

A Dynamic, Full Featured Portal for Campus Placement

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Abstract: The study paper introduces the Full-Fledged Campus Placement Portal, a cutting-edge tool made to make it easier for students and educational institutions to look for jobs. The portal guarantees simple access and effective management of placement tasks with its user-friendly layout and separate logins for administrators and students. Students can register for placement events, apply for jobs, and get updates on corporate visits. Tasks like posting job listings and organizing student registrations can be handled effectively by administrators. For a visually appealing user experience, the system incorporates cutting-edge technologies including HTML, CSS, JavaScript, and React. On the back end, Flask handles data management, and MongoDB effectively arranges data. The goal of this well-executed technological integration is to transform the conventional college campus employment hiring process by improving accessibility, effectiveness, and efficiency in job placements for both students and institutions.

Keywords: User-friendly interface, Educational institutions, Separate logins, Students, Administrators.

1. Introduction

In today's higher education landscape, effective campus placement management is essential for nurturing students' professional growth and building strong industry connections. Spreadsheets are used to administer the database in the existing system, which does this operation manually. Students receive notifications via email and WhatsApp groups [1].

Our study focuses on developing and implementing an advanced campus placement portal. The goal of this portal is to facilitate the connection between students and potential employers. Its user-friendly design allows log in with separate credentials. From the portal, students can register for future placement events, apply for employment, and receive real-time updates about companies that will be visiting. Additionally, the portal greatly streamlines and improves the user experience for students when registering for placements. Placement managers can monitor and control the whole placement environment thanks to the Campus Placement Portal's administrative login feature. This includes things like uploading necessary placement documentation, updating student profiles, and introducing new employment positions.

The Campus Placement Portal's extensive functionality and dynamic features not only transform the conventional campus recruitment scene but also foster significant collaborations

between academic institutions and the business organizations. Our research paper delves into the specifics of this groundbreaking project, emphasizing its potential to revolutionize the way employers and educational institutions work together and how students navigate career options.

The project introduces the Full-Fledged Campus Placement System to remove uncertainty, inconsistent practices, and complicated manual processes. This system effectively handles student data associated with college placement initiatives. It is intended to simplify placement-related task access and guarantee proper student data preservation. Colleges can handle and arrange student placement information more efficiently by using the placement portal [2].

Our research study explores the intricacies of a novel project, the Campus Placement Portal, demonstrating how it might completely transform the ways in which companies and students interact with institutions and students look for jobs. We draw attention to the portal's critical function in assisting students in forming meaningful career routes and vital relationships. Our goal in writing this research paper is to provide insight into the revolutionary impact of cutting-edge technologies on college campus placements.

2. Literature Review

To facilitate work management, our research focuses on the creation of the Full-Fledged Campus Placement Portal, with a particular emphasis on distinct logins for administrators and students. The portal intends to transform college campus employment hiring practices by increasing job placement accessibility, effectiveness, and efficiency.

Our research methodology is in line with the creative approach—especially about the addition of a chatbot and the use of distinct logins—that was emphasized in the research paper by Ruchita Khilari, Bhupinder Singh, and Hemachalam Tippana, who worked with Professor Priyadarshini Patil. Their focus on effective administration and user-friendly design served as inspiration for our project, which incorporates separate logins for administrators and students to provide individualized access and faster task completion. In line with the paper's goal of improving user experience and promoting smooth communication within the portal, we have also integrated a chatbot to offer students instant support [3].

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Our campus placement portal project was motivated by the research paper published in 2020 by Geetanjali Kori, Hitesh Kumawat, Jigyesh Rathod, Mayank Jeevtani, Murtaza Anis, and Akshita Sharma. Specifically, the research paper helped us implement features that made it easier to view and manage student information and retrieve student data in CSV format. Their focus on easy-to-use interfaces and productive administration aligns with our objective of improving job placement effectiveness and accessibility [4].

The project's notification and alert system was inspired by the 2019 study paper by Snehal Rebhankar, Shrutika Raut, Samiksha Chauhan, Nayan Tadas, and Praveen Sen which developed the Full-Fledged Campus Placement Portal. The importance of keeping students informed about placement activities was underscored by the portal's emphasis on efficient handling of placement tasks and timely updates on company visits. Recognizing how important it is for students to stay informed, we included a notification and alert system in our campus placement portal. With the help of this technology, administrators may easily tell students of critical information, such as placement drives, job openings, and other relevant notifications [5].

