



IJIRCCCE

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 10, Issue 3, March 2022

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.165



9940 572 462



6381 907 438



ijircce@gmail.com



www.ijircce.com

Placement Management System Using MERN Stack Technology

Vaibhavi Khachane¹, Kartik Reddy², Swarang Raut³, Muhib Lambay⁴

UG Students, Dept. of Computer Engineering, Theem College of Engineering, Mumbai University,
Maharashtra, India^{1,2,3}

Professor, Dept. of Computer Engineering, Theem College of Engineering, Mumbai University, Maharashtra, India⁴

ABSTRACT: As an advantage of automation is increasing now many manual processes are going to be automated. Since the automation System is in demand nowadays, colleges and universities converting a lot of their manual work into automated computer systems. One such system on which the college's success depends is the placements system and which should be automated. The project aims to provide a web application for the placement cell of the college. The purpose of this web application is to overcome the traditional placement management system and save time from repetitive work for managing data. The web application provides the three distinct modules as students, TPO, and Company to manage the placements data. Students can register themselves on the web portal with their academic details and apply from the same portal to campus placements. All the data related to students and companies are available to the college's TPO officer. Companies can connect with colleges and be able to arrange multiple drives in the same college and manage their data for a particular college.

KEYWORDS: Automation, Web Application, Students, TPO(Training and Placement Officer), Company, Data, Placements.

I. INTRODUCTION

Life now's could be stuffed with indispensable technological advancement and during this technological era, it's very difficult for any organization to survive without technology. The Planet World Wide Web contributes enormously to the creation of an ever-increasing global information database. It could even be used as a system to share information within an enterprise.

In today's education system campus placemats which is quite a common thing and require plenty of data collection and data management. As placements season approaches the college's TPO officer has to collect information about many students from the different portals. Students must fill their data in many portals which can cause wrong information and missing information.

Traditionally, all the campus drive updates are displayed on notice boards as result many students don't get information on time. Hence, a computerized system is required to supply error-free information and efficient information. The placement management system helps the training and placement officers to beat the problem of keeping records of hundreds and thousands of scholars and searching the eligible students for recruitment, supporting various eligibility criteria of different companies. It helps in the effective and efficient utilization of the hardware and also the software resources.

II. LITERATURE REVIEW

Firstly, surveyed the college's placements Management System present on the ground[1]. within the present scenario, colleges give updates to students via mail, WhatsApp, or bulletin board. Students' records are maintained on a variety of paper or excel sheets. Tracking of placement drives is maintained manually or within the form of an excel sheet and by using third-party software. The second survey paper is known as "Placement Management System for Campus Recruitment"[2].

This system has four modules Admin Module, HOD Module, Tutor Module, Tutor Module, and Student Module each module has its features for giving information and updating data. The third paper is "Placement support system"[3]. Placement support focuses on automating the placement cell. Authorizing the resumes, communicating about the various job openings to the scholar community, managing the corporate relationship for inviting them for the

placements, creating the situation metrics, monitoring the selection process, and communicating with users. This technique is commonly used as an application by the college to manage the student information concerning placements. Also helps companies coming for campus recruitment to establish student details. Before coming to the campus, companies can get information about eligible students alongside interested students.

Within the existing Placement system, maximum work is done manually and is open to an error system, which takes time for any changes within the system. This big problem is the searching; sorting and updating of the scholar data and no option available to store selected students' records and tracking of applied drives. There is no way to analyze what number of students is applied for drive and from which department.

III. PROPOSED SYSTEM

The proposed system consists of three modules namely Student, TPO, and Company; each module needs to do a different task based on their roles. It is more efficient and time-saving. The systems overcome the limitations in existing systems, all the student's records are saved in a database that is easy to maintain, decreases paperwork, reduced dependencies on multiple portals for storing information, reduced repetitive record-keeping tasks, easy to analyze students' interests. All module's user details are secured using jwt tokens and encrypted passwords so that no one can steal users' information.

The proposed system helps to achieve the following:

- Students have upcoming drive details on their registered account with all information of drive, students can easily apply with their resume to any drive with a single click.
- Students can easily track the drives in which they are applied.
- Companies can create multiple drives at the same time for a different position for the same college there is an option given for companies to upload selected candidates' files as per drive which can be accessed by college TPO.
- Tpo gets records of each student easily according to respective departments and can analyze applied students per drive using graphs.

The proposed System is Implemented using MERN (MongoDB, Express.js, React.js, Node.js) stack technologies. The root language of programming is JavaScript.

