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Conceptual Implementation of a Development Platform
For Women in Afghanistan
(Job for Women)

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the Name of Allah,

The Entirely Merciful (Rahman), the Especially Merciful (Rahim)

Abstract

The social life of women in every society is a very important issue and must be considered as the vital point for continuity of human being.

Today, the situation of Afghan women has increased considerably over the past few years, and there is some hope that there is a better future for Afghan women through equal contribution of women with men, Creating Jobs for Women, encouraging women in different fields, protecting women's rights in Islamic and Afghan culture framework.

To achieve these goals, we proposed conceptual implementation of a development platform for women in Afghanistan, a web application project as our final project and named ***Job for Women***, (for a hypothetical organization). The main aim to prepare such application is providing communication channels between educated Afghan women and organizations and companies to create and organize welfare life opportunities for them.

Acknowledgment

First of all, thanks to Rahman and Rahim Allah who gave us health, strength and opportunity to become university student especially got knowledge from professional staff of Kabul University.

As usual in the last year of the university education preparing of final project is required task of each student, to accomplishing this task Dr. Jawid Ahmad Baktash has supervised, monitored, instructed and gave us constructive suggestion to correct our mistakes. It worth's to express our special thanks and appreciation for him.

As well as, from the first class until the fourth class all university members did not hesitate to support us in each aspect of education therefore it worth to mention our appreciation and thanks to excellency university president, excellency head of the faculty, instructors, teaching staffs, admin staffs and all the other personnel of university.

At the end, thanks to our family members who support us, encourage us and believe us to be success in this educational journey.

Regards

Baseera Ruin

Rabea Mohammadi

Declaration

Although we are living in a country which has a lot of poor and jobless people but if we see from other perspective, we recognize that there are a lot of opportunities that we can use it. One of these opportunities is Information Technology facilities.

As a student of Kabul University, we realized that there are a lot of Afghan women that has abilities which are not been used yet for their improvements. As well as there are a lot of educated women who are not aware about the job and other opportunities. Therefore, we decided to prepare such a project which acts as a bridge between women and organizations.

Table of Contents

| | |
|-----------------------------------------------|-----|
| Abstract..... | i |
| Acknowledgment | ii |
| Declaration..... | iii |
| Table of Contents..... | iv |
| Table of Figures:..... | vi |
| Chapter 1..... | 1 |
| 1. Introduction | 1 |
| 1.1 Introduction | 1 |
| 1.2 Background and Recent Research..... | 1 |
| 1.3 Research Problems..... | 1 |
| 1.4 Research Goals..... | 2 |
| 1.5 Expected Outcome..... | 2 |
| Chapter 2..... | 3 |
| 2.1 System Model | 3 |
| 2.1.1 Waterfall Model | 3 |
| 2.2 Requirement Analysis: | 3 |
| 2.2.1 Functional Requirements:..... | 4 |
| 2.2.2 Non-Functional Requirements:..... | 4 |
| 2.2.3 System Requirements: | 4 |
| 2.3 Use Cases: | 5 |
| 2.3.1 Use Cases: | 6 |
| 2.4 Unified Modelling Language (UML) | 12 |
| 2.4.1 UML - Use Case Diagram:..... | 12 |
| 2.4.2 UML – Class Diagram: | 13 |
| 3.1.3 UML – Sequence Diagram:..... | 15 |
| 2.5 Entity-Relationship Diagram: | 22 |
| Database Diagram..... | 24 |
| Chapter 3..... | 25 |

| | | |
|-------------------|------------------------------------|----|
| 3.1 | System Implementation..... | 25 |
| 3.1.1 | Used Languages and Libraries:..... | 25 |
| 3.1.2 | Folder Structure | 27 |
| 3.2 | System Installation..... | 30 |
| 3.3 | User Interfaces..... | 31 |
| Conclusion:..... | | 35 |
| References: | | 35 |

Table of Figures:

| | |
|---------------------------------------------------------------------|----|
| Figure 1: Waterfall Model for Job for Women Web Application | 3 |
| Figure 2: UML Use case diagram for Job for Women Application | 12 |
| Figure 3: UML Class Diagram | 14 |
| Figure 4: Create System User Account..... | 15 |
| Figure 5: Create Organization Account | 16 |
| Figure 6: Create Contact Person Account..... | 16 |
| Figure 7: Sign-up Subscriber | 17 |
| Figure 8: Disabling Contact Person Account..... | 17 |
| Figure 9: Disabling Organization Account | 18 |
| Figure 10: Disabling Subscriber Account..... | 18 |
| Figure 11: Submit Job Announcement | 19 |
| Figure 12: Publish Submitted Announcement | 19 |
| Figure 13: View an Announcement | 20 |
| Figure 14: Search a Job by Keyword..... | 20 |
| Figure 15: Apply to an Announcement..... | 21 |
| Figure 16: Bill the Organization | 21 |
| Figure 17: Entity -Relationship (ER) Diagram..... | 23 |
| Figure 18: Database Diagram for Job for Women Web Application | 24 |
| Figure 19: Folder Structure of Source codes | 27 |
| Figure 20: Folder Structure of Source codes -Public Folder | 27 |
| Figure 21: Folder Structure of Source codes-Libs..... | 28 |
| Figure 22: Folder Structure of Source codes - Models..... | 28 |
| Figure 23: Folder Structure of Source codes - Views..... | 29 |
| Figure 24: Folder Structure of Source codes - Controllers..... | 29 |
| Figure 25: Databases tab in phpMyAdmin | 30 |
| Figure 26: Import tab in phpMyAdmin | 30 |
| Figure 27: Home Page | 31 |
| Figure 28: Subscriber signup | 32 |
| Figure 29: System Users' login..... | 32 |

| | |
|-----------------------------------------------|----|
| Figure 30: Add new organization account | 33 |
| Figure 31: Add new contact person | 33 |
| Figure 32: List of Announced Jobs | 34 |
| Figure 33: Search particular job..... | 34 |

Chapter 1

1. Introduction

1.1 Introduction

The social life of women in every society is very important issue and must be considered as the vital point for continuity of human being. Today, the situation of Afghan women has increased considerably over the past few years, and there is some hope that there is a better future for Afghan women.

To achieve these goals, we proposed conceptual implementation of a development platform for women in Afghanistan, a web application project as our final project and named ***Job for Women***, (for a hypothetical organization). This application will be used by organization for capacity building of women and provide welfare life opportunities for Afghan women through organizing short-term and long-term courses, trainings, workshops, seminars, job announcement and be on contact with employer organizations to provide job opportunities for educated Afghan women.

1.2 Background and Recent Research

In almost last two decades there are a lot of fields of job have been created in Afghanistan such as Telecommunication, Information Technology, Civil Engineering, Banking, Business Administration, Management, Health and etc. Beside to these, governmental and non-governmental universities and higher education institutes graduated hundreds of students with new and fresh ideas to fulfill these vacancies.

Indubitably remarkable parts of these students were women. Unfortunately, due to some economic or social restrictions, issues or unawareness, some of them could not be able to improve their professional skills, even not be able to find suitable job.

As well as, in this time period the term job providers or job portals, became in the scene and acted as a bridge between employer companies and the job seekers to ease communication of them. But there is no web site or organization focuses directly to situation of women.

1.3 Research Problems

As we researched about current job portals in Afghanistan, there are a few web sites that acts as job provider but those websites do not give any precedence for women to be selected. Therefore, it motivated us to provide a web application for a hypothetical organization to communicate with organizations, universities, and job employer companies to convince them to provide trainings, seminars, workshops, scholarships and even provide job opportunities for women and give high privilege to selecting educated Afghan women.

1.4 Research Goals

Inevitably in each society women are half part of society; therefore, focusing to improve their educational and professional skills and providing job opportunities for them has direct impact to improvement and development of that society.

In the last few years the situation in Afghanistan began to change, and number of educated Afghan women has been increased. Now it is the role of government and organizations to support them and motivate them to do their best for our society through supporting their equal contribution of women with men, creating jobs for women, encouraging women in different fields and protecting their rights in Islamic and Afghan tradition framework.

To achieve these goals as a students of computer science we planned to provide an application that might have positive impact for this process. This application could be used by any organization for capacity building and provide welfare life opportunities through organizing short-term and long-term courses, trainings, workshops, seminars, job announcement and be on contact with employer organizations to provide job opportunities for educated Afghan women.

1.5 Expected Outcome

Since the main focus of this application is women, improving the status of women in Afghanistan, job creation and employment opportunities for women, encouraging women in different fields, protecting individual and social rights of women. Therefore, all members of this web site will be only females.

Anyone can access and navigate to different pages of this website with public access right to gain announcement information for job opportunities, trainings, workshop, scholarship announcements and etc. To become subscriber of the system, through signup form she can fill her basic information and submit to system. Then verification email will be sent to her email account, by clicking the link in the received email, she will be able to subscriber of the system then navigate other pages especially applying to any announcement through this website and gain chance of selection in their desired position.