We were especially drawn to two important components of the paper issued in 2022: the Ask Query area for students and the capacity of Training and Placement Officers (TPOs) to oversee various aspects of the placement process. Students can ask questions in the Ask Query section and receive answers from TPOs, which promotes effective communication and effectively addresses student problems. On the other hand, the TPO's features include handling corporate information, keeping an eye on student enrollment, answering questions, and drafting student notifications. These characteristics caught our attention since they have a big influence on enhancing task management, and communication [6].

A campus placement portal with the goal of improving the user experience for students and educational institutions is introduced in the 2023 paper "College Placement Portal System" by Animesh Tyagi, Pranjul Agrawal, Prankur Srivastav, Pulkit Sagar, and Abha Sharma. With separate logins for administrators and students, the portal's user-friendly layout guarantees quick access and effective management of placement responsibilities. It's easy for students to apply for jobs, sign up for placement events, and get updates about company visits. The system combines modern technologies such as JavaScript, HTML, CSS, React, Node.js, Flask, and MongoDB to deliver a user experience that is both intuitive and aesthetically pleasing. By improving accessibility, this user experience-focused approach seeks to completely transform the conventional college campus hiring procedure [7].

In order to reduce human error and close the gap between Training Placement Officers (TPOs) and students, the study paper by Kapil Wagh, Dnyaneshwari Tilekar, Bramhesh Chaugule, and Pradip Gorde, published in 2023, emphasizes the importance of automating the complete placement management system. The goal of their Full-Fledged Campus Placement Portal is to make job searching easier for both institutions and students. The portal's goal is to improve the placement process'

accuracy and efficiency by automating operations including job applications, placement event registration, and communication updates [1].

The goal of Varsha Mali *et al.*'s 2019 article, "College Placement Portal System," is to develop a thorough campus placement portal. The comprehensive guidelines and frequently asked questions section is a noteworthy feature that is essential for students to grasp to prepare for interviews, manage the job placement process, comprehend employer expectations, and make efficient use of the portal. These resources act as a road map for students and boost their confidence in their ability to succeed. The portal aims to increase students' understanding and confidence through its well-structured FAQs and instructions, which will ultimately lead to a more successful experience [8].

A. Problem Statement

For both students and administrators, the absence of a well-designed Campus Placement Portal at educational institutions has resulted in serious issues. Without an appropriate system, students find it difficult to locate job opportunities, register for placement events, and stay updated about visiting firms. They lose out on opportunities as a result, and their professional choices become unclear. The placement process is chaotic because of the difficulties administrators have in keeping track of student registrations and job postings. Inefficiencies result from this disorder in the way employers and students communicate. To address these problems and enhance efficiency and communication for all parties involved in the placement process, it is essential to create a user-friendly Campus Placement Portal.

3. Proposed System

The solution under consideration is a comprehensive Campus Placement Portal that is intended to optimize the job placement and campus recruitment procedures for educational establishments. It provides administrators and students with two different ways to log in. Students get access to several options via the student login, such as applying for job posts, signing up for placement events, and getting frequent notifications about visiting firms. To make placement registration easier for students and to keep them updated on the newest employment openings, the system attempts to streamline the entire procedure. However, placement managers have access to a wide range of tools through the admin login that let them monitor and control the placement portal.

Administrators are capable of handling jobs like introducing new job positions with efficiency.

A variety of modern technologies are used in the system's development, such as HTML, CSS, JavaScript, and React for the frontend, which guarantees an engaging and aesthetically pleasing user interface. To efficiently manage complicated data processing and server-side processes, the backend makes use of Flask's capabilities. Using the reliable and scalable MongoDB database, the data management component is managed, guaranteeing smooth data storage and retrieval. The system hopes to give administrators the tools they need to effectively

manage the placement process while also offering a smooth and simple user experience by integrating these technologies. Overall, the system seeks to close the gap that exists between students and potential employers by providing both sides with an efficient and transparent placement management procedure.



