Kardan University Job Placement Management Information System

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Abstract

Internships offer students a period of practical experience in the industry relating to their field of study. This experience is valuable to students as a means of allowing them to experience how their studies are applied in the ”real world”, and as work experience that can be highly attractive to potential employers on a candidate’s CV. Interns are usually university students or university graduates who have not yet found employment. Interns are less frequently college students (under 18) or older career changers. An intern is someone who works in a position for an employer that operates in an industry they are interested in working in. Unlike conventional employment, internships have an emphasis on training, rather than employment itself. An internship provides a great opportunity for prospective employees to gain experience in a particular field or industry, determine if they have an interest in a particular career, create a network of contacts, or gain university module credits. Interns may also have the possibility of putting themselves forward for forthcoming opportunities for paid work, during their internship so for Bachelor students, it’s necessary to continue their studies and skills. IMIS is a creative online method, which enables the interns to provide their whole information through a web based on line system. All the information is going to be saved in the specific database, that we can fetch the data and store applier’s info over there easily. Therefore, it’s a big facility for promote the project to reach the aim and make it on line registry management out of existing processes because it wastes the time of project employees and interns. Moreover, papers and excel sheets tracking are time consuming processes and it’s difficult to store and document thousands of applications papers simultaneously. Throughout this documentation, I have gone to the ideation of the project, Aims of the project, and implementation of this management system. The JPMIS specification, design, implementation and validation processes are the focus of this document.

Contents

Chapter 1

Problem Definition

We live in an age that is directly related to the technology and we can solve our problems with the Internet, in here registering for a field of experiencing first steps of having a job (internship) using forms may cause lots of problems in case of wasting time and resource. So this management is for solving problems of internship appliers and makes easy way to rich the aim. Current system is paper base and applies are in problem to find those forms, from ministries and filling those forms bringing it back to that ministry and other processes, this program is in 3 other provinces too, forms may be lost in the way to bring it back on main branches is wasting the time and resource. So we have a concept of making these processes online through a web base management system.

1.1 Problem Statement:

This project investigates the processes and procedure that included in Internship Management System in order to replace with efficient and smart electronic system. Nowadays there is no existing system available for students in case of internship. The Process of requesting for internship is a manual process. The manual way will impact both the student and the program manager by waiting their time and effort, as well as it affects the quality, efficiency and productivity of the projects providing these programs.

Chapter 2

Introduction

An internship is an opportunity offered by an employer to potential employees, called interns, to work at a firm for a fixed, limited period of time. Interns are usually undergraduates or students, and most internships last for any length of time between one week and 9 months. Internships (also called “placements”, “work placements” or “industrial placements”) may be part time or full-time. They are usually part-time if offered during a university semester and full-time if offered during the summer, winter or Easter holidays when they typically last 4-12 weeks. Placements are usually fulltime and take place irrespective of term time or holiday time providing interns with real work is number one to ensuring your programs success.
Interns should be doing work related to their major, that is challenging, that is recognized by the organization as valuable, and that fills the entire work term. This system is designed to be easy to use for anyone who applies for a one-year internship program in Kardan University.

2.1 Background

As we searched a lot to find if there is a management system developed before, we couldn’t find such a concept for interns in other branches provided by Kardan University. Considering those problems we tried to facilitate the project so that there won’t be losing data due to storing it in excel sheets, losing forms in case of bringing back to the program recruitment staff. To be accessible anytime for appliers somehow we have internet problems in
Afghanistan, it can be a facility to access it faster a reliable way.

2.2 Acknowledgment

Our thank goes to Allah the almighty who gave us the ability, knowledge and all the skills to accomplish this project. We are grateful to Allah for his support during the tough and stressed moments of the work. We would like thank our teacher Lutfulrahman Haqmal, for his academic support and valuable guidance throughout this semester and we highly appreciate computer science faculty for giving us this opportunity to develop such a system and gave all support and facilities during the development and testing of KUIMIS Project.

2.3 Objectives

An internship provides a variety of benefits for young workers who want to broaden their chances of landing a job and jump-starting their careers. Internships give you a taste of what a profession is like, help you build your resume and let you meet people who can help you in your career. Don't be passive during an internship and miss opportunities to expand your business background. Take advantage of the many benefits of holding an internship. Throughout this system, people can easily register their selves into this program, so the objective of this system is to enhance the quality of works, to have pure data in database reliable, to be accessible every time everywhere.

Chapter 3
Requirement Engineering and System Modeling

3.1 Requirement Engineering

Refers to the process of defining, documenting and maintaining requirements to the sub-fields of systems engineering and software engineering concerned with this process. A function is described as a set of inputs, the behavior, and outputs Systems engineering and software engineering: Requirements in software engineering field are categorized as Functional and Nonfunctional.

3.1.1 Functional Requirements

Functional requirements specify particular results of a system and by other words, they describe what the system should do. For Internship Management System below requirements are Functional requirements:

1. The admin should add , delete , update System information like (Company , Units, Quotas, Students , Job Categories , Departments , Specializations)
2. Student should see the posts and apply for it.
3. Company owners should add, delete and update their own posts.
4. The system should redirect each user to its own page.
5. The system should validate data before sending it to database

3.1.2 Non Functional Requirements

Non- functional requirement, also known as quality requirements, define a function of a system or its component. By other meaning, it describes how the system works. For IMIS below requirements are nonfunctional requirements. Security (Encryption, SQL Injection, Session Management) Flexibility Reliability Cross browser Interface Responsive Design Availability.

3.2 System Requirements

Hardware and Software Requirements are the requirements which is required for implementing and running the project.

3.2.1 Hardware Requirements

Processor Memory Support: 1 MB RAM minimum, GB Hard Disk.

3.2.2 Performance / Time

Mobile application should have as much simple design as possible for easy navigation through entire application to avoid time wasting. Different techniques should be used to prevent from times wasted by machines

3.2.3 Security

As we take a look on our application domain we will find out that there are not too much issues with security, but still we have to take control of some challenges, every possible technique must be used to avoid SQL injection.

3.2.4 Open Source

This system should be developed based on open source technology. This will help both, stakeholders to extend application and other user (developer) to take advantage of this application.

3.2.5 Portability

The system should be active and workable platform independent.

