Faculty Information System

Sai Tribhuvan[1], Datta Wagh[2], Yash Jangam[3], Megha Jadhav[4], Prof.A.C.Naik[5], Prof.S.B.Pundage[6]
[1, 2, 3, 4, 5, 6]Dept of Computer Engineering
[1, 2, 3, 4, 5, 6] Shreyash College of Engineering and Technology

Abstract- *A Faculty Information System (FIS) is a web-based application designed to manage the professional information of faculty members within a college or university. The primary purpose of this system is to digitally store and manage faculty data, including personal details, qualifications, subjects handled, attendance, research work, and publications. This system replaces manual record-keeping, making data access fast, secure, and efficient. The objective of this project is to develop a centralized platform that simplifies information management for both the administration and the faculty.*

Keywords: Academic Management, Database Management, Faculty Information System, Faculty Records, Web Application.

I. INTRODUCTION

This is the foremost preliminary step for proceeding with any research work or system development, such as the **Faculty Information System (FIS)**. Before starting the technical implementation, it is essential to go through a complete thought process regarding the subject's viability.

For this project, the following research methods were utilized:

- **Read Published Work:** We analyzed existing journals and research papers in the field of academic management to understand the current digital landscape.
- **Online Research:** Extensive "Goggling" and searching of online databases were performed to evaluate the technical requirements and necessity of an automated system.
- **Requirement Gathering:** We identified that traditional systems often face data loss and high time consumption, necessitating a centralized digital platform.
- **Viability Analysis:** By researching existing solutions, we ensured that the FIS would provide significant weight-age to institutional management and academic grading.

II. WRITEDOWNYOURSTUDIESAND FINDINGS

Now it is the time to articulate the research work for the **Faculty Information System** using the ideas gathered in the previous steps. This involves adopting specific structural approaches to build the paper:

A. Bits and Pieces Together

In this approach, all researched information including database schemas, UI designs, and system requirements is combined into a unified research paper. This method allows the researcher to use already accomplished work in academic management as a starting building block for this paper.

B. Jump Start

This approach works best under the guidance of fellow researchers and experts. For this project, the authors continuously received inputs and expert comments from their guide, S.B. Pundage, and **HOD, A.C. Naik**. This interaction:

1) Enriches the information pool of the paper with professional upgrades.
2) Builds the researcher's confidence to take a "jump" and begin the formal writing process.

III. GETPEERREVIEWED

This represents the most crucial step for your researchpublication to ensure the academic integrity of the Faculty Information System project. Even if you are well-confident about your paper's technical architecture, it is essential that the drafted journal is critically reviewed by your peers or subject matter.

- **Review Process**: Always try to get maximum review comments to refine the system's logic.
- **Submission**: For formal peer review, send your research paper in the specific IJSART format to **editor@ijsart.com**.
- **Expert Input**: This process enriches the information pool of your paper with expert comments or upgrades regarding database management and web application security.Here is the detailed process for the peer review stage as required by the journal guidelines:

- **Crucial Milestone**: This is considered the most critical step for your research publication.
- **Expert Validation**: You must ensure that your drafted journal is critically reviewed by your peers or subject matter experts to validate your findings on the Faculty Information System.
- **Proactive Feedback**: Even if you are highly confident in your paper, you should always strive to obtain the maximum number of review comments possible.
- **Information Enrichment**: Receiving external feedback enriches the information pool of your paper with expert comments and necessary technical upgrades.
- **Formal Submission**: To initiate this process, you must send your research paper in the official IJSART format to the editorial team at **editor@ijsart.com**

IV. IMPROVEMENT AS PER REVIEWER COMMENTS

After the review, you must analyze and understand all the provided review comments thoroughly to make the required amendments in your paper.

- **Seeking Clarity**: If you are not confident about any specific review comment regarding the Faculty Information System, do not forget to get clarity about that comment from the editor.
- **Handling Criticism**: In some cases, your paper may receive a number of critical remarks; do not get disheartened and try to improvise the maximum.
- **Final Publication**: After the successful review and payment of publication charges, IJSART will publish your paper for the current edition.
- **Payment Details**: You can find the payment details at the official IJSART publication charges link.
- In a real-life academic scenario, the peer review process serves as the ultimate quality check for your research. Here is the detailed breakdown of this stage as it applies to your **Faculty Information System** project:
- **The Most Crucial Step:** Peer review is widely considered the most vital phase for your research publication.
- **Expert Scrutiny:** It is essential that your drafted journal is critically evaluated by peers or subject matter experts to ensure the technical logic of your system is sound.
- **Seeking Feedback:** Even if you are fully confident in your work, you should proactively seek the maximum number of review comments.
- **Knowledge Enrichment:** This stage enriches the information pool of your paper with expert comments, suggesting upgrades that you might have missed during the initial writing.

