International Journal of Advanced Research in Computer Science and Software Engineering

Research Paper
Available online at: www.ijarcsse.com

An Interactive Online Training and Placement System

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Abstract— Online Training and Placement (OTaP) 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. OTaP 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 .OTaP 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 Online Training and Placement (OTaP) system.

OTaP 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.

OTaP is an application to facilitate students in Rajiv Gandhi Institute of Technology (RGIT) 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. OTaP helps in developing a long-term cooperation relationship with companies. OTaP 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-friendly interface 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. PROBLEM DEFINITION

In an existing system, all processes are handled manually. The administrator should refer all the records kept for years ago to simply known the details. This is so tedious and time consuming. This process is so difficult when the

number of users increases. There are many limitations for the existing systems. In manual Training and Placement, all the work done at RGIT (Rajiv Gandhi Institute of Technology) is by human intervention due to which there were maximum chances of errors. 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 RGIT the records were stored in modified, excel sheets 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. 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 RGIT 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 RGIT there is no method to take the feedback about the student, about the company, or about the alumni. The system now at RGIT 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.

III. PROPOSED SYSTEM

The proposed Online Training and Placement 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. Alumni will be kept in touch by an automated notification by E-mail message. 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. The TPO can give an approval to edited information done by the student. 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 OTaP system. They provide the approval and conformance to the student through automated email 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. They can use the parent's details for further communication. They put online notices, schedule and events so that the entire user can view this.

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.
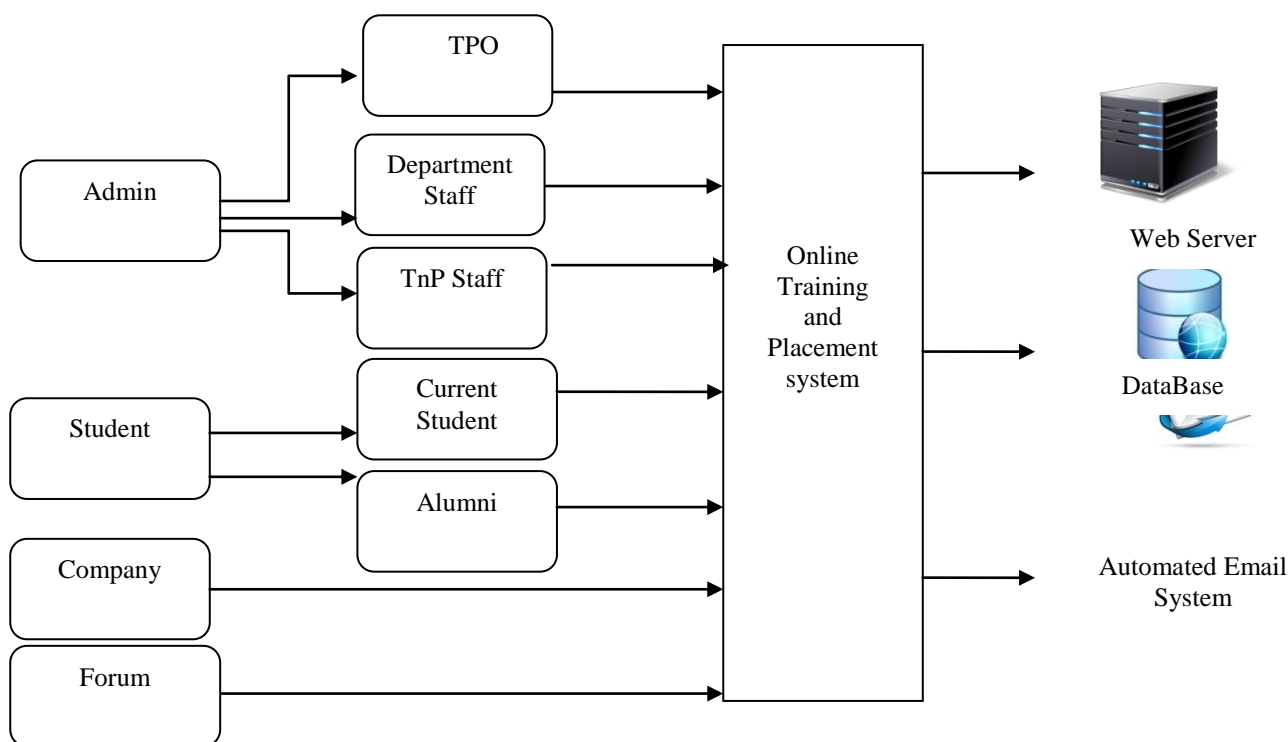

Fig. 1 Block Diagram

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 proposed Online Training and Placement system is intended to avoid all the drawbacks of existing system. It will add some more features than the existing system. The proposed Online Training and Placement system is a cost effective way of doing the manual processes done in the existing system. This helps the Rajiv Gandhi Institute of Technology (RGIT) organization to win the war in the existing competitive world.