3.2.6 Database

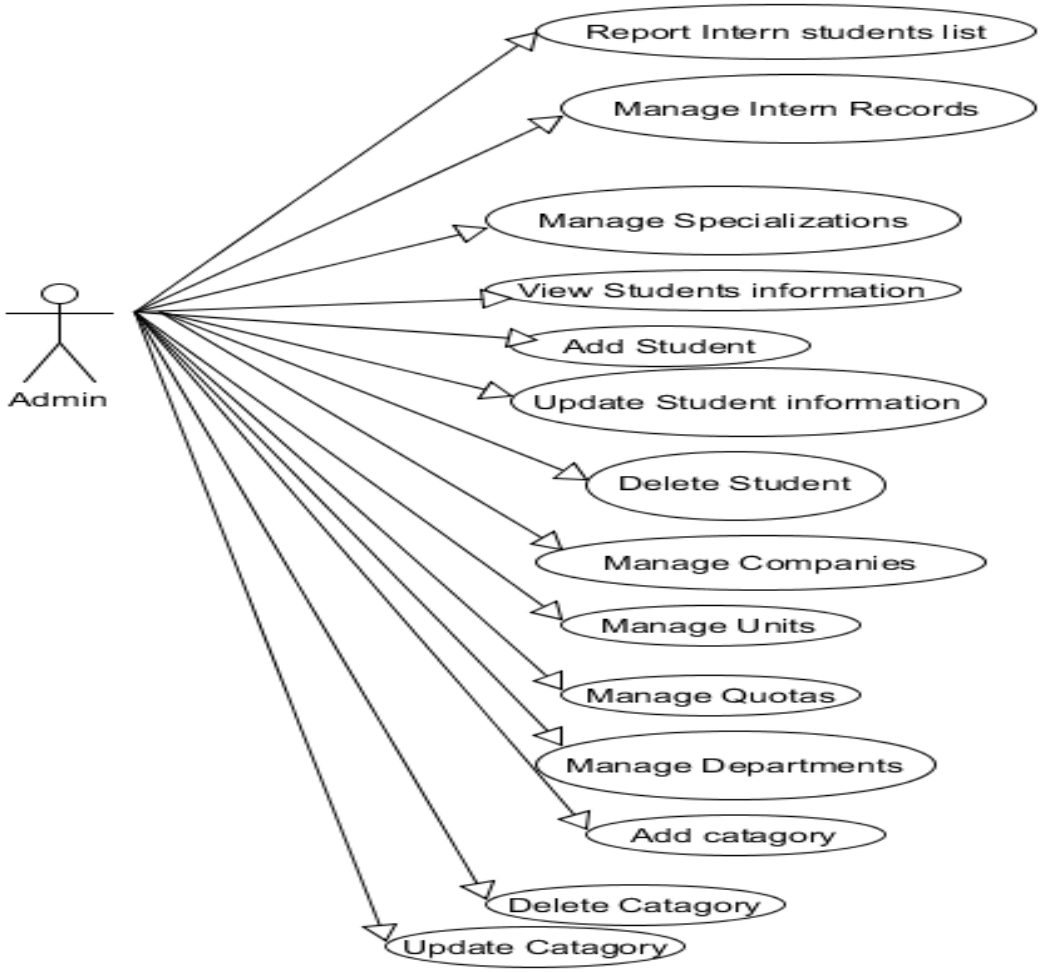
All the relevant data (worker info, user info, and etc.) must be stored in a database and as mentioned in above like other parts of the system database should also include those specifications.

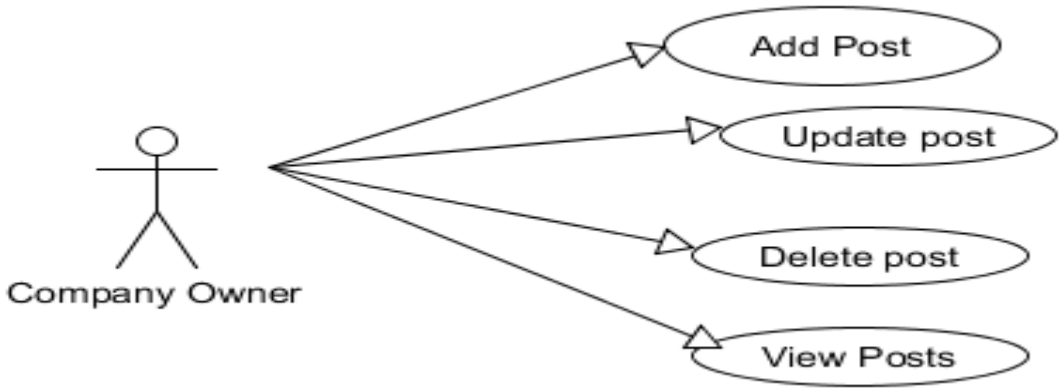
3.3 System Modeling

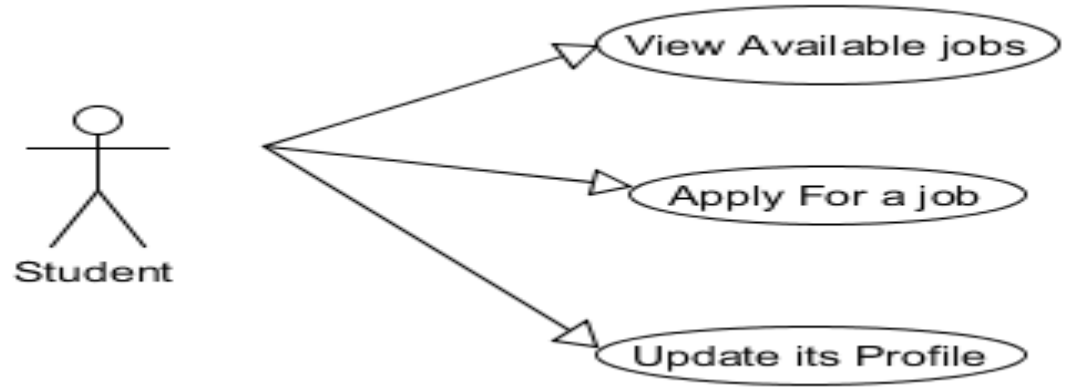
A system model is a conceptual model as a result of system modeling that describes and represents a system or a system model represents aspects of a system and its environment. Or System modeling is the process of developing abstract models of a system, with each model presenting a different view or perspective of that system. System modeling has generally come to mean representing the system using some kind of graphical notation, which is now almost always based on notations in the Unified Modeling Language (UML). However, it is also possible to develop formal (mathematical) models of a system, usually as a detailed system specification. There are many different types of models: Use case diagrams: shows the interactions between a system and its environment. Sequence diagrams: shows interactions between actors and the system and between system components. Data flow diagrams, which show the activities involved in a process or in data processing. Class diagram, which shows the object classes in the system and the associations between these classes.

3.3.1 Use Case Diagram

A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. In this context, a system" is something being developed or operated, such as a web site. The "actors" are people or entities operating under defined roles within the system Why Make Use Case Diagram? Use case diagrams are valuable for visualizing the functional requirements of a system that will translate into design choices and development priorities. They also help identify any internal or external factors that may influence the system and should be taken into consideration. They provide a good high level analysis from outside the system. Use case diagrams specify how the system interacts with actors without worrying about the details of how that functionality is implemented.