Fig. 1.

Student's Section:

- First, new students must register and set up their profiles on this platform.
- Those who have already registered only need to use their login information to log in.
- After logging in, they can see any newly created campus drives and take appropriate action.
- The edit profile section is where someone can make changes to their profile.

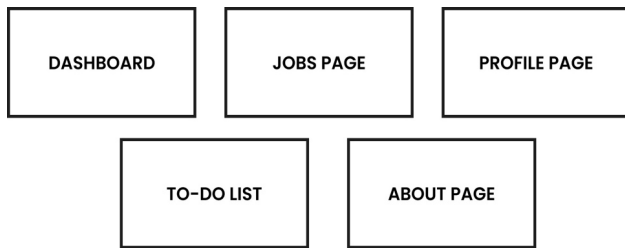


Fig. 2.



Fig. 3.

- Students can view their individual dashboard, which shows statistics like the number of companies they have applied to, the overall number of placed students, and the total number of rejected students, after logging into the student section.
- The most recent job postings are easily visible on the dashboard.
- The dashboard has easy access to exciting features like chatbots and notification alerts.
- The employment section makes it easier to track jobs you've applied for and to apply for new positions.
- Students can manage their accounts and modify the details of their profiles on the Profile page.
- Guidelines regarding college information, placements,

etc., are provided in the About section.

- The student's part has a section with a personalized to-do list.

Admin's Section:

The admin dashboard, which can be accessed by logging in, shows important data such as registered students, posted companies, placed students, and active companies.

- The admin control panel gives the admin the ability to handle several functions, including monitoring corporate drive status, sending alerts to students, adding, editing, and removing companies, and examining lists of registered and placed students.
- The administrator can add new job openings for students, complete with company descriptions and all required skills, under the Add Company area.
- Admins can update or modify their profiles under the profile section, and the admin section has a chatbot option.

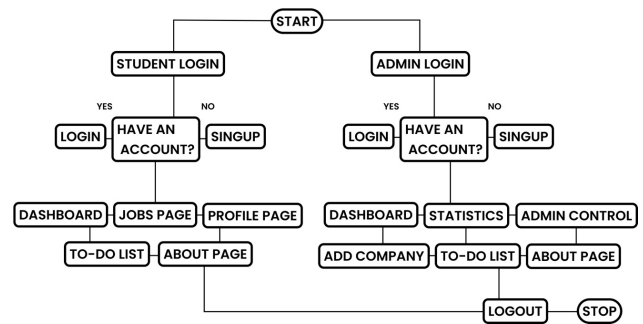


Fig. 4. Campus placement portal block diagram

4. Results

A. Students Section

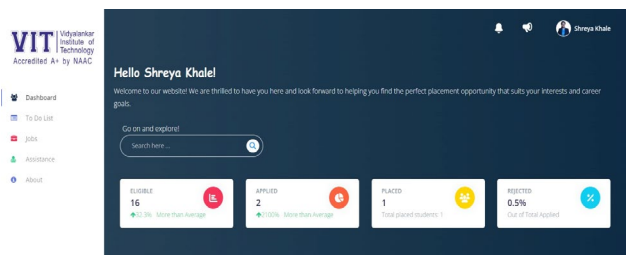


Fig. 5. Student's Dashboard 1

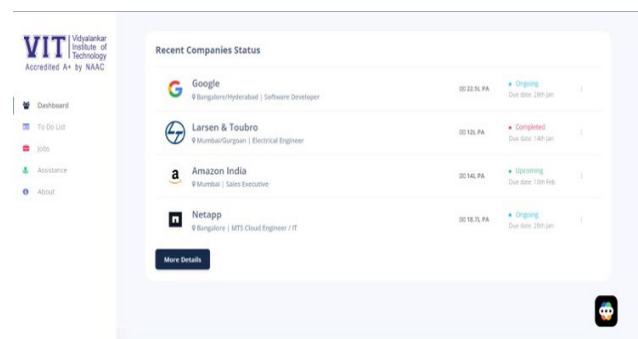


Fig. 6. Student's Dashboard 2

Students can access tailored statistics on their student dashboard, such as the percentage of statuses, including positions that are open, drive locations, drive statuses (finished or ongoing), and offered packages. Furthermore, a "More Details" button allows you to view further details about particular company's placement drive.

