

PLACEMENT MANAGEMENT SYSTEM

Somana Gouda¹, Srinivas j¹, Vignesh¹, U Tarun Raju¹

B.E. Student¹, Dayananda Sagar College of Engineering, Bangalore, India

Rashma S², Dayananda Sagar College of Engineering, Bangalore, India

Abstract: This paper is all about newly booming technology that provides quick placement management systems play a crucial role in educational institutions, assisting in the efficient and streamlined organization of student placements. This paper presents a survey of existing literature and research related to placement management systems, with a focus on gathering comprehensive information regarding their functionalities, benefits, and challenges. The survey explores various aspects of placement management systems, including data collection and management, matching algorithms, communication channels, and evaluation mechanisms. It examines the use of machine learning techniques and their applications in automating and optimizing placement processes, such as student-company matching and preference-based recommendations.

Index Terms - Management system, Connectivity, Dynamic Database, WIFI.

1.INTRODUCTION

Placement management systems have become indispensable tools for educational institutions in efficiently managing and organizing student placements. These systems leverage technology to automate and streamline various aspects of the placement process, ranging from data collection and analysis to matching students with suitable companies and evaluating placement outcomes. With the increasing complexity of the job market and the growing emphasis on industry-academia collaboration, placement management systems play a crucial role in ensuring successful transitions from education to employment. This survey paper aims to provide a comprehensive overview of placement management systems, encompassing their functionalities, benefits, challenges, and the role of machine learning techniques in their implementation. By synthesizing existing literature and research, this study seeks to consolidate knowledge and identify emerging trends and areas for further exploration. The primary objective of a placement management system is to facilitate efficient matching between students and companies, taking into account various factors such as student skills, preferences, and organizational requirements. These systems collect and analyze large volumes of data to generate meaningful insights and recommendations, enabling more informed decision-making for all stakeholders involved.

2. PROBLRM STATEMENT

The field of education has witnessed significant advancements in recent years, leading to a growing emphasis on ensuring successful career placements for students. Placement management systems play a vital role in facilitating the seamless transition of students from academia to the professional world. However, the effectiveness and efficiency of these systems vary widely, and numerous challenges persist in their implementation. The problem statement of this survey paper revolves around identifying the key challenges faced by placement management systems and exploring the existing solutions to address these challenges. The paper aims to provide a comprehensive overview of the current state of placement management systems, enabling researchers, educators, and policymakers to better understand the intricacies involved and make informed decisions regarding their implementation and improvement.

3.Literature Survey Summary

SL.NO	Title of the paper	Proposed model	Remarks
1.	Web-based application for the placement department [2016]	This paper explains how to solve a problem that arose in an existing manual system. The search and update of student data is a big issue in the current manual method.	Filtering the list of students based on the criteria of the campus drive would be tough for the training and placement officer
2.	A Research on Placement Management System [2017]	The system saves all of the students' personal information as well as their technical skills, which are needed for a CV to be sent to an employer.	The major problem in existing manual system is searching and updating of the student data
3.	A Review on Training and Placement System [2017]	The project is beneficial for college students, various companies visiting the campus for recruitment	Quantitative regression analysis of the effectiveness of job fairs, using descriptive

		and even the college placement officer.	statistical analysis results for big data mining and relevance description
4.	Develop a job web portal [2020]	Connect to the industries and acts as an online recruitment to support the students to find the right IT job after graduation	The existing portal of the faculty and to gather their requirements which can be incorporated in to the portal to be developed
5.	Training & Placement Management System [2021]	The existing system performs all tasks manually. To get details, the administrator should sort among all the records that have been preserved for many years	Time Consuming and Tedious: Every task is tedious and time consuming. Poor Communication: It is tedious for placement officers to interact with every student

- Above survey summary illustrate the placement management system survey.
- As we implement is that the wireless technology for newly recommendation project.

4.Literature Survey Summary (Current development technology)

SL.NO	Title of the paper	Proposed model	Remarks
1.	Web-based application for the placement department	As we encountered the issues of search and Update data by storing the currently and Alumni data separate and retrieving data based on criteria	Managing the huge amount of data would be challenging for Training and placement officer, which are driven by campus.
2.	A Research on Placement Management System	The system saves all of the students' personal information as well as their technical skills, along with academic activities which are needed for a	There is no any existing problem with system but some difficulties are faced while retrieving data we tackle as much as possible.

