
EDUWEB – A VIRTUAL CLASSROOM

Reena Bardeskar*¹, Tanishq Jena*², Rashmi Yadav*³, Swapnali Waman*⁴,
Mrs. Ashwini Dhoke*⁵

*^{1,2,3,4}Student, Department Of Computer Engineering, Dr. D. Y. Patil Institute Of Technology
Pimpri, Pune, Maharashtra, India.

*⁵Asst. Professor, Department Of Computer Engineering, Dr. D. Y. Patil Institute Of Technology
Pimpri, Pune, Maharashtra, India.

ABSTRACT

This project aims to provide a platform in the form of a virtual classroom to Students and Teachers with various functionalities. The main perspective of this portal is to design and implement online assignment submission and grading tool, provide an interface where faculties and students can interact online as well as provide smooth functioning of classes as well as generate a progress report. One of the advantages offered by online assignment submission tools is that it provides a quick transmission of assignments rather than using the conventional way of submitting assignments in college and students can get their doubts cleared using the discussion forum from their peers as well as teachers. This portal saves time and cost for faculties by permitting them to put up a quick response for students and also increases the quality of the feedback given to students.

Keywords: Online Education Portal, Assignment Submission And Grading Tool, Discussion Forum, Report Generation.

I. INTRODUCTION

As the educational world is moving faster and becoming more competitive, almost every university has started using an online submission system and technologies to facilitate their task, to have more time, and to be in pace with this presto moving IT world.

An online assignment handling is a system contained within the module virtual learning environment. The functionality of the standard assignment handling module has been extended to cater to all the department needs in terms of receiving assignments from scholars, making them available to teachers to mark, returning grades, commentary, and pronounced work to students, and keeping registry and course administrators informed at all stages of the process as well as generating a progressive report at the end.

Problem Statement

EduWeb: A virtual Classroom is built to provide the interface between students and faculty to assign, submit, mark/grade system virtually and a forum for discussion, which will save time and effort and make this process easy for students and faculty both.

Objective

- System will help the faculty in uploading study materials, create assignments, tests for students.
- System will provide analysis on students' performance and gives grades/ marks accordingly.
- A Discussion forum to put up Queries for Students.
- It will also generate a progress report at the end.
- Most importantly, System will save a lot of time and effort for the user as most of the work will now be automated.

II. LITERATURE REVIEW

Online Education Portal has assumed a significant role in recent times and has attracted serious attention of institutions over the last few years. A literature review reveals a considerable spurt in the use of these systems.

[1] Sangamesh K, Akash Samanekar, Ningappa T Pujar: Web-based management system considerably reduces the workload of the academic institution and helps them focus and invest time on their actual goal. Simplified registration and collection of fees through online forms, Creating and tracking the course-work, assignments, and exam papers in a classroom environment to support the goal of graduating students.

[2] **Shinwon Lee:** He proposed the system design that instructors can set up lectures without the professional computer-related technologies, and the interaction between instructors and learners becomes easy. This system helps in making the interaction between students and faculty easier by using a web browser in mobile-based on web app anywhere.

[3] **Faez, Poorya Bagheri, and Khalid Rahman:** Online Project and Assignment Submission, Management and Progress Monitoring System (OPAS) is a system that enables the student to submit their assignment or project online without submitting any physical files.

[4] **Muhardi, Muhardi et al.:** Based on the limited number and time of meetings, a web-based Learning Management System was built by using the Waterfall Model Method with the help of PHP programming language and MySQL.

