BITS CSE Connect: The Online Newsletter Hub

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ABSTRACT

The **BITS CSE Connect: The Online Newsletter Hub** serves as a dynamic platform for students, faculty, and staff to stay updated on important academic and extracurricular activities. This project aims to develop a comprehensive and user-friendly website that provides updates on events, notices, paper publications, placements,alumni details, and other essential announcements. The website will feature a well-structured interface with dedicated sections for different types of updates, ensuring easy navigation and accessibility. Additionally, an admin panel will allow authorized personnel to manage and update content efficiently. Using the authentication details the admin can login to the website into admin panel. The admin authentication is given to the faculty so that they can upload the information. The students can register to the website and view the information by logging into it. By implementing this platform, the college community can enhance communication, streamline information dissemination, and foster academic engagement, ultimately contributing to a more connected and informed campus environment. This will replace the general traditional system of passing the information and digitalize the information which makes easier for both the faculty and students.

1. INTRODUCTION

In today's digital age, the importance of maintaining an efficient online presence for educational institutions cannot be overstated. A well-structured college website plays a vital role in connecting students, faculty, and alumni, particularly in specialized departments like Computer Science and Engineering (CSE). The college website dedicated to the CSE department serves as a central hub for all relevant information, offering seamless access to essential details about academic programs, events, research publications, and departmental activities.

This online platform not only ensures easy navigation for prospective students but also provides a space for current students and faculty to stay updated on upcoming events, conferences, seminars, workshops, and other academic milestones. Additionally, it facilitates sharing of recent research papers, publications, and projects, contributing to the academic community's growth

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and collaboration. By embracing the digital space, the CSE department fosters a dynamic environment for learning, innovation, and engagement[1-22].

2. LITERATURE SURVEY

A Centralized Portal for a Student Support System based on Web Application by Kamal Sharma, R.M.Gomathi, Yahya Ibrahim Imtiaz (2022):

The proposed paper introduces an online platform designed to serve as a centralized system for managing student-related academic and administrative information efficiently. This web-based application aims to enhance accessibility and transparency by offering students a structured way to track important details such as:

Fee Details: The system provides students with a clear overview of their tuition fees, pending dues, and transaction history, ensuring better financial management.

Attendance Details: Students can check their attendance records, receive notifications regarding attendance shortages, and monitor their overall percentage to avoid academic penalties.

Examination Details: The platform enables students to access exam schedules, hall ticket information, and results in an organized manner.

Limitations: While the proposed system effectively covers core academic functionalities, it lacks certain essential features that could further enhance student engagement and experience. The paper does not include:

Student Projects: There is no dedicated module for students to upload or manage their academic projects, collaborate with peers, or receive faculty feedback.

Event Management: The system does not provide event-related functionalities such as event registration, participation tracking, or notifications for college activities. The proposed paper describes about having an online platform which provides the details regarding student's fee details, attendance details, examination details.

A Web based-College Event Management System and Notification Sender by J.R.V. Jeny, P. Sadhana, B. Jeeven Kumar, S.Leela Abhishek, T. Sai Chander (2022) :

The event management system is designed to facilitate the organization and coordination of various college events. It streamlines the process by allowing event managers to handle all aspects of event planning, including scheduling, venue allocation, participant registration, and real-time updates. Additionally, the system provides event managers with access to all registration details at different stages, ensuring smooth event execution.

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Limitation: Although the paper presents a comprehensive overview of event management, it primarily focuses on event-related functionalities and does not address aspects concerning student and faculty details, such as their profiles, roles, and participation history. This limitation suggests that future enhancements could incorporate student and faculty management features to improve the system's effectiveness.

Multi-platform college management framework by Dastgir Pojee, Farooq Shaikh, Vishal Kuvar, Fahim Rarh, Mohd. Abbas Meghani (2017):

This paper introduces a multi-platform framework designed to enhance college management by offering various digital solutions. The system provides users with an online paper-checking module, allowing efficient evaluation and grading of assessments. Additionally, it includes an attendance management module, enabling seamless tracking of student attendance records. A digital notice board feature is also integrated into the framework, ensuring that important announcements and updates are communicated to students and faculty members in a timely manner.

Limitation: While the paper presents a well-structured framework for college management, it does not include details about maintaining records of past important announcements. This limitation suggests that users may not have access to historical notifications, which could be useful for referencing previous communications and ensuring better information tracking within the institution.

