



Vocational Institute Platform

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Abstract The Vocational Institute Platform is designed to enhance the visibility, accessibility, and engagement of vocational training institutes, particularly in rural areas. Traditional methods of course promotion and student outreach are inefficient, limiting access to skill development opportunities. The proposed system provides an Android-based solution to facilitate real-time course updates, enrollment assistance, and institute-student interaction. It integrates location-based notifications, social media promotion, and push alerts to improve communication and awareness. The platform ensures secure data management, role-based authentication and transparent navigation for lab students and administrators. Developed using Android Studio, Firebase, and Java, this system improves accessibility and efficiency. Future improvements may include the recommendations of the course controlled by artificial intelligence and access to autonomous availability to cover a wider audience.

Keywords: Android system, vocational training, student's involvement, safe authentication, real-time notifications.

I) INTRODUCTION

In many rural areas, specialized institutions are trying to cover potential students with limited visibility Advertising resources that have a big impact "Professional Institute", a program for a project called "\ - this is an Android-based application, Use digital technology to solve these issues to increase accessibility and awareness Professional training program. The platform serves as an important bridge between rural and promising institutions.

Students who provide a centralized space where institutions can effectively promote courses are communicated.

Update and interact with the community. Important features of the application include location-based notifications. This allows users to receive appropriate updates for nearby institutions.

Cover your efforts and ensure information exchange over the network. In addition, push rations hold users Informed of critical events, admission and a new program that guarantee not to miss students Opportunities to promote their skills. Thanks to these functions, our project seeks to extend the possibilities of rural communities Having rendered more accessible and discovery professional training, contributing to the development of skills and A career shoulder strap, which otherwise could remain out of reach. The Professional Institute platform project solves the following important issues:

Location-based advertising: Using mobile notifications to notify users of nearby institutions and Their lesson. Integration into social networks: Cover more audiences, share updates, Events on all platforms. Push notifications for updates: Students providing students receive timely information about receipt, events and new courses. Improving accessibility and visibility: Increasing the coverage of vocational training programs for Rural communities. By developing this Android application, our project aims to support vocational institutes in rural areas, improving their visibility and accessibility to students. This summarizes the project's goals, methods, and expected impact, underscoring the potential benefits of the Vocational Institute Platform for enhancing educational opportunities in underscored areas.

II) PROBLEM DEFINITION

Specialist institutions in particular, in rural areas fight against students and promote courses and updates in real time due to digital presence and ineffective manual processes. The Professional Institute's platform is an Android-based solution that improves accessibility based on location-based notifications, social network integration, and notifications, enabling facilities to effectively promote courses and interact with students. With role-based authentication and secure data management, the platform simplifies student-institute interaction, reducing administrative workload and bridging the gap between skill development and employment opportunities.



III) METHODOLOGY

1) Analysis of requirements:

- Determine specific features of the Student and Administrator module.
- Determine the structure of your database to support students, courses and orders.
- Understand the flow of users and focus on how students view and place course orders, and how administrators control content and orders.

2) Design Phase:

- Database Design and API
- API PHP for transactions such as student registration, course search, ordering, ordering, and more.
- Design a clear and intuitive interface for student modules (for course navigation, ordering order status, visualization) and management modules (for managing courses, students, and orders).

3) Implementation Phase

- Backend Development
 - PHP and MySQL API for data management and order processing.
 - Implement authentication to restrict access to admin features.
- Student Module: Enable course browsing with details.
- Management Module: Admin orders to view and update student orders.

4) Testing and Deployment:

- Test: Unit tests for each component, integration tests for API connections, and positive user tests.
- Deployment: Host PHP APIs, distribute the app, and monitor for ongoing feedback.

5) Interview:

- Regular updates to add features, resolve issues, and maintain updates and compatibility.
- This should support student and administrator fluid development and a robust user experience.

IV) ARCHITECTURE

A. System Architecture

The diagram represents a Vocational Institute Platform Architecture, illustrating how different users (Admin and Students) interact with the system. The system has three types of users: Admin and Students. Each user interacts with the system through different functionalities.