IV. IMPLEMENTATION

The term Implementation has different meanings ranging from the conversation of a basic application to a complete replacement of a computer system. The procedures however, are virtually the same. Implementation includes all those activities that take place to convert from old systems to new. The new system may be totally new replacing an existing manual or automated system or it may be major modification to an existing system. The method of implementation and time scale to be adopted is found out initially. Neat the system is test properly and at the same time, the users are trained in the new procedure. Proper implementation is essential to provide a reliable system to meet organization requirement.

A. Module in Online Training and Placement System

1) Current Student: In the current student module, once the student login, they will see the news and events at the home page. They can manage the profile by putting all the information. They can communicate with the other users. They can download the resources provided by the users. They can see the company registered with the system. They can filter the company name wise. They can see the company web site address. Also they can see the jobs created by the TPO and what is their requirement. Also they can download the material provided by the company. Student can provide the feedback. Also setting option is provided to reset the password. Once the student will get the password on his provided email id, student can enter his profile. They have to complete the profile by putting all the required information. They have to provide the SSC percentage, HSC and diploma percentage are optional if not then put zero. Also student has to provide the information like live allow keeping term (atkt) and dead atkt. And they have to fill the semester wise percentage. The aggregate percentage will be automatically calculated. The reset option is provided to reset the whole profile.

2) *Alumni*: Alumni can register with the system. Alumni can participate in forum. Alumni can provide a feedback. Alumni can upload a data like e-book, question paper. Alumni can participate in communication. The password setting option is provided.

3) TPO: TPO can access, view and edit information of the users. TPO can give active and deactivate status to the user. TPO can see the recently changed /created login. TPO can generate the vacancy and informed the user by using automated email. TPO can search the student based on the company criteria and can prepare the list and will send to the company. TPO can inform the student about the company through the automated email. TPO can generate report of the student branch wise. TPO can sort the information based on the requirement. TPO can prepare the schedule and events about the companies and flash it to the every student login as well as front page. TPO can reset password of the student. TPO can contact with the company and can ask the detail information about company. TPO can take automated feedback and can see filled feedback given by alumni or company. TPO can communicate with the user-using forum. Conversion of the current student into the Alumni Can add/delete/edit the company Can add/delete/edit the job TPO can generate the report if required by the company or management like Class wise Report, Company wise Report, Placed student Report, Unplaced Student Report.

4) Company: Company can register with the college. In company module contact information, URL, Papers, vacancies will be provided. Company can edit their own contact information. Company can give their own application procedure by providing link. Company can see how many students are eligible based on the criteria provided. Companies have space allocated for resources they wish to make available. Companies can take feedback from TPO. Company can download the eligible student report.

5) TnP Staff: TnP Staff gives activation and deactivation status to the student. TnP Staff generate the report which required for the management for decision making. TnP Staff uploads the required material for the student. TnP Staff can communicate with the Student, TPO, and Departmental Staff through forum. TnP Staff can communicate with companies and based on the information provided by the companies they can generate the schedule and events and will provide the current student in their login. TnP Staff flash all the notices in the respective student login. TnP Staff generate the information flash it on the front page of the website. TnP staffs can upload/edit/delete the resource placed online. TnP staff can create/edit/delete the jobs. They can view the registered company.

6) Departmental Staff: One authorized staff can register with the system. Staff can fill the detailed information required for validation. Staff can upload or download the material required. Staff can upload the information. Staff can participate in communication through forum. Staff can see the any notice sent by the TPO. Staff can see the schedule or event in their login. Staff can see the company and jobs created by admin. Staff can see the registered student and their status .Password setting option are provided.

7) Forum: All registered user are eligible to participate in forum. Anyone can start the activity in forum and rest can give reply to that activity. Through the forum, data or link can be provided. Forum can be shown date wise. Forum can be updated topic wise. Forum can be filtered date wise.

