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Project proposal

on

Shikshalaya

SHIKSHALAYA

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Introduction

Shikshalaya is an innovative mobile platform designed to streamline and enhance the preparation process for competitive exams, starting with the Loksewa exams. The platform aims to simplify access to high-quality educational content by bringing together resources from multiple institutes in one convenient place.

Shikshalaya offers a comprehensive learning experience with a combination of premium video lectures, notes, and exclusive practice tests. It also provides free resources such as public tests and question banks, ensuring accessibility for students from different economic backgrounds. By consolidating content from various educational institutes, Shikshalaya eliminates the need for students to navigate multiple platforms, creating a one-stop hub for exam preparation.

For institutes, Shikshalaya provides a cost-effective solution by offering a platform where they can easily upload and distribute their educational materials, without the need for developing and maintaining their own app or website. The platform's user-friendly interface and integrated payment system further simplify the process for institutes and students alike.

Shikshalaya is poised for expansion, with plans to extend its reach beyond Loksewa to other competitive exams, continuously enhancing its impact in the education sector.

Project Justification

Background of the Project

In recent years, the landscape of competitive exam preparation has undergone a significant transformation with the rise of digital education platforms. Sectors like engineering (e.g., IOE exams), medical (e.g., CEE preparation), and other competitive exams have seen an increasing number of platforms offering video lectures, practice tests, and a variety of online resources. Educational institutes are adopting digital tools to expand their reach, enhance accessibility, and provide more flexible, affordable options for students.

However, while sectors such as engineering and medical exams have embraced this digital shift, the Loksewa exam preparation market remains underdeveloped in the digital space. Though a few institutions have begun experimenting with digital platforms, the overall market for Loksewa preparation is still in its infancy. The lack of a centralized, comprehensive platform dedicated to Loksewa preparation presents a significant opportunity.

Institutes offering Loksewa exam preparation face considerable challenges. While many are experts in content creation, they lack the necessary infrastructure to develop and maintain their own digital platforms. This results in a fragmented learning environment where students must navigate multiple platforms to access various study materials, leading to confusion and disengagement. Additionally, traditional coaching institutes often come with high fees and require physical presence, making it difficult for students to access flexible learning. The sheer variety of content spread across multiple platforms only adds to the complexity, making it harder for students to follow a structured preparation plan.

Shikshalaya aims to address this gap by offering an all-in-one platform for Loksewa exam preparation. The platform will consolidate content from various institutes, providing students with seamless access to video lectures, private notes, practice tests, and more—all in one place. For

institutes, Shikshalaya offers a cost-effective solution, allowing them to focus on content creation while the platform takes care of technical infrastructure, maintenance, and user management. Institutes can simply upload their content, track their revenue, and enjoy the benefits of a streamlined, user-friendly environment.

The platform is designed to benefit both students and educational institutions. Students will have access to a wide array of resources for Loksewa preparation, while institutes will reach a broader audience without the need to invest in costly digital infrastructure. With its potential to become the leading platform for Loksewa exam preparation, Shikshalaya is also poised to expand into other competitive exam sectors in the future.

Problem Statement

The preparation process for competitive exams like Loksewa faces numerous challenges, primarily due to the fragmentation of resources and the lack of a unified digital platform. While sectors like engineering and medical exams have successfully embraced digital solutions, the Loksewa exam market remains largely untapped.

Currently, only a handful of institutes offer digital resources for Loksewa preparation, and these are often limited in scope and accessibility. Many institutes, particularly smaller ones, struggle to effectively deliver their content to students. Some rely on sharing recorded lectures via Telegram, distributing notes through WhatsApp groups, or using apps that are underused or not optimized. This creates a disorganized learning experience where students are forced to jump between multiple platforms, often losing track of their progress.

Additionally, many institutes lack the resources to develop their own digital infrastructure. Larger institutes may have their own apps but fail to fully utilize them or provide a cohesive learning experience. Smaller institutes, in particular, face difficulties in competing in terms of both content

quality and marketing reach. Their inability to effectively brand themselves or manage the complexities of creating and maintaining a digital platform limits their growth and visibility.