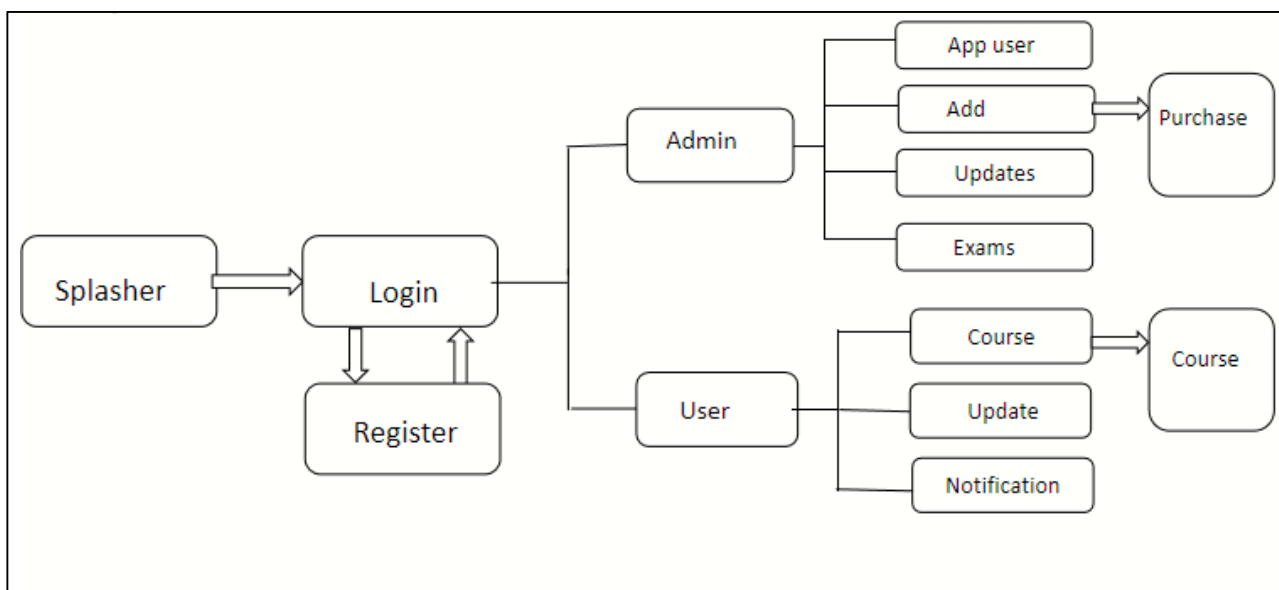


Fig 1: System Architecture

B. Activity Diagram

i. For Student

The Login Process for Student is explained in Fig 2. The student logs in with their credentials. If correct, they gain access; if not, they can reset their password using the forgot password option.

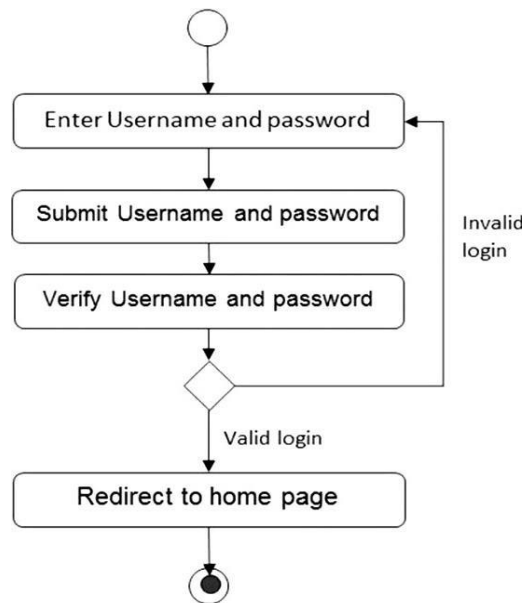


Fig 2: Activity Diagram (For Students)

ii. For Admin

The Login Process for Admin is explained in Fig 3. The admin logs in to the platform using their credentials. If the credentials are correct and verified against the database, the admin successfully logs in. If the credentials are incorrect, the forgot password option allows the admin to reset their password and log in with the new one.

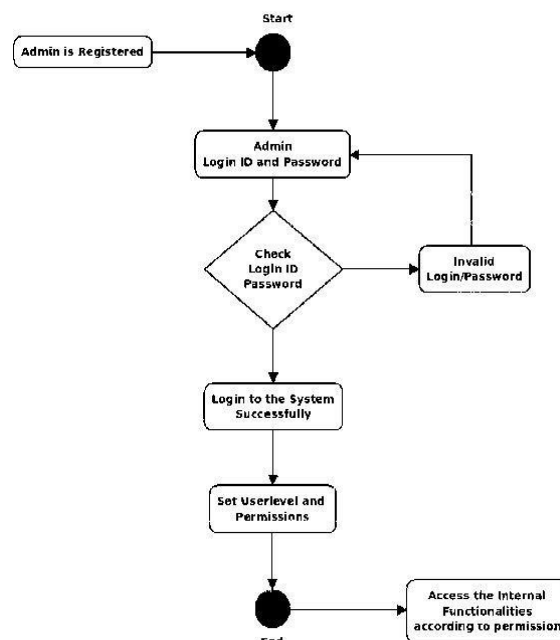


Fig 3: Activity Diagram (For Admin)