In the other hand organizations will fill the hardcopy form of contract after that account will be created for them then will be able to use the system with organization rights. Such as submitting announcement, searching job seekers information and etc.

Chapter 2

In this chapter we are going to determine system requirements, system models, and diagrams to depict system concept in visual format.

2.1 System Model

2.1.1 Waterfall Model

Waterfall Model is the first process model and very simple to understand. In this model each phase must be completed before the next phase can begin and overlapping is not allowed between phases. Therefore, in the development process any phase can begin if and only if the previous is completed.

We selected waterfall model for our ***Job for Women*** web application, with this model each process and result can be well documented and clearly defined.

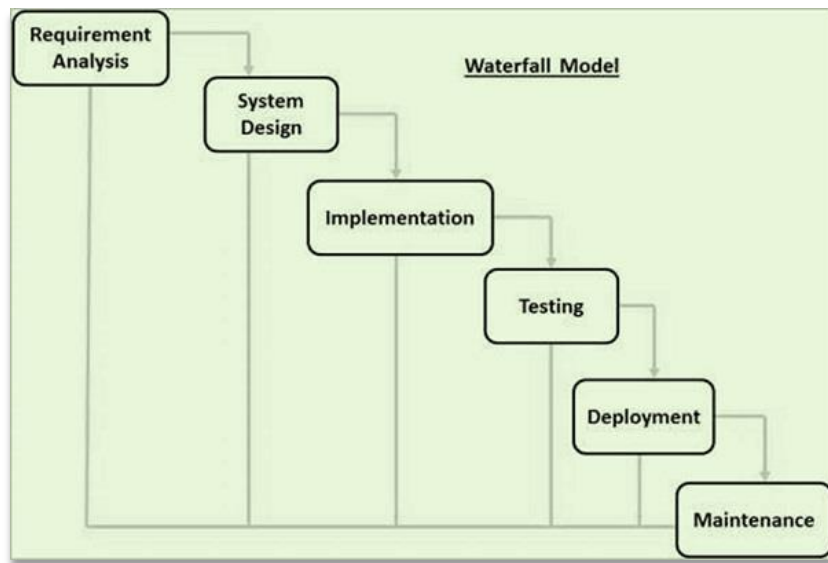


Figure 1: Waterfall Model for Job for Women Web Application

2.2 Requirement Analysis:

In order to develop software project first of all, analysis of requirement is a major step which affect success or failure of the system being developed.

Functional and non-functional requirements of this particular system are hereunder.

2.2.1 Functional Requirements:

Functional requirements define a function of a system or components of the that system. In the other word, it defines what is expected to be done by particular system.

1. Anyone will sign up to be subscriber of the system.
2. Administrator creates user account for system users as well as for the organization and its corresponding contact person.
3. Contact person of particular organization will be able to submit announcement.
4. Users can search announcements by keywords; such as job location, job category, fields and etc.
5. To prevent scrolling due to long loaded records by default, 10 records will be loaded per page.
6. Announcement should be present according to publish date from newest to oldest order.
7. Expired announcement should not be present.
8. Clicking to any record should move user to announcement detailed information page.
9. Announcement detailed page should have “Print” and “Apply” option buttons.
10. Submitting announcement should be easy and user-friendly.
11. Input validation should be done in client side as well as in server side.

2.2.2 Non-Functional Requirements:

Non-Function requirements describe constraints up the systems behavior and cover all the remaining requirements which are not covered by the functional requirements such as security.

1. The whole website should be responsive to support nice view for any kind of devices. Such as easy to read information on small screens.
2. Easy to navigate on a wide variety of browsers.
3. Easy to use to search any record through multi device such as smartphones.
4. Easy to fill the forms and submit.
5. Page load should be quickly and rendered in correct order.
6. Interfaces should be user friendly. Such as used icons in the website should be descriptive.
7. Header, Main Menu and Footer should be present in all pages.
8. Pagination should be included at the end of each loaded records page.

2.2.3 System Requirements:

1. Application will be accessible through any common browsers such as Google Chrome, Mozilla Firefox, Safari, Internet Explorer and etc.
2. It will be accessible through Desktop, Laptop and Hand-held devices such as smartphone, tablets.

3. In server side, Apache, MySQL, PHP are used.
4. In client side, HTML, CSS, JavaScript, jQuery Library and Bootstrap are used.
5. To data transfer between server and client, AJAX and JSON technologies are used.
6. To implement the system Model-View-Controller (MVC) architectural pattern is used.