For students, this results in scattered and inconsistent resources, leading to confusion and frustration throughout their preparation. The demand for a centralized, unified platform has never been greater. Shikshalaya solves these challenges by providing an all-in-one platform that enables institutes to upload their content—be it video lectures, notes, or practice tests—without worrying about technical aspects. This allows institutes to focus on what they do best: content creation. The platform also offers an integrated marketing and branding solution, allowing institutes to reach a broader audience by consolidating multiple offerings in one place. For students, Shikshalaya provides an organized, easy-to-use platform where all their study materials are available in one location, eliminating the inefficiencies and confusion of using multiple platforms.

Aim

To provide institutes with a centralized platform that allows them to easily upload and manage their content for Loksewa exam preparation, while offering them the tools to expand their reach, track revenue, and simplify their digital presence by focusing on content without technical burden.

Objectives

➢ **Unified Platform**: To provide a single platform for video lectures, notes, and practice tests from various institutes for Loksewa preparation.

➢ **Easy Content Upload**: To offer a simple system for institutes to upload and manage their content without technical hassles.

➢ **Accessible Resources**: To provide both paid and free content, ensuring access for students from all economic backgrounds.

- ➢ **Cost-Effective Solution**: To eliminate the need for institutes to build and maintain separate apps or websites.

- ➢ **Branding and Marketing Support**: To help institutes expand their reach and visibility through effective branding and marketing tools.

- ➢ **Support for Small Institutes**: To enable small institutes to improve their digital presence with minimal technical effort.

Features

- ➢ **Centralized Learning Hub**: Access video lectures, notes, and practice tests from multiple institutes in one place for a streamlined study experience.

- ➢ **Freemium Content**: Both paid premium content (video lectures, exclusive notes, and tests) and free public resources (question banks and tests) available.

- ➢ **Institute Content Upload**: Institutes can easily upload and manage their content, focusing on content creation without worrying about technical aspects.

- ➢ **Revenue Tracking**: Institutes can track the revenue generated from their content through a user-friendly dashboard.

- ➢ **User Profiles**: Students can create profiles to save their favorite lectures, monitor their progress, and track performance over time.

- ➢ **Search and Navigation**: Intuitive search functionality to find relevant content quickly, by topic, institute, or exam.

- ➢ **Payment Integration**: In-app payment system for seamless transactions related to paid content.

- ➢ **Updates and Notifications**: Real-time notifications about new content, exam schedules, and important updates related to Loksewa exams.

Scope of Work

The Shikshalaya platform will be developed using the MERN stack, which includes the following technologies:

➢ **MongoDB**: A NoSQL database that will store and manage all user data, content (video lectures, notes, tests), and other essential information in a flexible, scalable way.

➢ **Express.js**: A lightweight and fast backend framework for Node.js, used to handle API requests, manage routes, and integrate server-side logic with the MongoDB database.

➢ **React.js**: A powerful frontend library for building user interfaces, React will be used to create an interactive, responsive, and dynamic web interface for both students and institutes.

➢ **Node.js**: A JavaScript runtime environment that will power the backend of the application, enabling efficient handling of real-time requests, user authentication, and communication between the client and server.

By using the MERN stack, Shikshalaya will ensure a modern, scalable, and efficient platform that delivers high performance and seamless user experiences for both students and institutes. This technology stack will allow the platform to handle a large number of users, content uploads, and transactions while maintaining flexibility for future growth and feature expansion.

