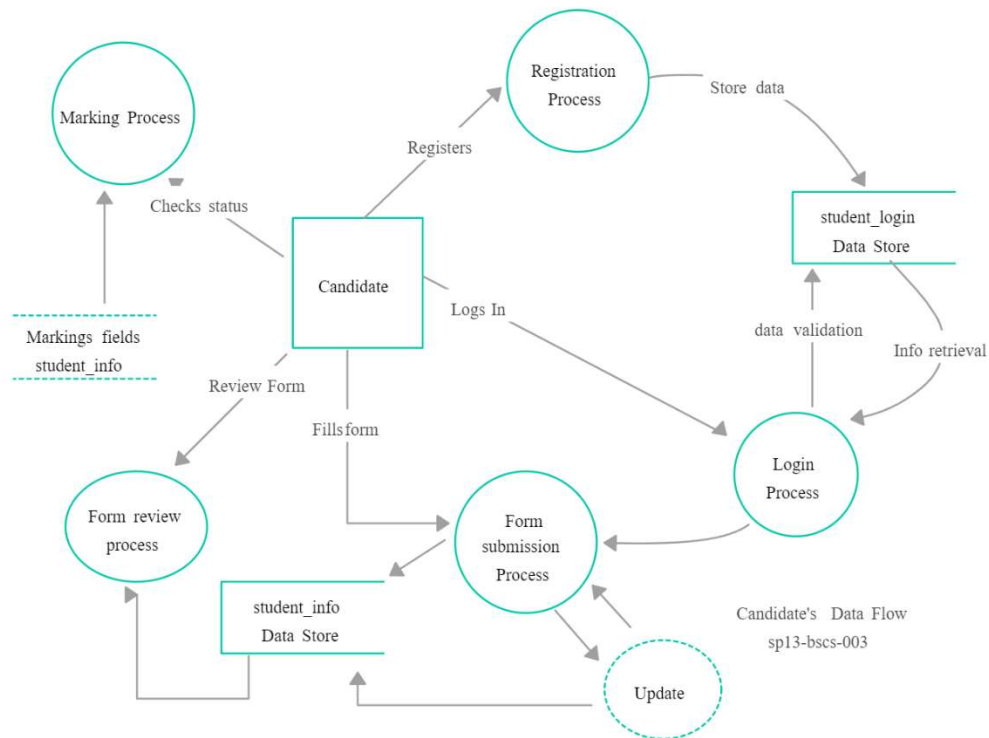
- Compatibility with different browsers and devices.

3.7 Design Constraints

- Use of ReactJS, CSS, and JavaScript for frontend development.
- Compliance with UI/UX design standards for a seamless user experience.