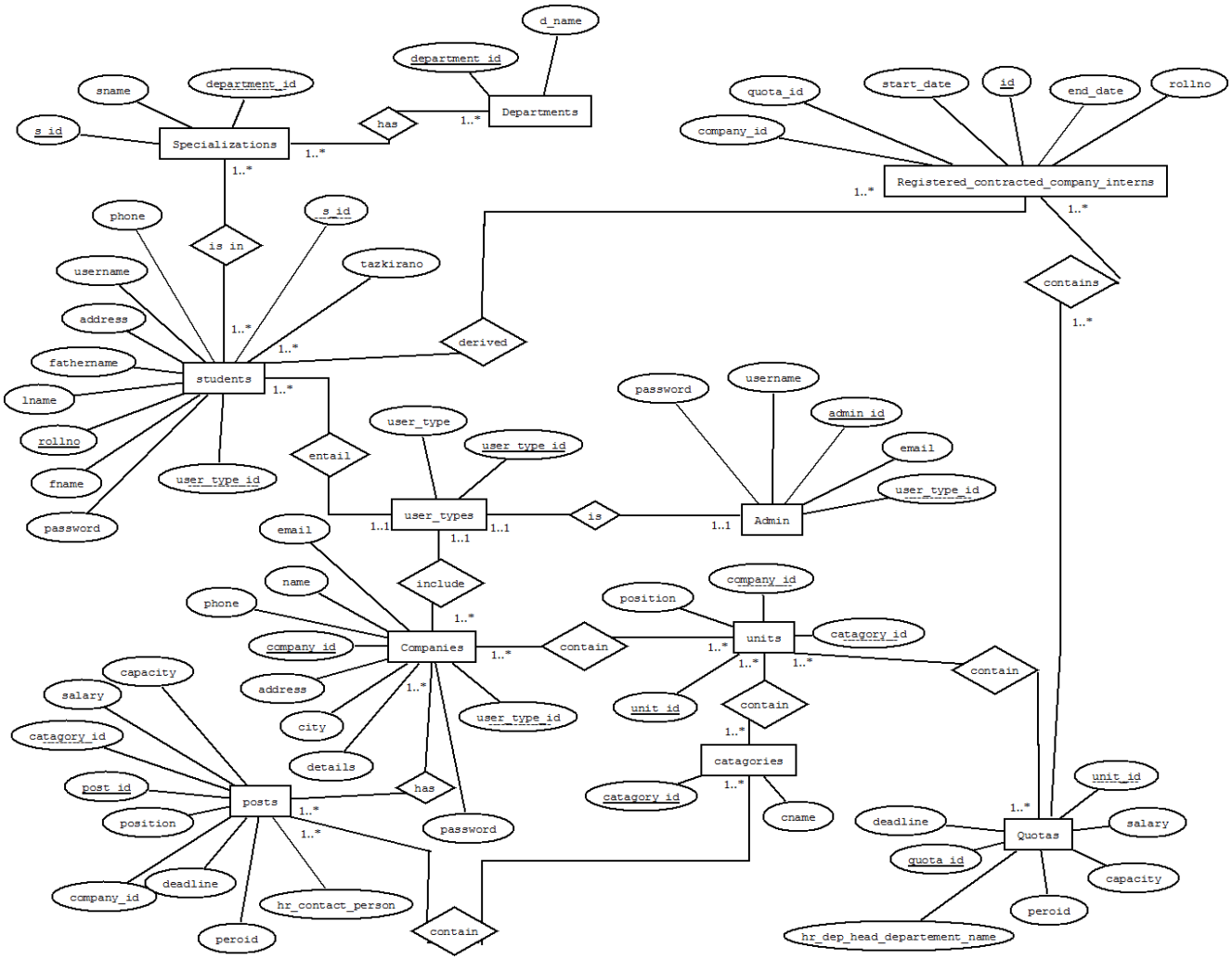




3.3.2 ER Diagram

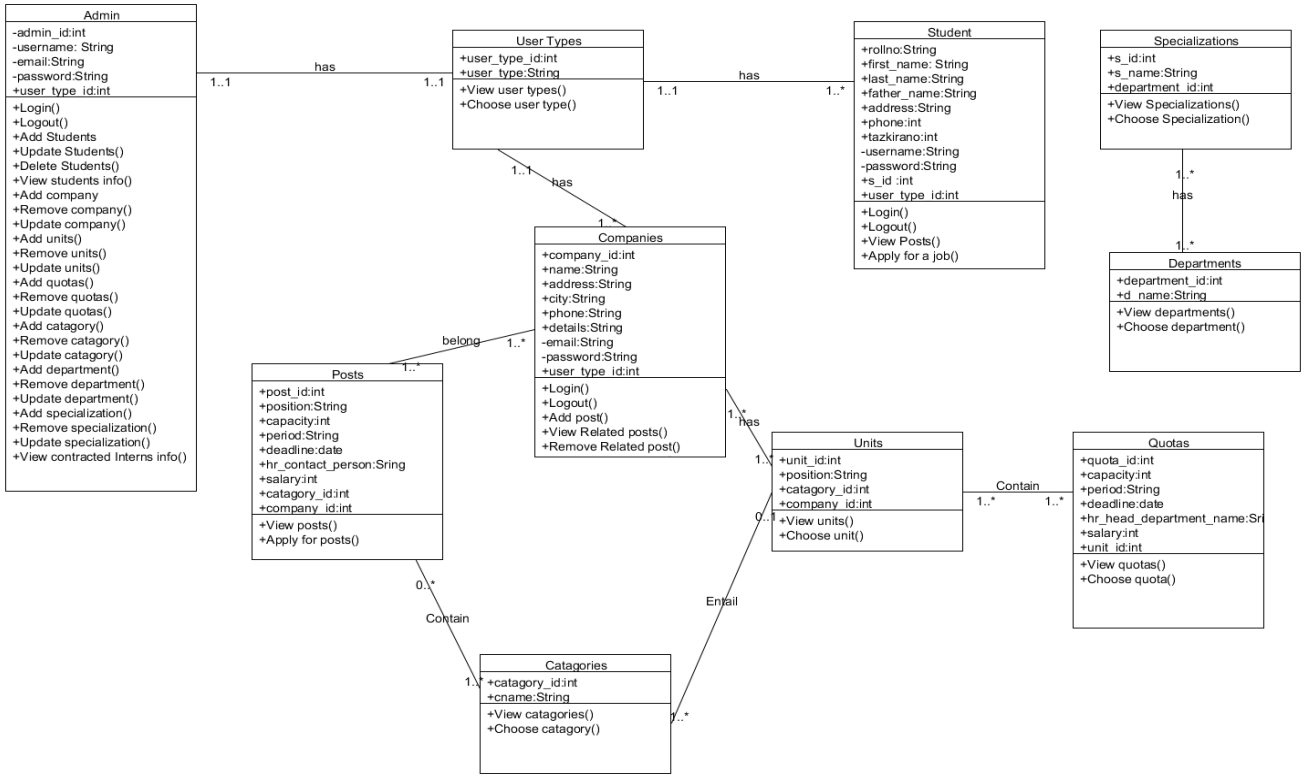
An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how entities such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the

interconnectedness of entities, relationships and their attributes. They mirror grammatical structure, with entities as nouns and relationships as verbs.



3.3.3 Class Diagram

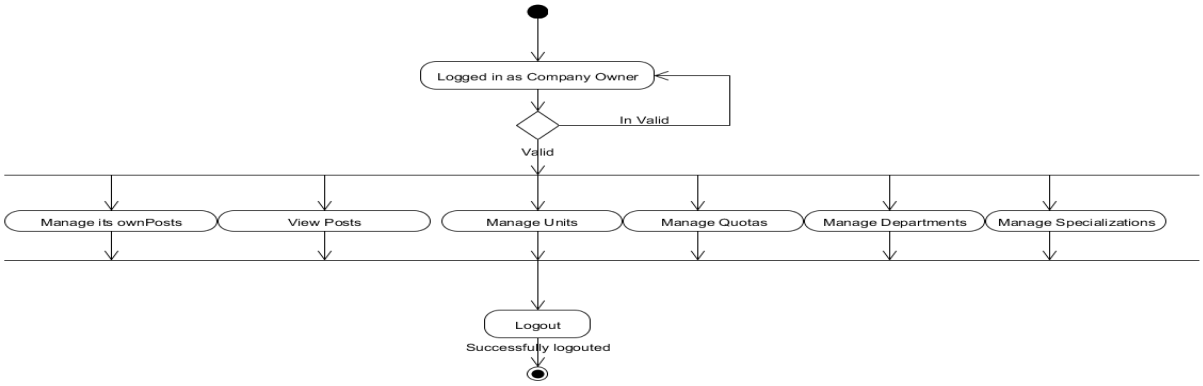
A class diagram in the unified Modeling language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects. The class diagram is the main building block of object-oriented modelling. It is used both for general conceptual modelling of the systematics of the application, and for detailed modelling translating the models into programming code. Class diagrams can also be used for data modeling the classes in a class diagram represent both the main elements, interactions in the application, and the classes to be programmed.



