

Automated Faculty Performance Evaluation System

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Abstract: *The Automated faculty Performance Evaluation System is a system that helps colleges keep all teacher-related information in one place. Instead of using paper files or different systems, everything is stored digitally, so it is easy to find and manage. It keeps details like teachers' personal information, qualifications, subjects they teach, student feedback, research work, and overall performance. This helps colleges understand how well a teacher is performing. The system also collects feedback from students, which helps in improving teaching quality. It keeps track of research and achievements, which are important for evaluation. Overall, it helps college management make better decisions by identifying strong performers and areas that need improvement. The system is easy to use, saves time, and makes the whole process more organized and transparent.*

Keywords: Diploma Api, Teacher Management System, Digital Records, Teacher Information, Student Feedback, Performance Tracking

I. INTRODUCTION

The Automated Faculty Performance Evaluation System is a system used in colleges to keep all teacher-related information in one place. Instead of using papers or different files, everything is stored digitally, which makes it much easier to manage. In this system, we can store details like teacher's personal information, their qualifications, subjects they teach, experience, research work, and also feedback given by students. Because of this, it becomes easy to understand how a teacher is performing overall. The main use of this system is to make the evaluation process simple and clear. It collects all the important data and shows the performance of each teacher properly. For example, student feedback helps to know how well a teacher is teaching, and research records show their academic contribution. This system also saves a lot of time because all work is done automatically instead of manually. It reduces mistakes and keeps the data accurate. At the same time, the system is secure, so only authorized people like HODs or administrators can access the information. Another good thing is that teachers can also check their own performance. They can see where they are doing well and where they need to improve. This helps them to grow and perform better. For college management, this system is very helpful because they can easily make decisions based on proper data. They can identify good performers, support teachers who need improvement, and improve the overall quality of education. In simple words, this system makes everything easy, fast, and clear. It helps both teachers and management, and improves the overall performance of the institution.

II. NEED OF PROJECT

In many colleges, teacher-related information is still managed using physical files or different systems, which makes it difficult to access and update data quickly. This often leads to confusion, duplication of records, and even loss of important information. Managing data in this way also takes a lot of time and effort, making the overall process inefficient.

Another major issue is that there is no single platform where all teacher details such as performance, qualifications, student feedback, and achievements are stored together. Because of this, it becomes hard for management to properly



evaluate teachers or identify areas where improvement is needed. Collecting and analyzing student feedback manually is also slow and not very effective.

Therefore, there is a need for a system like the diploma api that can store all information in one place and make it easily accessible. This system helps in reducing errors, saving time, and improving data management. It also supports better decision-making for college management, which ultimately helps in improving the quality of education.

III. PROBLEM DEFINITION

In many colleges, teacher-related information is still managed using traditional methods like paper files or multiple separate systems. This creates a lot of problems because the data is not organized in one place. It becomes difficult to search, update, or maintain records such as teacher details, subjects taught, qualifications, and performance. Managing information in this way takes a lot of time and effort, and there is always a risk of losing important data or making mistakes.

Another major problem is the lack of a centralized system to track teacher performance and activities. Information like student feedback, research work, and achievements is often stored separately or not recorded properly at all. Because of this, college management finds it difficult to evaluate teachers fairly and accurately. The process of collecting student feedback is also manual and slow, which reduces its usefulness and effectiveness.

Due to these issues, decision-making becomes challenging for the management. They are unable to clearly identify which teachers are performing well and which ones need improvement. This can affect the overall quality of education. Therefore, there is a need for a proper digital system that can store all teacher-related information in one place, make data easily accessible, reduce manual work, and help colleges manage everything in a more efficient and organized way.

IV. LITERATURE REVIEW

Evaluating the performance of teachers is very important for maintaining good quality education in any college or institution. It helps management understand how well teachers are performing and where improvements are needed. Because of this, many researchers and developers have worked on creating systems to manage faculty data and make the evaluation process easier. In earlier times, most colleges used manual methods for evaluation, like paperwork, files, or simple tools such as spreadsheets. Some institutions also used small database systems, but these were not very advanced. These methods had many problems. Data was often not properly organized, there were chances of errors, and the evaluation process took a lot of time. Also, different departments followed different methods, which made the results inconsistent. Many studies in the education field have suggested that there is a need for automated systems that can handle all faculty-related data in a better way. These systems should not only store information but also analyze it properly. Researchers have emphasized that a good evaluation system should include all important factors like teaching performance, student feedback, research work, and administrative responsibilities. In recent years, modern systems have been developed using web technologies and APIs. These systems store all data in one central place, making it easy to access and manage. They also provide features like real-time updates, automatic report generation, and performance analysis. This helps management get quick and accurate results without much manual effort. Another important point highlighted in studies is data security and scalability. Since faculty data is sensitive, it must be stored securely so that only authorized users can access it. At the same time, the system should be able to handle large amounts of data as the institution grows. The proposed Automated Faculty Performance Evaluation System is based on these modern ideas. It combines all important features into one system. It is designed to be secure, easy to use, and capable of handling large data. It helps in managing faculty information efficiently, improves transparency in evaluation, and supports continuous improvement in teaching and academic performance.