A case study of academic activity announcement system prototyping as a usability assessment technique by ThanaphatSaefyung, KhanithaSrisukwarophas, Chengwai Tan, PrasaraJakkaew, Sujitra Arwatchananukul (2022):

This paper focuses on enhancing accessibility for students by improving public relations in university activity announcements. The proposed system streamlines the process of disseminating academic activity information, ensuring that students receive timely updates regarding university events, workshops, and other important announcements. By utilizing usability assessment techniques, the study aims to optimize the efficiency and user-friendliness of the announcement system, making it more accessible and effective for students.

Limitation: While the paper successfully addresses the enhancement of university activity announcements, it does not cover aspects related to paper publications or alumni details. The absence of these features limits the system's ability to provide information about academic research outputs and alumni engagement, which could be valuable for students and faculty members seeking research references or networking opportunities with former students.

Near field application: NFC smart notice board by G. P Rajesh, Praveenraj Pattar, M. N Divya, Vara Prasad(2016):

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This paper extensively discusses the implementation of smart notice boards using Near Field Communication (NFC) technology. The proposed system aims to replace the traditional manual method of announcing notices by providing a digital, automated solution. By leveraging NFC technology, the smart notice board ensures efficient and instant dissemination of important information to students and faculty, reducing dependency on physical notice boards and minimizing delays in communication. This approach enhances accessibility and ensures that updates are delivered seamlessly across the institution.

Limitation: Although the paper effectively addresses the transition from manual to digital notice boards, it primarily focuses on online notices and does not cover aspects related to student placement details. The absence of placement-related information limits the system's capability to provide students with updates on job opportunities, recruitment drives, and career-related announcements, which are crucial for their professional growth and future prospects.

3. EXISTING SYSTEM

The traditional system of announcing the events, notices is via notice boards or by in person announcements. If any students want to know the details of the previous event highlights that is not that easy to know. To know the publications details of projects done by students, then there is a need to approach the faculties to take the details. If there are any events that are going to be organised to announce it to everyone, the organisers should go to every single classroom and talk about it with the students. For everything we have to manually say about the events, notices, publications, alumni details, etc.

The college website dedicated to the CSE department offers a comprehensive platform that enhances the overall student experience by providing critical information and tools. The platform serves as an efficient event management tool, handling all aspects of an event—from planning and registration to execution—ensuring smooth coordination. It provides users with access to registration information at various stages, allowing them to track their participation and involvement in events.

In addition, the website includes a unique online paper-checking module, making it easier for both students and faculty to manage and assess academic papers digitally. The attendance module simplifies tracking and reporting, ensuring that students and faculty can stay updated on attendance matters. Furthermore, the website features a digital notice board where important announcements, including university activity updates and event reminders, are posted for easy access by students. This platform not only streamlines administrative processes but also fosters greater communication and engagement within the CSE department.

4. PROBLEM STATEMENT

In many academic institutions, the lack of a centralized platform for information dissemination leads to fragmented communication and reduced student engagement. Announcements about

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events, workshops, seminars, and paper publications are often dispersed across various channels, including bulletin boards, emails, and social media, making it difficult for students and faculty to stay informed and connected. This inconsistency results in missed opportunities for professional development, academic collaboration, and extracurricular participation. The challenge is to design and implement a comprehensive, user-friendly college website that consolidates all relevant updates and information into a single, easily accessible platform. This solution aims to enhance communication, foster a sense of community, and promote academic excellence by ensuring timely and organized dissemination of important information.

5. PROPOSED SYSTEM

BITS CSE Connect is a centralized digital platform designed to provide students, faculty, and alumni with the latest updates on publications, events, notices, and alumni details related to the Computer Science & Engineering (CSE) department. The platform aims to enhance communication and engagement within the BITS CSE community.

System Features

1. User Management

- Role-based access: Admin, Faculty, Student
- Secure login and authentication
- Profile management for registered users

2. Newsletter & Publications

- Regularly updated CSE department publications

3. Events & Notices

- Upcoming department events, workshops, and seminars
- Important notices and announcements

4. Alumni Section

- Alumni details of passed out students

5. Admin Panel

- Content management system (CMS) for easy updates
- User management

Technology Stack

Frontend: HTML, CSS, JavaScript

Backend:php

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Database: MySQL

Expected Benefits

- Centralized platform for department news and updates
- Easy access to important announcements and publications

6. METHODOLOGY

Modules:

Our project includes three modules:

1. Admin Module
2. User Module
3. Database Module

Admin Module:

The Admin Module acts as the central hub of the Bits Newsletter project, enabling efficient management of content and user-related functionalities.The Admin Module serves as the entry point for new data, ensuring the platform stays up to date.