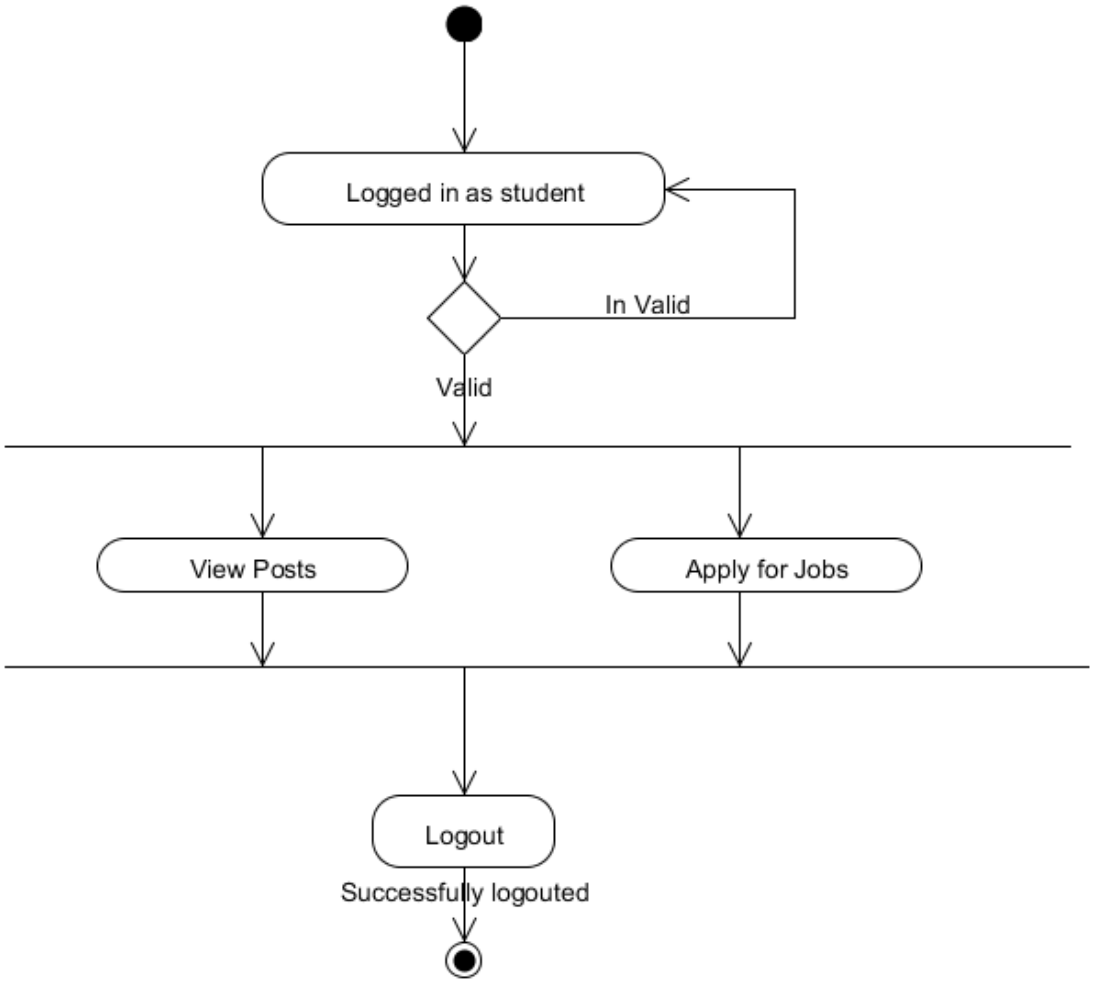
3.3.4 Activity Diagram

Activity diagrams are graphical representations of workflows of stepwise activities and actions [with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams are intended to model both computational and organizational processes (i.e. workflows) Activity diagrams show the overall flow of control.

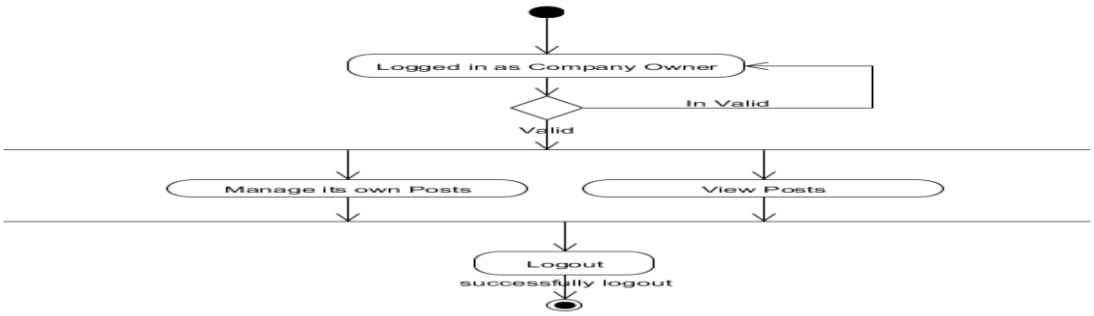
Admin Activity Diagram



Student Activity Diagram:



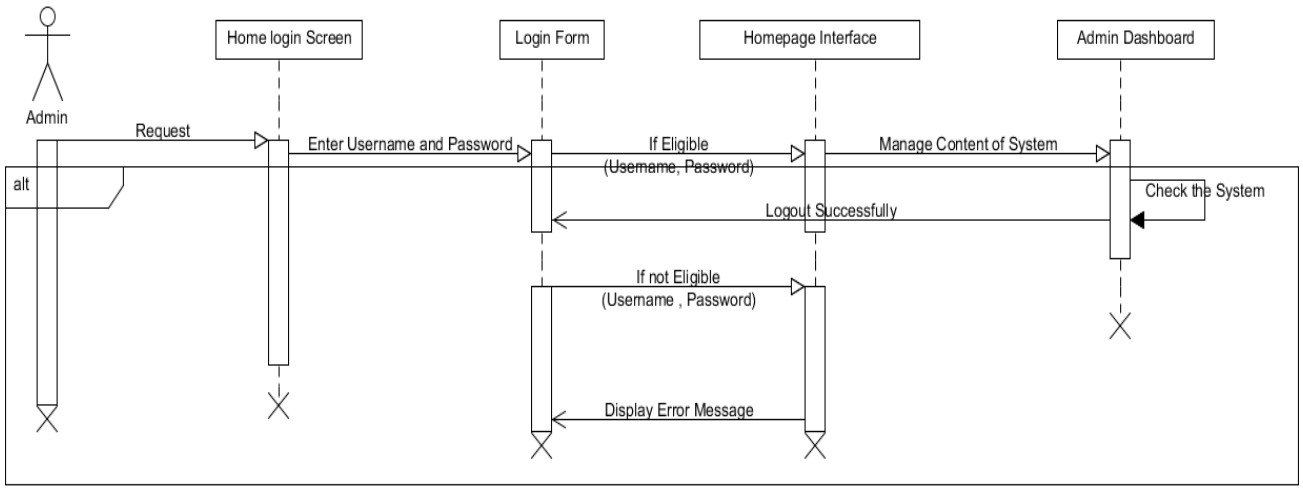
Company Owner Activity Diagram:



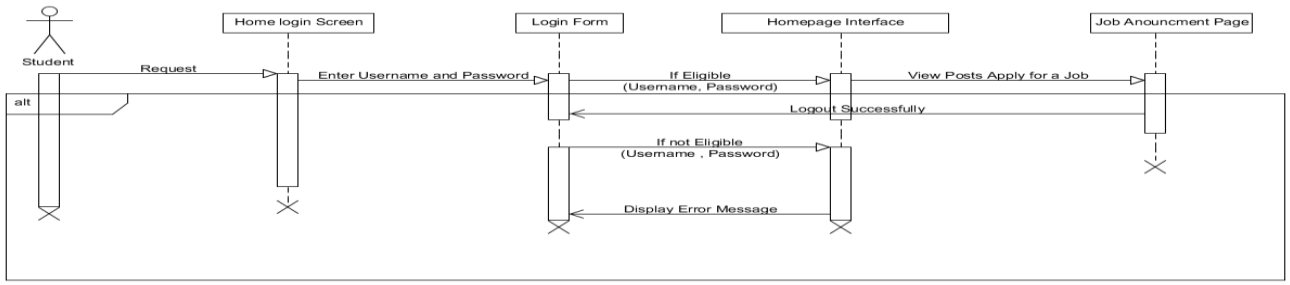
3.3.5 Sequence Diagram

Sequence diagrams are part of the UML and are used to model the interactions between the actors and the subsystems, (objects) within a system. A sequence diagram shows the sequence of interactions that take place during a particular use case or use case Instance. The subsystems, (objects) and actors involved are listed along the top of the diagram, with a dotted line drawn vertically from these. Main Purpose of Sequence Diagram: The main purpose of a sequence diagram is to define event sequences that result in some desired outcome. The focus is less on messages themselves and more on the order in which messages occur; nevertheless, most sequence diagrams will communicate what messages are sent between a system's objects as well as the order in which they occur. The diagram conveys this information along the horizontal and vertical dimensions: the vertical dimension shows, top down, the time sequence of messages/calls as they occur, and the horizontal dimension shows, left to right, the object instances that the messages are sent to.

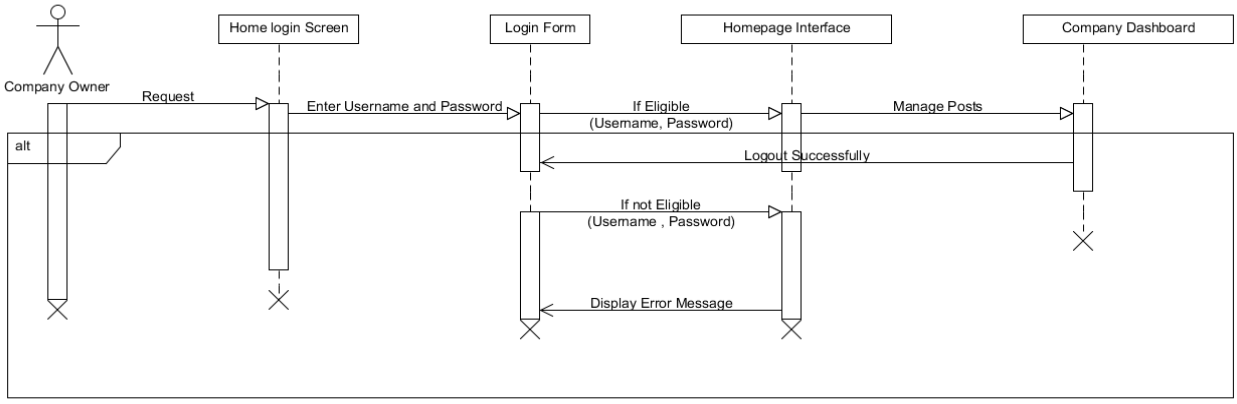
Admin Sequence Diagram:



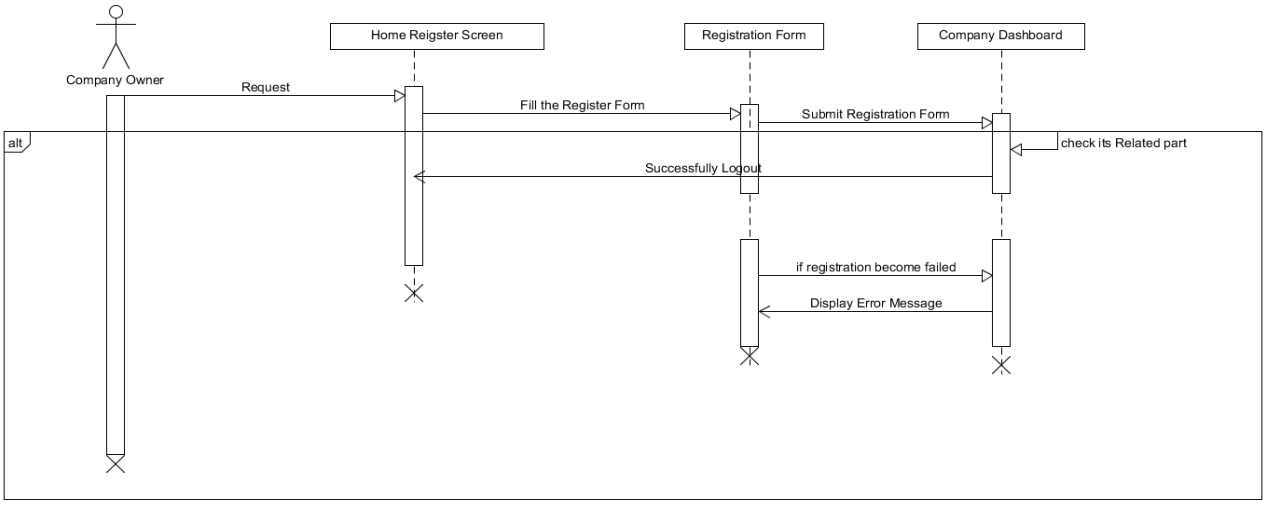
Student Sequence Diagram:



Company Owner Sequence Diagram:



Company Owner Registration Sequence Diagram:



Chapter 4
Methodology

Incremental built model is a method of software development where the model is designed, Implemented and tested incrementally (each time a little more is added) until the product is finished. It involves both development and maintenance. The product is defined as finished when it satisfied all of its requirements. This model combines the elements of the waterfall model with the iterative philosophy of prototyping. The product is recomposed into a number of components, each of which are designed and built separately (termed as built). Each component is delivered to the client when it's complete. This allows partial utilization of product and avoids long development time. It also creates a large initial capital outlay with the subsequent long wait avoided. This model pf development also helps ease the traumatic effect of introducing completely new system all at once. The methodology that we used in Internship Management system is incremental model. Using Incremental model help us to develop the MIS in many phases. First version of Internship MIS have more functionality to the user which help them to work interactive in system, But we want to add more functionality in advance on the internship MIS, the incremental model help us to develop the advance version of Internship MIS according to the need of users.

