

# Comprehensive Campus Recruitment and Placement Management Platform

Vimalathithan S<sup>1</sup>, Pandarinathan V<sup>1</sup>, Susindhiran S<sup>2</sup>, Shanthi Nisha E<sup>1</sup>, Geetha K<sup>3</sup>

<sup>1</sup>Department of Computer Science and Engineering Mohamed Sathak AJ College of Engineering, Chennai, India - 603103

<sup>2</sup>Department of Physics CARE College of Engineering, Tiruchirappalli, India - 620024.

<sup>3</sup>Department of Chemistry Bharathidasan Institute of Technology, Tiruchirappalli, India - 620009

**Abstract:** From a student's perspective, a wide range of benefits and opportunities can be gained through placements. The training and management of placements are regarded as crucial aspects of an educational institution, where most of the work is currently done manually. In colleges, the manual system requires a considerable amount of manpower and time. To address this issue, a web portal is proposed. The project focuses on the development of an application for the college's placement department. This system is designed to be accessed and used efficiently throughout the organization, with login credentials enabled. It will also be utilized by Placement Officers to manage student placement information, reducing manual tasks and minimizing paperwork. Additionally, the system allows the personal and academic information of students to be viewed. The requested list of candidates will be generated for companies seeking recruits based on specific eligibility criteria. The primary goal is to reduce the amount of manual work and time involved.

**Keywords:** - *front-end development, Candidate eligibility criteria, progressive web app, back end development, database management using MySQL and PHP, Campus recruitment.*

## I. INTRODUCTION

Similar to other placement management websites, information on placement providers and available placements is provided by the "Placement Management System," along with up-to-date records of all students. A platform is offered where students are able to view and assess their opportunities. Different types of user accounts, such as Admin, Student, HODs, and Tutor, are included in the system. For each student, a profile is created with the necessary credentials to access the portal. MySQL is used for database management, and student data is sorted based on eligibility criteria specified by the respective companies. A list of eligible candidates is prepared, and students can choose whether to attend a particular drive or test. Based on this, a final data set is automatically generated, and interested candidates are registered by the system. This approach reduces the workload of college staff and faculty, eliminating the problems caused by human errors and the time wasted by manual processes.

## II. LITERATURE REVIEW

### II.1 A Platform for Online Training and Placement Management is Established

The system is designed as an application that can be accessed throughout the college organization once proper login credentials are provided. It is used by the training and placement officers (TPO) to manage student information related to placements. The students' login is intended to allow them to fill out the registration form. A key feature of this project is that registration is required only once.

The details of the students are maintained by the application, and a requested list of candidates is generated for recruitment based on specific queries. Administrators logging in are able to search for any information submitted by the students. The project is intended to assist colleges in implementing full IT deployment. Additionally, fast access to placement-related activities is facilitated by the system.