1. Access & Authentication

- Admin logs in using an email and password.
- Secure authentication ensures that only authorized admins can access and manage the system.

2. User Management

- Register Faculty or Students: Admin can create new user accounts.
- Delete Users: Admin can remove users when necessary.

3. Placement News Management

- Add Placement News: Admin can upload job placement details specifically for CSE students who have secured jobs. Images of the students along with the company name.
- Delete Placement News: Admin can remove placement news when necessary.

4. Publications Management

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- Add Publications: Admin can upload mini and major projects from previous years for CSE A, CSE B, and CSE C.
    - Each publication includes:
        - Team members' details
        - Project guide details
        - Project name
        - PDF document of the project
- Delete Publications: Admin can remove publications if needed.

5. Events Management

- Add Events: Admin can post event details.
- Event Status Management: Events appear in the "Recent Events" section upon upload.
- There is also a "Previous Events" section to see previous events.
- Delete Events: Admin can remove events when necessary.

6. Alumni Management

- Add Alumni Details: Admin can store alumni records, including:
    - Roll number
    - Email
    - Phone number
    - Photo

7. Notices Management

- Add Notices: Admin can upload official announcements and updates.
- Delete Notices: Admin can remove outdated notices as needed.

User Module:

The User Module serves as the interface for students and faculty, allowing them to access and manage important information. It ensures secure access to content uploaded by the admin and provides features for managing user accounts and retrieving necessary updates.

1. User Authentication & Login

- Users must log in using their credentials to access any content on the platform.
- The login system ensures data security and prevents unauthorized access.
- If a user forgets their password, they can use the "Forgot Password" feature to securely reset it.

2. Viewing Uploaded Content

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After logging in, users can view all uploaded content, including:

- Placement News – Information about campus placements.
- Publications – Previous year mini and major project details, including team members, guides, project names, and PDFs.
- Events – Recent and past events organized within the institution.
- Alumni Section – Details of past students, including their roll number, email, phone number, and photos.
- Notices – Important academic and administrative announcements.

Content is dynamically updated as per the latest uploads by the admin.

3. Password Management

- Users can reset their password using the "Forgot Password" feature if they lose access.
- Logged-in users can update their password anytime to enhance security.

4. Profile Management

- Users can update their profile details, including personal and contact information.
- Keeping profiles updated ensures better communication and record maintenance.
- Profile management helps users maintain an active and accurate database entry.

5. Access to Informational Pages

- Users can navigate to the "About Us" page to understand the purpose and mission of the Bits Newsletter.
- The "Contact Us" page allows users to reach out for assistance, support, or inquiries.

6. Database Integration & Real-Time Updates

- The User Module retrieves data from the database, ensuring users always access the latest information.
- Any new placement news, publications, events, or notices uploaded via the Admin Module become instantly visible to logged-in users.
- The system is designed to handle real-time updates without delays.

Database Module:

1. Database Structure & Tables

The database consists of multiple tables, each dedicated to storing specific types of information:

- Users Table – Stores user details such as email, password, name, and role (faculty or student).

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- Placement News Table – Contains information about job opportunities, company names, and other placement-related details.
- Publications Table – Stores previous year mini and major project details, including team members, guide, project name, and related PDF document.
- Events Table – Maintains records of recent and past events, with recent events being displayed for one day before moving to the previous events section.
- Previous Events Table – Stores all past events, ensuring event history is accessible.
- Alumni Table – Contains alumni details, including roll number, email, phone number, and photo.
- Notices Table – Stores important announcements, ensuring students and faculty are informed about academic and administrative updates.

2. Data Flow & Management

- Admin uploads data through the Admin Module, which is then stored in the respective tables in the database.
- Users can access this data only after logging in through the User Module.
- Events Management: Any event uploaded today is classified as a recent event. After one day, it automatically moves from the events table to the previous events table without requiring manual intervention.
- Data Updates & Deletion: The admin has full control over data management, including adding, updating, and deleting placement news, publications, notices, events, and alumni details if necessary.

3. Security & Integrity

- The database ensures secure authentication for both admin and users, preventing unauthorized access.
- Role-based data visibility ensures only admins can modify content, while users can only view data after authentication.
- Regular data validation and integrity checks ensure that stored information remains accurate and relevant.