Project Plan

Figure 1: ERD Diagram
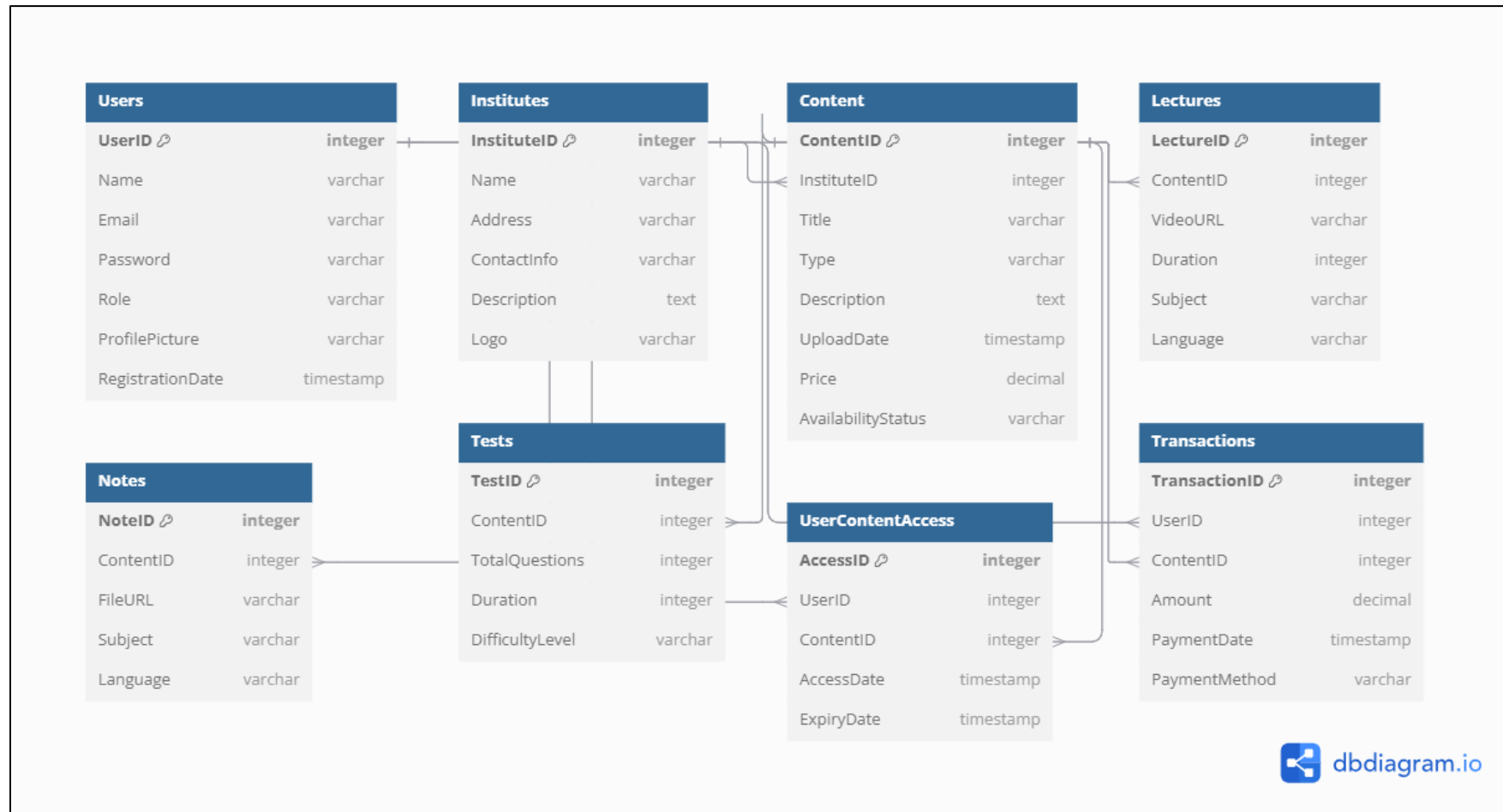
Prototypes

Prototype: First Page - Login (Institute or Student)

This page serves as the entry point for both institutes and students. Users can choose their role

(Institute or Student) and proceed to the respective login or registration screen.

> **Institute**: Institutes can log in to manage their content, track revenue, and upload materials.

> **Student**: Students can log in to access study resources, monitor progress, and take tests.

Figure 2: Landing Page

The page is designed to be simple, intuitive, and user-friendly, ensuring easy navigation for both user

types.

Prototype: Login Page

The login page allows both institutes and students to securely sign in to their accounts. It includes:

➢ **Username/Email and Password Fields**: For users to enter their credentials.

➢ **Login Button**: To authenticate users and direct them to their respective dashboards (Institute or Student).

➢ **Sign Up Navigation**: User can redirect to sign up page to create account.