V. METHODOLOGY TO SOLVE THE PROBLEM

The Diploma API system is made using something called a three-layer structure, which means the system is divided into three parts. This makes the system easy to understand, easy to use, and it can handle many users at the same time. It is also easy to update or change if needed. Each part has its own job, so everything works smoothly.

The first part is the Presentation Layer, which is what users see on the screen. It is the website interface. We use HTML to design it and Java to make buttons and features work. This layer shows information to users and allows them to interact with the system. The design is simple so that anyone can use it without any difficulty.

The second part is the Application Layer, which works like the brain of the system. It does all the main work in the background. We use Firebase here to manage things like login, user access, and processing data. It makes sure users only see what they are allowed to see and keeps everything updated in real time.

The third part is the Database Layer, where all the information is stored. We use Firebase Realtime Database to save data like user details and other important records. This layer keeps the data safe and organized. It can also handle many users at the same time without problems.

Overall, this system is simple, fast, and easy to use. It helps manage everything properly and gives a smooth experience to users.



Fig. 1. Local Hire system Architecture

VI. OBJECTIVES OF PROPOSED WORK

1. To create a system that stores all teacher information in one place
2. To make it easy to access, update, and manage teacher details
3. To collect and manage student feedback in a simple way
4. To track teacher performance, achievements, and research work
5. To reduce manual work and save time for college management
6. To improve accuracy and avoid data loss or errors
7. To provide secure access so only authorized users can use the system
8. To help management make better decisions based on proper data
9. To improve overall efficiency and organization of the system



VII. DETAILS OF DESIGN, WORKING, AND PROCESS

1. Design

The system is designed in a simple and user-friendly way so that anyone can use it easily. It uses a three-layer structure:

- The Presentation Layer (what users see on the website)
- The Application Layer (handles all the logic and processing)
- The Database Layer (stores all the information)

The design includes features like login, adding teacher details, viewing performance, and checking feedback. The interface is kept simple so users like admin, HOD, or teachers can easily navigate.

2. Working

The system works step by step when a user interacts with it. First, the user logs in with valid credentials. The system checks the login details and gives access based on the user role.

After login, the user can perform actions like adding teacher information, viewing data, or checking feedback. The request goes to the system (Application Layer), which processes it and connects to the database. The database stores or retrieves the required information and sends it back to the user.

Everything is updated in real time, so users always see the latest data.

3. Process

The process of the system is simple and clear:

1. User logs into the system
2. User selects an action (add, view, update data)
3. System processes the request
4. Data is stored or fetched from the database
5. Result is displayed on the screen

This process makes the system fast, accurate, and easy to use. It reduces manual work, avoids errors, and helps in better management of teacher performance.