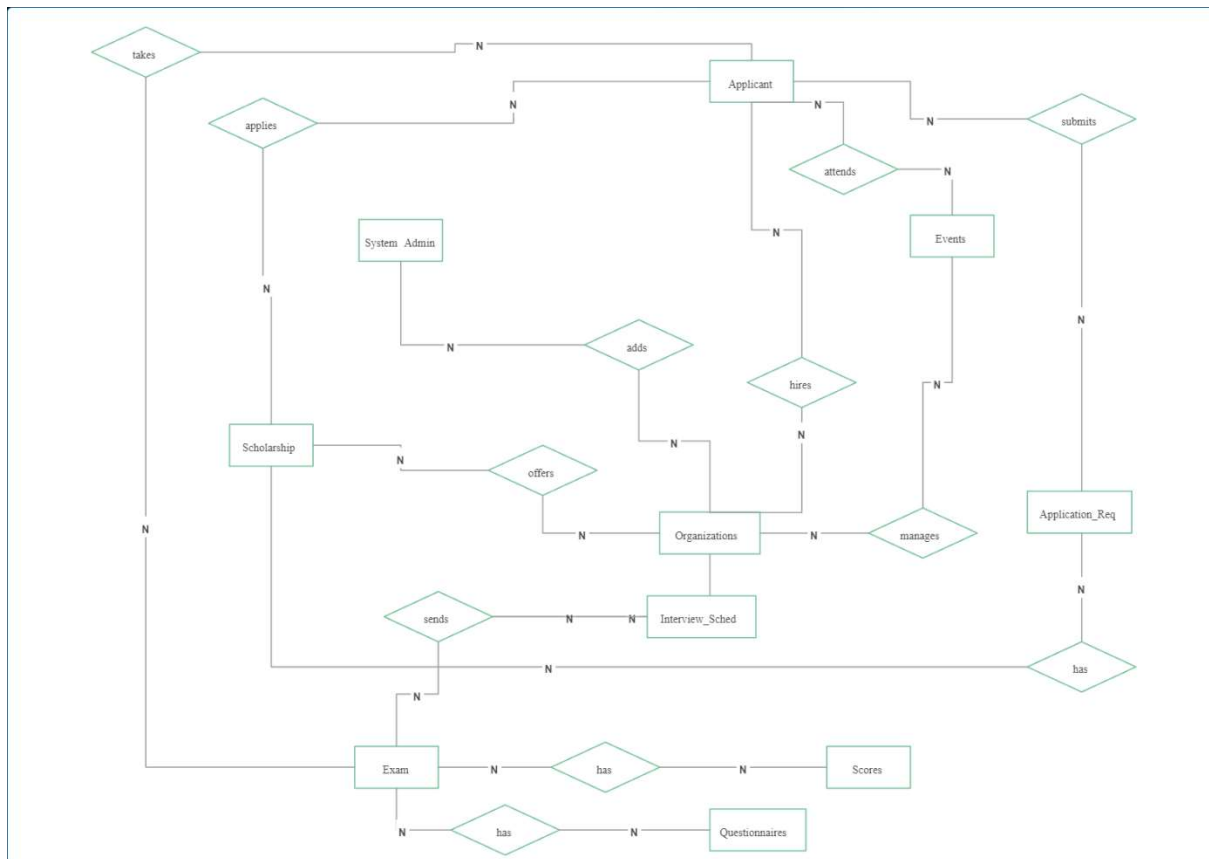
4. Analysis Models

4.1 Data Flow Diagram (DFD)



The Data Flow Diagram provides a visual representation of how data moves through the various components of the web application, including user interactions, document uploads, verification processes, and backend integrations.

4.2 Entity-Relationship (ER) Diagram



The Entity-Relationship Diagram helps to define the database structure of the web application, including entities such as users, documents, scholarship schemes, and their respective relationships and attributes.

4.3 State Diagram

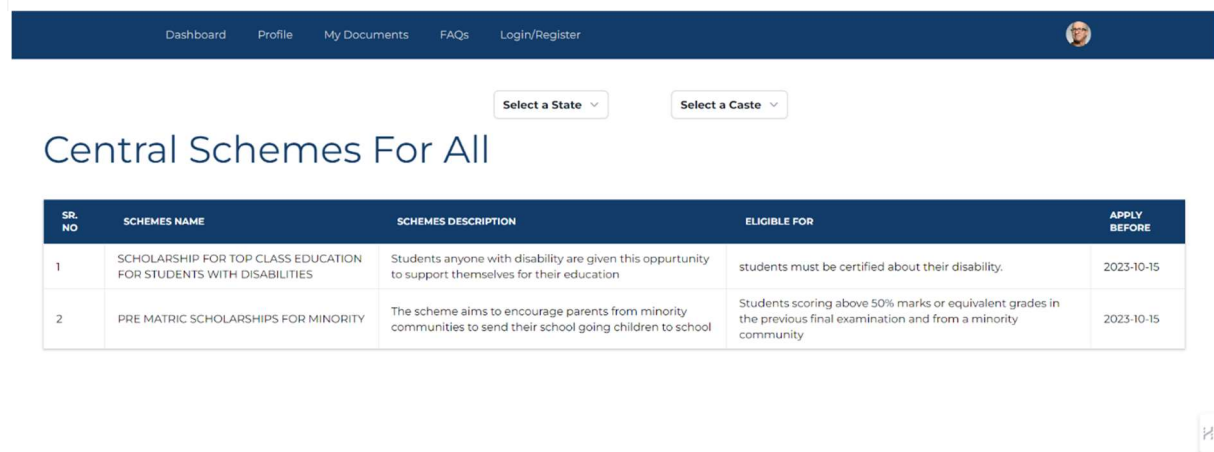
The State Diagram captures the various states and transitions within the web application, such as document status (pending, verified, not verified), user authentication states, and system states during document verification processes.