Figure 3: Login Page
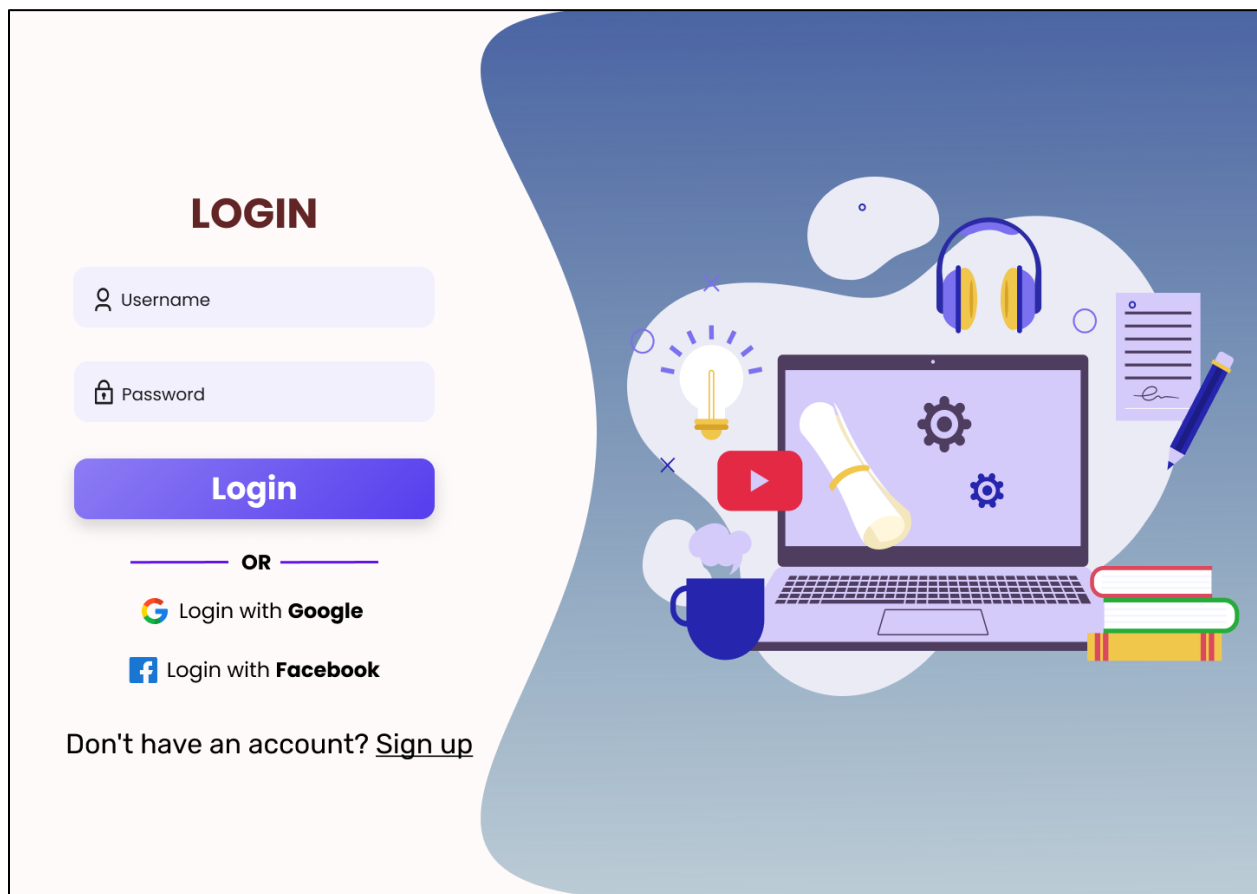
The design focuses on simplicity and security, ensuring a smooth login experience for all users.

Prototype: Sign Up Page

The sign-up page allows new users (both institutes and students) to create an account. It includes:

➢ Role Selection: Users can choose whether they are signing up as an Institute or a Student.

➢ Form Fields: Necessary form fields.

➢ Sign Up Button: To submit the form and create an account.

➢ Redirect Links: A link to the login page for existing users.

Figure 4: Sign Up Page

The design is simple and user-friendly, guiding users through the registration process seamlessly.

Prototype: Home Page (Student)

The home page for students is designed to provide easy access to all essential resources and features

related to their Loksewa exam preparation:

- ➢ **Home**: A section displaying available video lectures and courses, categorized by topics or exam

  subjects. Students can browse or search for specific courses.

- ➢ **My Courses**: A section displaying video lectures and courses purchased by the student.

- ➢ **Tests and Notes**: Quick access to practice tests and study notes. This section includes both free

  and paid resources, allowing students to take tests and access notes for review.

- ➢ **Updates and News**: A feed of important updates related to the Public Service Commission, new

  content added to the platform, upcoming exam schedules, and other relevant announcements.

- ➢ **Settings**: A link to the student's profile and account settings, where they can update personal

  information, manage notifications, and adjust preferences.

