Placement Support System

Prof. Rupali Komatwar [1], Swapnil Kamble[2], Mihir Khedekar[3], Kishor Walzade[4]

Lecturer, Computer, Atharva College of Engineering, Mumbai, India[1]

Student, Computer, Atharva College of Engineering, Mumbai, India[2,3,4]

Abstract: Placement Support System automates activities of training and placement cell provides opportunities to the student community to use collective intelligence to increase selection ratio and eases out process of creation of management information automatically. Placement Support focuses on the automation of the placement cell. Authorizing the resumes, communicating about the various job openings to the student community, managing the corporate relationship for inviting them for the placements as well other activities, creating the placement metrics, monitoring the progress of the selection process and communicating with different users .Placement Support system provides the module like Student (Current Student/ Alumni), Administrator (TPO/ TnP Staff/ Departmental Staff), Company and Forum. It has the features like Integrated Toolkit for Reach-out to Companies Track. It manages Placement process of each Job posting individually. Manage Company Profiles, Manage Job Postings, Authenticate and activate the student profiles, Send Notifications to students, Create list of students as per company HR Manager Job Request, provides the list of shortlisted student with resume to company HR Manager, Export data of shortlisted students to excel file based on Search Criteria, Manage student profile, Set preferences for student eligibility criteria for placement, Time & Role Based Secured Access to users.

Keywords: TPO, TnP, Security, Authorizing, Forum.

I. INTRODUCTION

The use of Internet and World Wide Web revolutionized the provision of information and the facility for the user to take action on the information obtained. The use of internet enables users to manage placement process. This led to a unique web based placement management system developed specifically by the placements practitioner and the software programmer to become Placement Support system.

Placement Support system is an online application that can be accessed throughout the organization and outside as well with proper login provided. This system can be used as an application for the Training and Placement Officer (TPO) of the college to manage the student information with regards to placement. Students logging should be able to upload their information in the form of a CV. Visitors/Company representatives logging in may also access/search any information put up by Students.

Placement Support is an application to facilitate students in Atharva College Of Engineering(ACE) to register, search and apply for jobs. The companies and the TPO to take effective actions on the web as follow-on from the information they have viewed. TPO provides approval of student registration and updating. Placement Support helps in developing a long-term cooperation relationship with companies. Placement Support system provides information on placement providers and the placements they offer so that students may view and assess their opportunities.

Computer based information system are designed to improve existing system. Whatever the information, TPO has to pass to the student and he OR SHE CAN INFORM online. Improve accuracy in result. It has user-friendlyinterface having quick authenticated access

to documents. It provides the facility of maintaining the details of the students. It will reduce the paper work and utilize the maximum capabilities of the setup and organization as well as it will save time and money, which are spending in making reports and collecting data. It can be access throughout the organization and outside as well with proper login provided.

This system can be use as an application for college to manage the student information concerning placement. Also helps company coming for campus recruitment to see student details. Before coming for campus, company can get information about eligible students along with interested students.

II. LITERATURE SURVEY

Mr. Nilesh Rathod, Dr Seema Shah, Prof Kavita Shirsat's[1] gives the basic idea of the existing system, all processes are handled manually. the administrator should refer all the records kept for years ago to simply known number of users increases. there are many limitations for the existing systems. in manual training and placement, all the work done at ACE is by human intervention due to which there were maximum chances of errors.

Luan, Jing's paper for data mining provides easier ways to handle data of students[2].The interface of student and administer is maximum which makes the system time consuming. students created and submitted their cvs early in the year, leaving them frozen in time. lists were produced for each company, and students had to regularly travel in to review the notice board. the process was slowing ,valuable academic time was diverted from activity That is more useful at ACE the record were stored in modified,excel sheet hence sorting is a problem.

