# Web Based Placement Management And Tracking System

1<sup>st</sup> **Rohit Patil** Dept. of CSE JSPM's Imperial College Of Engineering And Research Pune India rohitp14022001@gmail.com

3<sup>nd</sup> Omkar Salunke Dept. of CSE JSPM's Imperial College Of Engineering And Research Pune India omkarsalunke13055@gmail.com

Abstract-By creating software that controls placement operations with a user-friendly GUI, we are putting forth an intelligent and simple solution for placement activities. This project aims to create a system that a college's placement cell may use. The objective is to develop a system with functionality for performing the tasks. related to placement services, like showing each other information about the student and the company Our TPO serves as a communication link between the organization and the student. The foundation of software development is a fully modular design. Because the architecture is modular, we will be able to replace or add modules in the future to improve a certain feature in a given circumstance. The goal is to create a system that is functional for carrying out the duties. related to placement services, such as exchanging details about the student and the industry. The main goal of this project is to automate the current procedure and remove the sole point of contact with placement coordinators. Our project facilitates quick access to processes for placement-related tasks. The task is to develop a web-based application for a university's internship management system. It is a web-based program built on the Windows platform that allows university internship departments to store information about students in a database so that companies can use them in the recruitment process if they have the required credentials. one by one the system has relevant data about students. The system stores all students' personal information and expertise intend resumes for employers. Educational institutions can use this system to manage student data and internship information. Students must be able to access their accounts and upload assignments. This project supports student nursing.

Keywords—Task Scheduling, Resource Placement Module, Controller Placement, TPO, Authorization. 2<sup>nd</sup> **Rajpal Pawar** Dept. of CSE JSPM's Imperial College Of Engineering And Research Pune India pawarrajpal54@gmail.com

4<sup>th</sup> Ashish Gaigol Dept. of CSE JSPM's Imperial College Of Engineering And Research Pune India ashishgaigol@gmail.com

# I. INTRODUCTION

Controlling placement and work-based learning Systems that use paper, databases, spreadsheets, and email exchanges have long supported learning. Unfortunately, most of these are resistant to change and unable to react swiftly in the fastpaced world of today. sufficient, especially during the summertime. They require a lot of staff. There are a lot of websites that place people in jobs. However, the interactive features would enable users to act on the information. the world's use of the internet the delivery of information has been transformed by the World Wide Web. as well as the capability for the user to act on the information acquired. Information on placement providers and the positions they offer is included in our placement management system, like many others, so that students can access and evaluate their prospects. Typically, people or activities are arranged by a design or plan. The positioning objective institute's goal is to open doors to the workforce. Providing world-class training to Institute students in major businesses/industries. The placement cell also offers plenty of app opportunities for students to improve their personalities by routinely hosting programmers on communication skills. It operates with a tight-knit organization and has a framework that gets information to the pupils as quickly as feasible. Our project offers the capability for keeping student information and obtaining the necessary list of applicants for the business looking to hire students based on supplied criteria.

The system will have many accounts kinds for various user types, such as administrators and students. The system sorts student data by the requirements set forth by the relevant companies and manages databases using MySQL. Students can select whether they wish to participate in a particular drive or exam from a list of applicants who meet the requirements.

## II. MOTIVATION FOR THE WORK

Colleges manually record training and placement-related activities and placement-related data, and they maintain excel sheets with student information on those who advance to the next round. Therefore, we can decide to create a web application for tasks associated with training and placement. TPO, the recruiter, and the student all contributed to the development of this project.

## **III. PROBLEM STATEMENT**

The current approach requires students to select a specific college where the placement will take place, and it is necessary to store all of these papers, taking up a lot of space. Since everything is done manually, there is a danger that some documents will be lost, and managing the student's information is challenging. There is a danger of lost pupils because TPO would have to manually maintain all data of companies and students. This requires a lot of paperwork; therefore, eligible Students are not given the ability to submit applications to companies. As a result, it is necessary to complete all of this work digitally, thus our main objective is to replace all paper with a single piece of paper.

# IV. LITERATURE SURVEY

Finding factors that can recognize students at risk based on activity data accessible in learning management systems has been the subject of extensive research (LMS). These characteristics frequently depend on the environment, such as the structure of the course, how the activities are evaluated, or whether the course is wholly online or a hybrid. To the best of our knowledge, there isn't presently a prediction model in the learning analytics literature that can generalize effectively to a wide range of various course types utilizing data from the LMS. By training several neural networks to identify students who would likely deliver their assignments on time based on their behavior, this study attempts to address early prediction of students at risk [1]. The College uses the College Activity Management System to manage events such as seminars, farewell parties, and annual functions. It provides information about the recruitment process, monitors student attendance, and provides information about professors, university information, industry information, sports information, and university achievements. Notifying you of tests and results, receiving complaints, and participating in various other university-related activities. Implementing an Android-based mobile campus application is the main goal of this project to move institutions and educational systems forward. Parents, teachers, and children all use the app. Previous methods required viewing all information online or in paper form. In addition, it is extremely difficult to obtain information at the time of searching [2].