Figure 5: Dashboard - Students
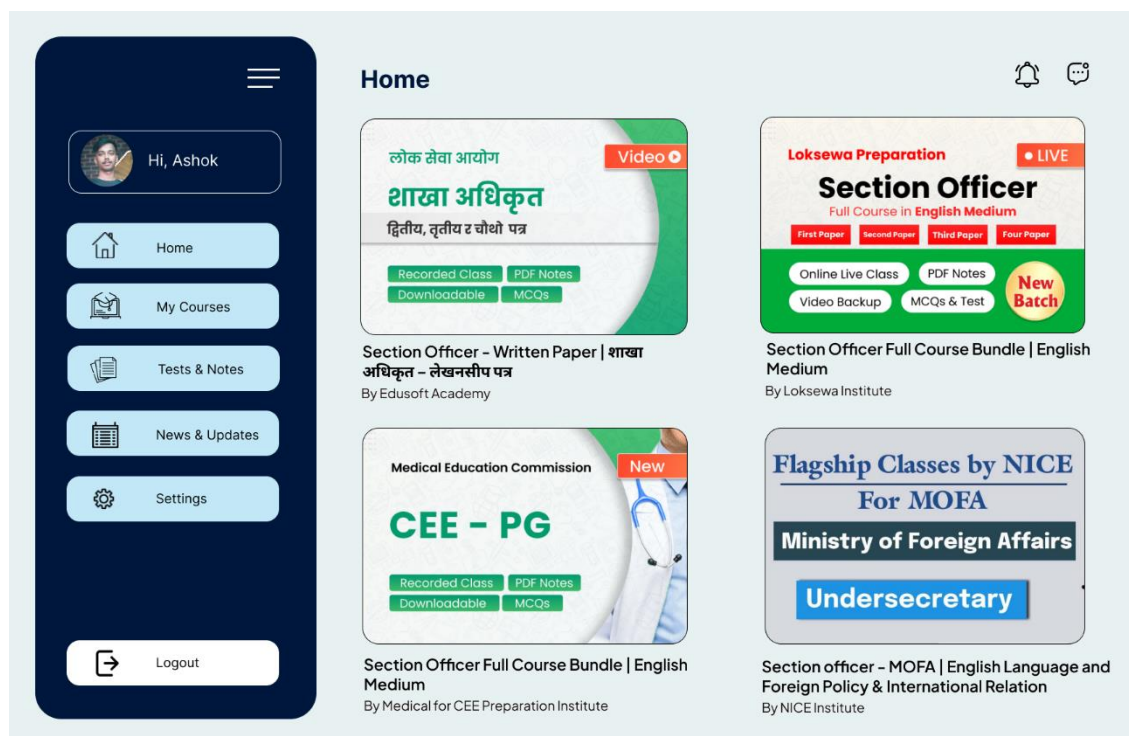
Prototype: Home Page (Institute)

The home page for institutes is tailored to help them manage and track their content while offering

insights into their performance:

➢ Home: A section where institutes can upload the video lectures, notes, and practice tests. It

includes options for adding new content or editing existing materials.

➢ Courses: A section where institutes can see, manage, and organize their video lectures, notes,

and practice tests.

➢ Enrollment: A quick overview of the revenue generated from the content shared on the

platform.

➢ Content Overview: A summary of all active content, allowing institutes to manage, categorize,

and track the status of their lectures, notes, and tests.

➢ Settings: A link to manage account details, institute profile, and notification preferences.

Figure 6: Dashboard - Institutes

Conclusion

Shikshalaya aims to revolutionize the way students and institutes prepare for the Loksewa exams by providing a centralized, user-friendly digital platform. With its unique approach, the platform bridges the gap between fragmented learning resources and offers a comprehensive solution for both students and educational institutes. Students benefit from easy access to a variety of high-quality content, while institutes can manage their materials without the burden of technical infrastructure. By combining both paid and free resources, Shikshalaya ensures accessibility for students from all backgrounds, empowering them to efficiently prepare for their exams.

As the platform expands, it holds the potential to become the leading digital solution for Loksewa exam preparation, creating new opportunities for institutes to reach a broader audience and enhance their digital presence. Ultimately, Shikshalaya's all-in-one approach will streamline exam preparation, offering a seamless experience for both learners and educators, paving the way for future growth in other competitive exam sectors.