V) RESULT

The following snapshots show the implementation results of the proposed system: Fig 4 displays the Student Login Page of the project, from where the student can log in and navigate to other sections of the website, such as About, Contact, and more.



Fig 4: Student Login Page

Fig 5 is the Student Registration page from where student can register to the application and set their login credentials.

Fig 5: Registration Page

Fig 6 is the Navigation Menu, which allows users to navigate to different sections such as Home, About Us, Contact Us, Profile, and Log Out.

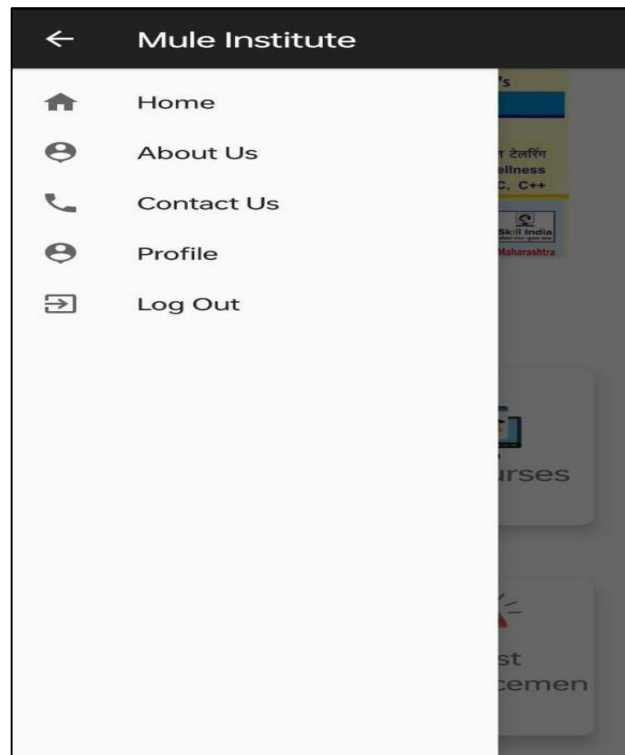


Fig 6: Navigation Menu

Fig 7 is the Student Dashboard, where students can access their courses, exam updates, and latest announcements.

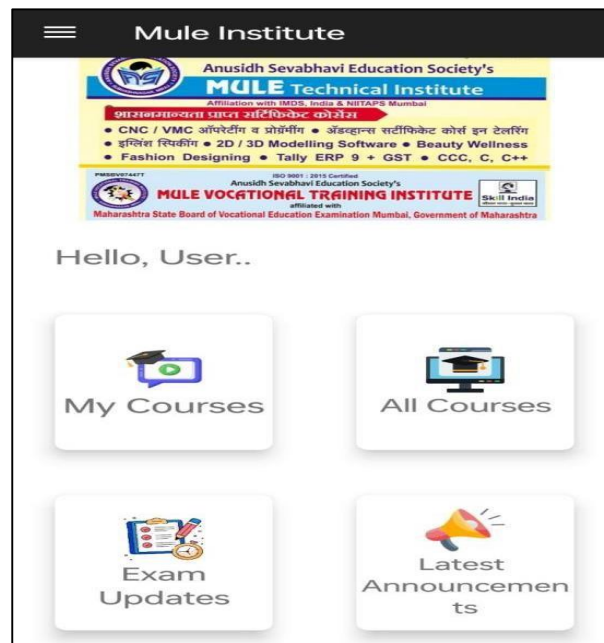


Fig 7: Dashboard

**VI) CONCLUSION**

In conclusion, the proposed platform of the Professional Institute validates important limitations regarding the current system by automating various tasks. Processes such as student records, course registration, communication with students, updating information, ensuring effective confidentiality, and managing students. Automated platform functions will reduce manual efforts, increase efficiency and offer more unhindered experience to students and administrators.

Consequently, the proposed system must overcome the problems encountered in the existing installation, which leads to a more efficient, transparent and practical professional training environment for the user.

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