		CV to be sent to an employer.	
3.	A Review on Training and Placement System	The project is beneficial for adopting the wireless technology in their campus for recruitment process.	By recognizing the limitations and working towards improvement, educational institutions can enhance the effectiveness of the training and placement system, comprehensive career guidance are key areas that require attention for a more efficient training and placement system.
4.	Develop a job web portal	Connect to placement management system which is active for both parties for 2 years to support the student and future growth.	The slight problem with requirements of higher faculty for existing portal which is inconvenient to portal to developed.
5.	Training & Placement Management System	The existing system performs all the tasks dynamically. To get the details, administrator should sort among all the records that have been preserved for many years	Time Consuming and Tedious: Comparatively better the is dynamic and versatile Poor Communication: chance for misunderstanding between ends

5. PURPOSE

The purpose of a placement management system for a survey paper is to effectively organize and manage the placement and positioning of survey questions within the paper. The placement of survey questions is crucial as it can impact the quality of responses and the overall validity of the survey results. A placement management system helps researchers and survey designers determine the optimal placement strategy for survey questions, ensuring the survey is structured in a logical and coherent manner.

Here are a few key purposes of a placement management system for a survey paper:

- Question Flow
- Contextualization
- Response Bias Minimization
- Survey Length Management
- Section Segmentation
- Data Analysis Facilitation

6. SCOPE

The scope of a placement management system for a survey paper would typically involve exploring various aspects related to the design, development, implementation, and evaluation of such a system. Here are some key areas you can consider for your survey paper:

- Automation of Placement Procedure
- No Need to do Paper Work
- To save the environment by using paper free work.
- To increase the accuracy and efficiency of placement procedure
- Management of Student Data
- Analysis of overall Placement

7. OBJECTIVE

- **To provide a comprehensive overview of placement management systems:**

The survey paper aims to present a holistic understanding of placement management systems by exploring their functionalities, components, and key features. It seeks to establish a foundation of knowledge for readers to grasp the fundamental concepts and workings of these systems.

- **To investigate the integration of techniques in placement management:**

It focuses on examining how machine learning techniques have been leveraged in placement management systems. It aims to explore the different applications of machine learning, such as student-company matching, personalized recommendations, and algorithmic improvements, to enhance the efficiency and effectiveness of the placement process.

- **To summarize the existing research and literature on process:**

This seeks to consolidate the current state of research and literature related to placement management systems. It aims to review and analyze relevant studies, highlighting their methodologies, findings, and contributions. This objective provides readers with a comprehensive understanding of the existing knowledge and serves as a reference for further research.

- **To identify research gaps and propose future directions:**

Aims to identify areas where further research is needed. It aims to pinpoint research gaps and challenges that require attention, such as data privacy, algorithmic fairness, and system scalability. Additionally, it proposes potential future directions for research and development, suggesting innovative approaches and technologies that can enhance placement management systems.

- **planning and organizing various placement drives in campus:**

Students should use the fair in order to grab the opportunity understand what companies are looking for in candidates and what skills are vital for their future roles. Career/Job Fairs are a valuable opportunity to hone networking skills and gain practice in articulating their value to a prospective employer

8. PROPOSED SYSTEM



Fig 1.1 Overview

The system comprises 3 major components:

1. Admin
2. Student
3. Company

❖ Admin:

- Login: Admin needs to login with valid login credentials for accessing the system
- Create test taker: test taker is the student of our university who are eligible for accessing the system.
- Create test: Sample questions for the test to be taken by test takers i.e., students.
- View marks/results: Admin can see the results and marks obtained by the test takers.

❖ Student:

- Current Student: Has he/she currently pursuing in college details
- Alumni: Student pass out details of he/she alumni of current college

❖ Company: Directly contact with placement management online training system

❖ Form: E-Application form through E-mail service to student

9. SYSTEM DIAGRAM

- ❖ The system consists of three modules as admin module, student module and recruiter module. Each module has a same login page that contain user id and password field, by entering value in that field the user should login to the system.