4. Real-Time Data Access

- Any new updates made in the Admin Module instantly reflect in the User Module.
- Users always access the most recent placement news, publications, notices, and events.
- Dynamic queries fetch relevant content, ensuring smooth and efficient data retrieval.

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7. RESULTS

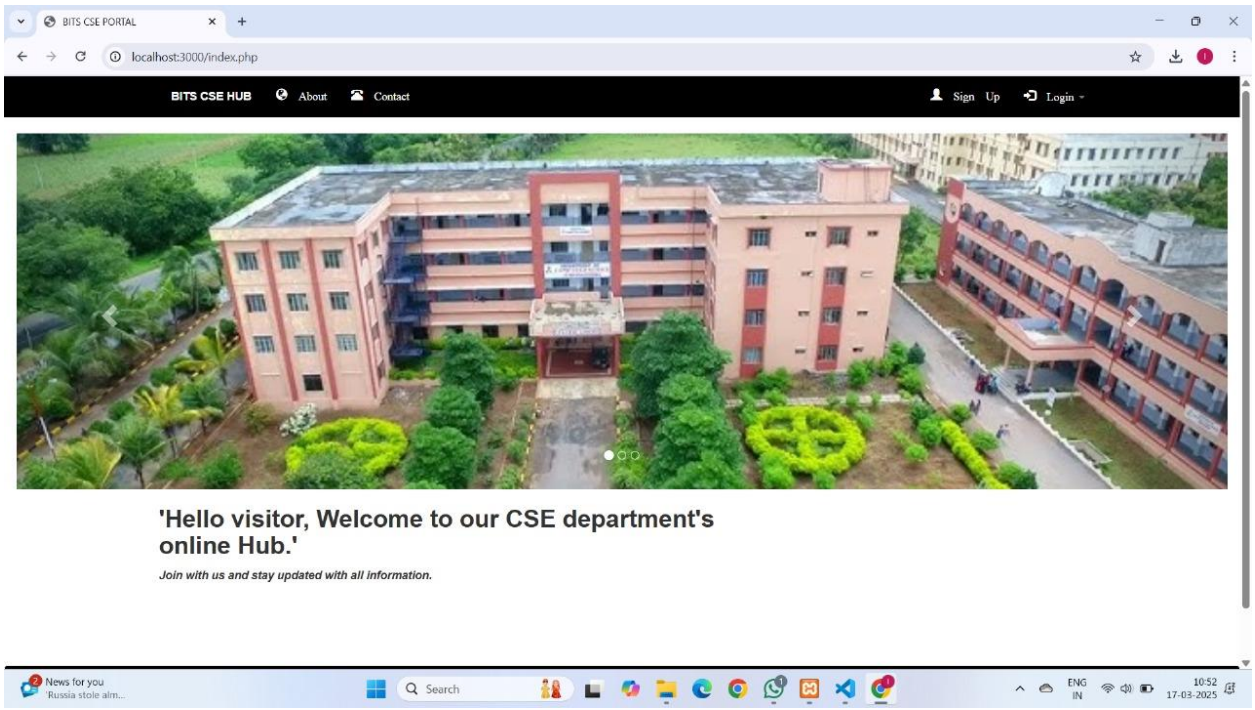

Fig.1 Homepage

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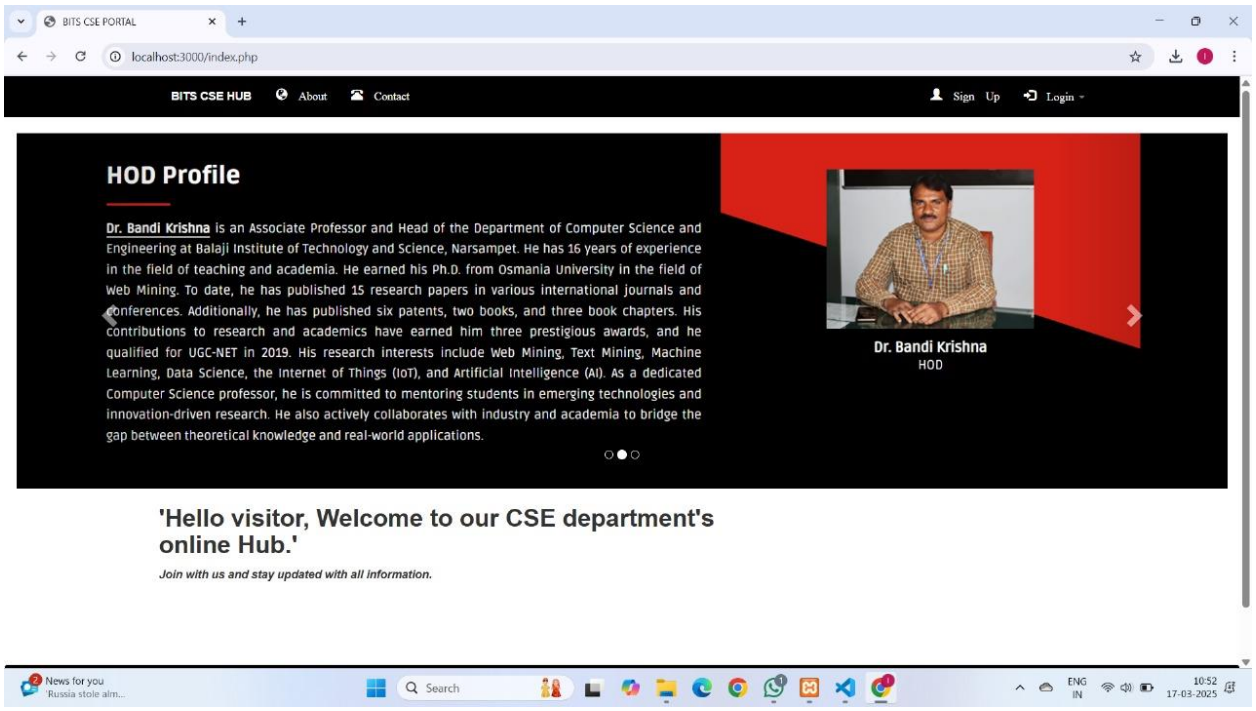

