An Interactive Webcast Portal of Training Placement using SMTP and Database using PHP

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Abstract: *The Training and Placement Department plays a crucial role in facilitating students' interactions with various companies and securing placements. By cultivating relationships with esteemed organizations and industrial establishments, the Placement Department assists both undergraduate and postgraduate students in exploring career opportunities. Its mission includes equipping students with knowledge, expertise, and skills to meet industry demands and make well-informed career choices. However, manual management of data pertaining to campus recruitment events poses difficulties, highlighting the need to automate these processes to minimize errors and improve efficiency.*

This study proposes the creation of a Training and Placement Application to tackle these challenges. The application will be web-based, featuring intuitive interfaces for both students and administrators (Training and Placement Officers, TPOs). To ensure usability across different devices, the application will be compatible with smartphones and web browsers. Leveraging React + Vite as the underlying technologies for design and development, the application aims to provide adaptability, customization, and scalability while retaining essential features for streamlined management of training and placement activities. Students will have the ability to create profiles and complete registrations effortlessly, while administrators can efficiently oversee and manage all operations through the application

Keywords: React, Php MyAdmin, Web-Based Application, Automation, Admin Dashboard, Training and Placement Dashboard, Student Placement Dashboard, Company Dashboard

I. INTRODUCTION

The utilization of the Internet and the World Wide Web has transformed the dissemination of information and the ability for users to act upon the acquired information. Leveraging the Internet to empower students and companies in managing the placement process, with active participation from the Placement Coordinator, has led to the development of an innovative web-based training and placement management system.

The online training and placement management system offer insights into placement providers and the opportunities they offer, enabling students to evaluate their options. KDKCE (KDK College of Engineering) will feature well-crafted websites to notify students of available positions and guide them on preparing for their experiential learning.

The online training and placement management system is a platform designed to streamline the registration and application process for students at KDKCE. Users can easily access the system, and data retrieval is swift. The student registration form collects personal information, academic qualifications, and professional skills. Job details for placed students are provided by the administrator, enabling job providers and the placements coordinator to take prompt actions based on the information accessed. The administrator plays a pivotal role in the project, granting approval for student registration and updates.

II. PROBLEM DEFINITION

In the existing setup, all procedures are handled manually. The administrator must refer to historical records for accessing details, a process that is both laborious and time-consuming. As the user count grows, managing this process becomes increasingly complex. The current systems exhibit various constraints.

In the manual Training and Placement procedure at KDKCE (Karmavir Dadasaheb Kannamwar College of Engineering), human intervention is prevalent, leading to a heightened risk of errors. The interaction between students and administrators is extensive, resulting in a system that consumes significant time. Students submit their resumes early in the academic year, after which they remain static. Lists are compiled for each company, and students are required to frequently check the notice board, slowing down the process and diverting valuable academic time. At KDKCE, records are stored in modified Excel sheets, causing sorting issues. The Excel sheets are not optimal; for instance, when filtering for students with 2 ATKTs (Allowed to Keep Term), those with 0, 1, and 2 ATKTs are selected, whereas only those with 2 ATKTs are pertinent. The files are not organized in a hierarchical manner, making searches challenging and updates ambiguous, resulting in data redundancy.

Searches are performed manually based on company criteria, necessitating the Training and Placement Officer (TPO) to manually scrutinize each student's marks and eligibility. An efficient search method is lacking, and students are solely informed through traditional notice boards, risking missed opportunities. Students are inadequately briefed about Training and Placement activities, and there is no means of communication between students, alumni, and the TPO. Any individual wishing to communicate with the TPO must physically visit their office for pertinent information, as resources such as company question papers, CV templates, and job specifics are not readily accessible to students.

Feedback regarding students, companies, and alumni is not gathered by KDKCE's Training and Placement department. The current system fails to capture acknowledgments from students attending specific events, resulting in last-minute confusion. There are limited interfaces between students and the Training and Placement department, and no records are maintained of former students, leading to poor communication between past and present students and the Training and Placement department.

III. PROPOSED SYSTEM

The envisioned Training and Placement Portal system is crafted to deliver significant benefits to both students and institutions, facilitating seamless data retrieval. During the planning phase, the college recognizes the arduous and time-consuming process of gathering data from individual students. The proposed portal serves as an online platform accessible within the institution. This framework is segmented into five components, outlined as follows:

- Admin
- Training and Placement Cell
- HODs
- Student
- Company

Admin:

The role of the admin is pivotal in ensuring the smooth operation of this endeavor. In this designated section, the admin will enter their credentials to gain access to the system. Once logged in, the webpage will exhibit details concerning students, companies, and Head of Department particulars. The admin holds complete authority over the webpage and can utilize the query function to extract essential data for campus recruitment initiatives.