V. RESULT AND DISCUSSION

The home page of Online Training and placement system is shown in the Fig.2. Right side there is different events and news is flashing. Middle part is design to facilitate the user to register with the system and to sign in with the system. The Menu bar contains about us, contact us, Register etc. options.
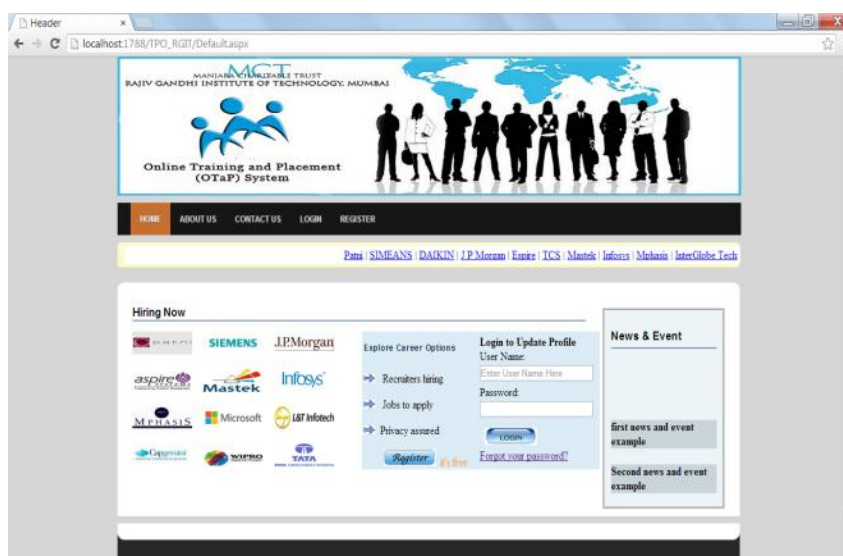

Fig. 2 Home Page

After Registering with the system users can login to the system. They can select their user type as shown in Fig. 3 then can enter username and password. After authentication the users will be navigated to their home screen.

Fig. 3 Login Page

Users can see the forum, they can communicate with the users through forum, and TPO can delete the forum if some objectionable subject comes in. Sorting of the forum is possible by using the name, topic name, date wise. Fig. 4 Forum Topic page is shown.

Fig. 4 Forum Page

In Online Training and Placement system, TPO and company manage the job, TPO can edit or delete the job, TPO and company can add the new job as well as can edit the jobs details. Based on the job creation the student get short listed for the particular company. In job page there are information of jobs like job title, company name, description, min aggregate, action and view student option. Fig. 5 illustrates the Jobs Page.

Fig. 5 Jobs Page

Online Training and Placement system produces different types of report for different users of the system. A report for printing a particular students profile is as shown in the Fig 6.
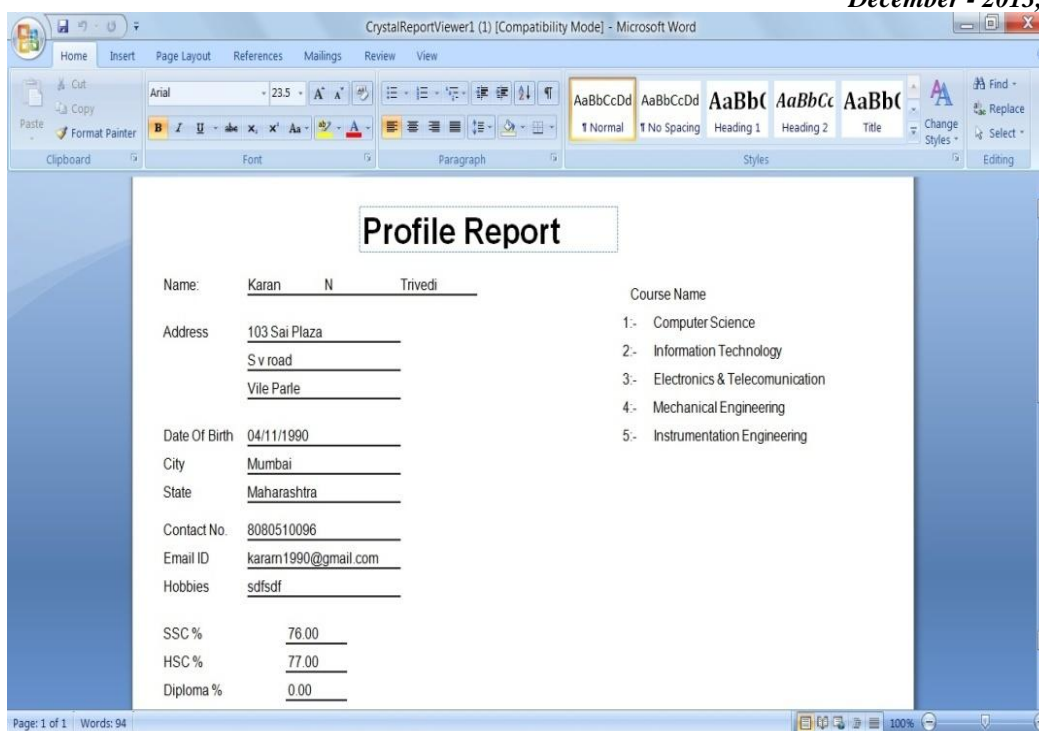
Fig. 6 Student's Profile Report.

