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Design Paper on Online Training and Placement System(OTaP)

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Abstract—The management of Training and Placement is supported by paper-based systems, databases, spreadsheets and E-mail communications. Training and Placement is the crucial part of any educational institute in which most of the work till now is being done manually. The aim of this project is Automation of Training and Placement unit of RGIT (Rajiv Gandhi Institute of Technology). The project will include minimum manual work and maximum optimization, abstraction and security. This is a web application which will help students as well as the administration authority to carry out each and every activity in this department.

The system is an application that can be accessed throughout the RGIT (Rajiv Gandhi Institute of Technology) organization with proper login provided. This system can be used as an application for the Training and Placement Officers (TPO) of the college to manage the student information with regard to placement. Students logging should be able to upload their information in the form of a CV. The key feature of this project is that it is a onetime registration. The application provides the facility of maintaining the details of the students. It also provides a requested list of candidates to recruit the students based on given query. Administrator logging in may also search any information put up by the students. This project will aid colleges to practice full IT deployment. This will also help in fast access procedures in placement related activities.

KEYWORDS: RGIT,UPDATION,FILE SYSTEM,OTAP,

I. OBJECTIVE

Our objective is to analyze the current Training and Placement system in the RGIT(Rajiv Gandhi Institute of Technology) .once the problem has identified propose a online Training and Placement system which can implement at RGIT.

I. INTRODUCTION

The use of the Internet and the World Wide Web has revolutionized the provision of information and the facility for the user to take action on the information obtained. Use of the Internet to enable students and companies to manage the placement process with the active involvement of the Placement Coordinator. 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 System (OTaP).

OTaP, provides information on placement providers and the placements they offer so that students may view and assess their opportunities. RGIT (Rajiv Gandhi Institute of Technology)will have well-developed web sites to inform their students of vacancies and how to prepare for their work-integrated learning experience.

OTaP is an application to facilitate students in RGIT to register, search and apply for jobs. The users can access easily to this and the data can be retrieved easily in no time. In the student registration form, we can give personal details, educational qualifications, and professional skills and upload resume. The job details of the placed students will be provided by the administrator. The job provider and the placements coordinator to take effective actions on the web as a follow-on from the

information they have viewed. The administrator plays an important role in our project. He provides approval of student registration and updating.

II. EXISTING SYSTEM

In the RGIT(Rajiv Gandhi Institute of Technology) existing system lead to many problems .These are as follows-

Problems in Existing System

- Maximum Manual Work: All the work that is done until now is done by human intervention.
- Errors: Due to which there was maximum chances of errors.
- Maximum Human Interface: The interface of student and administer is maximum;
- Time Consuming: Due to the above problems every procedure becomes time consuming;
- File System: The records were stored in modified access sheets hence sorting problem
- Not Hierarchical: The files were not stored hierarchical format hence searching problems;
- Updating Records: Due to above problems the updation was very difficult and ambiguous;
- Duplication of files: Due to the above problem the duplication of records was usual hence data redundancy;
- Less alertness: The students were not being made aware of the Training and Placement activity hence there might have been loss of opportunities;
- Less Optimized: The Access 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 2ATKT;
- Inefficient System: The system now could not take acknowledgement from the students attending to particular event hence lots of confusion at the last moment;
- Synchronization problem: There was less interface between student and Training and Placement department;
- No Alumni record: There was record no kept of the past students;
- Less Communication: There was less communication between past or present student with the Training and Placement department;

III. PROBLEM DEFINATION

The existing system is doing all the processes manually. The administrator should refer all the records kept for years ago to simply know details. This so tedious and time consuming. This process is so difficult when the number of users increases.

There are a lot of limitations for the existing system. In manual Training and Placement all the work that is done at RGIT (Rajiv Gandhi Institute of Technology) is by human intervention due to which there is a maximum chances of errors.The interface of student and a TPO is maximum which makes the system time consuming.

At RGIT the records are stored in modified access sheets hence sorting is a problem. The files are not stored hierarchical format hence searching is a big problem due to this the updation is very difficult and ambiguous this leads to the duplication of records is usual hence data redundancy;

The students are not being made aware of the Training and Placement activity hence there might have been loss of opportunities. The Access sheets were less optimized e.g. suppose we want students having 2 ATKT then the student with 0,1,2 ATKT are select whereas required result is only of 2ATKT.

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 are fewer interfaces between student and Training and Placement department. There was no record kept of the past students. There is less communication between past or present student with the Training and Placement department.

IV. PROPOSED SYSTEM

The proposed Online Training and Placement System(OTaP) meant to give more easiness to the users that they can add and retrieve information so quickly. There are mainly three types of users they are administrator, student and recruiter. 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. Students can register and view the details. The recruiter can view the details of the students and can approve or reject their applications.

