Predictive Data Collection and Analysis for Placement Using CodeIgniter Framework

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ABSTRACT

The purpose of the project is to replace the traditional placement management with digitized system, which helps in maintaining student database such as student list, shortlisted students list for placement, examination results and resumes which is essential for placement procedures. The application that is designed can be accessed over internet as the application is hosted on the server. The application can lead to error free, secure, reliable and fast management system. The organization can maintain computerized records with redundant entries, which will avoid manual record keeping. Basically the project describes how to manage and maintain required data for better performance and better placement procedures.

Keywords. CodeIgniter, Model-view-controller, digitized placement.

I. INTRODUCTION

The purpose of the project "Predictive Data Collection and Analysis for Placement Using CodeIgniter Framework", manual work makes the process slow and other problems such as inconsistency and ambiguity on operations. In order to avoid this web based placement managed system is proposed, where the student information in the college with regard to placement is managed efficiently. It intends to help faster access procedures in placement related activities and ensures to maintain the details of the student. Students logging should be able to upload their personal and educational information. The key feature of this project is that it is one time registration enabled. Registered students, placement officer, can access the application generated based on login credentials. The TPO of the college can use the system to manage the student information regarding placement. Students can register through their USN and can upload their information in the form of a resume after successful registration. The job details of the placed students will be provided by the administrator. The administrator plays an important role in our project. Our project provides the facility of maintaining the details of the students and gets the requested list of candidates for the company who would like to recruit the students based on given query.

II. PROBLEM STATEMENT

A. EXISTING SYSTEM

In colleges, Placement Officer enter the information of students manually. They have to sort & arrange resumes of students according to various branches and notify them according to company requirements, if any modifications or updates are required, it has to

be done manually. Existing systems lack security, are tedious and time consuming which involves more man power, consumes large volume of paper and requires huge amount of storage space to dump the data, searching individual student information was troublesome. This process becomes more difficult when the database of number of students increase.

B. PROPOSEDSYSTEM

The application provides users with a unique login after registration, it facilitates maintaining details of the students with updated marks and resumes, it can also list candidates for the companies who would like to recruit the students based on their requirement query, to aid TPO with data maintenance of students and companies. Any updates about the placement activities such as information about the companies visiting the college for recruitment will be intimated to the students via SMS and e-mail prior to a week. Student's information is maintained in the database, it gives more security to data, ensures data accuracy, reduces paper work and save time, only eligible students get chance, it makes information flow efficient and paves way for easy report generation, reduce the space, cost effective and matches the company and students with higher precision.

III. LITERATURE SURVEY

The paper presents a SMS-based recommendation system for campus recruitment, which can help college placement office to match the companies and students with higher precision. Based on profile similarity degree, the preference lists of companies and students are calculated.

[1]. The system is an application that can be accessed and effectively used throughout the organization with proper login enabled. This system can be used as an application for the Placement Officers in the college to manage the student information with regard to placement [2]. The paper focuses on managing student's information using digitized method which is easy to access rather than manually

[3]. The system provides automation in all the processes like registration, update, and searching of the student data. Also, if the student is eligible for company then the student can directly apply for the company [4]. The paper aims at providing the Facility to automate and simplify the process of registration and list generation of eligible students for placement. This System do all work regarding placement like collecting student records, Authenticate & activate the student profiles, Notifying eligible students via automated E-mail message, Check the number and percentage of placed & unplaced students. Proper login with time & role based secured access is provided to Placement Officer, Company, College staff and Students. Students logging should be able to upload their information in the form of a Resume. Placement Officer can access, view information of the users and prepare schedule of all activities regarding placements. Company can give their own application procedure by providing link. College staff can see the registered students and their status. All registered users are eligible to participate in forum. [5]. The paper on Android based training and placement automation for campus drive is a System, which automates training and placement activities and provides opportunities to the students, who are eligible according to the company criteria and makes easy the process of managing information regarding students and companies automatically [6]. The paper presents the development of placement predictor system (PPS) using logistic regression model. Based on the student scores in matriculation, senior secondary, subjects in various semesters of technical education and demographics, PPS predicts the placement of a student in upcoming recruitment session [7]. The framework can be utilized as an application for the Training and Placement Officer (TPO) of the foundation to deal with the understudy data with respects to position and likewise did the position movement. Understudies logging ought to be capable to transfer their data as a CV, Individual points of interest, Academic subtle elements. TPO, Principal, HOD, Department co-ordinator logging

can get to/pursuit data set up by Students W.R.T. their power [8].

