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Online Feedback Management System: A Digital Approach to Educational Improvement

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Abstract: *The creation of a student feedback system has allowed for the evaluation and analysis of the college faculty's performance. In the educational system, student evaluation of instruction is essential. The main objectives are to analyse the student's responses and gain their opinions. The academic staff can be evaluated and assessed by students in higher education using web-based platforms through feedback. This has been shown to be advantageous because, based on online reviews and comments from students, it frequently enhances the performance of academic staff. Students can submit their views by logging in with their login information to the online portal for student feedback. And through the admin login, administrators may view/analyse the performance of the respective faculty in the form of charts.*

Keywords: faculty's performance

I. INTRODUCTION

The feedback purpose serves improvement by reflecting thoughts about products along with individual performance evaluations. The system delivers essential information through proper methods at the precise moment. Education plays a key role in elevating human life quality standards. Advanced education in India operates as the largest educational system across the world. Private educational institutions established themselves after privatization which helped fulfill the expanding demand for educational services. After each session the educational staff administer a Google form for scores calculation which generates total marks for professors and sections.

Tele-Tutoring success depends on the specific feedback procedures that bring about those outcomes. This structure establishes both the authority along with the instructional approach position within the domain. The quantity of students studying in educational institutions makes it difficult to handle feedback through manual processes. The process of collecting performance evaluation data for journal article tutoring requires significant commitment from executive personnel. The process of evaluating tutoring success through paper assessments requires significant financial resources and duration of time. Information technology dramatically transforms the way education functions in modern times. Educational institutions should either buy or lease a Feedback Management System (FMS) in order to show their fashion-conscious practices and system flaws. The University Subventions Commission demands feedback about preceptors from the preceptors. The National Accreditation and Assessment Council (NAAC) receives student feedback directions from the Commission since this data helps assess the current state of education delivery. This paper examines the unsupervised ethics together with practices as well as possibilities and challenges in India's advanced education system.

II. LITERATURE REVIEW INTRODUCTION

The interest of higher education institutions toward capturing student perspectives about literacy and tutoring has increased recently through internal auditing procedures. This paper presents information about field research alongside discussing strategies used by other Australian institutions. Student feedback is appreciated by all Australian institutions yet their check processes differ while survey results can be both verified and not trusted.

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Data provides minimal implicit information for cross-sector analysis yet often end up becoming either misused or abused according to sources. [1] Every organization must form a thorough assessment process that includes a valid, dependable, multifaceted and beneficial formative assessment check as per research findings.

The assessment of teaching methodologies and ethical management practices by researchers will provide necessary information to understand the perspectives of external parties and task-related stakeholders in modern public international settings. This article discusses the procedures postsecondary institutions utilize for implementing their student-control systems through online methods.

Research analyzes the student feedback system which operates at a public university institution.[2] study explains its approach for efficiency evaluation through data retrieved from the Feedback Management System to determine the effectiveness of speaker education for novices and experienced presenters. The ranking system utilizes student feedback from the Student's Feedback sections that measure professional behaviors and instructional approaches of the speakers. The study evaluated the impact coaching had on skilled and unskilled speakers through its experimental design. Student feedback about mentoring quality shows mixed positive and negative comments which can be attributed to the fact that both experienced and novice speakers received instructional feedback. [3]

Various methods exist to automatically evaluate participant speech for offering relevant suggestions and emotional support according to research studies. Research indicates that two automatic systems currently function for this purpose. The authors studied voice signals directly by using low-level physicochemical properties. The research investigation-maintained focus on how participants displayed their emotions throughout the speaking process. The main purpose of this research is to identify speech emotions instead of building a speaker assistance system. [4] The main limitation of these methods lies in their reliance on speaker speech characteristics while facial expressions are crucial in presentations. The moderation queue has the power to deliver new perspectives along with creative suggestions and outstanding presentation designs according to reference. Such possibilities enable the recognition of employee suggestions which helps attract organizational involvement for the future. Effective suggestion boxes designed by teams stimulate individuals to present ideas which will help particular business operations. [5] Most available online resources exist in dis-organized forms according to research findings. The research provides systematic methods to create semantic information that transforms textual information into computer-interpretable data. A person accessed information from online searches by using their newly acquired knowledge in order to retrieve appropriate results. [6]