III. PROPOSED ARCHITECTURE

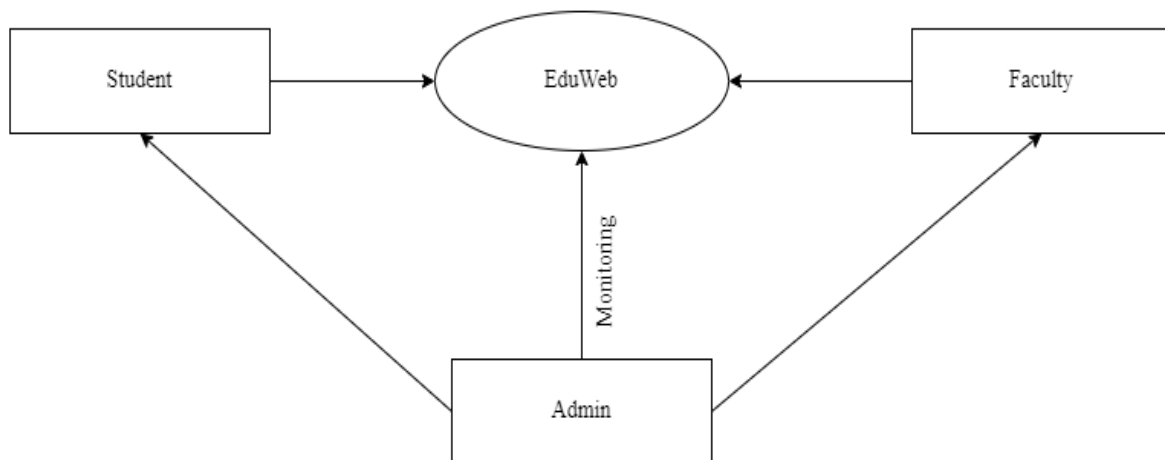


Figure 1: EduWeb Architecture

The proposed architecture has 3 modules:-

Admin Module

Admin Module is one of the main Modules in EduWeb. It helps the students as well as faculty in the registration process. Admin has the record of the number of subjects and teachers allocated to those subjects and also the number of students enrolled in a class.

Student Module

In this module, students can view all courses in which they are enrolled and also view the assignments, tests given. After evaluation of the assignment, test student can check their score for the respective and also get a cumulative result at the end of a semester. Students also have the facility to download and view the study material provided by the respective subject teacher. They can also make use of the discussion forum provided to put up their queries related to the subject or assignments.

Teacher Module

In this module, the teacher can view the number of subjects allocated to them and also has the facility to check the number of students enrolled for the particular subject. They can also upload the study materials, tests, assignments and at the end, the teacher will evaluate the assignments and give grades accordingly to the students.