V. CONCLUSION

A conclusion section is not strictly required by the template, but it is highly recommended to elaborate on the importance of the work.

- **System Impact**: The Faculty Information System optimizes institutional efficiency by eliminating manual errors and increasing the speed of data retrieval.
- **Content Policy**: While the conclusion may review the main points of the paper, do not replicate the abstract as the conclusion.
- **Future Scope**: This work highlights the importance of digital transformation and suggests future applications, such as the integration of AI-based performance analytics for faculty grading.

VI. APPENDIX

The **Appendix** section provides a space for the technical details that are too extensive for the main body but essential for proving the functionality of the **Faculty Information System (FIS)**.

1. Database Schema (ER Diagram)

This describes the logical structure of your system's data.

- **Faculty Table**: Includes fields like Faculty_ID, Name, Qualification, and Date of Joining.
- **Research Table**: Stores publications, journals, and patents linked to the Faculty_ID.
- **Attendance Table**: Tracks daily login/logout or lecture hours.

2. Data Flow Diagrams (DFD)

- **Level 0**: Shows the interaction between the Administrator, Faculty, and the FIS Database.
- **Level 1**: Breaks down the processes like "Add Faculty Records," "Update Research Papers," and "Generate Reports".

3. System Modules Overview

Essentially, your system consists of several major functional units:

- **Admin Module**: Responsible for managing faculty accounts and institutional oversight.
- **Faculty Module**: Allows individual scholars to update their research work and profiles.
- **Search Engine**: A retrieval tool used to find documents or specific faculty profiles quickly.

VII. ACKNOWLEDGMENT

The authors would like to express gratitude to Prof. Anil Naik, Head of the Department of Computer Engineering, for his extensive experience and guidance in academic administration throughout this project.

REFERENCES

[1] S.B. Pundage, "Methodologies in Academic Information Management," Internal Research Review, Shreyash College of Engineering and Technology.
[2] A.C. Naik, "Digital Transformation in Engineering Education Systems," Academic Journal of Engineering, 2025.
[3] K. C. Laudon and J. P. Laudon, *Management Information Systems: Managing the Digital Firm*, 15th ed., Pearson Education, 2018.
[4] R. Elmasri and S. B. Navathe, *Fundamentals of Database Systems*, 7th ed., Pearson, 2016.
[5] X. Y. Jing, F. Wu, Z. Li, R. Hu and D. Zhang, "Multi-Label Dictionary Learning for Image Annotation," in *IEEE Transactions on Image Processing*, vol. 25, no. 6, pp. 2712- 2725, June 2016.

BIOGRAPHIES

[1] **Megha Jadhav** Miss Megha Jadhav is currently pursuing a Diploma in Computer Engineering from S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic), Chh. Sambhajinagar, India. Her areas of interest include web development and database management systems.
[2] **Yash Jangam** Mr. Yash Jangam is currently pursuing a Diploma in Computer Engineering from S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic), Chh. Sambhajinagar, India. His areas of interest include software development and database systems.
[3] **Sai Tribhuvan** Mr. Sai Tribhuvan is currently pursuing a Diploma in Computer Engineering from S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic), Chh. Sambhajinagar, India. His areas of interest include web technologies and information systems.
[4] **Datta Wagh** Mr. Datta Wagh is currently pursuing a Diploma in Computer Engineering from S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic), Chh. Sambhajinagar, India. His areas of interest include database management and system design.
[5] **Prof. Anil Naik** Prof. Anil Naik is the Head of the Department of Computer Engineering at S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic), Chh. Sambhajinagar, India. He has extensive experience in teaching and academic administration in the field of computer engineering.
[6] **Prof. S.B. Pundage** is a Professor in the Department of Computer Engineering at S.Y.P. Shreeyash College of Engineering and Technology (Polytechnic). His interests include academic information management and system development.