4.0.1 Result

This application will provide facility in registering of interns in many step. It means by using this system the user (Intern, Company owners) will be able to easily register themselves and the other user (admin) will be able to easily find their registered forms and information. Moreover here we have to users which are admin, company owners and the interns, this system can ease lots of work of the project it's made for.

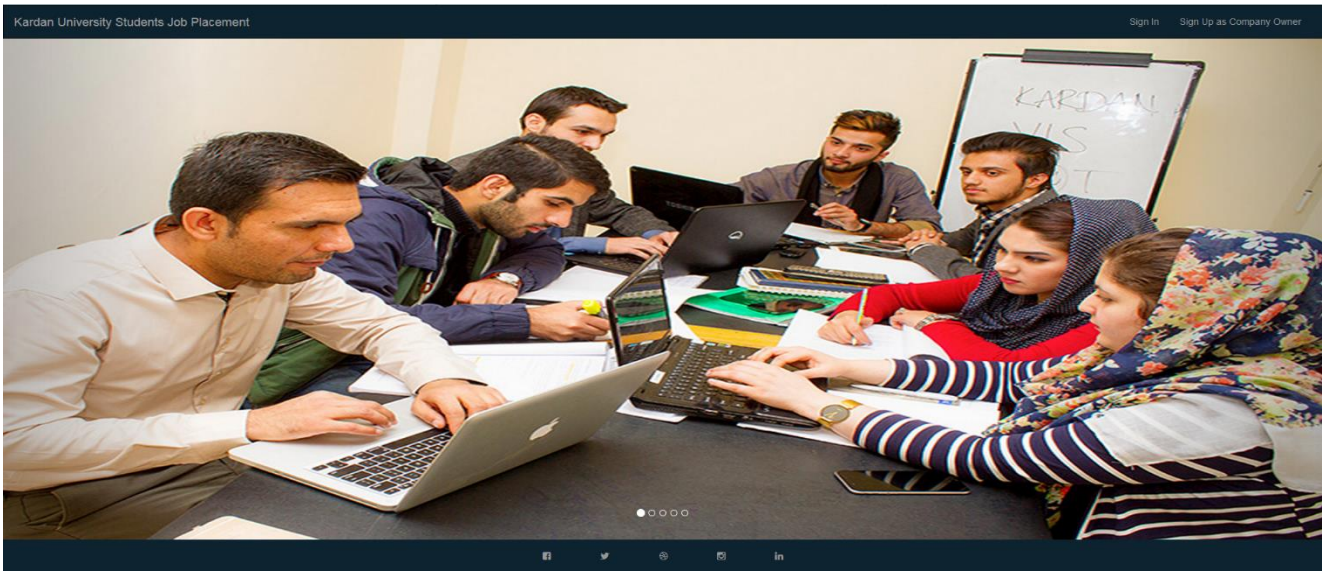
Chapter 5
Implementation

In implementation we have system interface, that's made with Php, html5, Bootstrap, Css3 jQuery Bootstrap and JavaScript and the database on phpmyadmin.

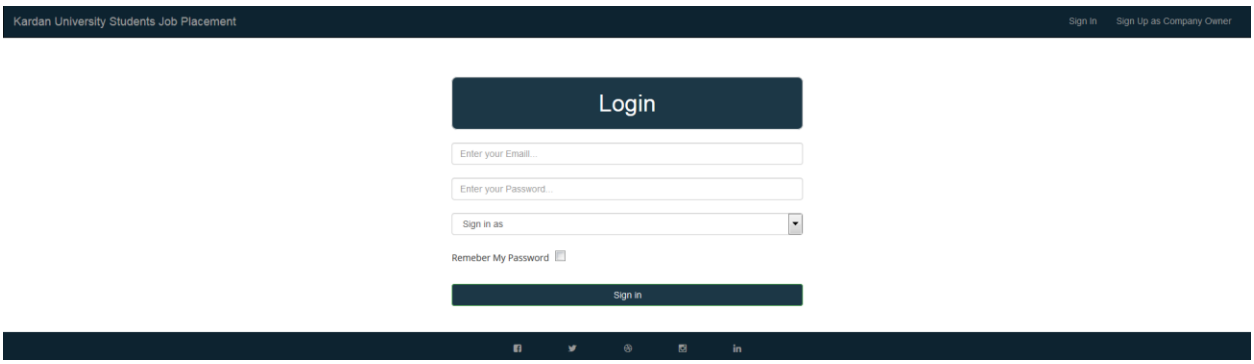
Interface based on PHP

PHP (Hypertext Pre-Processor) is a server-side web programming language that is widely used for web development. However, here are many languages which are used for web development or web programming. But among all of them PHP is the most popular web scripting language. So, let us find out why PHP is widely used for web development… PHP language has its roots in C and C++. PHP syntax is most similar to C and C++ language syntax. So, programmers find it easy to learn and manipulate. MySQL is used with PHP as back-end tool. MySQL is the popular online database and can be interfaced very well with PHP. Therefore, PHP and MySQL are excellent choice for webmasters looking to automate their web sites. PHP can run on both UNIX and Windows servers. PHP also has powerful output buffering that further increases over the output flow. PHP internally rearranges the buffer so that headers come before contents.
PHP is dynamic. PHP works in combination of HTML to display dynamic elements on the page. PHP only parses code within its delimiters, such as. Anything outside its delimiters is sent directly to the output and not parsed by PHP. PHP can be used with a large number of relational database management systems, runs on all of the most popular web servers and is available for many different operating systems. PHP5 a fully object oriented language and its platform independence and speed on Linux server helps to build large and complex web applications. So, in general PHP is cheap, secure, fast and reliable for developing web applications.