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

- Online Registration: Traditionally the job of registration was done manually at RGIT by passing the registration form to the students. But this was too much time consuming and also erroneous. So the major need was for the automation for registration by online registration by students themselves.
- Security For Administrator: The files in which the data is stored is stored in Access file sheets that too separately for each class of department; so the files could be accessed by any one accessing the computer. These files may be 'confidential'. So there is a special need for security.
- Automatic Calculation of student marks: The Calculations done until now was done manually and fed into the access sheets. So the need arises for the automatic calculation of student marks average/aggregate.
- Optimized Sorting of data: The modified access sheets were not that efficient as, when we want to select students having 2 ATKT then the student with 0, 1, 2 ATKT were select whereas required result is only of 2 ATKT.
- Hierarchical Structure of departmental data: As mentioned earlier the data was stored separately for classes of each department the problem of searching was time consuming and as well the duplication could occur. So there is a need for a centralized hierarchical structure.
- Instant Notification to the student: The only method for notification until now is by notice board which is not reliable. To countermeasure this problem the notification can be send by E-mail and mobile sms.
- Alumni Data Base: The alumni data is insufficient and is out of reach of the students. So the proper method to employed to store the alumni data.

V. DESIGN DETAIL

In the OTaP System there are following module and their design details are as follows

Student Section

In the Student Section we can consider student registration-Students will register for the site in T.E. first semester and update the account in B.E. first semester. Online updating facility will be provided after registration. After registration record will get verified by administrator. We can also consider the departments for identifying the student in which department. Also we need to consider the additional fields like Training, Project done, Hobbies, Extracurricular activities, Technologies of by known student.

Alumni

In the Alumni Section we need to consider last 3 years data maintenance. In this section registration will be done and separate profile will be maintained of each alumni and also the required notification sent by E-mail /message. For communication purpose alumni can access forum. We can transfer current student alumni records as it get pass out for identifying the status of the student

Forum

The Forum Section is used for student to student Communication. Actually The Forum will be viewable to all not only communication purpose but also transferring the knowledge .The purpose of the Forum is if student has logged in he/she can ask/answer the question else can view only and also they can share the ideas with alumni.

Information Desk

On the information desk the data available is T&P and alumni staff details. Company information is also provided to the student. In this section we are providing the Download link where student can download CV formats, Paper formats books, and Sample question sets.

Other activities

In this section the available information is company criteria, List of eligible students Confirmation from students, Final list display and Final schedule of any activity. And all on the above activities the administrator will have control over this.

Use case diagram

Based on number of different scenarios, we have come across the following uses of the OTaP system.

- Login
- Registration
- Update Student Detail
- Update Company Detail
- Search Student Details
- Update Staff Details
- Update Placed Student detail
- View Details
- Upload and Download Resume

The Use case Diagram for OTaP is shown Below.

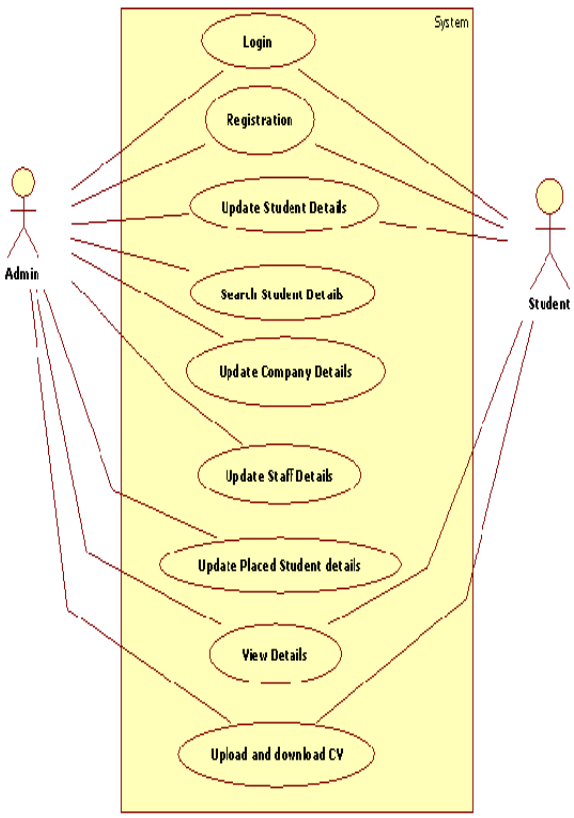

Fig 1.1Use case Diagram

Class diagram:

At the Object Oriented Analysis we found following classes after few iterations.

- Web Application
- Information Desk
- Form
- User
- Student
- Admin
- Current Student
- Alumni