5. GitHub Link

<https://github.com/VRThakur20/ReactJS-Project>

6. Screenshots

6.1 Dashboard



The Dashboard serves as the central hub for users, offering a personalized view of their scholarship applications, document statuses, upcoming deadlines, and notifications.

6.2 List of States

Phone Number

Enter Phone Number

Enter Your Password

Enter Your Password

Login

SignUp



The List of States page presents a comprehensive list of scholarship opportunities categorized by states, enabling users to easily find relevant schemes based on their geographical location.

6.3 Documents

<div>Aadhar Card</div> <div>Aadhar Card - 123456789012</div> <div>Verified</div>	<div>PAN Card</div> <div>PAN Card - 123456789012</div> <div>Verified</div>	<div>Metric Result</div> <div>Metric Result</div> <div>Verify!</div>
<div>Caste Certificate</div> <div>Caste Certificate</div> <div>Pending</div>	<div>Domicile Certificate</div> <div>Domicile Certificate</div> <div>Pending</div>	

The Documents page provides a detailed overview of the user's uploaded documents, including their verification status (pending, verified, not verified), with functionalities for document management and updates.

6.4 Login and Register Page

The Login and Register page provides a seamless and secure login/signup process, enhancing user authentication and access control to the web application's features.

6.5 University Side Site

DashboardProfileMy DocumentsFAQsLogin/Register

Student Details

Student Name

Van Raj Thakur

Registration Number

12111596

Certificates

CERTIFICATE NAME	CERTIFICATE STATUS	CERTIFICATE LINK
Income Certificate	Verified	View Certificate
Metric Result	Verified	View Certificate
Aadhar Card	Verified	View Certificate

The University Side site offers universities a dedicated platform for efficient document verification, with tools and features tailored to their verification processes and requirements.

6.6 Scholarship Scheme Information

DashboardProfileMy DocumentsFAQsLogin/Register

Scheme Information

Scheme details and documents.

Verify Required Documents

Scheme Name

Punjab PMS (Post Metric Scheme)

Scheme Description

Students anyone with disability are given this opportunity to support themselves for their education