Table 1: Major Literature Review

Authors & Year of Publication	**Methodology Adapted**
1] Author: J. M. K. Koon et al. **Year**: 2018	The authors used an agile development framework to build a student feedback system that featured recurring iterations of development and adjustments. The system development process used agile principles to enable both adjustments of feedback and adaptation to the changing needs of the educational institution.
2] Author: R. S. Soni et al. **Year**: 2019	The proposed research used the Waterfall model to develop a feedback management system. The approach required developers to execute system development stages sequentially while obtaining requirements and developing system design followed by deployment.
3] Author: Boud, D., & Molloy, E. **Year**: 2013	Higher education feedback requires redefinition to create active participation strategies which improve student learning.
4] Author: M. R. Alam et al. **Year**: 2021	The system deployed cloud-based development as a means to improve scalability in addition to accessibility. Through agile development the system became accessible through a cloud platform which streamlined the collection and analysis of multi-institutional student feedback storage capabilities.
5] Author: V. R. Patil et al. **Year**: 2021	The authors employed the prototype model for creating a student feedback management system. The development method started with building an

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	operational prototype soon after project initiation to receive ongoing feedback from students and teachers for repeated updates.
6] Author: R. P. Sharma et al. **Year**: 2018	The research used a mixture of agile and waterfall methods which is labeled as a hybrid integration technique. The system design section used waterfall methodology but requirements analysis followed waterfall principles before transitioning to agile implementation and testing phases.

III. SYSTEM ARCHITECTURE

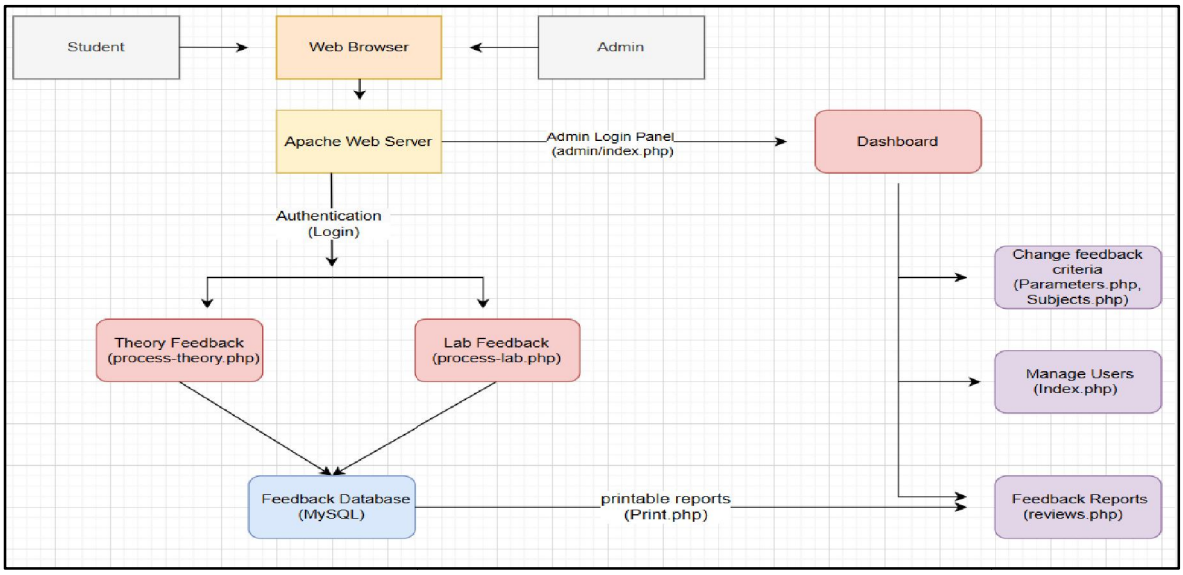

Fig. 1. Architecture Diagram

Several phases constitute our system model structure which includes:

1. Student login
2.Admin Login
3.Feedback Collection and Database Management
4. Feedback Analysis and Reporting

The Online Student Feedback System enables access through a web portal which students use for their login. Students must enter their platform using unique login details consisting of username and password after reaching the platform. The system implements a login mechanism which provides dependable access authentication so unauthorized persons cannot supply feedback. After successful login students find structured evaluation forms which allow them to rate Theory and Lab courses individually. The system stores both categories of feedback data under separate database tables called feedbackdata_theory and feedbackdata_lab.

The system provides an independent login platform for administrators to manage the system. The successful authentication grants users administrative access to the Admin Panel that allows management of users and display of student feedback reports as well as performance insight generation. The admin dashboard offers three main features which enable users to create and delete students and track faculty rating patterns and export raw feedback data for institutional research purposes.

Students utilize structured assessment forms which enable them to rate different learning aspects including course materials as well as professor teaching performance alongside laboratory equipment quality and learning venue environment. A MySQL database stores the gathered feedback through separate database tables for Theory and Laboratory sections. When students complete the forms their data gets tracked through student identifiers while a timestamp notes when they finish each submission. This process enables proper tracking and future reference retrieval.

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The automated feedback processing module of the system enables administrators to generate detailed reports through its built-in functionality. The system analyzes feedback information to assess both instructor capabilities andeducational programs and their weak points. Decision-makers obtain graphical reports and statistical analyses through the system which generates exportable summaries in both Excel and CSV formats. Through this functionality educational quality enhancement continues at the institution through student-based assessments

IV. RESULT

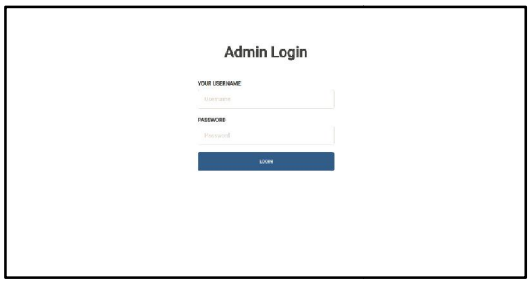

Fig. 2. Admin-Login Page

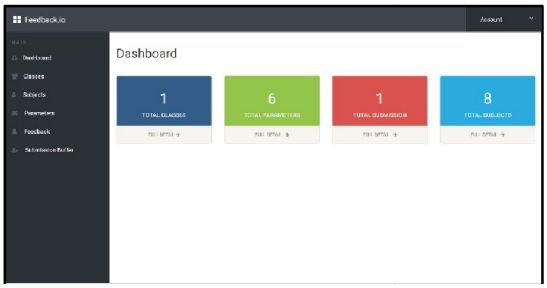

Fig. 3. Admin Dashboard

The Online Student Feedback Management System implemented successfully created an organized web-based platform which gave students a simplified method to give feedback and administrators a way to examine results. The system enables students to offer course and faculty feedback through its easy to use interface so students can have a smooth experience. Students can provide feedback data through the structured interface where rating systems and comments together with suggestions are validated for data accuracy.