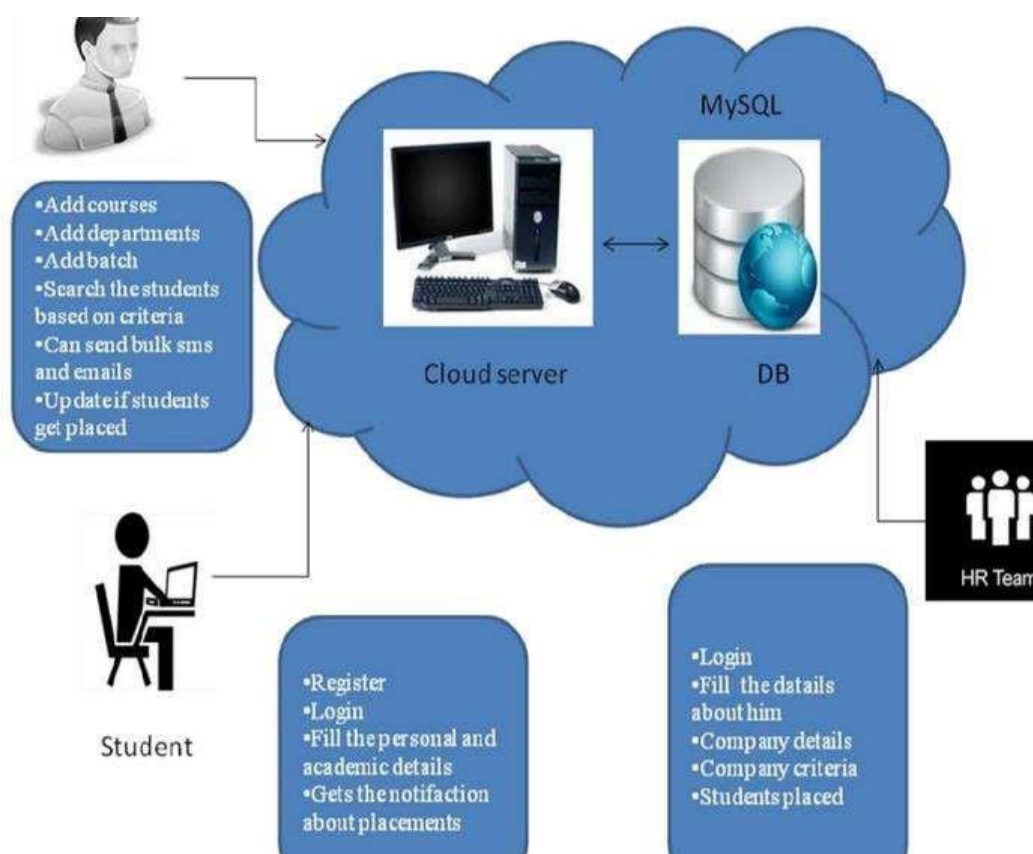


Fig 1. Online System

## II.2 Recruitment Processes are Managed Using an Android Application

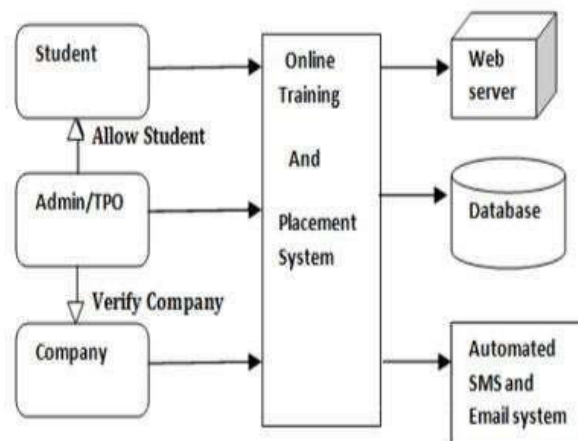
In the paper "**Campus Employment Information Network Development Based on Android Platform**", it was stated that system development posed no significant difficulties. Data storage was arranged using SQLite, which offered low resource consumption, requiring minimal memory space while ensuring fast processing speed. With the development of mobile communication technology, mobile phone data transmission was made faster due to the more powerful information processing capabilities, the extensibility, and the 4G high-speed data transmission. The web application was written in the powerful Java language, though it also supported other languages like C. This application was accessible without boundaries and could access the core functions of mobile devices via standard APIs.

In "**Campus Recruitment Management: Platform Based on Dynamic Electronic Commerce**", the use of electronic recruitment systems was discussed to facilitate and enhance

human resource management. These systems addressed the needs of employers and job seekers by utilizing internetworking methods, increasing the speed of employment and improving recruitment quality and services. These systems became crucial in assisting with human decision-making, ensuring the right candidates were placed in appropriate positions. Due to rapid changes in job demands and the increasing specialization and experience required, recruiters faced challenges in finding the right employees for their businesses.

The paper "**Information System Based on College Campus**" described the use of Android mobile apps to provide information about college campuses. Android, the fastest-growing open-source mobile platform, was powered by the Linux operating system. Android offered a simple yet powerful application development framework with open access to APIs, allowing the creation of richer mobile applications. It was also noted that Android was a software stack for mobile devices that included the operating system, middleware, and key applications.

In "**Web-Based Placement Management System**", the improvements made in system development were discussed. The system overcame limitations of existing systems by maintaining student information in a secure database, ensuring data accuracy, reducing paperwork, and saving time. Only eligible students were given placement opportunities, information flow was made more efficient, and report generation was simplified. Additionally, the system was cost-effective and reduced physical space requirements.



Online Recruitment is aimed at developing a web-based and central recruitment process system for the HR Group for a company.

Fig 2.1. Web Based Placement Management System

### III. PROPOSED SYSTEM

The proposed system is comprised of four main modules: administrator, student, company, and college faculties. Each module is facilitated by the system to create an account using a unique username and password. Accounts are created by students, allowing them to add their personal information, such as marks, academic details, resumes, desired job roles, and preferred company names. Companies are also able to create accounts, through which company details, job vacancies, required skills, and training information can be added. Student data, for those who have applied for specific job roles, can be accessed directly by the companies.

The entire system is controlled by the administrator, who is given the ability to add or remove data and accounts, as well as view the list of students who have applied for placement. The

fourth module is designed for college faculties, including HODs and the principal. They are permitted to view and access the data, and additional details may be added by them if necessary.

#### IV. SYSTEM DESIGN

The system contains 4 modules. Each module have same login page.

- 1) Admin module
  - It can be the placement officer
  - Can maintain the placement activities via system
  - Can add or remove batches, department, drives
  - Can analyse the placement activities of each students.
- 2) Student module
  - Can login their details
  - Can register for upcoming drives, according to their interests.
  -
- 3) Company Module
  - Login using password and username
  - Update the details about their companies and vacancies
  - Can view and download the details about the students who have applied for the vacancy
- 4) Institution Module
  - It can be the principal, HOD, or tutors
  - Also can view the details about students, companies, drives.....

