

Development of a feature-rich, practical online application for the Training and Placement Dept. of the college

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Received: Oct/22/2014

Revised: Nov/06/2014

Accepted: Nov/20/2014

Published: Nov/30/2014

Abstract:- This project is aimed at developing an online application for the Training and Placement Dept. Of the college. The system is an online application that can be accessed throughout the organization and outside as with proper login provided. This system can be used application for the TPO of the college to manage the student can be 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.

Keywords:-Generic Technology Keywords, Specific Technology Keywords,Project Type Keywords.

I. INTRODUCTION

Many Educational Institutions are using this sort of functionalities but not as an automated application. The official websites of the organizations are just having the data not an intractable interface. The process will be completely automated where students can update their profile themselves dynamically like updating his/her resumes adding or deleting additional information. TPO monitors the application, he would update the application and he directly communicates with the companies and students.

II. LITERATURE SURVEY

TECHINQUE:

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on an outline design of system requirements in terms of input, processes, output, fields, programs and procedures. This can be qualified in terms of volumes of data, trends, frequency of updating in order to give an introduction to the technical system. The application is the fact that it has been developed on Windows XP platform and a high configuration of 1GB RAM on Intel Pentium dual core processor. This is a technically feasible.

FEASIBILITY STUDY:

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order to give an introduction to the technical system. The application is the fact that it has been developed on Windows XP platform and a high configuration of 1GB RAM on Intel Pentium dual core processor. This is technically feasible.

Economic Feasibility:

Establishing the cost-effectiveness of the proposed system i.e. if the benefits do not outweigh the costs then it is not worth going ahead. In the fast paced world today there is a great need of online social networking facilities. Thus the benefits of this project in the current scenario make it economically feasible.

Operational Feasibility:

It is to find out whether the current work practices and procedures support a new system. Also social factors i.e. how the organizational changes will affect the working lives of those affected by the system.

III. PRESENT WORK

PROPOSED SYSTEM:

The process will be completely automated where students can update their profile themselves dynamically like updating his/her resumes adding or deleting additional information. TPO monitors the application, he would update the application and he directly communicates with the companies and students.

Advantages:

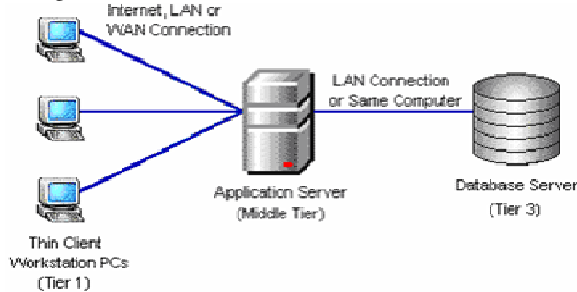
1. Will be updated dynamically
2. Reduced work to TPO
3. Notifications will be transferred to all the students
4. All the data and information will be transparent

SPECIFICATION:

System Requirements specification

SYSTEM ARCHITECTURE:

The application will follow three-tier architecture. In three-tier architecture application will run the traditional client/server model but from the web requir server. The client only displays the GUI and data but has no part in producing results.



Three-tier architecture will contain the following tiers

Client/Presentation Tier:

This tier includes all the HTML content or forms to be displayed on the client browser. It is the form which provides the user interface to end user. Programmer uses this tier to get or set the data back and forth.

Business Logic Layer:

In the Business logic tier, the actual processing of the data and the logic behind the implementation of the application will be present. This tier can contain a class, which can be used to write the functions, and also works as a mediator between the presentation tier and data tiers.

Data Tier:

Data Tier contains methods and classes that deal with passing and storing data to the data Storage Layer. Queries or stored procedures are used to access the data from the database or to perform any operation to the database. It stores the data passed by the presentation tier.

DEFINITIONS, ACRONYMS & ABBREVIATIONS:

- HTML: Hypertext Markup Language is a markup language used to design static web pages.
- Asp: Active server pages are used to develop web application.
- IIS: Internet Information Service is a web server to run web application.
- VS: Visual Studio is application where we can develop application by using this IDE.
- HTTP: Hypertext Transfer Protocol is a transaction oriented client/server protocol between web browser & a Web Server.
- HTTPS: Secure Hypertext Transfer Protocol is a HTTP over SSL (secure socket layer).
- TCP/IP: Transmission Control Protocol/Internet Protocol, the suite of communication protocols used to connect hosts on the Internet. TCP/IP uses several protocols, the two main ones being TCP and IP.

IV. MODULE DESCRIPTION

The project is done in 3 modules:

1. Authentication
2. Accessing
3. Updating

Authentication:

This module completely deals with the process of authenticating different users of the application. There are three different users who use the application.