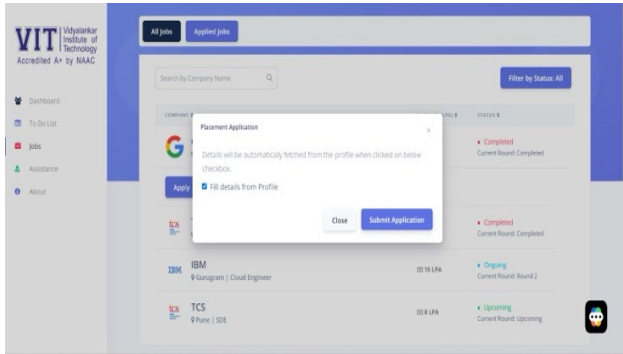


Fig. 7. Student Register Job

Students can apply for jobs through the jobs web page, where the system will immediately retrieve their information from the database so they can register with a company.

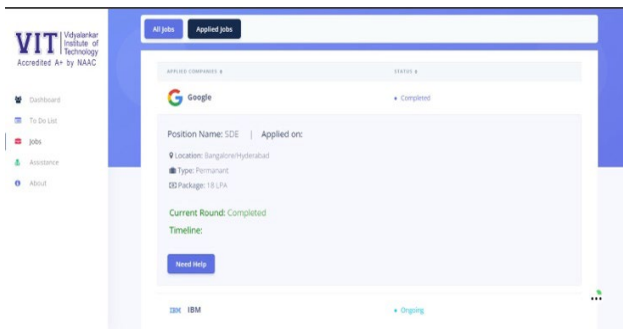


Fig. 8. Applied Job List

Through the portal, students can view a list of the companies they have applied to. This list contains information on the job for which the company is conducting interviews, the location, the package that is being offered, and the interview rounds' current state.

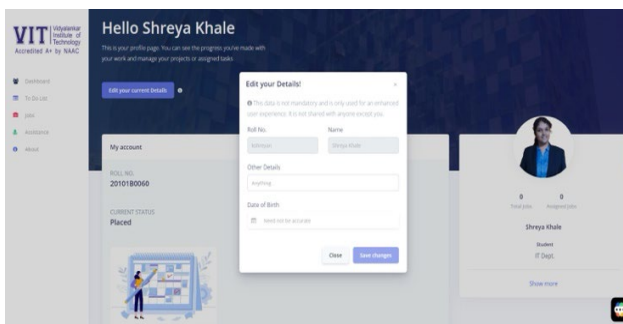


Fig. 9. Student Profile

A student profile on the placement portal shows the information students provided while registering. Additionally, students can make necessary edits to their information.

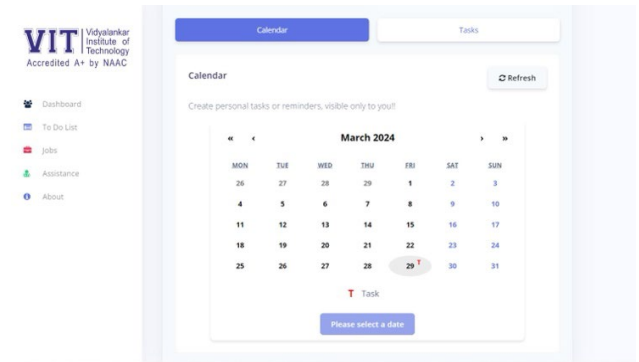


Fig. 10. Customized Tasks

Students may create task reminders with information like the task's due date, completion status, and notes or descriptions under the customizable tasks area.

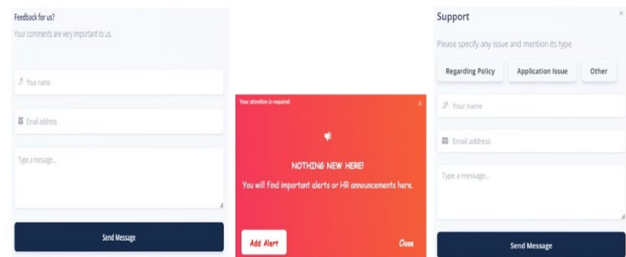


Fig. 11. Feedback, Alerts, Support

- **Feedback:** Students can submit their names, email addresses, and comments regarding the performance of the portal in the feedback section.
- **Alerts:** Administrators can publish significant placement-related alerts in this section for students to view.
- **Support:** With the help of this function, students can ask for help if they run into any problems using the placement portal.