In the campuses of educational institutions, this article illustrates an Enterprise Resource Planning (ERP) system for the Training and Placement Cell. The entire placement procedure will be automated by the proposed TnP Vision system. It is an interactive software platform that focuses on managing and analyzing student data to digitize processes, provide visibility into student achievement, and give employers a platform to streamline the hiring process. It offers all participants insight into placement activities [3].

University curriculum have been significantly impacted by several actions taken by numerous executives and intellectuals throughout the past, both at the institutional level and at the level of individual majors. Understanding how the number of students is advancing through the content, where to enhance the infrastructure, and how to improve the education system are urgently needed if we are to enhance student results. There is a shared concern among universities in the United States to greatly increase student retention and academic achievement [5].

To address the global optimization issue of premature convergence encountered by other swarms' various algorithms for Asset Placement in the Cloud services layer of the Cloud, the blueprint for the server is presented such that it includes the Management In the context and Resource Placement components of the cloud. [6]. The college's placement administrators can use this system as a tool to manage student data related to placement events. Students ought to be able to create a portfolio profile online that includes their educational background [7]. All processes like enrollment, renewing, and monitoring is automated by the proposed OTAP system. It offers a thorough resolution to the issue with the current system [8].

They focus on teaching better skills to staff and students, making teaching more challenging and rewarding. This application is built using a Linux server and database. The database is connected to the application via PHP. Servers can go down, so accessing information stored on them is not always easy. For more information, see. Its main goal is to provide a simple interface for collecting and managing all kinds of student data [9]. It uses an MVC architectural style that separates the major tasks associated with building an application (data management, mobile user interface rendering, web services, etc.) to ensure quick and effective maintenance of your application [10].

Student records systems manage a set of data, including tuition and fees, timesheets, degree courses, and test scores, from entry till graduation. The web portal outlined now will make all of this data available. [11].

# V. EXISTING SYSTEM

In the existing system, each task that holds the activity Working with databases required more manual attention. It's a time-consuming and expensive process that, in the worst case, if not the worst-case scenario, results in kids losing out on chances.

In JSPM Imperial College of Engineering and Research Pune the problems of the existing system are as follows:

- Time-consuming and Tiresome: Every task is time-consuming and tedious.
- Error Vulnerable: The likelihood of errors is highest when there has been the most human involvement.
- The maximum amount of human involvement is required for all placement-related tasks.
- Less attention: There is a danger of missed opportunities if the students are not given placement information promptly. demands greater focus on the task.
- Data updating: Since there is no central database and the system is manual, updating data is difficult.
- The interaction between placement officers and each student is tiresome due to poor communication.
- Security: A flaw in the current system is that anyone may view and easily manipulate our data.
- Duplicate Data: There is a greater likelihood that duplicate data will be present in the current system and cause a redundancy issue.

## VI. PROPOSED A SYSTEM

By handing the registration form students in the past, the registration process was done manually. However, this took too much time and was inaccurate. Therefore, the primary requirement was for online student registration to be automated. These are objective project is to create software for the college's placing and training Division. In our proposed system, there will be three different types of users: students, company HR, and TPOs. As our system's administrator, TPOs will be able to manage all of the software, including sending notifications to eligible students about company requirements and collecting follow-ups from both students and companies. Up until this point, there has only been one unreliable method of notification: notice boards.

The proposed "Placement management application" gives simple information sharing to students. Overcomes the restrictions of the present system and guarantees to offer:

- automating data access and entry
- deals with a single point of contact
- makes recruiting easier
- guarantees data accuracy
- time is saved by reducing paperwork
- Information can be delivered to pupils simply.
- risk of missing out on chances is greatly reduced
- Questions answered via message boards

# A. Module

1) Student Module: - Once a student registers for programs the student's identity will be verified by the system. Once authenticated students can sign on straight to the system with login information. pupils can talk to the officer in charge of training and placement. Also, the learner can become ready for many jobs by giving the system aptitude exams. The method will determine which subject area each pupil lacks. And provide assessments to students based on the outcomes the method will determine which subject area each pupil lacks, Refer to fig.1

2) TPO Module: - The person in charge of TPO plans events and communicates with each company. Students who meet the criteria will be notified of their internship driving dates He is in charge of operating this system. He has access to student information for all departments. After the student submits the application materials to the employment office, the employment coordinator can evaluate the information that the student has supplied.