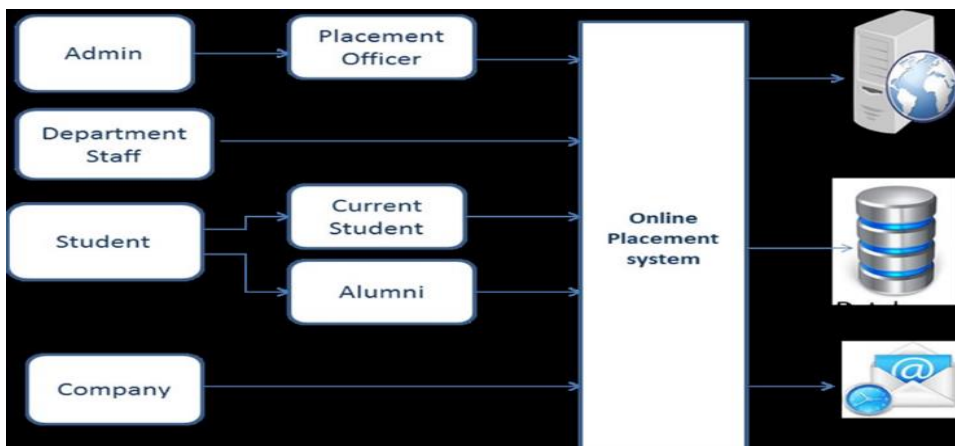


Fig 1.1 Overview

10. RESULT AND DISSCUSION

This project is developed using machine learning and Ai libraries, using Python, JavaScript/HTML CSS language and backend is MySQL, MongoDB used for configuration. Sha256 password encryption is use for security of data. Our main aim is automation so for that we have modules Resume Generation from information forms and Aptitude tests with answer evaluation and questions set.

Future scope of the project includes Direct communication with employer or HRM and Direct E-interview system after tests for candidates that are above cut off marks. Providing offer letter to students through website and including Alumni association who are willing to help our college for providing placements.

✓ REFERENCE LINK

- [1] Jidnyasa Raut, Komal Pat il, Payal Gothi, Riddhi Kamat, Prof. Nileema Pathak “CABAL: Training and Placement Departmental Portal” IOSR Journal of Engineering(IOSRJEN), Volume 3, Aug-2019.
- [2] Prof. Anagha Kulkarni, Priyanka Hajare, Priyanka Khandave, Shital Adhav, Swati Pimpale, “Implementation of Online Placement System”, IJERMT All Rights Reserved International Journal of Emerging Research in Management &Technology ISSN: 2278 -9359 (Volume-5, Issue-1), January2016.
- [3] Rajnish Tripathi, Raghvendra Singh, Ms. Jaweria Usmani “Campus Recruitment and Placement System” International Conference on Recent Innovations in Science and Engineering, April 2018.
- [4] Swat I Choudhary, Monica Landge, Shital Salunke, Swarupata Sutar, Kirti Mhamunkar “Advance Training and placement web portal” International Journal of Technical Research and Application ISSN: 2320- 8163 Volume:4 Issue: 2, 2016.
- [5] P. Anitha Vairamany, Dr. K Subramaniyan “Placement Prediction in Self Employment Using K Means Clustering” (UGC Care Journal, Volume 40, March 2020.
- [6] Shubhangi Patil, Nutan Sonawane, Priyanka Kulkarni, Priyanka Khadse “Training and Placement Portal with Student Performance Analysis” International Research Journal of Engineering and Technology (IRJET), Volume-5, May-2018.
- [7] Dr. Ram Joshi, Mrinal Chaudhari, Pratiksha Gaikwad, Savani Kadam “Training and Placement Portal” International Research Journal of Engineering and Technology (IRJET), Volume-4, Dec-2017.

[8] Huda Al-Shehri, Amani Al-Qarni, Leena Al-Saati, Arwa Batoaq, Haifa Badukhen, Saleh Alrashed, Jamal Alhiyafi, Sunday O. Olatunji “Student Performance Prediction Using Support Vector Machine and K-Nearest Neighbor” IEEE 30th Canadian Conference on Electrical and Computer Engineering (CCECE), 2017.