The excel sheets were less optimized e.g. suppose we want students having 2 atkt then the student with 0, 1, 2 atkt were select whereas required result is only of 2 ATKT. Baker, Ryan SJD, and Kalina Yacef's paper show unique methods of data mining[3] The files were not stored hierarchical format hence searching was a big problem, due to this the updating was very difficult and ambiguous this leads to the duplication of records was usual hence data redundancy. Searching is done manually based on the company criteria TPO will identify the eligible student by looking the excel sheet.TPO has to see each and every student marks and their eligibility. No searching method is provided. The student will get notify through traditional notice board only. There may be chances of loss of opportunity. The students were not being made aware of the T&P activity. At ACE there is no any method of communication with the TPO, Student, or Alumni. If anyone wants to talk with the TPO he has to go in a TPO cabin and take relevant information. The information like company question paper, CV Format, Job details are not available to the student. At ACE there is no method to take the feedback about the student, about the company, or about the alumni. The system now at ACE Training and Placement department could not take acknowledgement from the students attending to particular event hence lots of confusion at the last moment. There were fewer interfaces between student and Training and Placement department. There was no record kept of the past students. There was less communication between past or present student with the Training and Placement department Romero, Cristóbal, and Sebastian Ventura's paper gives new methods fo handling student data throught data mining[4]

III. PROPOSED SYSTEM

The proposed Placement Support System meant to give more easiness to the users that they can add and retrieve information so quickly. Once you open this web application at the front end all the schedule/event are available to everyone. Also in the every current student login this schedule/event are available. There are mainly six types of users they are Current Student, Alumni, Training and Placement Officers (TPO) of the college, Training and Placement Staff, Departmental Staff and Companies. The administrator is the master user; he gets the most number of priorities than the other users. The different functions involve the case of an administrator are updating, approval. The administrator can view and approve the various application forms. There are two types of student; Current Student and Alumni. Current Students can review and enter information around the clock and from any location. Students can edit their CVs online, and update them constantly. Students can very flexibly search for and View Company and vacancy details, and apply to vacancies by attaching a CV. Students can access relevant resources placed online for them. For alumni the last three years data will be maintained. A separate registration will be done by the alumni and separate profile will be maintained of each alumni. They will have access of forum, with which they can post queries, reply queries.

This will help the current student as there will be sharing of ideas by alumni's. Students on placement will also use the system to read important announcements, to obtain information on assessment, to see the results of assessments recorded in the system. Administrators have three different users like TPO, TnP Staff, and Departmental Staff. Each user provided a different features and security. In addition, TPO can search the eligible student based the company criteria and can generate the list. Also TPO can send an automated email to the eligible student. TPO can communicate with the student through the forum module. When TPO first login, they see all the recently changed / created companies and vacancies. Like other users, they can examine any vacancy on the system. Of course, they can also search for vacancies via flexible forms. Strict policy based security defines an upper limit on the allowed activities of a given admin user like TPO. TPO can gather information on all students for which they have appropriate permissions; this can be on an individual or group basis, they can also export a spreadsheet of important statistics on a group for further or detailed analysis. At a glance the system status page reveals a great deal of information about the most recent usage of the system. TnP Staff is the one the most important user in the Placement Support system. They give the validation of the information provided by the student through automated email system. They can see the information provided by the student like marks, contact details, parent mobile number, extracurricular activity or other information. They find the student based on the skill or extracurricular activity.
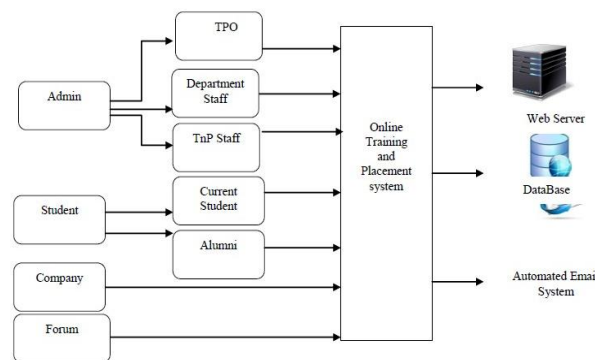

Fig.1. Block Diagram of placement support

One authorize Departmental Staff can register with the system. Staff can give the required material to the student for the placement. They also uploads/download the information. They can communicate with the Student or TPO through forum.