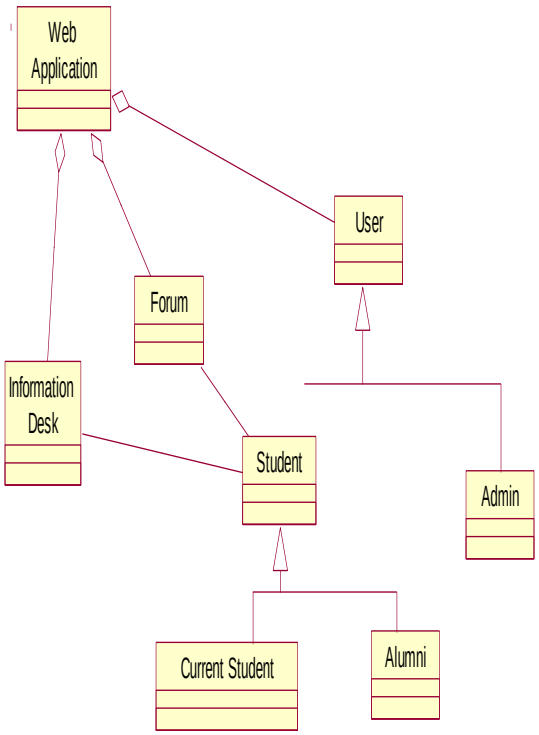

Fig 1.2 Class Diagram

Among these classes the Class User is a super class for two sub class Student and Admin. The Admin have few extra rights as compare to the user student. User can login, get registered, view details, Upload/ download CV. Student class is a parent class to Current student and Alumni.

The Classes Forum, User and Information Desk are all aggregated in Web Application. They are connected on a whole part relationship.

Sequence diagram:

For a Scenario Successful login the sequence of actions are shown with the sequence diagram.

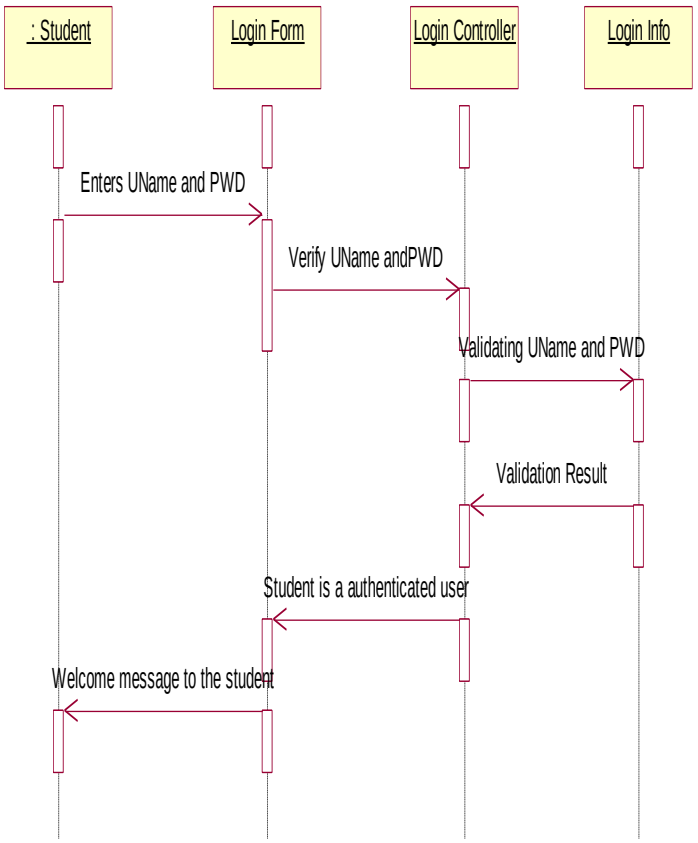

Fig 1.3 Sequence Diagram for successful login scenario.

The above diagram gives the sequence diagram of the successful login.

The following diagram shows the collaboration of the successful login. It gives the step for the login.

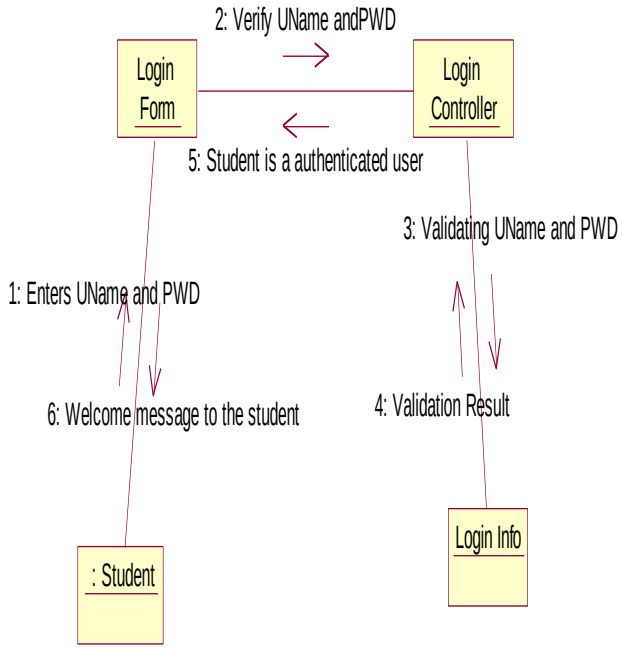

Fig 1.4 Collaboration diagram for successful login scenario.

The above diagram gives the detailed view of the successful login. Which has the some steps to perform.

VI. 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 and updation of the student data and also no any notification method available for giving information to student expect the notice board.

The proposed OTaP system gives the automation in all the processes like Registration ,Updation , Searching .It provide the detail solution to the existing system problem

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