VI. USER'S COMMENTS AND STATISTICS

This section of the paper presents the evidence from various users on their experiences of Online Training and Placement system. Fig. 7 illustrates the chart based on the feedback of different users about the information arrangement in OTaP. Fig. 8 shows a purpose to develop OTaP system.
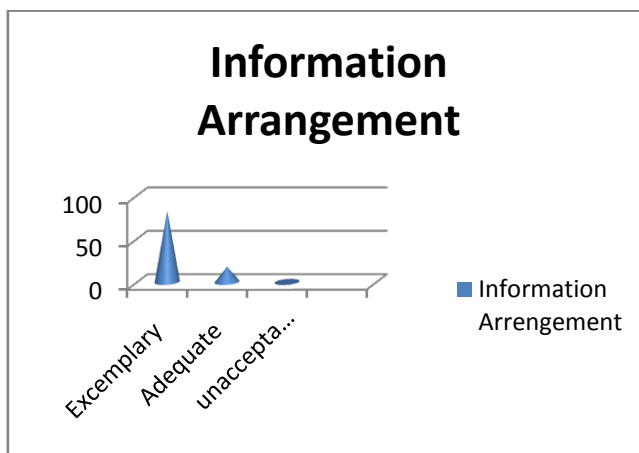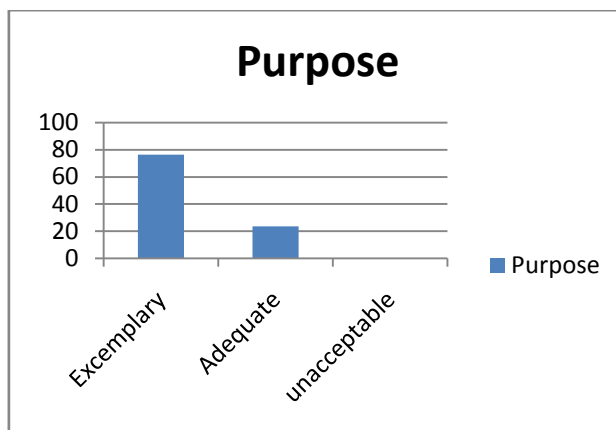

Fig. 7 Information Arrangement

Fig. 8 Purpose to develop

VII.   CONCLUSION

In the existing system, maximum work goes manually and it is error prone system, takes time for any changes in the system. The big problem is the searching; sorting and updating of the student data and no any notification method available for giving information to student expect the notice board. In the Online Training and Placement System provides automation in all the processes. The system gets automated in the online registration all the user, activation and 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. OTaP System provides quality implementation solution in teaching environment.

VIII.   FUTURE SCOPE

The system has been designed at the maximum possible excellence. Still we accept drawbacks, as it is a human effort. The system cannot provide the sms integration. Hence, it can be modified to give the sms integration. The system can be made more users friendly. The program is coded in more structured manner so we can include future enhancement. There is scope for improvement of the system. Apart from these there is scope for generating many more features. This software can be extended easily without affecting the functionality. In the future, we can place the system on the cloud so the maintenance of the data can be reduced. The exam system will integrated with the OTaP system so the student result can get directly. There can be many more future enhancement and improvement in the OTaP system.

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