Fig.2 Homepage

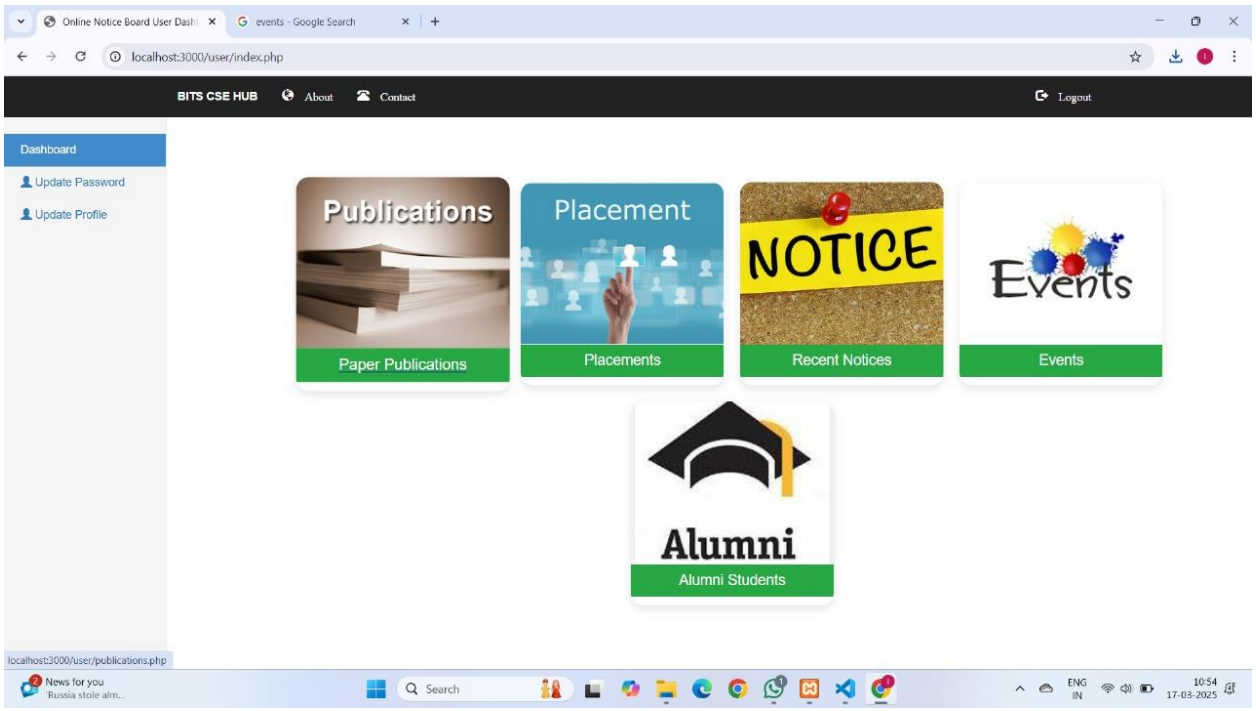

Fig.3 User Page

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