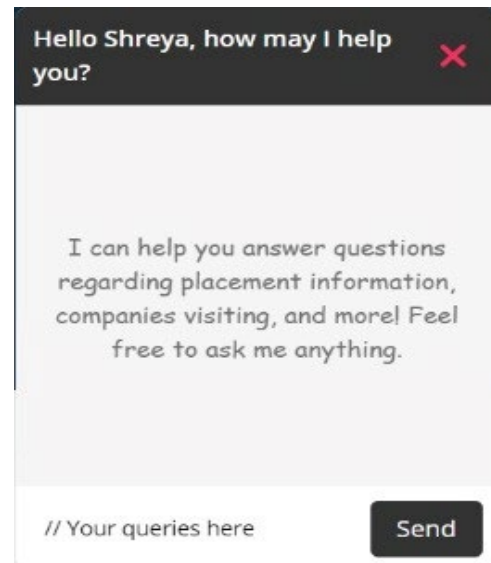


Fig. 12. Chatbot

There is a chatbot on the placement platform that may answer questions from students.

Admin Section:

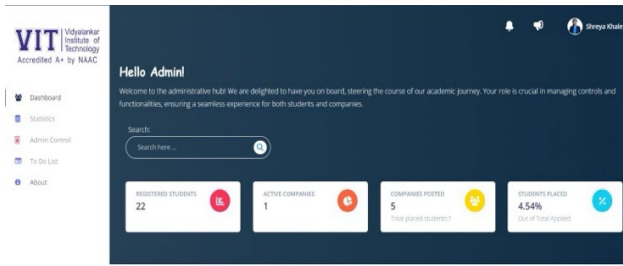


Fig. 13. Admin Dashboard

Data like registered students, active companies, companies that the admin has posted, and the placement rate of students will all be displayed on the admin dashboard.

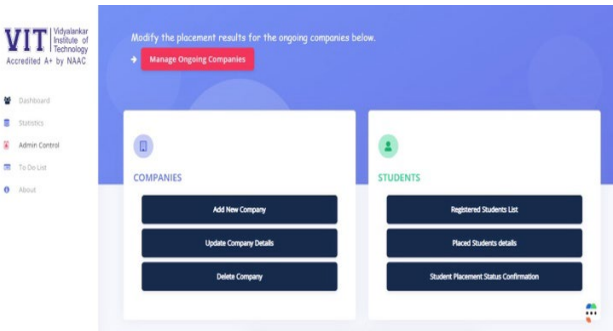


Fig. 14. Admin Control Features

The admin can examine student lists, verify placement data including confirmation status, download student lists in CSV format, add new companies, update company details, delete individual companies, and more in the admin control section.

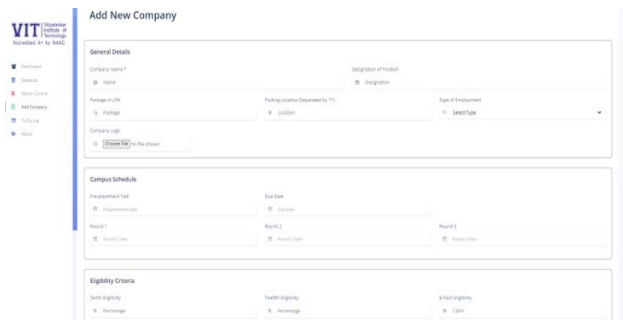


Fig. 15. Add New Company

Admins can publish job openings by including company information, offering package, location, campus placement timetable, and other relevant information on the "Add New Company" page.