IV. METHODOLOGY

A. System architecture

The Figure 1 shows the system architecture of Placement portal which consists of three modules. The Admin, Student and Department. The Application includes database that stores and maintains Student information, Company details and Department data.
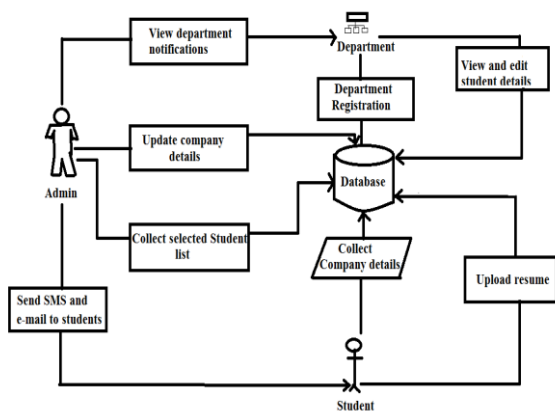

Figure 1. System architecture

B. System modules

STUDENT MODULE. In this module, creation of student input records about academic career from SSLC, PUC and all semester with facilities to modify the records and viewing changed records. The Student views the company details and verifies particular company details and provides valid details for registration.
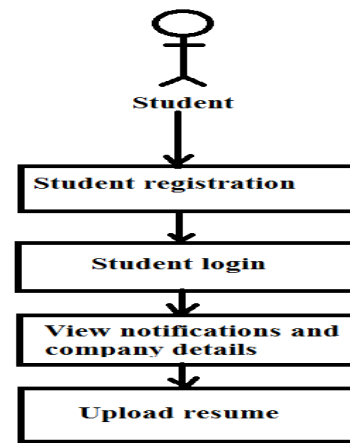
Figure 2. Student module

ADMIN MODULE. The admin is the placement officer who views the students' details and add company details and posts the selected students list. Sending email to student for complete list of information for particular campus.
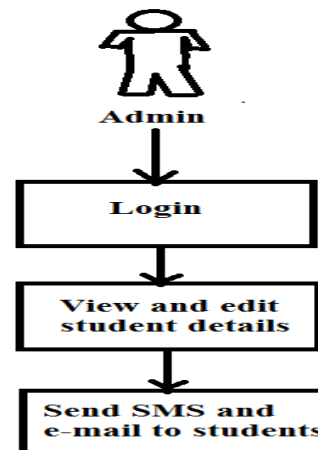

Figure 3. Admin module

DEPARTMENT MODULE. The department can view the student list, shortlisted student list of their particular department. They can also update notifications about their department activities which can be viewed by students and TPO. The department can also view the notifications put up by TPO.
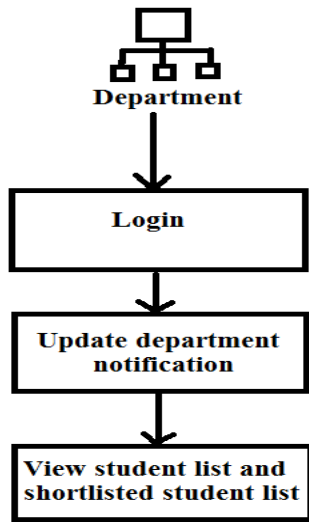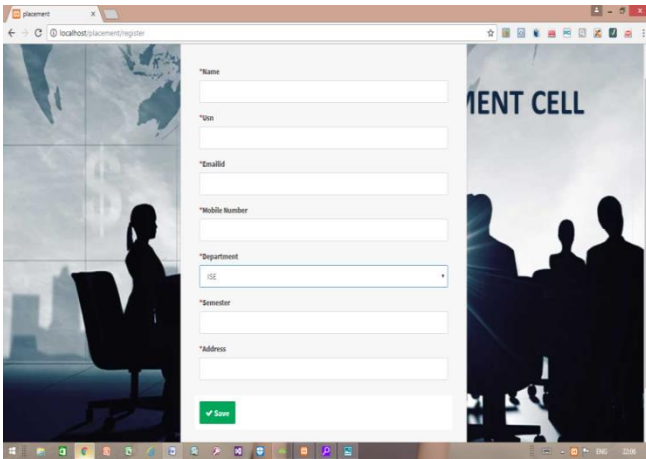
**Figure 4.** Department module

