

College Resources and Event Management & Analysis

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Abstract: *This research paper aims to propose a platform for College Resource and Event Management & Analysis. The platform will provide various services such as sharing study content from teachers to students, a one-stop destination for official notices, managing college events and schedules, a platform for sharing career experiences from alumni, BE project tracking service to avoid duplicate project ideas, and a place for internship reference. Additionally, the platform will add an extra advantage for colleges to collect and analyses data of students and college to make decisions for improving the quality of education and sharing experiences. The platform will be implemented using Google's latest and fastest technology framework Flutter, which supports web and mobile development. The whole application will be implemented in Micro-service Architecture to reduce resource use on mobile devices.*

Keywords: Campus facilities, Data Analysis, Student Organization, Academic Support

I. INTRODUCTION

The current college management system is based on a traditional approach that is manual and paperbased. It lacks the ability to manage college events, schedules, and official notices efficiently. Additionally, there is no platform for sharing study content from seniors to juniors, sharing career experiences from alumni, and tracking BE project ideas. Thus, there is a need for a platform that addresses all these issues and provides a centralized system for college management. This paper proposes a platform for College Resource and Event Management & Analysis. Platform to share study content from seniors to juniors. One stop destination for official notices. Managing college events and their schedules. Platform for sharing career experiences from alumni. BE project tracking service to avoid duplicate project ideas, this leads innovation in projects. Place for internship reference. In the world of data trend, This project will add an extra advantages for colleges to collect and analyze data of students and college to make decisions for improving quality of education and share experiences. This project deals with the various functioning in College management process. The main idea is to implement a proper process to improve previous system. To avoid miscommunication between college and students, it is necessary to have centralize official application for managing and notifying about latest updates. A micro-services architecture is a type of application architecture where the application is developed as a collection of services. It provides the framework to develop, deploy, and maintain micro-services architecture diagrams and services independently.

II. LITERATURE REVIEW

The proposed platform for College Resource and Event Management & Analysis aims to provide a centralized system for college management. The platform will provide various services such as sharing study content from seniors to juniors, a one-stop destination for official notices, managing college events and schedules, a platform for sharing career experiences from alumni, BE project tracking service to avoid duplicate project ideas, and a place for internship reference. This section will provide a literature review of relevant studies, books, and articles that highlight the importance of such a platform and its potential impact on college management.

Rajmane et al. (2016) proposed a digitalization of management system for college and student information. They emphasized the need for a computer-based system to manage college and student data, which can be easily accessed and updated. Their study found that a computer-based management system can improve the efficiency of college management by reducing manual work and ensuring the timely availability of information. This study supports the importance of a platform like the one proposed in this research paper.

Similarly, Patnaik et al. (2016) proposed a college management system that included features such as student information management, attendance management, and examination management. Their study found that such a system can significantly reduce the time and effort required for managing college administration. The proposed platform in this research paper also aims to improve college management by providing features such as managing college events and schedules, sharing career experiences from alumni, and tracking BE project ideas.

In terms of event management, "Event Management and Best Practices" by Julia Rutherford Silvers, CMP, CSEP provides a comprehensive guide to planning, organizing, and executing successful events. The book covers various aspects of event management, including site selection, event design, catering, and risk management. Similarly, "Event Management: A Practical Guide" by Gerard O'Mahony provides practical advice on managing events, including planning, marketing, budgeting, and risk management. These books provide valuable insights into event management, which can be incorporated into the proposed platform for managing college events and schedules.

In terms of college resources and information, "The Insider's Guide to the Colleges" by the staff of the Yale Daily News provides a comprehensive overview of colleges across the United States, including information about academics, campus life, and more. Similarly, "The College Handbook" by the College Board provides detailed information about colleges and universities across the United States, including statistics on admission, tuition, financial aid, and more. "The Fiske Guide to Colleges" by Edward B. Fiske provides a comprehensive guide to colleges and universities across the United States and abroad, including information about academics, campus life, and more. These books provide valuable information that can be incorporated into the proposed platform for sharing study content from seniors to juniors and tracking BE project ideas.

In conclusion, the literature review highlights the importance of a centralized system for college management, which can improve the efficiency of college administration and provide valuable resources and information for students. The proposed platform for College Resource and Event Management & Analysis aims to address these issues by providing various services such as sharing study content from seniors to juniors, a one-stop destination for official notices, managing college events and schedules, a platform for sharing career experiences from alumni, BE project tracking service to avoid duplicate project ideas, and a place for internship reference. The platform will be implemented using Google's latest and fastest technology framework Flutter, which supports web and mobile development. Additionally, the whole application will be implemented in Micro-service Architecture to reduce resource use on mobile devices. Shachi Mall et al. [10], Xu Wu et al. [11], N. Shelke et al. [12] and S. L. Bangare et al. [13-16], V. Durga Prasad Jasti et al. [17] have shown different methods for machine learning.