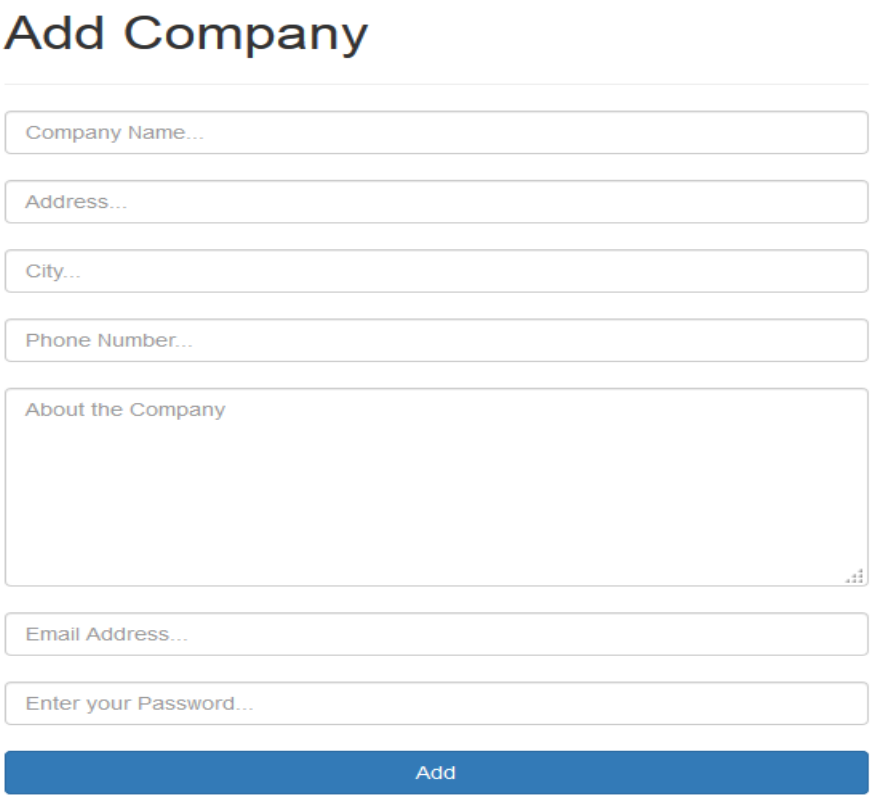
Interface Home Page



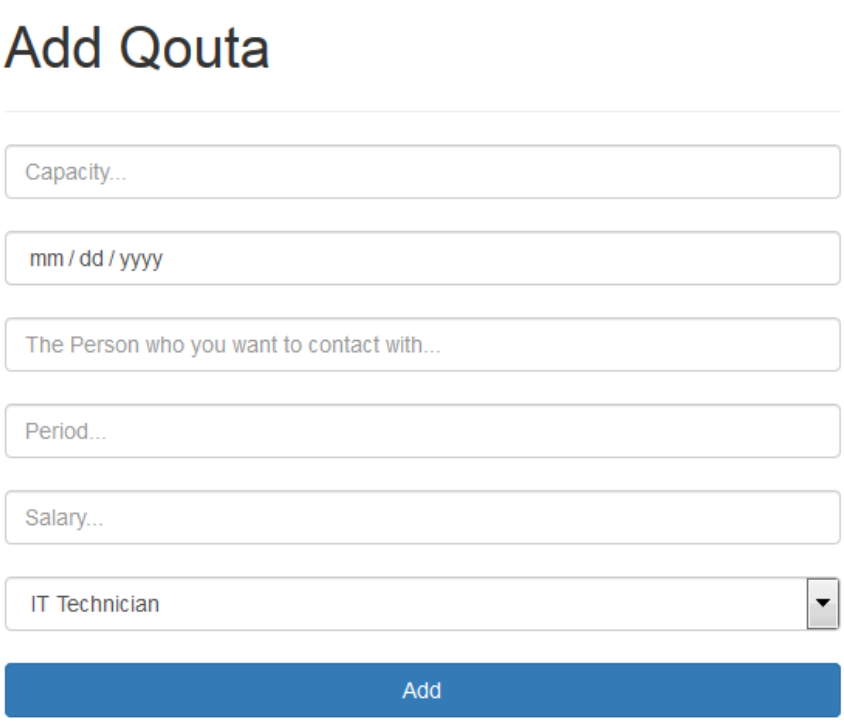
5.1 Functionalities of System



5.2 Adding Company

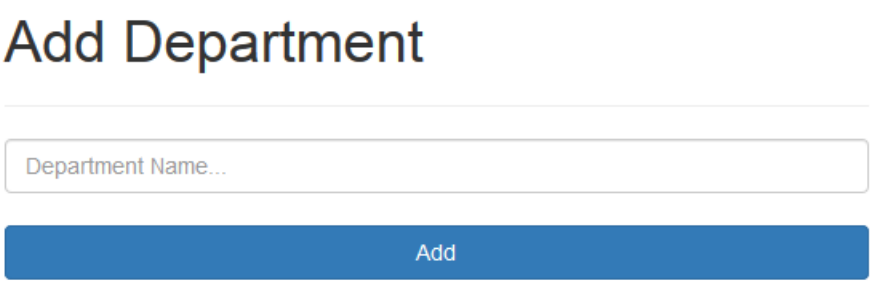


5.3 Adding Quota

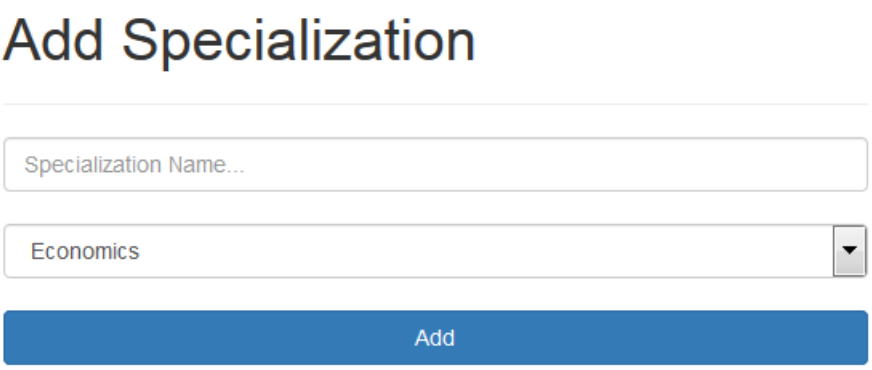


5.4 Adding Unit

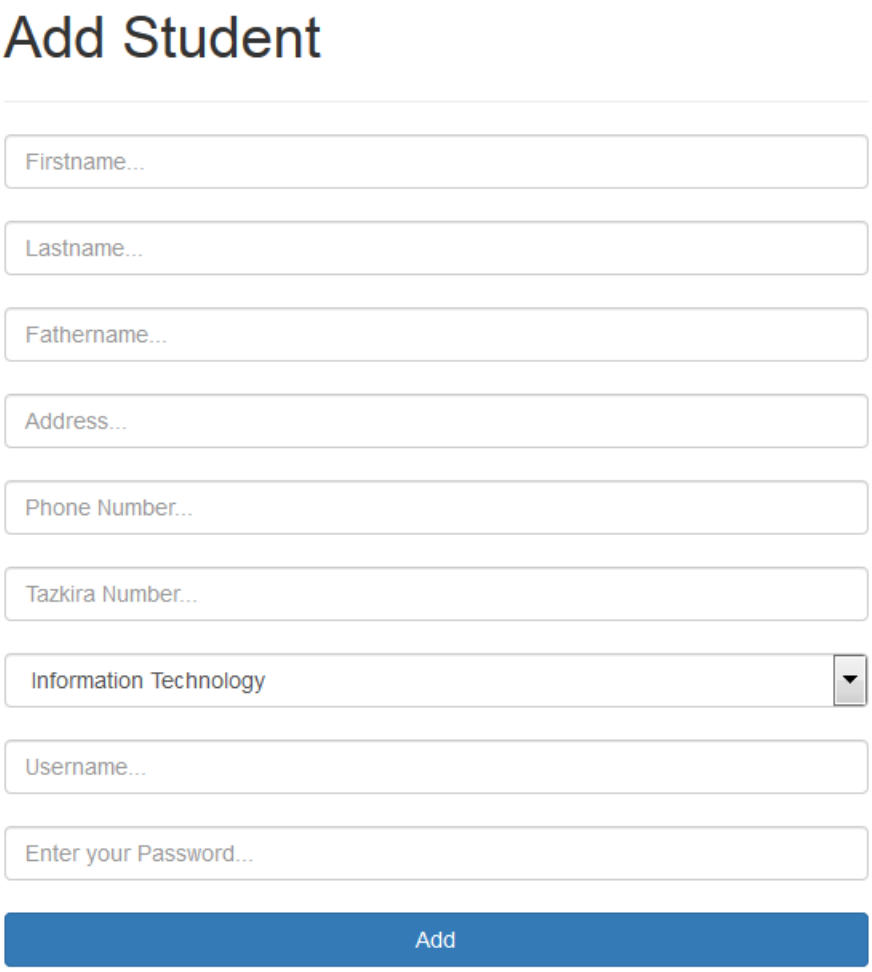
5.5 Adding Department



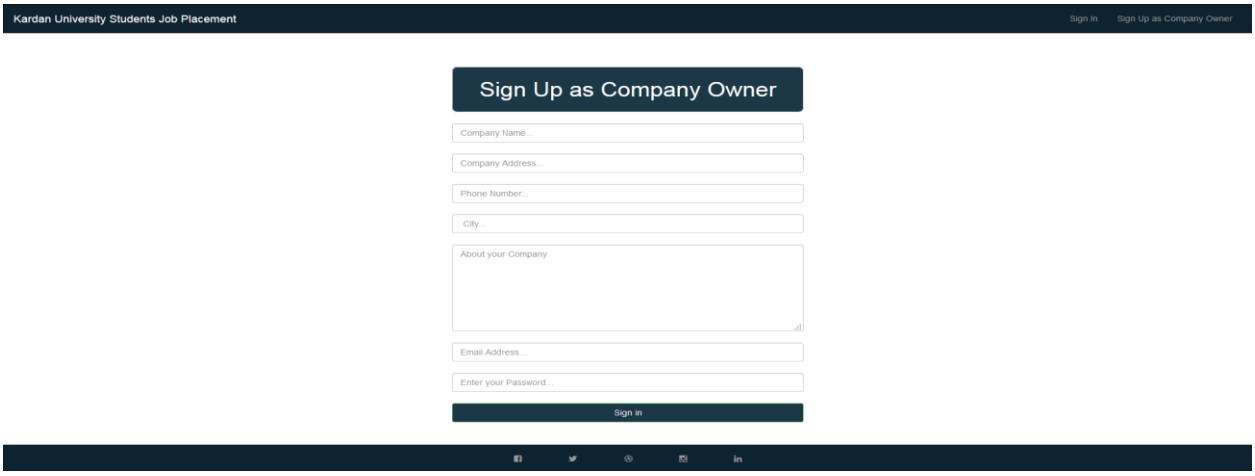
5.6 Adding Specialization



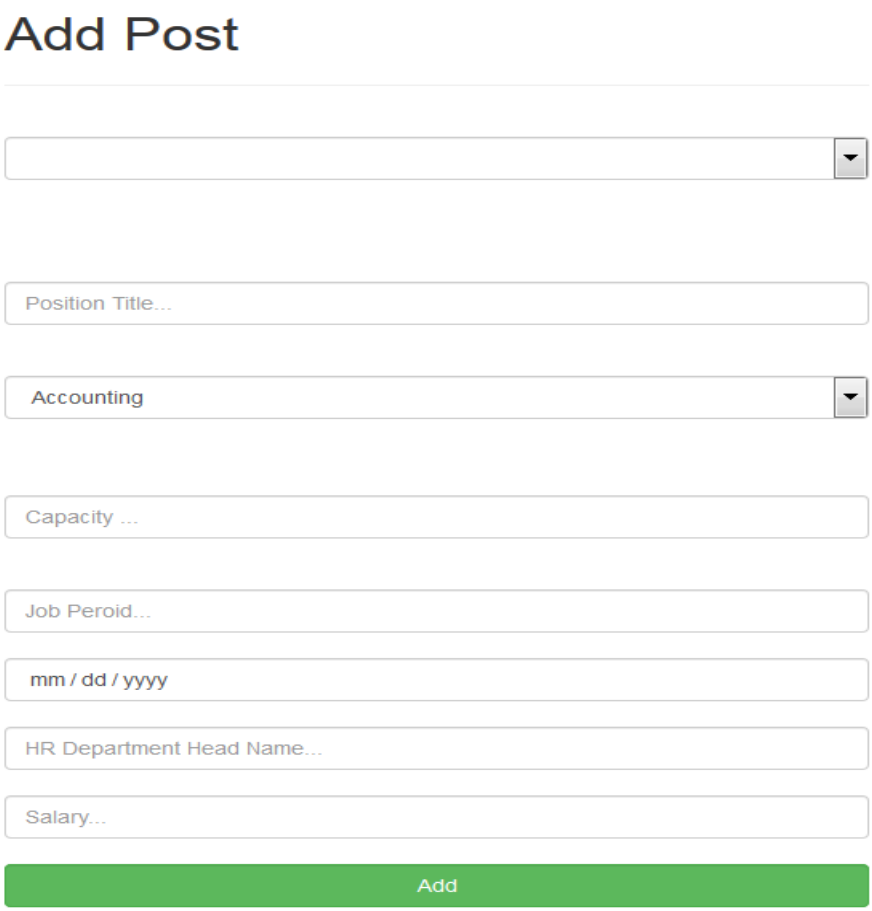
5.7 Adding Student



5.8 Company Sign Up page



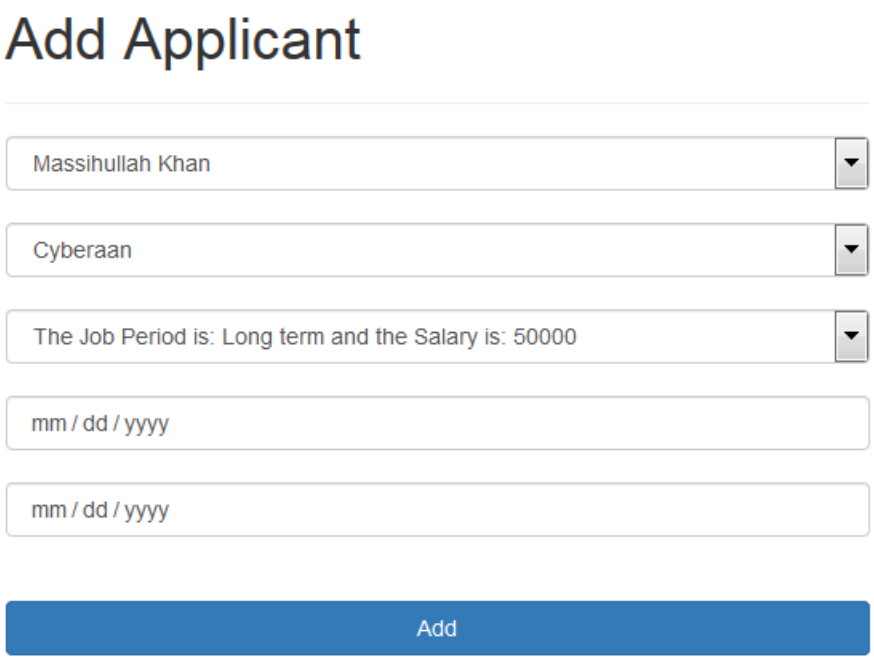
5.9 Adding Post



5.10 View Job Lists

POST Number:	Position Title:	Company Name:	Deadline:
1	Marketer	ASHDO	08/15/2018
2	Web Developer	Netlinks	06/12/2018
3	Guard	ASHDO	2018-06-26
4	News Announcer	Khurshid TV	2018-06-19

5.11 Add Applicant



Chapter 6
Conclusion

6.0.1 Summary

This chapter covered all the steps of implementing the Internship Management System with all steps of creating the database and details about the main features using types of programming languages. Through this system student who want to apply for one internship program can register their self and after being succeed and approved they can follow up by the admin of system. The proposed system is fully web based with interactive interface and database. The technology we used is: PHP, CSS3, HTML5, Bootstrap, jQuery, JavaScript and for making the database we used phpmyadmin.

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