System administrators use a centralized interface to view student feedback records. The system maintains safe storage of feedback information in its database for simple accessing and inspection purposes. The system allows administrators to track student answers effectively so they can handle questions while gaining performance and course effectiveness insights about faculty teaching

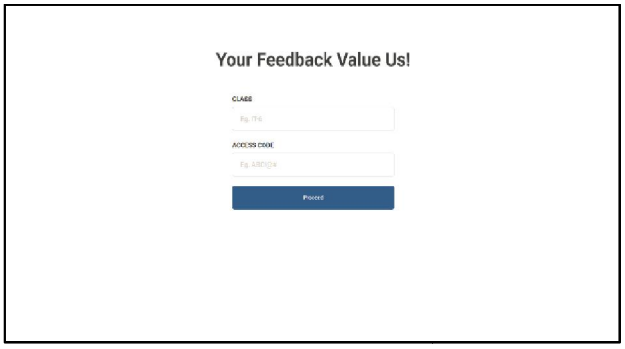

Fig. 4. Student Login Page

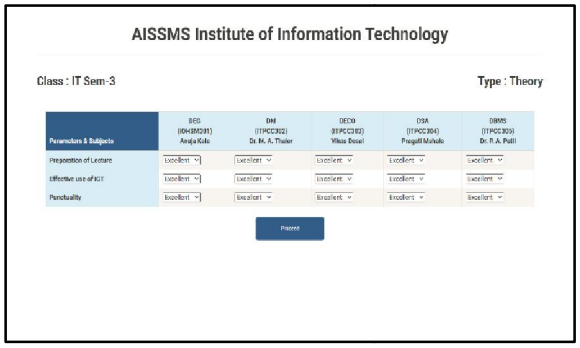

Fig. 5. Theory Feedback Page

Visual reports from the system help users to make informed decisions through feedback data display. The generated reports enable administrators to study academic patterns while assessing instructor performance and pinpointing enhancement locations which achieves better universal academic results. The system enables user profile management through which students along with administrators can maintain their personal details by ensuring secure access to their private information.

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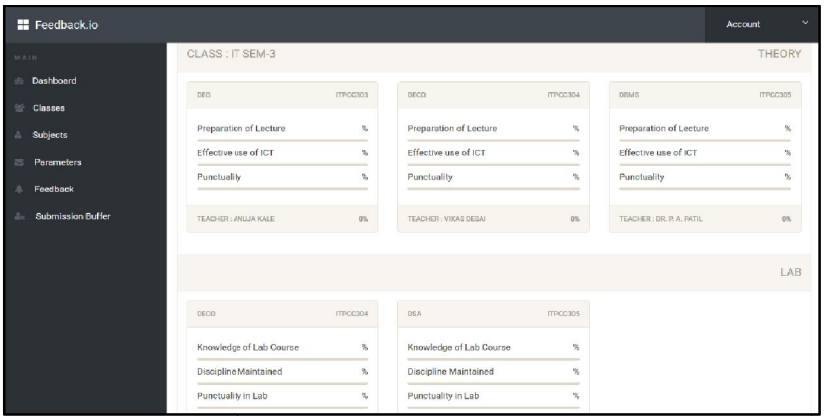

Fig. 6. Reports

The creation of the Online Student Feedback Management System optimized feedback collecting and management processes while improving system efficiency alongside greater transparency. Such a system improves the educational experience through its organized data-driven approach to evaluating feedback. The system supports academic developments through a student-centered setting by helping institutions base their choices on organized insights.

V. CONCLUSION

Educational institutions utilize the Feedback Management System to improve their capability for student feedback collection and assessment procedures. The system enables students to deliver structured input about both theory instruction and lab work to achieve complete evaluations. Web technology applications enable the system to manage data rapidly and efficiently. An interactive web portal allows students to offer feedback which gets instantly stored in a database. This platform minimizes the distance between students' anticipated services and instructors' actions which results in strengthened classroom effectiveness. The digital feedback method provides more precise results than paper systems and reduces both human mistakes and simplifies administrative work. Through the system administrators can analyze student responses while creating detailed reports that direct quality enhancement decisions for teaching purposes. Feature implementations on the admin panel allow users to control system access while facilitating feedback review and generating performance reports to enhance the feedback management process. The replacement of old manual procedures makes the system more transparent and accountable which leads to better student-responsive features in academic organizations.

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