He can submit the necessary materials for students. He is able to interact with the pupil, HR, and department coordinators via the communication wall. He can provide information about the organization going forward as well as the activities the T&P Cell plans to undertake, Refer to fig.1

3) Company HR Module: - Company can contact with the institution and provide the TPO officer the recruiting timetable and criteria. The TPO may choose to store information about the workshops or training sessions that will be held at the college in this area. The administrator may download all the information on the HRs, students who have been placed, training information, and all allocated firms into an excel file, Refer to fig.1



fig.1 Module Communication

# B. System architecture

Once logged in, TPO displays a list of companies and jobs. TPO are responsible for demonstrating student eligibility according to company standards and have access to student resumes. The TPO has access to designated authorities and can conduct necessary information investigations. Company representatives are authorized to review student resumes and provide company standards. When a company registers for the first time, it must provide contact and financial information. Website URL You are responsible for keeping your website and contact details up to date. The proposed system should provide new functionality while at the same time fixing the weaknesses of the existing system. The proposed method eliminates all manual work from the current system and saves money refer to fig.2



fig.2 System Overview (Structure)

#### C. Discussion

Every single operation in the existing system is carried out by hand. The college training and placement officer was required to review the prior years' records for even the slightest details. The existing system has several issues. In a manual placement management system, people do every duty. As a result, errors are more likely to occur. There is no hierarchy in the file organization. Finding anything particular gets based on the result. Information duplication, which can result in data redundancy, is a concern due to the complexity and ambiguity of updating some data. Some students may lose their opportunity to get a seat because they are unaware of the placement updates supplied by the college's training and placement officer. It offers a clear-cut user gateway to quickly collect and upkeep all kinds of pupil information. For the benefit of both students and faculty, accurate, current information on students' academic careers must be created and managed to refer to fig.2

In the current system, the majority of tasks are carried out manually and every action requires human involvement. Due to the aforementioned issues, there are the most human faces at the student and administrator's interface, which makes every operation time-consuming. The sorting issue was caused by the entries being saved in modified Access sheets. Searching was difficult since the files weren't stored hierarchically. These issues made the update confusing and challenging. Due to the aforementioned issues, files are duplicated, resulting in normal data duplication. Students may not be informed about training and placement options, resulting in missed chances. Less communication occurred between students and the training and placement division.

Users are continuously growing in number. This is a timeconsuming and unpleasant process. With the right login information, the proposed system may be viewed online. The student's record contains details about their academic performance, educational background, and personal information. For student data, this system acts as a central database. The college's Training and Placement department can utilize this system as an application to handle student data for recruiting efforts.

It focuses on providing students with an interface that is easy to use. The development and administration of trustworthy, current data concerning a student's academic career are essential in both universities and colleges. Pupils' data systems deal with a range of records on students, academic reports, colleges, courses, curricula, batches, placements, and other resources.

#### VII. CONCLUSION AND FUTURE SCOPE

Once logged in, TPO displays a list of companies and jobs. TPOs are responsible for demonstrating student eligibility according to company standards and have access to student resumes. The TPO has access to designated authorities and can conduct necessary information investigations. Company representatives are authorized to review student resumes and provide company standards. When a company registers for the first time, it must provide contact and financial information. Website URL You are responsible for keeping your website and contact details up to date. The proposed system should provide new functionality while at the same time fixing the weaknesses of the existing system. The proposed method eliminates all manual work from the current system and saves money.

All processes including registration, processing, and searching will be automated through the proposed online training and placement system. It provides a complete solution to your system's current problems.

#### REFERENCES

- [1]. D. M. Olive, D. Q. Huynh, M. Reynolds, M. Dougiamas and D. Wiese, "A Quest for One-Size-Fits-All Neural Network: Early Prediction of Students at Risk Online Courses", IEEE Transactions on Learning Technologies, vol. 12, no. 2, pp. 171-183, 2019.
- [2]. Ashok Kumar, Ch. Mohan Srinivas, Vishnu Vardhan Reddy, K. Kiran Kumar, "College activity management system", IEEE, June 2018.
- [3]. Vinayak G. Kottawar, Siddharth R. Bhoite, Pramod B. Deshmukh, Mayur S Nagre, Rushikesh S Zanwar, "Automation and Analysis of Campus Placements in Colleges,", IEEE, 2021.
- [4]. "Superset The Official University Recruitment Platform", Superset, January 2018
- [5]. M. Raji, J. Duggan, B. DeCotes, J. Huang and B. V. Zanden, "Visual Progression Analysis of Student Records Data", 2017 IEEE Visualization in Data Science (VDS), pp. 2-5, 2017.
- [6]. Preeti Abrol, Dr. Savita Gupta, Karanpreet Kaur, ": Analysis of Resource Management and Placement Policies using a new Nature Inspired Meta-Heuristic SSCWA avoiding Premature Convergence in Cloud", 2016.

