Pace

Aayush Satra[1], Sachin Jaiswal[2], Riyaz Memon[3], Sanjay Wankhede[4], Shubhra Tonge[5]

[1,2,3,4]*Final Year Student, Diploma in Computer Engineering, Vivekanand Education Society's Polytechni,* Chembur, Maharashtra India
[5]Mentor in Final Year Project Diploma in Computer Engineering, Vivekanand Education Society's Polytechnic, Chembur, Maharashtra India

ABSTRACT—

Pace is an application for managing different departments in an institute, with different access levels for users. It will store data about students, teachers, fees, and exam results in a database. It will use the iterative model of SDLC to add new features and modules. User profiles will be editable by respective users, and admins will have access to the whole database.

Keywords—Pace Institute, E-Learning, IMS

I. Introduction

Pace is the ultimate solution to digitize and streamline the day-to-day operations of colleges and universities. From student enrolment system to admission management and online classes management to finance management and human resource management, as well as every other process of institute operations. It also digitizes routine work of the campus such as student attendance management system, student record management system, student profile management system, student record keeping system, student mark management system, student fee management, and other small and big operations.

II. User based problem

Every organization, whether big or small, has challenges to overcome and manage the information of students and Faculty. The application is reduced as much as possible to avoid errors while entering the data. It also provides an error message while entering invalid data. No formal knowledge is needed for the user to use this system.

1. It was less user-friendly.

2. It was limited to a single system.

3. It requires more employees to work.

4. It was a time consuming process.

5. The present system was very less secure.

6. It is unable to generate different kinds of reports.

III. Literature Survey

The proposed application is designed to provide students and faculty with a comprehensive platform that enables them to access information related to their courses, assignments, grades, and daily schedules. The application provides virtual tours of the institute, giving users a feel of the facilities available within the premises. This information is easily accessible through the application, making it a convenient resource for students and faculty members alike.

The application is designed to be user-friendly, allowing students to navigate easily through the system and access the information they need. Students can check their assignments, class schedules, and grades from anywhere, and at any time, providing them with a convenient way to manage their academic progress. Additionally, faculty members can use the application to manage their daily schedules, upload assignments and notices for students, and monitor the progress of their students.

The administrator manages the accounts of students and faculty members, ensuring that each user has access to the resources they need. The administrator also manages the institute's timetable, ensuring that students and faculty members are aware of their classes and schedules. The application is regularly updated with the latest information about the institute, ensuring that students and faculty members are up-to-date on any changes.

In conclusion, the proposed application provides a comprehensive platform that enables students and faculty members to manage their academic progress effectively. The application is user-friendly and provides easy access to information related to courses, assignments, grades, and schedules. With the help of the application, students can keep track of their academic progress, while faculty members can monitor the progress of their students, making it an essential tool for any academic institution.

A. *Problem Identified*

E-learning has been an emerging trend in education, especially in the past few years. With the advent of technology, the mode of education has been shifting from traditional classrooms to online learning platforms. However, e-learning is not without its challenges. One major problem that has been identified for e-learning applications is student engagement.

Student engagement refers to the extent to which students are motivated to participate and actively involved in the learning process. In a traditional classroom setting, teachers can monitor students' engagement and motivate them to participate. However, in e-learning, students are often left to their own devices, which can lead to disengagement and lack of motivation.

One reason for this problem is that e-learning often lacks the face-to-face interaction that is a part of traditional classrooms. Students can feel isolated and disconnected from their peers and teachers, which can affect their motivation to participate in the learning process.

Another reason for the problem of student engagement is the lack of interactive and engaging content. E-learning platforms can be monotonous and lack the interactivity that is necessary to keep students engaged. When content is dry and uninteresting, students are more likely to lose interest and become disengaged.

Furthermore, e-learning applications can be overwhelming for students who may not be tech-savvy. The learning curve for e-learning platforms can be steep, and students may feel overwhelmed and discouraged, leading to disengagement.

Lastly, e-learning applications may not cater to all learning styles. Students have different learning styles, and e-learning platforms may not have the necessary tools and resources to cater to these different learning styles. This can lead to disengagement among students who feel that the platform does not suit their learning needs.

In conclusion, student engagement is a major problem that has been identified for e-learning applications. To address this problem, e-learning platforms need to focus on creating engaging and interactive content, incorporating face-to-face interaction, and catering to different learning styles. By doing so, e-learning applications can ensure that students remain motivated and engaged in the learning process.