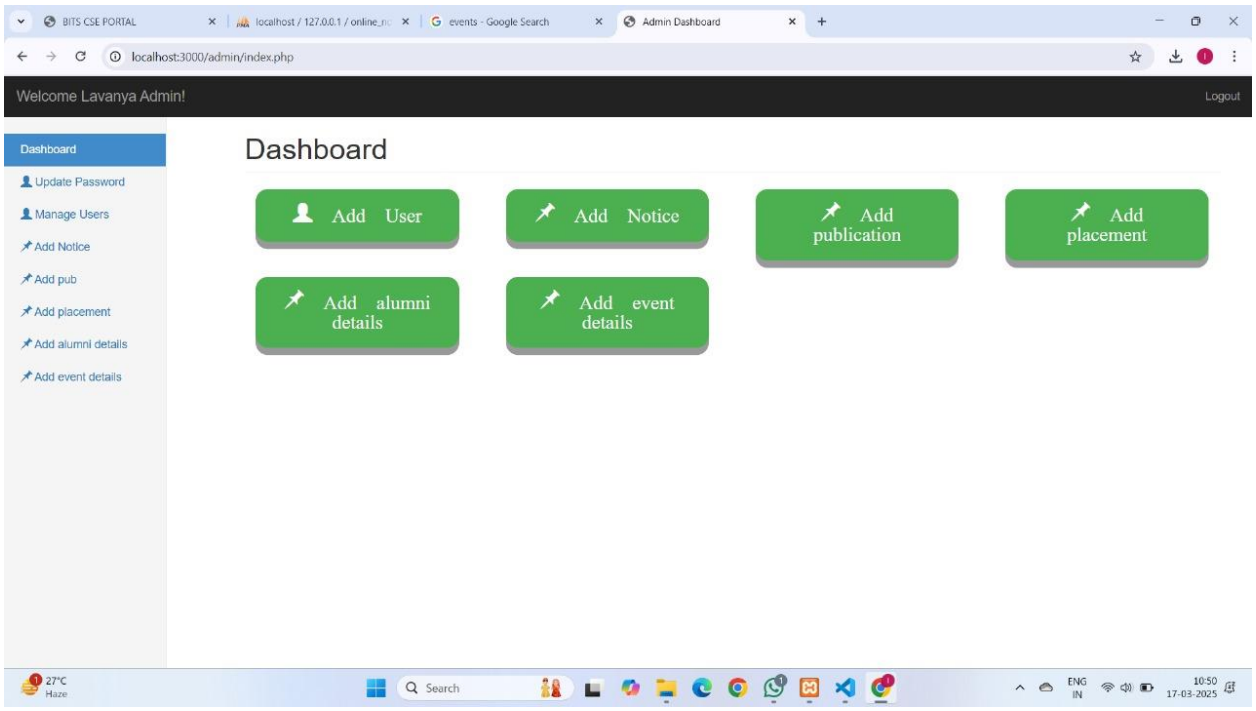
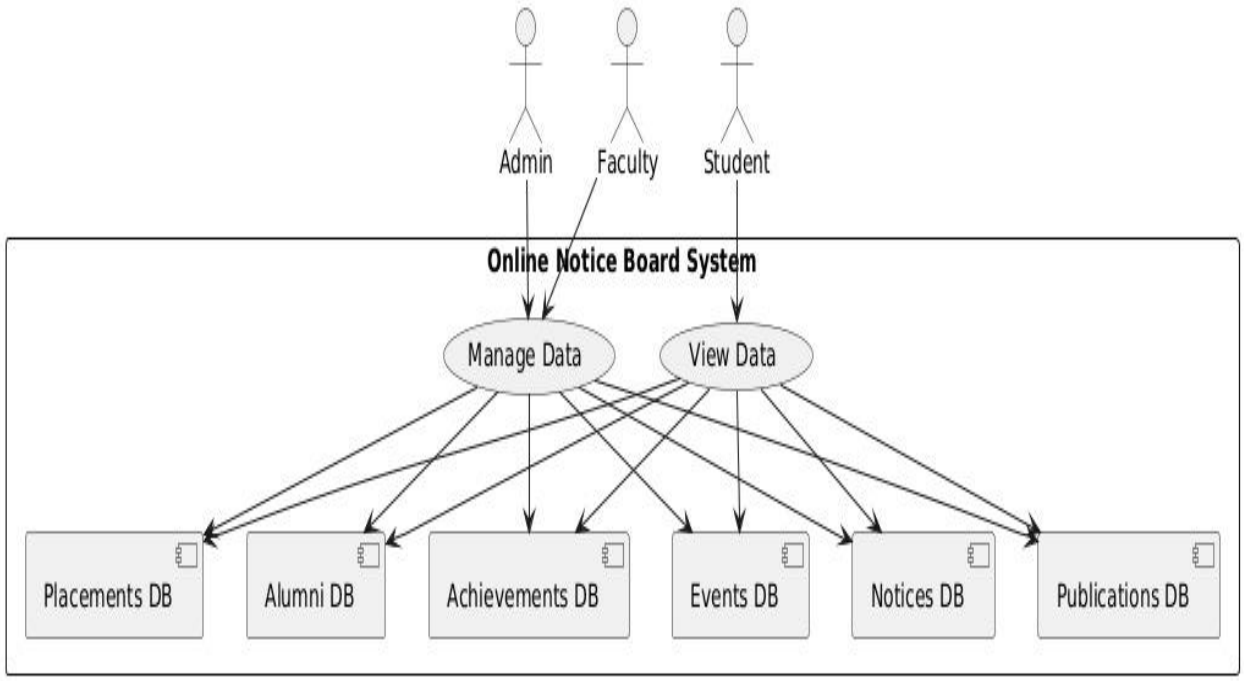