1. Student
2. Admin
3. Corporate

Normal people who visit the college website are not considered to be the users of the application because they are not allowed to access any information of the students of the college. All the users are having same type of authentication a better security will be added in later enhancements.

Accessing:

Accessing is that the users of the application should to view some information from the application but all the information is not viewed by all the users for example

- a. Student cannot post the notifications.
- b. A corporate official cannot view all the details of the students.

As the developers of the application we took care of such issues in the module. This module completely concentrates on the output of the application.

Updating:

This module completely concentrates on the input of information to the application. Students are allowed to enter their details on their own and also to update their resumes every time. So we concentrated on the input the data is less redundant and available where ever it should be. This module completely concentrates on the input of information to the application. Students are allowed to enter their details on their own and also to update their resumes every time. So we concentrated on the input the data is less redundant and available where ever it should be.

V. DESIGN**INTRODUCTION TO UML DIAGRAMS:**

Systems design is the process or art of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development. There is some overlap and synergy with the disciplines of systems analysis, systems architecture and systems engineering.

Unified Modeling Language:

UML stands for Unified Modeling Language. It is a third generation method for specifying, visualizing and documenting the artifacts of an object oriented system under development. Object modeling is the process by which the logical objects in the real world (problem space) are represented (mapped) by the actual objects in the program (logical or a mini world). This visual representation of the objects, their relationships and their structures is for the ease of understanding. This is a step while developing any product after analysis.

The goal from this is to produce a model of the entities involved in the project which later need to be built. The representations of the entities that are to be used in the product being developed need to be designed. Software design is a process that gradually changes as various new, better and more complete methods with a broader understanding of the whole problem in general come into existence.

The Unified Modeling Language encompasses

A number of models.

- Use case diagrams
- Class diagrams
- Sequence diagram

Use Case Diagram:

Use case diagram consists of use cases and actors and shows the interaction between them. The key points are:

- The main purpose is to show the interaction between the use cases and the actor.
- To represent the system requirement from user's perspective.
- The use cases are the functions that are to be performed in the module.
- An actor could be the end-user of the system or an external system.

Class Diagram:

Class Diagram consists of the classes and the objects and the interaction between them. It mainly deals with the interaction between classes in the system, their behavior and properties of the system. Apart from classes this also provides inheritance relationships in the project. Class diagrams consist of basically two parts: first one is the member variables and class variables and the second part consists of the total number of methods available in the class.

Sequence Diagram:

The purpose of sequence diagram is to show the flow of functionality through a use case. In other words, we call it a mapping process in terms of data transfers from the actor through the corresponding objects.

The key points are:

- The main purpose is to represent the logical flow of data with respect to a process

- A sequence diagram displays the objects and not the classes.

BEHAVIOURAL DIAGRAMS:

What are Behavioral Diagrams?

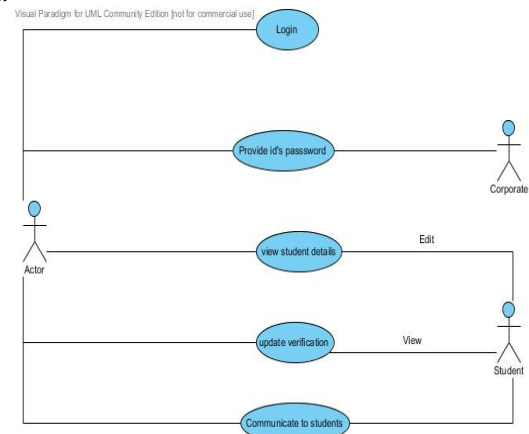
Structural diagrams are state chart diagrams, activity diagrams, sequence diagram and collaboration diagrams.

- **State chart diagram** represent the possible states and transitions of instances of a specific class.
- **Activity diagram** are like flowcharts. They diagram a set of possible user interactions. Individual examples of user interactions are written in use cases.
- **Sequence diagram** show example sequences of messages sent between instances. . Sequences diagram show instances in columns and messages in rows with time increasing down the length of the page.
- **Collaboration diagram** also show example sequences of messages sent between instances. But they number the messages. The diagram can be laid out any way you choose.
- This project is aimed at developing an online application for the Training and Placement Dept. of the college. The system is an online application that can be accessed throughout the organisation and outside as well with proper login provided. This system can be used as an application for the 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.

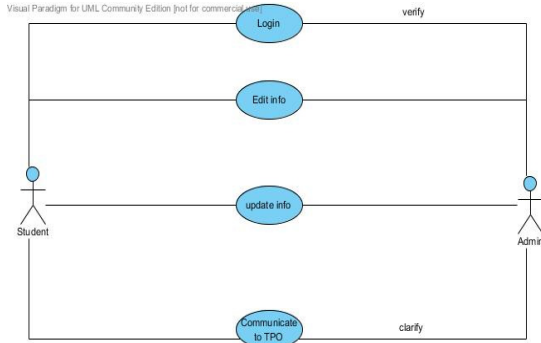
A person should be able to Access/ Search CVs/information from the first page (only read access),login to the system through the first page of the application ,change the password after logging into the system,Upload his/her CV,See/change his/her details,Get help about the application on how to use the different features of the system.

