TUTOT STUDENT PORTAL MANAGEMENT SYSTEM

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ABSTRACT

An integrated and scalable platform is required to effectively manage academic activities in light of the growing demand for digitalization in education. The tutor-student portal management system presented in this project is intended to organize learning materials, monitor student progress, and expedite academic communication. Tutors can develop and administer courses, upload resources, issue assignments, and review student work using the system. Students can interact with tutors, access resources, turn in assignments, and keep track of their attendance. Transparency, real-time interaction, and effective data management are guaranteed across educational institutions with this system. The system's evaluation shows better managerial effectiveness and learning results.

Keywords: Student Portal, Tutor Dashboard, Assignment Management, Attendance Tracking, E-learning, Educational Technology

I.INTRODUCTION

Technology is becoming a vital instrument for boosting administrative effectiveness and learning experiences in the quickly changing field of education. Digital platforms are progressively replacing or supplementing the traditional educational approach, which is mostly dependent on in-person contacts and manual processes. The way tutors engage with students and oversee academic activities has changed as a result of the growth of Learning Management Systems (LMS), online courses, and blended learning environments. Notwithstanding this change, a lot of educational establishments—particularly small and medium-sized universities—continue to face challenges with disjointed systems, little automation, and ineffective lines of communication.

By providing an integrated web-based platform that centralizes all academic procedures, the Tutor-Student Portal Management System tackles these problems. The system is intended to act as a digital link between students and tutors, promoting improved academic preparation, efficient communication, and easier student activity tracking.

II. RELATED WORK

A variety of Learning Management Systems (LMS) and educational portals have emerged as a result of the education sector's use of digital platforms over the past 20 years. These platforms are designed to make remote learning, performance monitoring, and course administration easier. Enhancing the interactions, collaboration, and sharing of academic resources between tutors and students has been the focus of numerous academic and commercial initiatives. The Tutor-Student Portal Management System is built on a solid foundation provided by the literature and systems now in use, which also highlight important shortcomings in present implementations.

1. Learning Management System LMS

Well-known learning management system (LMS) systems like Moodle, Blackboard, and Canvas have been thoroughly studied and extensively used in educational institutions worldwide. For instance, Moodle is an open-source platform that enables teachers to design unique classes, distribute content, and assess students via tests and homework. Even though these systems are extensive, smaller schools with fewer resources may find them less accessible due to the high setup, technical knowledge, and server maintenance requirements.

2.Communication and Collaboration Tools

Significant progress has been achieved in closing the communication gap between teachers and students thanks to platforms like Microsoft Teams for Education and Google Classroom. For a smooth teaching and learning experience, Google Classroom in particular connects with other Google Workspace features. These technologies, however, frequently rely significantly on cloud storage and third-party integrations, which may give rise to data privacy issues and necessitate a steady internet connection for best performance.

3. Attedence and Academic Tracking System

A number of separate academic monitoring systems have been created to track attendance, record grades, and produce progress reports. These are frequently created as stand-alone mobile or desktop apps. The efficiency of RFID and biometric systems in automating attendance procedures was emphasized in a study by Srivastava et al. (2020), however the high expense and technical difficulties were also noted.

III.METHODOLOGY

The Tutor-Student Portal Management System was developed using a methodical, modular methodology that guarantees scalability, security, and functionality. The display layer, application layer, and data layer make up the three-tier architecture upon which the system is based. To guarantee accessibility across a range of devices, the presentation layer is created using HTML, CSS, JavaScript, and responsive front-end frameworks like Bootstrap. Server-side technologies like PHP and Node.js power the application layer, which manages the

business logic. User identification, role-based access control, assignment procedures, and communication handling are among the essential elements that are managed by this layer. To manage user records, course content, assignment submissions, grades, attendance logs, and messaging history, a relational database system like MySQL is used for data storage.

The system has a number of essential modules. By employing session management and password encryption techniques, the Authentication Module offers tutors and students a secure login experience that guards against unwanted access. Tutors can design, maintain, and update courses and learning resources that students can access and download with the help of the Course Management Module. Students can submit their answers immediately through the site, and tutors can upload assignments with due dates using a dedicated Assignment Module. For evaluation purposes, submitted tasks are timestamped and kept in the database. Students can examine their attendance summary, and tutors can mark daily or weekly attendance using the Attendance Module's interface. By enabling internal communications between tutors and students, the Communication Module encourages candid communication and prompt doubt-clarification.

IV EXPERIMENTAL RESULTS

A prototype installation of the Tutor-Student Portal Management System was set up in a controlled academic setting within the Department of Computer Science at a nearby institution in order to assess its efficacy, usability, and performance. Over the course of a semester, 60 undergraduate students in five classes and three tutors participated in the system's testing. Comparing the trial phase to traditional manual techniques, the main goal was to see gains in academic collaboration, assignment management, student-tutor communication, and general administrative efficiency. While students turned in assignments, examined performance metrics, and spoke with their teachers via the internal messaging system, tutors used the platform to build course modules, upload reading materials, assign homework, record attendance, and connect with students.
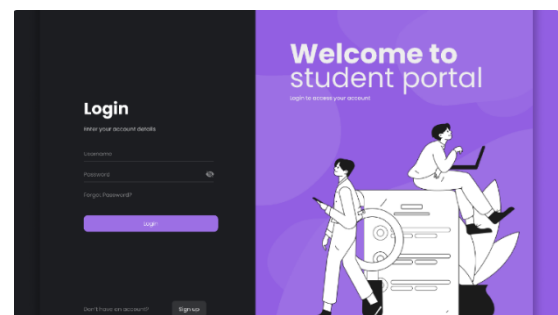

Fig 1.1 Login _Page

V CONCLUSION & FUTURE STUDY

For contemporary academic settings, the Tutor-Student Portal Management System offers a complete and effective solution. It guarantees improved communication, openness in the educational process, and real-time monitoring of students' development. This system may be a good substitute for the disjointed systems that are now in use in many institutions.

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