VIII. RESULTS AND APPLICATIONS

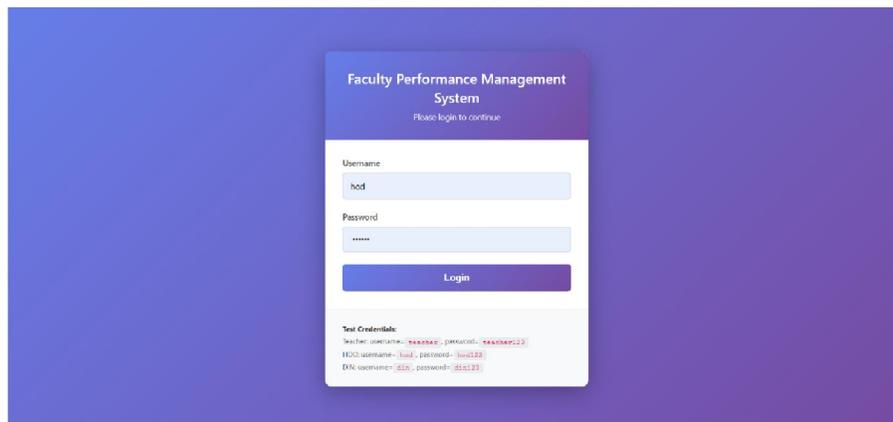


Fig.1. Login Dashboard For Faculty, Hod and IQAC member



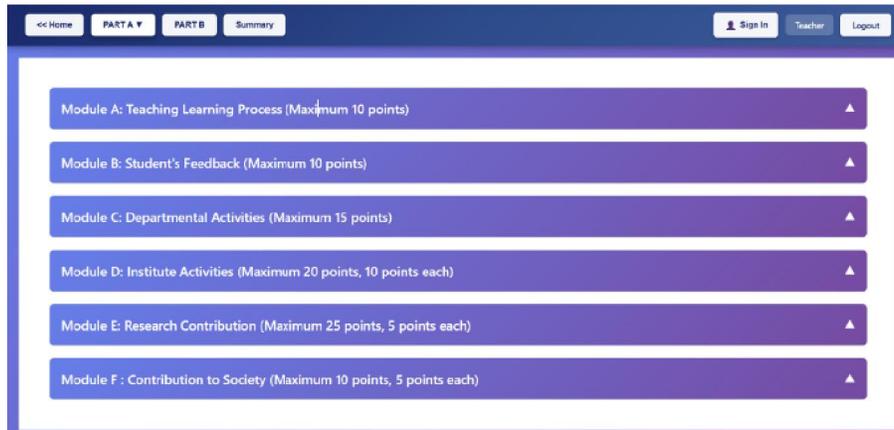


Fig.2. Main Points of Faculty Performance

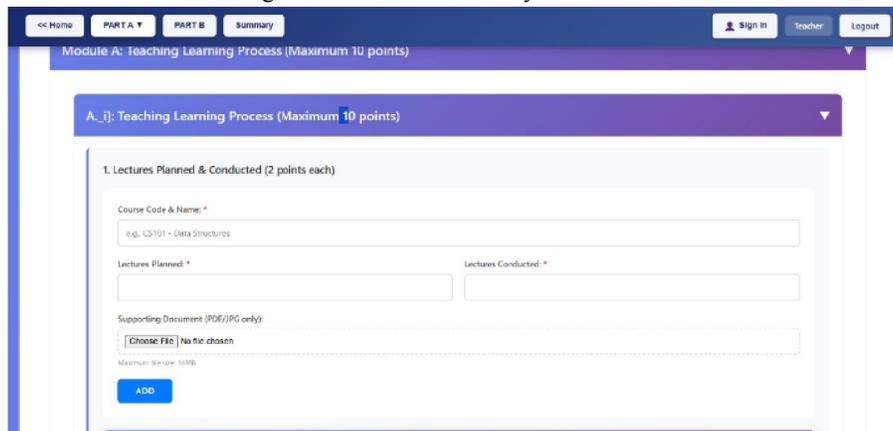


Fig.3. Faculty Dashboard where they fill all their information about the lectures

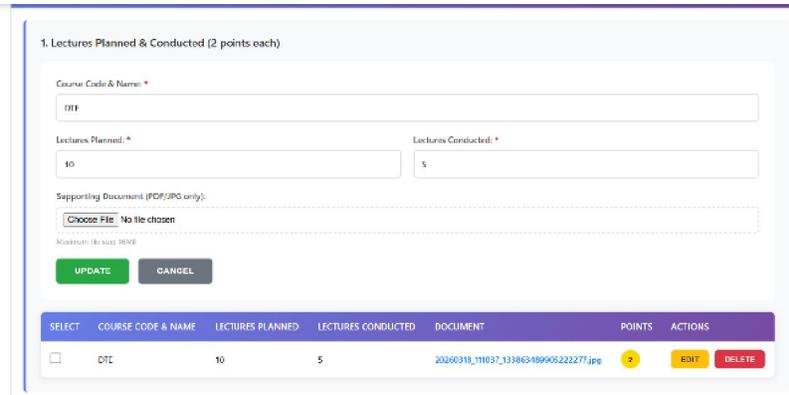


Fig.4. When Faculty Fills All The Information About The Lectures

It Displays In Table Format And Any Document Related It Is Also Shown In The Table



Fig.5.All the information faculty added is editable and updated

Fig.5. Hod Dashboard Showing The Faculty Name To Check Their Performance Before IQAC Member

VIEW	ID	DOCUMENT NAME	COURSE NAME	LECTURES PLANNED	LECTURES CONDUCTED	POINT CLAIMED	REPORTING OFFICER POINT
View	1478	data1oc1oc1.pdf	313203 DIGITAL TEO INNOVES (DTI)	45	45	2	2
View	1546		312501 BASIC ELECTRICAL & ELECTRONICS	60	60	2	0
View	1547		22012 IDIP	32	32	2	0

Fig.6. In hod dashboard it shows the information which is filled by faculty member



IX. CONCLUSION

The Automated Faculty Performance Evaluation System helps colleges manage all teacher-related information in a simple and organized way. By storing everything digitally, it reduces manual work, saves time, and avoids errors. The system makes it easy to track teacher performance using student feedback, research work, and other important details.

It also helps teachers understand their own performance and improve where needed. At the same time, college management can make better decisions based on accurate data. The system is secure, easy to use, and ensures that only authorized users can access the information.

Overall, this system improves efficiency, transparency, and the quality of education. It benefits both teachers and management by making the evaluation process faster, clearer, and more effect

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