Criteria

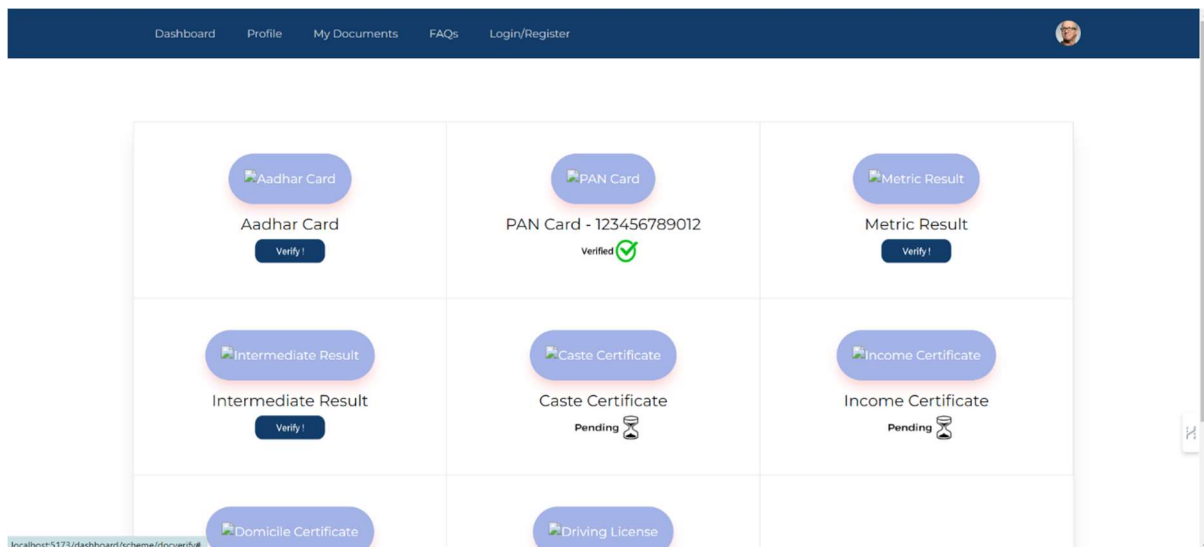
Applicable to students having annual family income not more than Rs. 2.50 lac and eligible for PMS. The concerned SC students shall submit a self attested-undertaking regarding his/her family annual income at the time of admission.

Documents Required

Income Certificate
Caste Certificate
Disability Certificate
Bank Account Details
Passport Size Photo
Previous Year Marksheet
Fee Receipt

The Scholarship Scheme Information page offers users comprehensive details about available scholarship schemes, helping them make informed decisions and understand application requirements.

6.7 Student Documents



The Student Documents page provides a transparent view of the documents uploaded by students, their verification status, and functionalities for managing and tracking document statuses.

7. Appendices

7.1 Screenshots

7.1.1 Dashboard

The Dashboard screenshot (Figure 6.1) provides an overview of the user's account status, notifications, and quick access to key features. Users can easily navigate through their scholarship applications, track document statuses, view upcoming deadlines, and receive notifications for important updates.

7.1.2 List of States

The List of States screenshot (Figure 6.2) displays available scholarship schemes categorized by states, enabling users to explore schemes based on their geographical location. This feature enhances user experience by providing a convenient way to find relevant scholarship opportunities.

7.1.3 Documents

The Documents screenshot (Figure 6.3) showcases the user's uploaded documents, their verification status, and options for managing and updating documents. Users can track the progress of their document verification and take necessary actions as per the application requirements.

7.1.4 Login and Register Page

The Login and Register page screenshot (Figure 6.4) illustrates the seamless and secure login/signup process using mobile numbers. This feature ensures user authentication and access control to the web application's features, enhancing overall security and user experience.

7.1.5 University Side Site

The University Side Site screenshot (Figure 6.5) provides universities with tools and functionalities for efficient document verification. Universities can verify student documents securely and expedite the verification process, contributing to a streamlined workflow.

7.1.6 Scholarship Scheme Information

The Scholarship Scheme Information screenshot (Figure 6.6) displays detailed information about each scholarship scheme, including eligibility criteria, required documents, and deadlines. Users can make informed decisions about scholarship applications based on this comprehensive information.

7.1.7 Student Documents

The Student Documents screenshot (Figure 6.7) offers users a transparent view of their uploaded documents, verification status, and options for managing and tracking document statuses. This feature empowers users to stay informed and actively manage their scholarship applications.

8. Conclusion

In conclusion, the Software Requirements Specification (SRS) document outlines the comprehensive requirements for developing a sophisticated web application focused on providing scholarship information, facilitating document uploads, and enabling document verification. The document covers key aspects such as the purpose, scope, definitions, product functions, user characteristics, constraints, assumptions, dependencies, specific requirements, analysis models, screenshots, and a conclusion summarizing the entire document. The inclusion of screenshots provides visual context and enhances understanding of the web application's functionalities and user interface elements, contributing to a well-rounded and informative SRS document.

This Conclusion section summarizes the key points and highlights the importance of the SRS document in defining the requirements and scope of the web application project.