Training and Placement Cell:

The Training and Placement Cell (T&PC), also referred to as the training and placement officer, is responsible for managing information pertaining to different recruitment events and student's participation in these events. The T&PC also has the authority to modify data and update details regarding students who have secured placements. Furthermore, the T&PC communicates with students by sending messages containing company-related information.

HODs:

The main responsibility of the Department Head (HOD) entails validating the data provided by students. In case of any discrepancies, the HOD would inform the student and offer assistance in rectifying errors. Moreover, the HOD would distribute details about corporations and oversee the updating of announcements and communications.

Student:

In the student segment, students need to enroll themselves to enter the platform. They are required to furnish a username, password, email address, and choose a security query to finalize the registration form. After the registration procedure is finalized, students can sign in to the platform using their unique identification and password. Each student is permitted to enroll only once for portal access

Once successfully logged in, students can submit applications for preferred job openings by uploading their CVs for the companies they are keen on. Furthermore, students can stay updated about campus recruitment events by consistently reviewing notifications.

Company:

Enroll and oversee company profiles. Publish employment opportunities with comprehensive descriptions and prerequisites. Browse and refine student profiles according to specified criteria. Arrange interviews and handle correspondence with prospective candidates.

The proposed online training and placement web portal is implemented to avoid the disadvantages of existing system which will bring more features to proposed system. The proposed system is implemented to do the following:

The problem for sorting/searching of data is solved by doing a search student option, it can also use the apply filter option for students means which students criteria match the company criteria using SSC, HSC or Graduation marks. It will give the list of students.

Replica of files: As said earlier the student data is separated according to department wise so there will no duplication in system.

Technology Used: HTML5, CSS Framework (Tailwind CSS, SCSS), JavaScript, Php, ReactJs + Vite, React Router, NodeJs, PhpMyAdmin.

IV. EXISTING SYSTEM

1. Sorting Issue: In our institution, records are managed in Excel sheets, where organizing the data consistently poses a challenge.
2. Retrieval Challenge: The files lack proper arrangement, leading to difficulties in searching for specific information.
3. File Replication: Poor data maintenance and organization contribute to unnecessary duplication of files.
4. Increased Manual Labor: Previously, all tasks were carried out solely by the TPO, resulting in a heavier workload.
5. Accuracy: Human intervention in manual tasks raises the likelihood of errors occurring.
6. Time-Intensive: The aforementioned issues contribute to prolonged procedures, consuming more time than necessary.

V. LITERATURE SURVEY

We review various research papers, manuals, and documents related to our project concept. Below are some literature sources that provide valuable insights into identifying diverse methods or approaches for constructing this project.

Title: A Review on Placement Management System Author: Spoorthi M S, Kavana V, Koushik S N, Veena M Year: 2021 (July)

Limitation: This system provides automation in all processes like registering, updating, searching. In this system students have access to virtual resources, commentary, and a platform that works as a user interface. This android app also has an admin login option and placement UI. Users are convenient to view this app in web as well as in android view [1].

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Title: Placement Management System for Campus RecruitmentAuthor: Aneena Felix, Ajeena Sunny, Angelin Saji Year: 2020 (May)

Limitation: Although in this paper, placement management system is used as an application for Training and Placement Officer to manage the placement related activities and also the student can be able to update their profile but in the student dashboard there should be such facility that student can also see the specific companies based on their academic criteria. Laravel framework is usedto expand this application along with Model-View-Template (MVT) pattern [2].

Title: Training & Placement Management System

Author: Akshata Bhalgat, Ina Datta, Abhishek Kolkar, Aditya MateYear: 2017 (Dec)

Limitation: This system focuses on three algorithms like K-Means Clustering, Naive Bayes classifier, ID3 Algorithm. Using K- Means Clustering they combines the untagged dataset into different clusters. The training and placement process evaluates the relationship between words in the categories and training documents, and then categories and the entire training set. The feasible facts are gathered using calculations based on Bayes' Theorem. While ID3 Algorithm model the classification process, a tree is constructed using the decision tree technique from that dataset. Once a tree is produced, it is applied to every tuple in the databaseleading to classification for that tuple [3].