IV. SYSTEM ARCHITECTURE

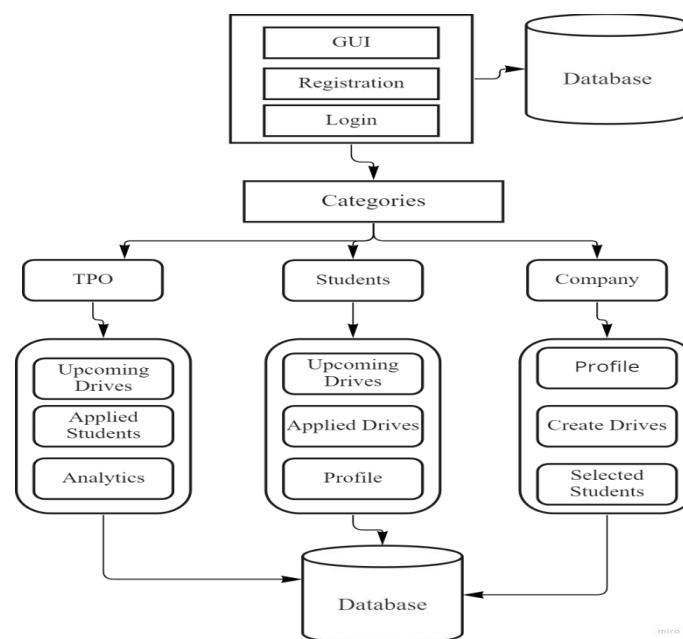


Fig. System Architecture

V. ADVANTAGES

- Common Platform for all campus placement-related activities.
- Dedicated platform for single college.
- Reduction in repetitive tasks and Paperwork.
- Easy to analyze data of placements.
- Maintainable Students data.
- Allow employers to approach the college online for their recruitment needs.
- MERN Stack gives high-performance and reliability to our web application.
- Engaging and Easy to use UI for users.

VI. CONCLUSION AND FUTURE WORK

From a proper analysis of positive points and constraints on the component, it can be safely concluded that the product is highly efficient for the TPO of college and for Students. Generally, the TPOs of the colleges have to face a lot of problems in the management of student information. All the information has to be managed manually. So there needs to develop a system that can solve the mentioned problem. This application comes with a solution that not only provides a highly technology-based system to manage placement-related student information and students can apply for jobs.

The proposed system is much more efficient compared to the existing one. This app will be a total blast who wants to automate their campus placements. The project's goals were met by observing the software development process as well as software design and implementation concepts. Three primary sections were planned and implemented to achieve the project's goal: To begin with, the UI is appealing, intuitive, responsive, and designed with a positive user experience in mind. This was accomplished and executed by adhering to the Web design rules for web portals, as well as using MERN technologies. Secondly, the design. Thirdly, the implementation of the actual project with all functionalities.

The proposed model in the future can give more features such as Interview experience sharing blogs, online video calling interviews, Training features, etc. As we are using NoSQL for the Database so we can use big-data technology to grow this application. Also, the Mobile application of the proposed system can be built.

REFERENCES

1. An Automated Training and Placement System, Farhana Siddiqui, Dept. of Computer Engineering, MH. Saboo Siddik College of Engineering, Mumbai, India
2. Design Paper on Online Training and Placement System (OTAP) Mr. Nilesh T. Rathod Student: M.E. (Computer Science and Engineering) Vidyalkar Institute of Technology Wadala, Mumbai, India. nilesh.rathod@vit.edu.in
3. Héico A. Soares and Raimundo S. Moura, "A methodology to guide writing Software Requirements Specification document", Departamento de Informática Instituto Federal do Piauí and Departamento de Computação Universidade Federal do Piauí, 2015 IEEE.
4. Ajeena Sunny¹ Aneena Felix¹ Angelin Saji¹ Christina Sebastian¹ Praseetha V.M., "Placement Management System for Campus Recruitment", International Journal of Innovative Science and Research Technology, Volume 5, Issue 5, May – 2020
5. Prof. Rupali Komatwar¹, Swapnil Kamble², Mihir Khedekar³, Kishor Walzade, "Placement Support System", International Journal of Advanced Research in Computer and Communication Engineering Vol. 5, Issue 1, January 2016.
6. Suraj Trimukhe, Anil Todmal, Kanchan Pote, Monali Gite, Asst. Prof. S.S. Pophale, "Online Training and Placement System", International Journal of Advanced Research in Computer Science and Software Engineering. Volume 7, Issue 4, April 2017.
7. Raghava S, Chethan, A Prathibha, BS Department of ISE, Assistant Professor, National Institute of Engineering, Karnatak "Placement Management System Based on ASP.NET Technology"



INNO  **SPACE**
SJIF Scientific Journal Impact Factor

Impact Factor: 8.165

doi[®]
cross **ref**

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

 **9940 572 462**  **6381 907 438**  **ijircce@gmail.com**



www.ijircce.com

Scan to save the contact details