Modeling And Analysis

Developing this project for better usage and experience becomes very important considering the scope of this project going live. In order to develop this project efficiently, we communicated with our project guide and also a couple of corporate developers who are known to us. By discussing with them, we intended to understand how a mobile application is developed in the actual corporate world and what procedure we should follow to have a smooth development of the project. Understanding everything and having internal discussion with the team members, we planned our project methodology.

We would first finalize the features and specifications which shall be implemented in our project. Once we have a clear vision of features to be implemented, we would first design the application with an intention to have a decent UI and UX. UI which stands for User Interface is to design how the user will see the application, what color combinations and buttons our application will be having, and how every page of the application will look like. UX which stands for User Experience is to design an application keeping in mind the experience of a user. This includes to think on where the button shall be placed, a click on button should display which page, to summarize in short, it aims to make sure the user has a convenient and efficient user experience so that they wish to revisit the application Once we have our design ready and approved from the project guide, we would be starting with development of the actual project. For which, we shall be using development languages like:java. The major thing in our development phase shall be to integrate APIs of planned institute platforms. Once we have our application developed and ready, we shall proceed with one of the important things of the software development life cycle – Testing. If we want our platform to go live and be of maximum usage to the institute, we will have to test the application to ensure it is bugs free, there doesn't lie any fault in the project and will not fail. For testing as well, we shall be classifying the process into multiple steps to ensure it is tested as much as possible. Once the testing is done, we intend to make this project go live. So far, we have planned to inculcate this methodology of our project, but there might be certain changes in case of any unavoidable interference.
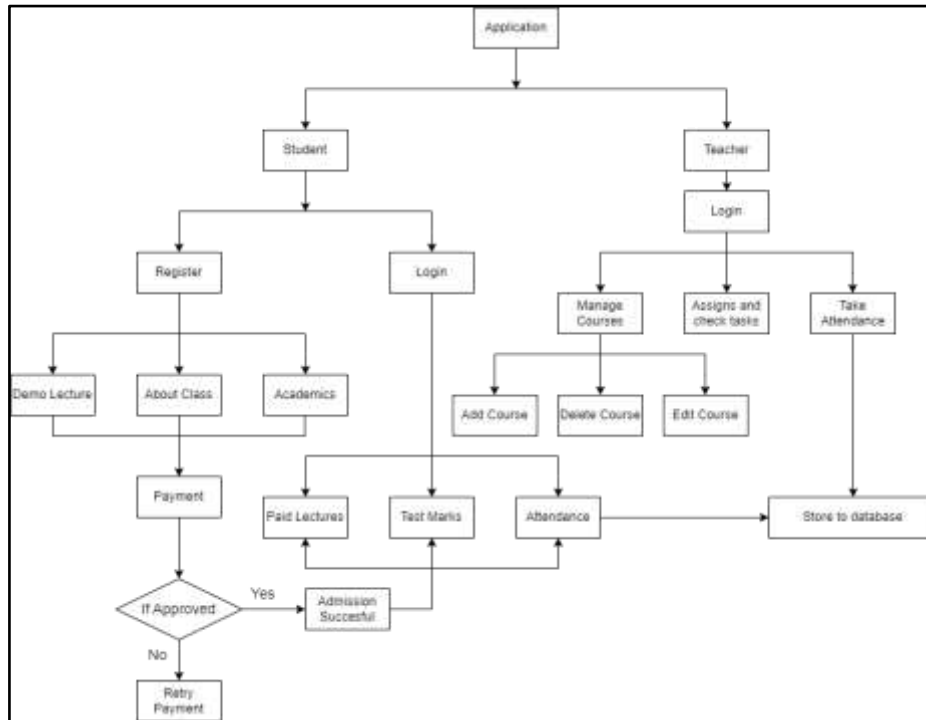
References

[1]. Anderson, T. (2016). Towards a theory of online learning. In Anderson, T., & Kanuka, H. (Eds.), e-Learning and Distance Education, Second Edition (pp. 1-27). Routledge.

[2]. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. The Internet and Higher Education, 7(2), 95-105.

[3]. Siemens, G. (2005). Connectivism: A learning theory for the digital age. International Journal of Instructional Technology and Distance Learning, 2(1), 3-10.

[4]. Mayer, R. E. (2001). Multimedia learning. Cambridge University Press.

[5]. Oliver, M., & Trigwell, K. (2005). Can "Blended Learning" be redeemed?. E-Learning, 2(1), 17-26.