Fig.4 Admin Page

8. FLOW DIAGRAM



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9. CONCLUSION

In the ever-evolving academic landscape, staying informed and connected is crucial for students, faculty, and alumni alike. **BITS CSE Connect – The Newsletter Hub** has been envisioned and developed as a comprehensive platform that consolidates various essential aspects of departmental communication. Serving as a centralized hub, the website aims to provide seamless access to notices, event updates, publication details, alumni interactions, and placement opportunities, ensuring that no critical information goes unnoticed.

One of the primary objectives of BITS CSE Connect is to bridge the communication gap between students and faculty within the Computer Science department. Traditionally, information was dispersed across multiple channels—email threads, WhatsApp groups, bulletin boards, and department websites—making it difficult for students and faculty to track important updates. This platform centralizes all information in a structured, easily navigable format, eliminating the inefficiencies associated with scattered communication methods.

By ensuring that notices are updated in real-time and categorized effectively, students and faculty can retrieve relevant information without hassle. Academic institutions thrive on a vibrant ecosystem of events, ranging from technical workshops. However, keeping track of these events often becomes a challenge, especially when multiple events overlap or when announcements are made on short notice. BITS CSE Connect solves this problem by offering a dedicated event calendar, where students can view upcoming events.

BITS CSE Connect offers a dedicated placement section that provides details of the placements drive that are conducted in the college and the details of the students who placed in the companies.

REFERENCES

1. A Centralized Portal for a Student Support System based on Web Application by Kamal Sharma, R.M.Gomathi, Yahya Ibrahim Imtiaz (2022)
2. A Web based-College Event Management System and Notification Sender by J.R.V. Jeny, P. Sadhana, B. Jeeven Kumar, S.Leela Abhishek, T. Sai Chander (2022)
3. Multi-platform college management framework by Dastgir Pojee, Farooq Shaikh, Vishal Kuvar, Fahim Rarh, Mohd. Abbas Meghani (2017)
4. A Case Study of Academic Activity Announcement System Prototyping as a Usability Assessment Technique by ThanaphatSaefyung, KhanithaSrisukwarophas, Chengwai Tan, PrasaraJakkaew, Sujitra Arwatchananukul (2022)
5. Near field application: NFC smart notice board by G. P Rajesh, Praveenraj Pattar, M. N Divya, Vara Prasad(2016)
6. Ramdas Vankdothu,Dr.Mohd Abdul Hameed, Husnah Fatima" A Brain Tumor Identification and Classification Using Deep Learning based on CNN-LSTM Method" Computers and Electrical Engineering , 101 (2022) 107960
7. Ramdas Vankdothu,.Mohd Abdul Hameed "Adaptive features selection and EDNN based brain image recognition

doi: 10.48047/ijiee.2025.15.4.27

on the internet of medical things", Computers and Electrical Engineering , 103 (2022) 108338.