Title: CABAL-Training and Placement Departmental Portal

Author: Payal Gothi, Jidnyasa Raut, Prof. Nileema Pathak, Komal Patil, Riddhi KamatYear: 2019 (Aug)

Limitation: This CABAL portal consists of 7 important features like Generation of report, forum, SMS notification, resume building, admin, company, student. In this various technology and tools are used like Microsoft Visual Studio, ASP.NET framework and one software application SQL Server Management Studio (SSMS). SSMS is used for handling, configuring, monitoring, configuring and administering every SQL infrastructure [4].
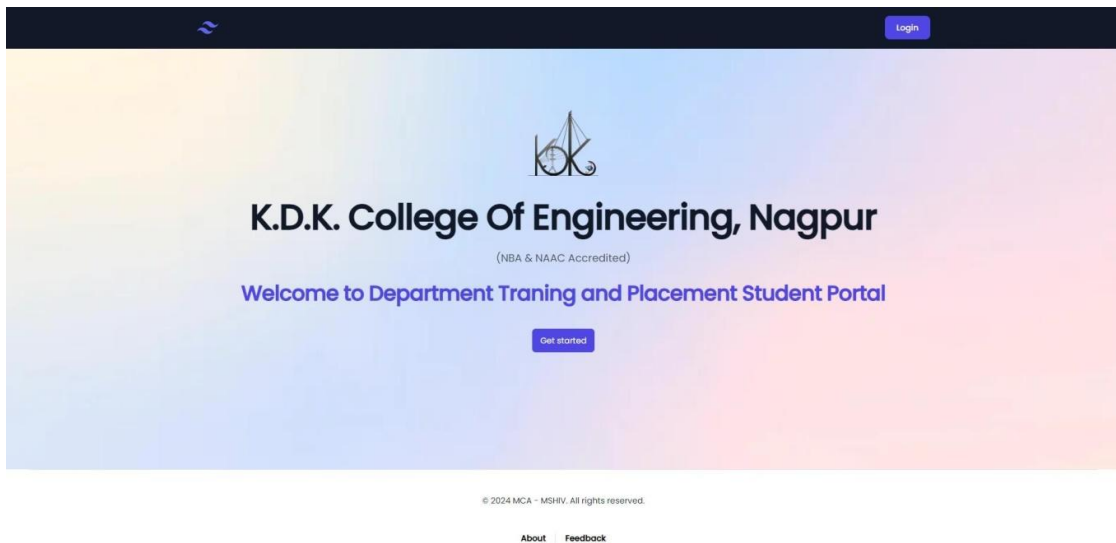
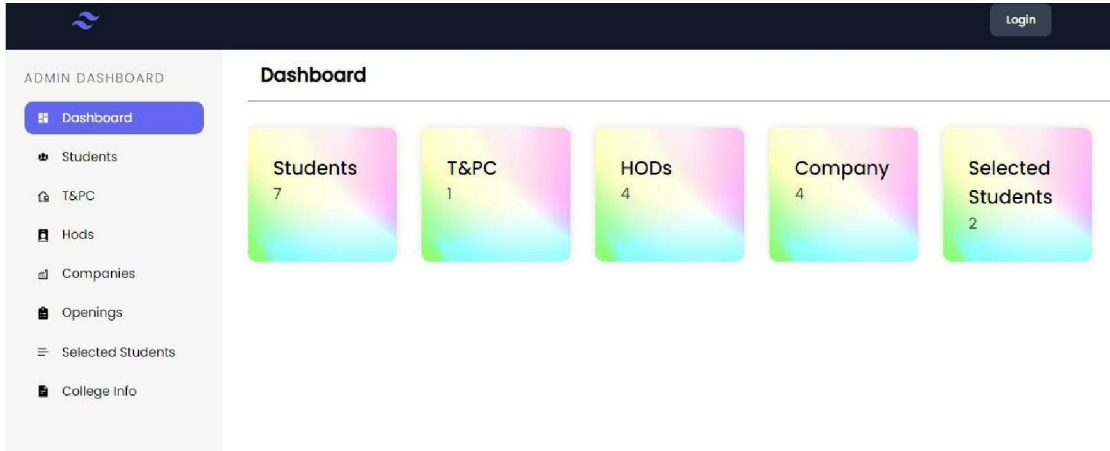## VI. RESULT