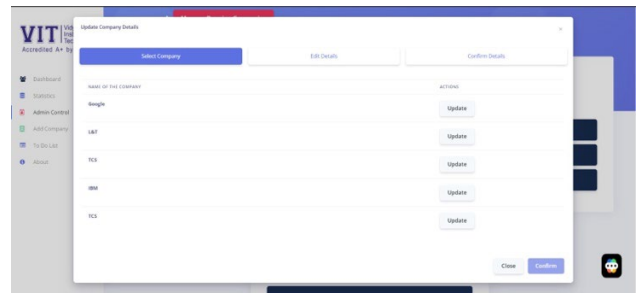


Fig. 16. Update Existing Companies

Admins can update the details of companies listed on the placement portal by visiting the "Update Company Details" tab.

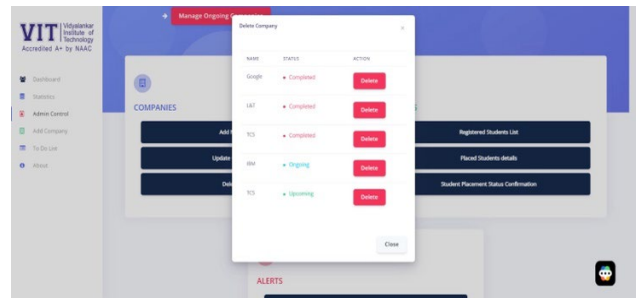


Fig. 17. Delete Companies Page

Administrators can remove a specific company's posting using the "Delete Companies" page.

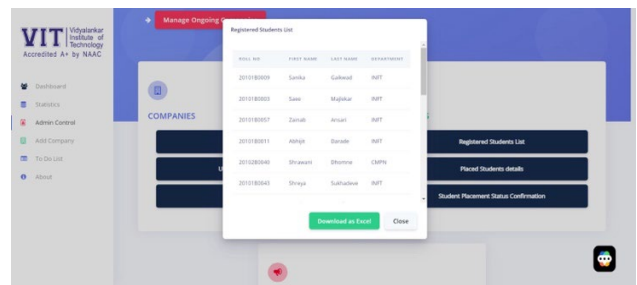


Fig. 18. Download Student's list CSV

The list of students registering for placements is visible to administrators and may be downloaded in CSV format.

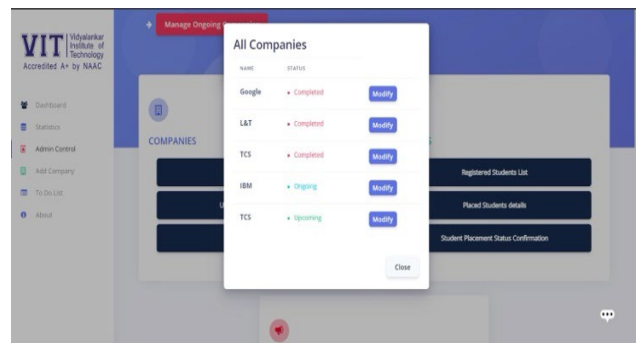


Fig. 19. Modify Placement Status

Admins can use this functionality to update the placement status to ongoing, completed, or upcoming based on how many

rounds a company has completed.

5. Conclusion

We've worked hard to make things simpler for students and TPOs during campus placements in our Placement Portal. We recognize issues and determine the most effective fixes for them. Our administrators design a process that reduces paperwork and saves time. We employ an approachable design to make the system easier for consumers to understand. Every section of the portal, such as the TPO and student modules, has a specific area of emphasis. To construct the portal, we make use of technologies like Flask, React, and JavaScript. Students can look up companies using the portal and apply to the ones they want. Our automated platform is essential for graduating students looking for jobs in a variety of fields since it streamlines the placement process for both students and TPOs.

6. Future Scope

There is a lot of room for improvement in the developed campus placement portal. To increase its effectiveness, we might incorporate a lot of additional features.

- The system will eventually be moved to cloud infrastructure to simplify data maintenance.
- Through integration with the exam system, students will be able to rehearse online for campus recruiting.
- Exams including verbal skills, logical reasoning, and quantitative aptitude will provide students with immediate feedback.
- The integration of multiple analytical methods will be

utilized to evaluate the problem-solving skills and study habits of the students.

- We'll use artificial intelligence to keep track of student information and offer customized assistance.
- For ease of comprehension, student data will be displayed in visual forms such as charts and graphs.

Acknowledgement

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