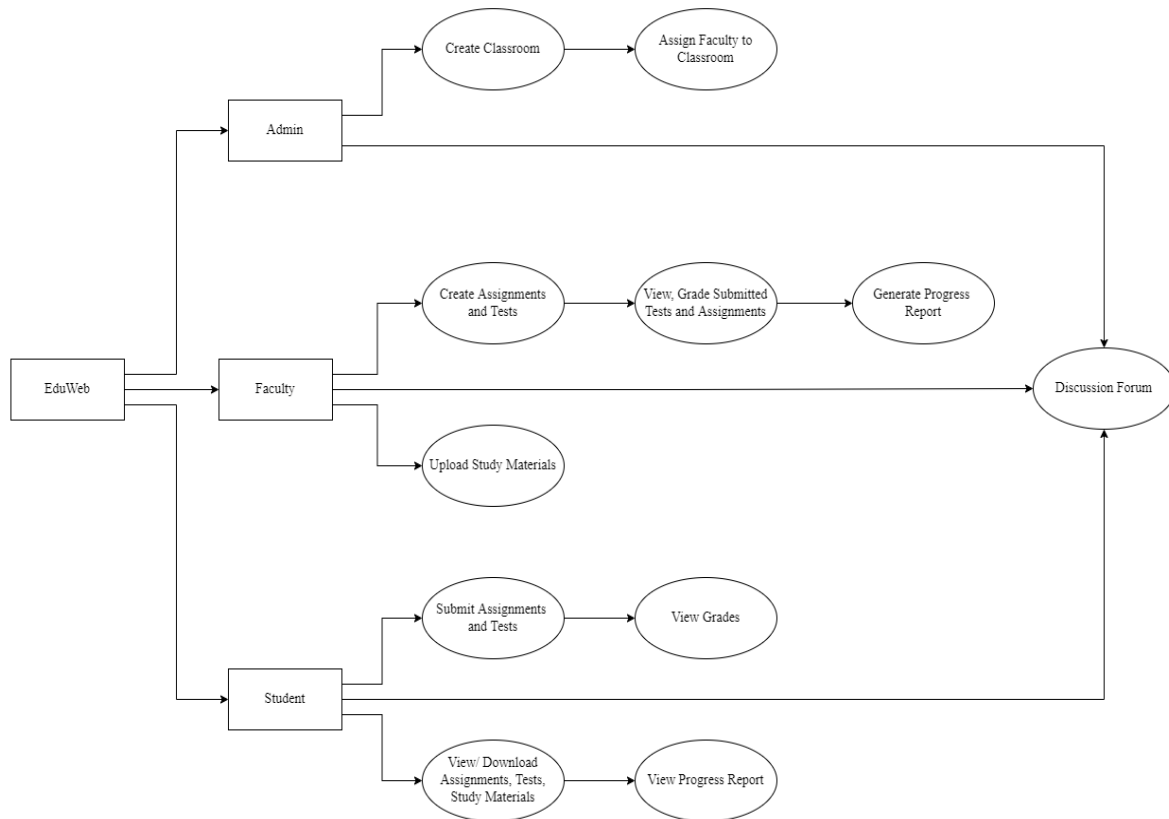


Figure 2: Data Flow Diagram of Project

IV. LIMITATIONS

- Less Integration Facility: This application doesn't provide a google calendar facility. This may cause some problems with monitoring assignments or quizzes.
- No Automated Updates: Activities don't update automatically, so we need to refresh regularly to get all updates.
- Difficult Learner Sharing: Students cannot share their work with other students unless they become 'owners'. This facility is only with teachers.

V. CONCLUSION

It has been a great pleasure for us to work on this exciting project. This application is developed for reducing the workload on the institute and also for remote learning students. It is beneficial for all the educational institutes as it saves time and makes it easy to keep records, access study materials, tests, assignments online with an additional forum for discussion of doubts, etc. The maintenance is done only by the authorized person(admin) and this is paperless work that can be monitored and controlled remotely.

VI. REFERENCES

- [1] Sangamesh K, Akash Samanekar, Ningappa T Pujar, "Student Management System", International Journal Of Engineering Research & Technology (IJERT) ICRTT – 2018 (Volume 06 – Issue 15)
- [2] Shinwon Lee "Design and Analysis of Mobile Learning Management System based on Web App." MUE 2015 (2015).
- [3] Faez, Poorya Bagheri, and Khalid Rahman. "Online Project and Assignment Submission, Management and Progress Monitoring System (OPAS)." (2014).
- [4] Muhandi, Muhandi et al. "Design Of Web-Based LMS (Learning Management System) in SMAN 1 Kampar Kiri Hilir", Journal of Applied Engineering and Technological Science (JAETS)(2020).
- [5] Buddhini Gayathri Jayatilleke, Gaya R. Ranawaka, Chamali Wijesekera, Malinda C.B. Kumarasinha, "Development of mobile application through design-based research", Asian Association of Open Universities Journal (2018).

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- [6] Muhammad Ahsan Saleem, Nouman Moeen, Hamza Waqar, "Skill Tuner – An Automated Skill Learning Management Web App"(2021).
- [7] Quteishat, Anas & Anwar, Al-Mofleh & Al-Mefleh, Mutaz & Al-Batah, Mohammad. "Module For Online Assignment Submission", 10.1109/ICMSAO.2011.5775475 (2011).
- [8] Teka, Degif, "School Management System", School of Graduate Studies of Addis Ababa University, (2008).