Figure 1.1: Home Page
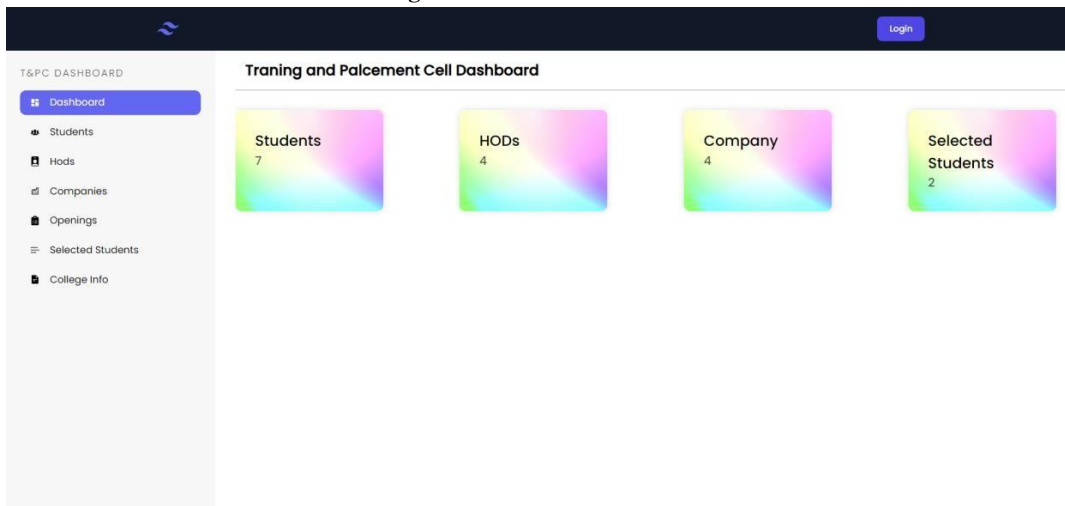
Figure 1.2: Admin Dashboard

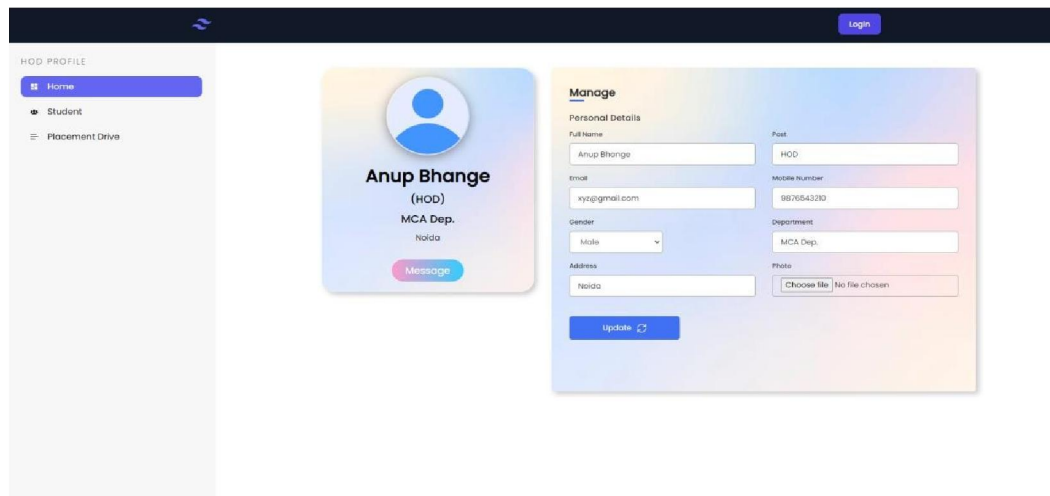**Figure 1.3:** Training and Placement Cell Dashboard