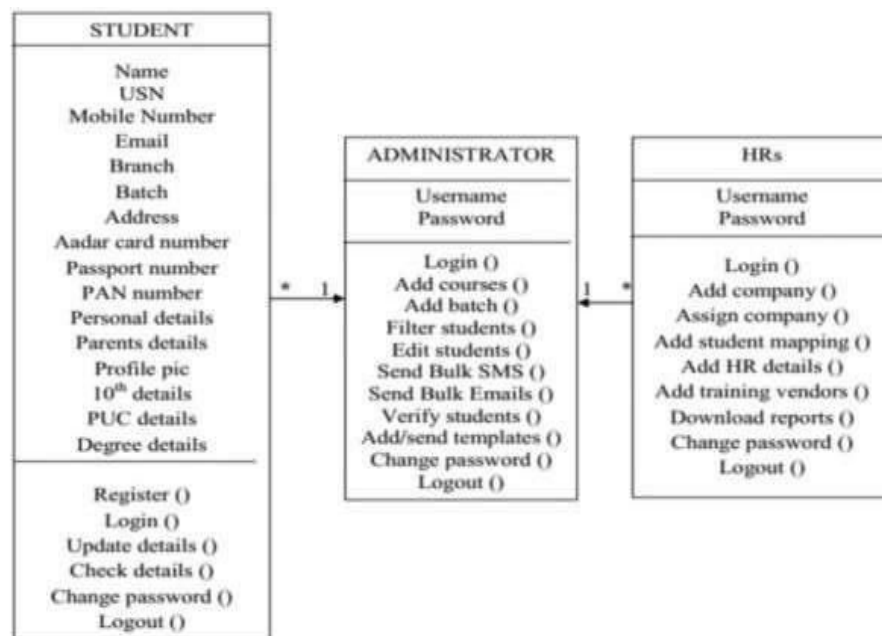


Fig. 4. Class Diagram For Online Training And Placement Management System.

Fig. No. 4.1 System Design

## **V. PROS & CONS**

### **V.1. Advantages.**

There will be no need of putting up notice or emailing every student about the company coming in college. The students can keep updated themselves through this software

The company can view all students' detail and system can shortlist students according to their criteria instead of doing manually.

There is admin login that can view and manage both students and company's account and also can put up notifications

Student can register online instead of going to placement department for registration.

This system saves time and efforts.

### **V.2. Disadvantages**

Students can't edit their applications once sent. It would require admin to change data It requires large database

## **VI. CONCLUSIONS.**

The training and management of placements are recognized as crucial aspects of educational institutions, where most of the work is performed manually. The manual system in colleges is noted to require significant manpower and time. With this project, a web portal is aimed to be developed to address this issue. The project is focused on the creation of an application for the college's placement department. The system is designed to be accessed and effectively utilized throughout the organization with proper login credentials enabled. It can also serve as an application for Placement Officers in the college, allowing for the management of student information regarding placements, thereby reducing manual work and minimizing paperwork.

The system is expected to help the college overcome the challenges associated with keeping records of hundreds of students and searching for students who meet recruitment criteria. Up-to-date information regarding all students in the college is provided by the system. Effective and timely utilization of resources is facilitated. The project offers a user-friendly, reliable, and fast management system. Operations can be carried out smoothly and effectively by the placement officer. Computerized records can be maintained by the college, thus reducing paperwork, time, and costs.

## **VII.ACKNOWLEDGMENT**

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## REFERENCES

### [1] Books

**Chaudhary, A., & Singh, P. (2019).** *Placement Management Systems: An Integrated Approach to Recruitment*. New Delhi: Academic Press.

**Rao, R. (2018).** *Human Resource Management: A Comprehensive Guide to Placement Strategies*. London: Sage Publications.

### [2] Journal Articles

**Varshney, D., Sharma, B., & Jain, S. (2014).** "Campus Recruitment Management: Platform Based on Dynamic Electronic Commerce." *International Journal of Computer Applications*, 97(12), 1-5.

**Bilawane, S., & Jambhulkar, P. (2015).** "Information System Based on College Campus." *International Journal of Advanced Research in Computer Science and Software Engineering*, 5(2), 123-127.

**Anjali, J., Jeyalakshmi, A., Anubala, R., & Sri Mathura Devi, G. (2016).** "Web-Based Placement Management System." *International Journal of Computer Applications*, 141(8), 10-15.

### [3] Conference Papers

**Zhongxi, C. (2015).** "Campus Employment Information Network Development Based on Android Platform." In *Proceedings of the International Conference on Information Technology and Management* (pp. 45-50).

**Kumar, A., & Singh, V. (2020).** "Development of a Smart Placement Management System Using Mobile Technology." In *Proceedings of the National Conference on Emerging Trends in Technology and Management* (pp. 150-155).

### [4] Theses

**Sharma, R. (2021).** "Development of an Online Placement Management System." Master's thesis, University of Technology, [City, Country].

### [5] Online Resources

**TechTarget.** (n.d.). "What is a Placement Management System?" Retrieved from TechTarget.

**ResearchGate.** (n.d.). "Placement Management Systems: Challenges and Solutions." Retrieved from [ResearchGate](#).