III. DESIGN METHODOLOGY

Based on past work and assessment, the project is accomplished with an forgiving of an intelligent assistant capable of taking user query and analyzing it, and respond the user by using voice media. Python libraries and speech reorganization APIs are used to integrate the personal voice assistant python speech to text model is used.

3.1 System Architecture

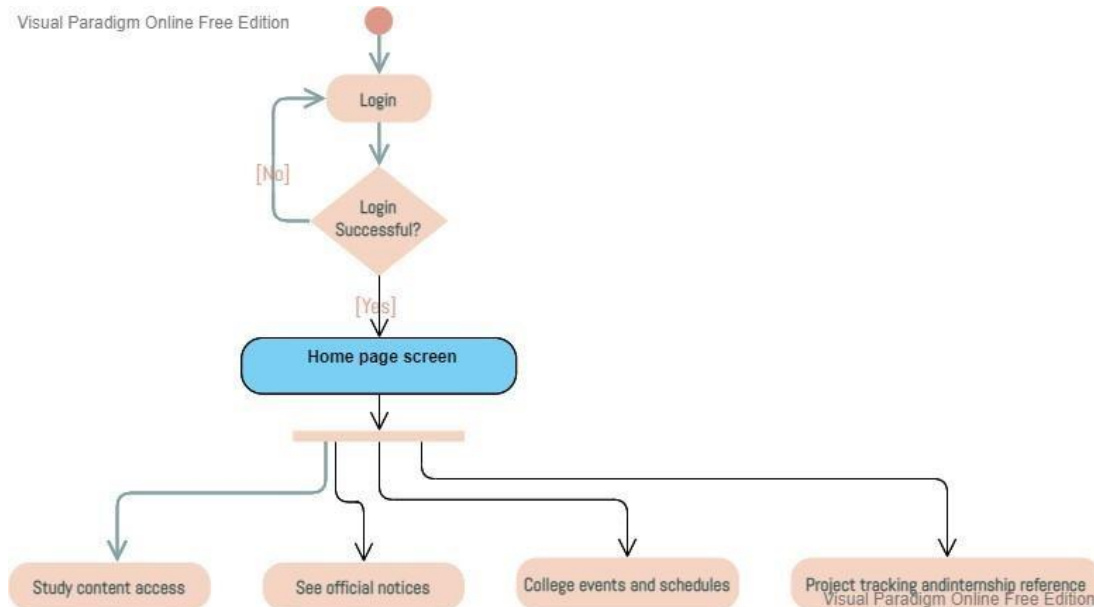


Fig.1 Architecture Diagram

IV. FUNCTIONAL REQUIREMENTS

This system aims to improve the efficiency of college information management, and the main function is managing and maintaining information [8]. The administrator and students are two major functional requirements in the system. The Administrator will be given more powers (enable/disable/update) than other users. It will be ensured that the information entered is of the correct format. For example name cannot contain numbers. In case if incorrect form of information is added, the user will be asked to fill the information again. Students use the system to query and enter their information only.

V. NON-FUNCTIONAL REQUIREMENTS

5.1 Performance Requirements

The proposed system that we are going to develop will be used as the chief performance system for helping the organization in managing the whole database of the student studying in the organization. Therefore, it is expected that the data base would perform functionally all the requirements that are specified.

5.2 Safety Requirements

- The database may get crashed at any certain time due to virus or operating system failure.
- Therefore, it is required to take the database backup.

VI. PROBLEM SOLUTION

We propose a web-based solution that will provide a user-friendly interface for resource and event management. The solution will be divided into two main components: Resource Management and Event Management.

6.1 Resource Management

The resource management component will allow users to manage various college resources such as classrooms, labs, equipment, and personnel. It will provide the following features:

- Resource Booking: Users can book resources for a specific time period and receive confirmation of the booking.
- Resource Scheduling: Users can schedule resources based on availability and track the usage of resources.

- Resource Tracking: Users can track the usage of resources and generate reports on resource utilization.
- Event Management: The event management component will allow users to manage various college events such as seminars, workshops, and conferences. It will provide the following features:
- Event Booking: Users can book event spaces, equipment, and personnel for a specific time period and receive confirmation of the booking.
- Event Scheduling: Users can schedule events based on availability and track the usage of event resources.
- Event Analysis: Users can analyze event data to identify trends and make informed decisions for future events.

The proposed solution will also include the following features:

- User Management: Users can manage their accounts and access the system based on their roles and permissions.
- Reporting: Users can generate various reports on resource and event usage to help with decision-making.
- Notifications: Users can receive notifications on resource and event bookings, cancellations, and changes.

VII. CONCLUSION

We are building a centralized place to share study material from seniors to juniors and teachers. Also, one-stop destination for official notices which will be managed by the central authority of the college. In the world of data, we are going to create an application to track college data for colleges to take proper decisions by seeing student's interest. This project will avoid duplication of project ideas because of tracking the records of every year's projects. This will lead to more innovative project ideas from students. College students can contact their alumni for internship reference and can ask for any help.

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