- [7]. Anjali, Jeyalakshmi.PR, Anbubala, "Web-Based Placement Management System", International Journal of Computer Science and Information Technologies, Vol. 7 (2), 2016.
- [8]. Mr. Nilesh T. Rathod, Prof. Seema Shah, "Design Paper on Online Training and Placement System (OTAP)", International Conference on Education and Educational Technologies, 2013.
- [9]. K. Anand, Retheesh D, J. Hemalatha, S. Karishma, R. Logeswari "Application for Training and Placement Cell" International Journal of Pure and Applied Mathematics Volume 119 No. 15 2018, 2013-2020.
- [10]. P. S. Rajebhosale, S. Choudhari, S. Patil and A. Vyavahare, "SMART CAMPUS - An Academic Web Portal with Android Application", Int. Res. J. Eng. Technol., vol. 3, no. 4, pp. 389-394, 2016.
- [11]. Cmak Zeelan Basha, Sofia Tasneem, Preethi Miriyala "Enhanced Technique for Placement Monitoring using ServiceNow Portal" International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-1, November 2019.
- [12]. Luis Cruz, Rui Abreu, "Performance-Based Guidelines for Energy Efficient Mobile Applications" Mobile Software Engineering and Systems (MOBILE Soft), IEEE/ACM Fourth International Conference 2017.
- [13]. D. A. Antony, G. Singh, and E. J. Leaving, "Mobile Application for Student Attendance and Mark Management System", Int. J. Comput. Intell. Res., vol. 13, no. 3, pp. 425-432, 2017
- [14]. M. N. Dedhia and D. V. C. Kotak, "ANDROID BASED CAMPUS SOLUTION FOR COLLEGE", Int. J. Comput. Sci. Mob. Comput., vol. 6, no. 11, pp. 12-17, 2017.
- [15]. K. V. Thangam, T. S. Kumar, V. Yogesh, and S. Prabhu, "Android Application for College Management System (M-Insproplus)", Int. J. Mod. Trends Eng. Res., vol. 4, no. 2, pp. 41-44, 2017.
- [16]. S. Trimukhe, A. Todmal, K. Pote, M. Gite, and S. Pophale, "Online Training and Placement Management System", International Journal of Advanced Research in Computer Science and Software Engineering, vol. 7, no. 4, pp. 344-349, 2017
- [17]. "Calyx Pod", Calyx pod, 2017.
- [18]. K. Datarkar, N. Hajare, N. Fulzele, S. Kawle, V. Suryavanshi and D. Radke, "Online College Management System", Int. J. Comput. Sci. Mob. Comput., vol. 5, no. 4, pp. 118-122, 2016.
- [19]. P. G. Scholar and E. Engineering, "DEVELOPING AN ANDROID APPLICATION FOR COLLEGE MANAGEMENT SYSTEM", Int. J. Futur. Innov. Sci. Eng. Res., vol. 2, no. 2, pp. 75-80, 2016.
- [20]. M. L. S. Jadhav, M. T. R. Made, M. S. S. Jagushte, and M. M. K. Gosavi, "Web-based Notification Management System with Android Application", Int. J. Sci. Technol. Eng., vol. 2, no. 10, pp. 1218-1220, 2016.
- [21]. Pooja Naik, Kavita Kattimani, Suvarnamala Divate, "Android Application on College Management", International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE) ISSN: 0976-1353 Volume 14 Issue 2 –APRIL 2015.P. Rani and D. R. Vohra, "Generating Placement Intelligence in Higher Education Using Data Mining", International Journal of Computer Science and Information Technologies, vol. 6, no. 2298– 2302, pp. 1-5, 2015.

- [22]. Hitesh Kasture, Sumit Saraiyya, Abhishek Malviya, Preeti Bhagat, "Training & Placement Web Portal", International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169 Volume: 2 Issue: 3, March-2014.
- [23]. H. Siirtola, K. J. Raiha, and V. Surakka, "Interactive Curriculum Visualization", 2013 17th International Conference on Information Visualisation, pp. 1-3, 2013.
- [24]. S. Goel, R. Kiran, and D. Garg, "Vulnerability Management for an Enterprise Resource Planning System", International Journal of Computer Applications, vol. 53, no. 4, pp. 19-22, 2012.
- [25]. X. Li and X. Yan, "The Problems and Countermeasures on Student - Records Management in Electronic Service Work of Colleges and Universities", 2011 International Conference on Control Automation and Systems Engineering (CASE), pp. 1-3, 2011,
- [26].T. Gosavi, S. Gaikwad, R. Nazirkar and A. Salke, "ANDROID BASED TRAINING AND PLACEMENT AUTOMATION", National Conference-Ekalavya-2k15, ISSN 2348-6953.