C. Advantages

- The application gives more security to data.
- Ensures data accuracy.
- Reduces paper work and save time.
- It makes information flow efficient and paves way for easy report generation.
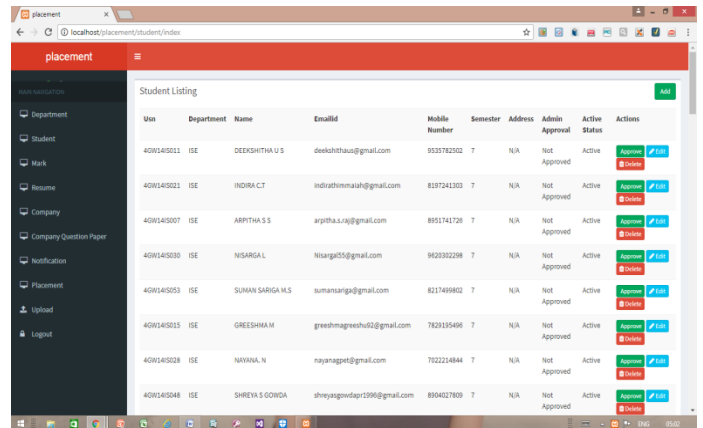
V. RESULTS AND DISCUSSIONS

Snapshot 5.1. Registration Page

The Student can get registered through this registration page by filling their respective details in the provided fields.
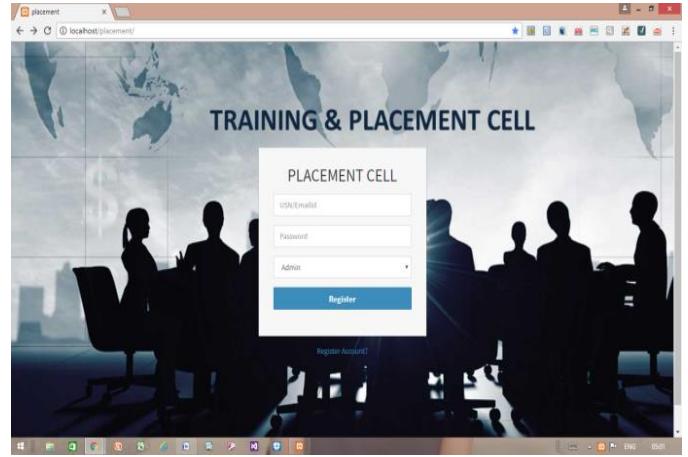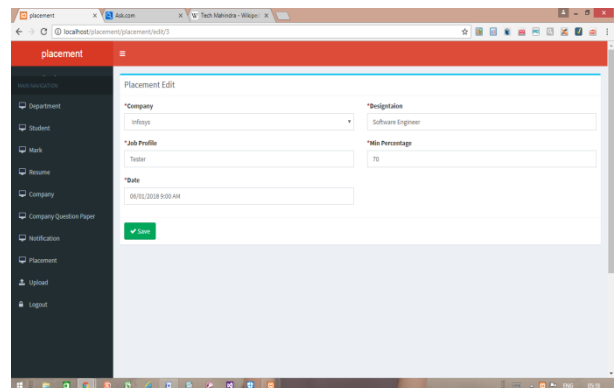

Snapshot 5.2. Login Page

After successful registration the Student can login through their USN and approved password issued by the TPO.

Snapshot 5.3. Students List

After the Admin logins, the list of registered students will be displayed.

Snapshot 5.4. Sorting based on Student Aggregate

Using the optimization technique, based on company requirements the students will be sorted.

Snapshot 5.5. List of Sorted Students

The list of sorted students will be displayed.

VI. ACKNOWLEDGEMENT

VII. CONCLUSION

The traditional way of manual placement management is replaced by the digitized placement management system, which helps in maintaining placement aspirant database and minimizing the time consumed in the placement process. The overall process of placement is more secured and automated as the marks of the student are updated through university's official result website. The application can be extended for various colleges, so that only one web portal for a city can be maintained, For pool campus conducted in the colleges, limited access to the system can also be given to other college students. The online aptitude test can also be integrated with the online placement system so the student can take the test from anywhere. Same logic can be converted in to android platform and develop a reliable application in future.

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