8. Ramdas Vankdothu,.Mohd Abdul Hameed,Ayesha Ameen,Raheem,Unnisa " Brain image identification and classification on Internet of Medical Things in healthcare system using support value based deep neural network" Computers and Electrical Engineering,102(2022) 108196.
9. Ramdas Vankdothu,.Mohd Abdul Hameed" Brain tumor segmentation of MR images using SVM and fuzzy classifier in machine learning" Measurement: Sensors Journal,Volume 24, 2022, 100440 .
10. Ramdas Vankdothu,.Mohd Abdul Hameed" Brain tumor MRI images identification and classification based on the recurrent convolutional neural network" Measurement: Sensors Journal,Volume 24, 2022, 100412 .
11. Bhukya Madhu, M.Venu Gopala Chari, Ramdas Vankdothu,.Arun Kumar Silivery,Veerender Aerranagula " Intrusion detection models for IOT networks via deep learning approaches " Measurement: Sensors Journal,Volume 25, 2022, 100641
12. Mohd Thousif Ahemad ,Mohd Abdul Hameed, Ramdas Vankdothu" COVID-19 detection and classification for machine learning methods using human genomic data" Measurement: Sensors Journal,Volume 24, 2022, 100537
13. S. Rakesh [a], NagaratnaP. Hegde [b], M. VenuGopalachari [c], D. Jayaram [c], Bhukya Madhu [d], MohdAbdul Hameed [a], Ra mdas Vankdothu [e], L.K. Suresh Kumar "Moving object detection using modified GMM based background subtraction" Measurement: Sensors ,Journal,Volume 30, 2023, 100898
14. Ramdas Vankdothu,Dr.Mohd Abdul Hameed, Husnah Fatima "Efficient Detection of Brain Tumor Using Unsupervised Modified Deep Belief Network in Big Data" Journal of Adv Research in Dynamical & Control Systems, Vol. 12, 2020.
15. Ramdas Vankdothu,Dr.Mohd Abdul Hameed, Husnah Fatima "Internet of Medical Things of Brain Image Recognition Algorithm and High Performance Computing by Convolutional Neural Network" International Journal of Advanced Science and Technology, Vol. 29, No. 6, (2020), pp. 2875 – 2881
16. Ramdas Vankdothu,Dr.Mohd Abdul Hameed, Husnah Fatima "Convolutional Neural Network-Based Brain Image Recognition Algorithm And High-Performance Computing", Journal Of Critical Reviews,Vol 7, Issue 08, 2020(Scopus Indexed)
17. Ramdas Vankdothu, Dr.Mohd Abdul Hameed "A Security Applicable with Deep Learning Algorithm for Big Data Analysis",Test Engineering & Management Journal,January-February 2020
18. Ramdas Vankdothu, G. Shyama Chandra Prasad " A Study on Privacy Applicable Deep Learning Schemes for Big Data" Complexity International Journal, Volume 23, Issue 2, July-August 2019
19. Ramdas Vankdothu, Dr.Mohd Abdul Hameed, Husnah Fatima " Brain Image Recognition using Internet of Medical Things based Support Value based Adaptive Deep Neural Network" The International journal of analytical and experimental modal analysis, Volume XII, Issue IV, April/2020
20. Ramdas Vankdothu,Dr.Mohd Abdul Hameed, Husnah Fatima" Adaptive Features Selection and EDNN based Brain Image Recognition In Internet Of Medical Things " Journal of Engineering Sciences, Vol 11,Issue 4 , April/ 2020(UGC Care Journal)
21. Ramdas Vankdothu, Dr.Mohd Abdul Hameed " Implementation of a Privacy based Deep Learning Algorithm for Big Data Analytics", Complexity International Journal , Volume 24, Issue 01, Jan 2020
22. Ramdas Vankdothu, G. Shyama Chandra Prasad" A Survey On Big Data Analytics: Challenges, Open Research Issues and Tools" International Journal For Innovative Engineering and Management Research,Vol 08 Issue08, Aug 2019

doi: 10.48047/ijiee.2025.15.4.27

BIBLIOGRAPHY

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