The companies will have to get register for the first time so that their information's like the URL, the contact information, papers, vacancies will be provide. Companies can edit their own contact information to help keep it current. They can also edit information about the company and any vacancies, producing much richer and current information, and a sense of ownership for the company. Companies can decide to allow online applications or to require their own dedicated application procedure. Companies can see relevant resources made available to

them, and companies have space allocated for resources they wish to make available. Companies can view all students that have applied for vacancies, together with information on their availability, application time, cover letters, attached CVs etc.The applied eligible students can then attend the aptitude test which will be conducted on the same software within the college boundaries and the specified time and date. The proposed Placement Support system is intended to avoid all the drawbacks of existing system. It will add some more features than the existing system. The proposed Placement Support system is a cost effective way of doing the manual processes done in the existing system. This helps the Atharva College Of Engineering(ACE) organization to win the war in the existing competitive world.
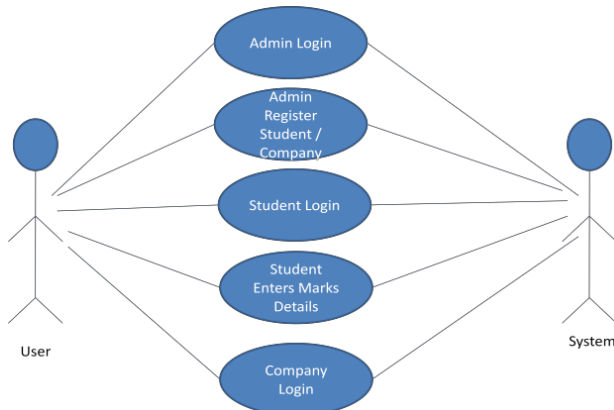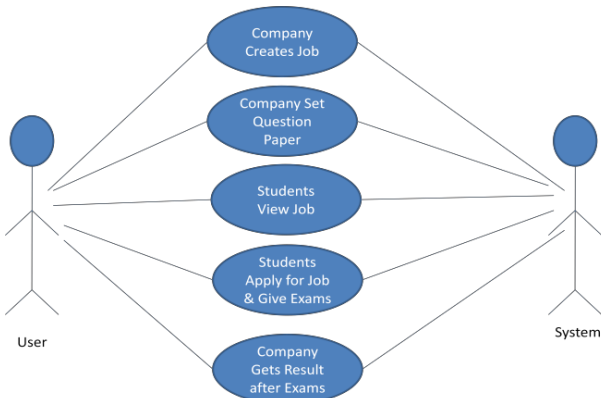

FIG 2. Use Case Diagram for Login Process

Fig 3. Use case diagram for job profile

IV. METHODLOGY

A. *Decision Support System (DSS):-*

[5]Decision Support System (DSS) is a computer-based information system that supports business or organizational decision-making activities. DSSs serve the management, operations, and planning levels of an organization (usually mid and higher management) and help to make decisions, which may be rapidly changing and not easily specified in advance (Unstructured and Semi-Structured decision problems). Decision support systems can be either fully computerized, human or a combination of both.

The term DSS is difficult to define. In fact, DSS was defined differently according to the authors. The controversy seems more clear between academics and DSS users. While academics have perceived DSS as a tool to support decision making process, DSS users see DSS as a tool to facilitate organizational processes. Moreover, some authors have extended the definition of DSS to include any system that might support decision making. In order to overcome this difficulty in the definition of DSS, Sprague (1980) recommends to define DSS by its characteristics, as following:

* DSS tends to be aimed at the less well structured, underspecified problem that upper level managers typically face;
* DSS attempts to combine the use of models or analytic techniques with traditional data access and retrieval functions;
* DSS specifically focuses on features which make them easy to use by noncomputer people in an interactive mode; and
* DSS emphasizes flexibility and adaptability to accommodate changes in the environment and the decision making approach of the user.
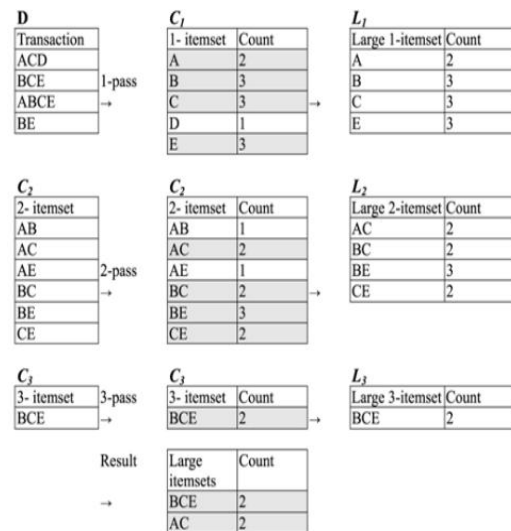

Fig. 4. Apriori Algorithm for Data Mining

B. *Visual Studio*

The Microsoft Visual Studio development system is a suite of development tools designed to aid software developers—whether they are novices or seasoned professionals—face complex challenges and create innovative solutions. Every day, software developers break through tough problems to create software that makes a difference in the lives of others. Visual Studio's role is to improve the process of development to make the work of achieving those breakthroughs easier and more satisfying. The Microsoft Application Platform is a portfolio of technology capabilities, core products, and best practice guidance focused on helping IT and development department's partner with the business to maximize opportunity. As one of the core products of the Microsoft Application Platform, Visual Studio can help you drive the right business efficiencies, customer connections, and value-added services by providing a single, fully integrated development environment for all

types of development, including Microsoft Windows, Microsoft Office, Web, and mobile applications. Use Visual Studio development solutions to give your development team powerful ways to:

- Increase productivity and quality through integrated and familiar tools.
- Deploy, secure, and support your critical Web applications and infrastructure.
- Reduce costs through better visibility of your development process.
- Provide better predictability and planning through integrated process and methodology support.

C. *SQL SERVER:-*

Microsoft SQL Server 2005 is integrated data management and analysis software that enables organizations to reliably manage mission-critical information and confidently run today's increasingly complex business applications. SQL Server 2005 allows companies to gain greater insight from their business information and achieve faster results for acompetitive advantage. Following are the benefits of SQL Server

- High Availability
- Performance and Scalability
- Security
- Manageability

V. CONCLUSION

Existing system, maximum work goes manually and r prone system, takes time for any changes in the The big problem is the searching; sorting and of the student data and no any notification available for giving information to student expect ce board. In the Placement Support System automation in all the processes. The system gets ed in the online registration all the user, activationand deactivation of the user, personalization to the user, resources to be provided online, communication between the users, online feedback, other setting option. The admin can see the user information and will validate it, generate the student list based on the company criteria, company details can be provided to the user, searching and sorting can be done, and reports can be generated. Alumni data can be maintained. Overall, all the process of the training and placement department is automated. Quality assurance in teaching learning environment is a tedious process. No customized application is available for maintaining quality procedures in teaching environment. Placement Support System provides quality implementation solution in teaching environment.

ACKNOWLEDGMENT

REFERENCES

[1] Mr. Nilesh Rathod, Dr Seema Shah, Prof Kavita Shirsat, "An Interactive Online Training And Placement System",IJARCSSE, 2013.

[2] Luan, Jing. "Data Mining and Knowledge Management in Higher Education-Potential Applications" (2002).

[3] Baker, Ryan SJD, and Kalina Yacef. "The state of educational data mining in 2009: A review and future visions." JEDM-Journal of Educational Data Mining 1, no.1 (2009): 3-17.

[4] Romero, Cristóbal, and Sebastian Ventura. "Educational data mining: A survey from 1995 to 2005." Expert systems with applications 33, no. 1 (2007): 135-146.

[5] Kabakchieva, Dorina. "Predicting student performance by using data mining methods for classification." Cybernetics and Information Technologies 13, no. 1 (2013): 61-72.

[6] Kotsiantis, Sotiris B., and Panayiotis E. Pintelas. "Predicting students marks in hellenic open university." In Advanced Learning Technologies, 2005. ICALT 2005. Fifth IEEE International Conference on, pp. 664-668. IEEE, 2005.