VI. Use case:

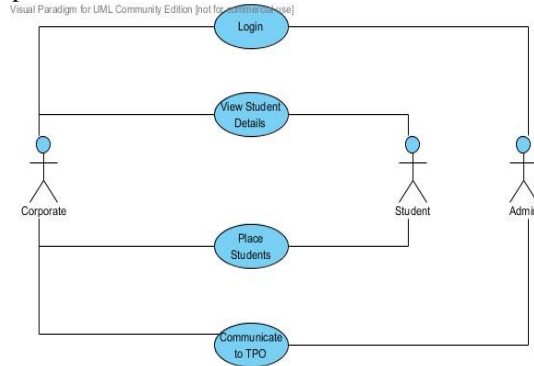
Student:



Admin:

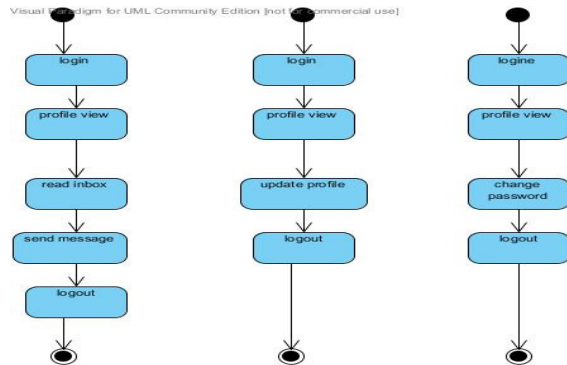


Corporate:

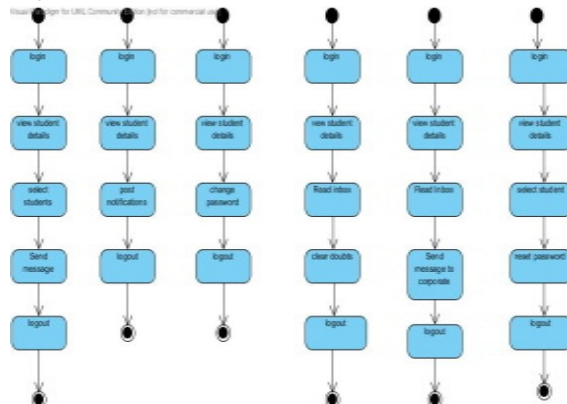


State diagram:

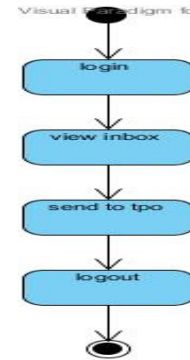
Student:



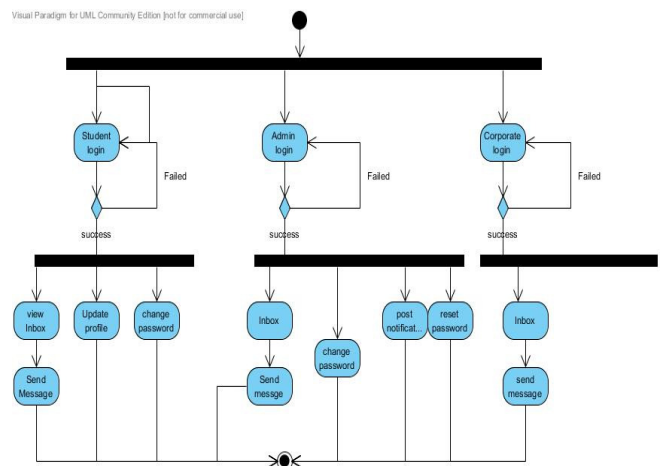
Admin:



Corporate:



Activity Diagram:



Acknowledgments

This work was partially supported by Air Force Office of Scientific Research MURI Grant FA9550-08-1-0265, National Institutes of Health Grant 1R01LM009989, US National Science Foundation (NSF) Grant Career-CNS-0845803, and NSF Grants CNS-0964350, CNS-1016343, CNS-1111529.

VII. CONCLUSION

From a proper analysis of positive points and constraints on the component, it can be safely concluded that the product is a highly efficient GUI based component. This component can be easily plugged in many other systems. Also the component is user friendly. Generally the TPO's of the Colleges has to face a lot of problems in management of the Students information. This all information has to be managed manually. So, there is a need to develop a system that can solve the mentioned problem. This software comes with just that solution.

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