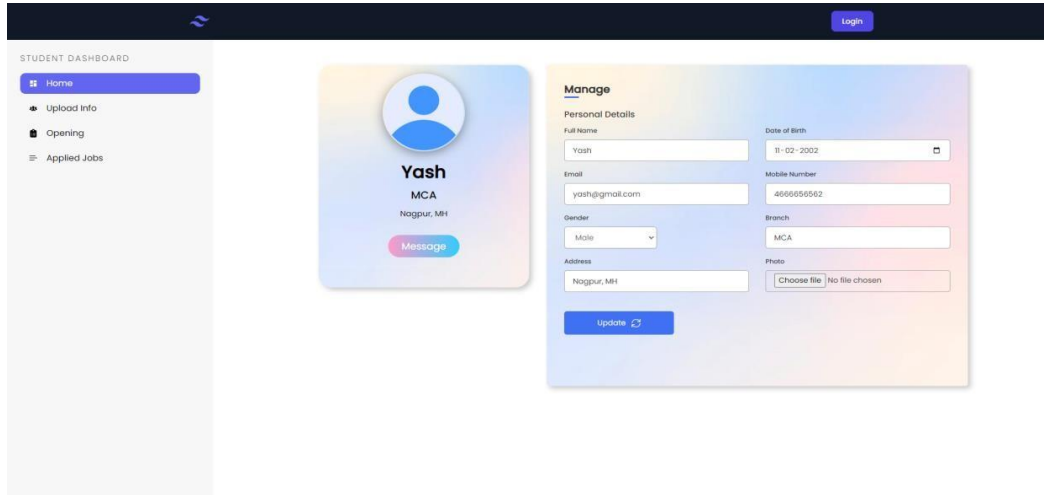**Figure 1.4:** HOD's Dashboard

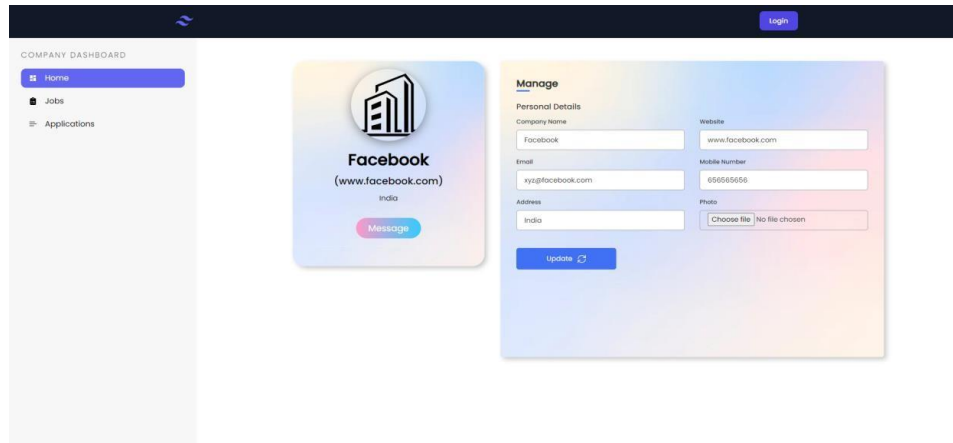**Figure 1.5:** Student Dashboard
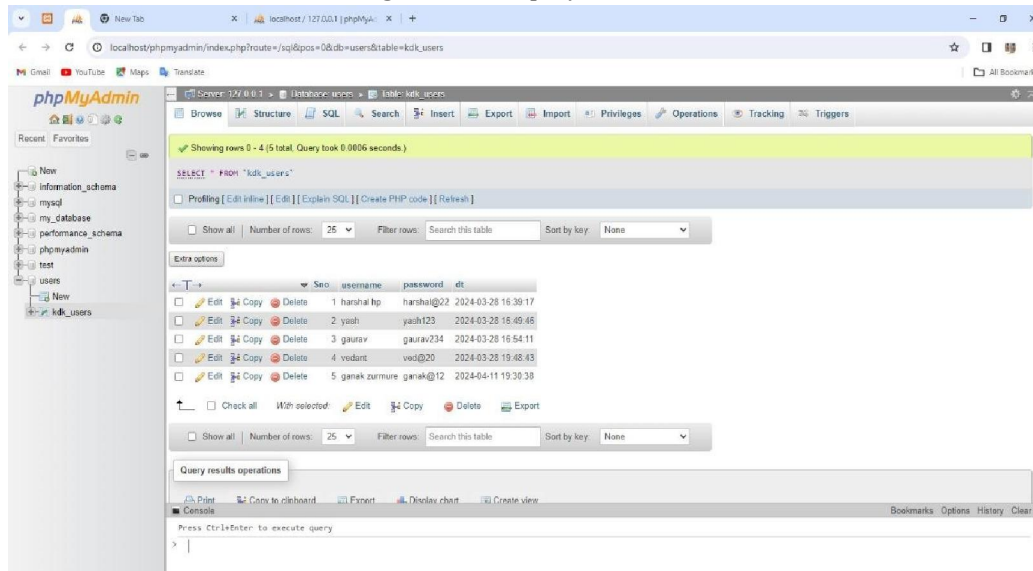

Figure 1.6: Company Dashboard

Figure 1.6: Backend

VII. CONCLUSION

Addressing the growing demand for convenience and centralizing all information has consistently posed a challenge for all parties involved. Through the adoption of this portal, we believe we can alleviate some of the burdens for both students and administrationby offering a substitute for the existing system in use. This platform aids in the organization of diverse tasks associated with the daily operations of placements.

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