2.3 Use Cases:

Today's usage of informatics systems are dramatically increased in each aspect of business environments. From small to large enterprises want to adopt himself to this technology storm. All organization, enterprises and government entities want to move their traditionally daily operation to new and modern technology system.

To implement these business requirements, effective and efficient interaction of business and IT solution entities are very important. Naturally it is not necessary to know IT related technical details of system development and operation by business entities but as stakeholders of the systems being implementing it is important to interact with IT team. For this purpose, some communication techniques have been provided for explaining of system which will be understandable by all parties who is involved in this process; one of these techniques is Use Case.

Use Cases are textual explanation method of system requirements which is used in system analysis to identify, clarify and organize system requirements. It explains user interaction with the system in order to achieve particular goal from the system. For this purpose, process will be explained step by step and shows the functionality of particular software system and all possible sequence of interaction between system and user will be included as a set.

Use cases should be used to explain what functionality the software does instead of how the software does it. In this way it helps both the business entity regarding to functionality of particular use case as well as helps developers to know what needs to be built.

It will not mention anything about technical details such as programming paradigm, which programming language is being used and how to connect to database or various components and external APIs.

The main elements of use cases are as below:

- ID
- Name
- Description
- Pre-condition
- Main Success Scenario
- Post Condition
- Failure Scenario

2.3.1 Use Cases:

| | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-01 |
| Use Case Name | Adding System User |
| Trigger | New User is present to add to the system |
| Description | To create user account with Administrator, Publisher role or Contact Person role. |
| Primary Actor | Administrator |
| Stakeholder and Interests | <ul style="list-style-type: none">• All system users: Anyone who uses this system is managed by Administrator.• Organization: contact person of organization. |
| Precondition | <ul style="list-style-type: none">• Administrator should be logged in to the system.• User information should be present. |
| Main Success Scenario | <ol style="list-style-type: none">1. Administrator clicks to Add user button.2. System loads the form.3. User fills the form with appropriate data such as first name, last name, email and etc.4. User clicks submit button.5. User will be registered to database. |
| Success Guarantees | User creation will be done. |
| Failure end condition | User creation will not be done. |

| | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-02 |
| Use Case Name | Organization Creation |
| Trigger | New Organization is present |
| Description | There is new organization which signed contract with Job for Women organization to submit its announcement through this website. |
| Primary Actor | Administrator |
| Stakeholder and Interests | Organization: This is the main use case to create account for employer company. |
| Precondition | <ul style="list-style-type: none">• Administrator should be logged in to the system.• Organization contract form should be signed by two parties (Job for Women and the Organization). Existence of this contract is mandatory.• Bank Receipt for subscription fee is needed. |
| Main Success Scenario | <ol style="list-style-type: none">1. Administrator clicks to “Add Organization” button.2. System loads Add Organization page.3. Administrator fills the required fields including uploading of soft-copy of contract and bank receipt for subscription fees.4. System saves new organization account. |
| Success Guarantees | Organization account will be created. |
| Failure end condition | Account creation fails and no changes will be bringing in the database. |

| | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-03 |
| Use Case Name | Contact Person for Organization |
| Trigger | Contact Person introduced by organization |
| Description | In order to login to system on behalf of organization this particular user account will be created as contact person. Then user will be able to login to system and submit announcements. |
| Primary Actor | Administrator |
| Stakeholder and Interests | Organization: In order to login to system on behalf of organization user account will be created. |
| Precondition | <ul style="list-style-type: none"> Administrator should be logged in to the system. Organization account should already be created for this particular contact person. |
| Main Success Scenario | <ol style="list-style-type: none"> Administrator clicks Add Contact Person button. System, loads Contact Person page. Administrator fills all required fields. Administrator, click the submit button. System saves new contact person information in database. |
| Success Guarantees | User account will be created for this particular contact person. |
| Failure end condition | If user account creation fails organization should be informed. |

| | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-04 |
| Use Case Name | Add Subscriber |
| Trigger | Sign-up link clicked |
| Description | Anyone who wants to be subscriber of this website be able to sign up her basic information with valid email account. |
| Primary Actor | Public user (everyone) |
| Stakeholder and Interests | |
| Precondition | <p>Email account should be valid.</p> <p>Email account should not be existing in the system.</p> |
| Main Success Scenario | <ol style="list-style-type: none"> User clicks to sign-up link. Subscriber form will be loaded. User fills the form with appropriate data such as full name, email and etc. User clicks submit button. System sends verification email to user`s email address. User clicks the link in the verification email to verify her email account. User will be redirected to this website. User will be registered to database. |
| Success Guarantees | User subscription will be done. |
| Failure end condition | User creation will not be performed. |

| | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-05 |
| Use Case Name | Disable Organization Account |
| Trigger | Clicking disable button. |
| Description | Due to some reason organization account should be disabled. |
| Primary Actor | Administrator |
| Stakeholder and Interests | <ul style="list-style-type: none"> Administrator, Organization |
| Precondition | <ul style="list-style-type: none"> Administrator should be logged in to the system. End of Contract Abusing of the system Issue with payment periods. |
| Main Success Scenario | <ol style="list-style-type: none"> Administrator selects the particular organization. Administrator fills the reason for disabling. Administrator clicks the disable button. System disables the organization account and all its corresponding contact persons. |
| Success Guarantees | Organization and its contact persons will be disabled and not able to login to system after this action. |
| Failure end condition | |

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-06 |
| Use Case Name | Disabling Subscriber's Account |
| Trigger | Click to Disable Subscriber |
| Description | Due to some reason subscriber's account disabling will be needed. |
| Primary Actor | Administrator |
| Stakeholder and Interests | Administrator, Subscriber |
| Precondition | <ul style="list-style-type: none"> Administrator should be logged in to the system. Abusing of the system |
| Main Success Scenario | <ol style="list-style-type: none"> Administrator selects particular subscriber from the system. Administrator fills the reason of subscribers' account disabling. Admin clicks Disable button. System disables her account. |
| Success Guarantees | After disabling particular subscriber's account, she will not be able to use her account. Until re-enabling of her account by Administrator after getting written letter |
| Failure end condition | Subscriber account will be active. |

| | |
|----------------------|-----------------------------------|
| Use Case Id | UC-07 |
| Use Case Name | Submit Job Announcement |
| Trigger | Click new job announcement button |
| Description | New announcement is needed. |

| | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Actor | Contact Person of organization, Administrator, Publisher |
| Stakeholder and Interests | Organization: submits the announcement Administrator: Manages billing and other announcement related tasks. |
| Precondition | 1. Contact Person should be logged in to the system. |
| Main Success Scenario | <ol style="list-style-type: none"> 1. User clicks to submit job announcement link. 2. Job announcement page will be loaded. 3. User fills the required fields. 4. User clicks the submit button. 5. System publishes this particular announcement. |
| Success Guarantees | <ul style="list-style-type: none"> • Announcement will be published and all kind of users including public users are able to see the details of this announcement. |
| Failure end condition | Announcement will not be saved. |

| | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-08 |
| Use Case Name | List all Jobs |
| Trigger | Users want to see job announcements |
| Description | System should provide list of all job announcements for users. |
| Primary Actor | All users, (Administrator, Publisher, Organization, Subscriber, Everyone) |
| Stakeholder and Interests | |
| Precondition | Job announcement should be present in the system. |
| Main Success Scenario | <ol style="list-style-type: none"> 1. User clicks to Job Announcement button. 2. System loads all available jobs sorted according to publish date from newest to oldest. 3. User clicks to one particular job announcements to see the details. 4. System loads the detail page of that particular job. |
| Success Guarantees | All available jobs will be loaded. |
| Failure end condition | |

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-09 |
| Use Case Name | Search a Job |
| Trigger | User wants to get information regarding specific job. |
| Description | Rather than to scan specific job from the list more often users want to access to job announcement more quickly through search options. |
| Primary Actor | All users, (Administrator, Publisher, Contact Person, Subscriber, Everyone) |
| Stakeholder and Interests | |
| Precondition | Job announcement should be present in the system. |

| | |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main Success Scenario | <ol style="list-style-type: none"> 1. User fills the keyword in the search area. 2. A user selects the search criteria from the drop-down lists such as fields and area (city) etc. 3. User clicks the search button. 4. System finds all matched job announcements and list them. 5. User clicks to particular job announcement. 6. System, loads details of that job in a new page. |
| Success Guarantees | If there is available job announcement with user provided criteria, system will find them and list them all. |
| Failure end condition | |

| | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-10 |
| Use Case Name | Apply for a Job |
| Trigger | Subscriber selects a job to apply. |
| Description | One of the main functionality of this website is to provide Job application facilities for subscribers. |
| Primary Actor | Subscriber |
| Stakeholder and Interests | Administrator: Administrator can get information about number of application to a particular job. |
| Precondition | Subscriber must be logged in to the system. Subscriber should not have applied to same job. |
| Main Success Scenario | <ol style="list-style-type: none"> 1. Subscriber selects particular job from the list. 2. Job detailed information page will be loaded. 3. Subscriber clicks Apply button. 4. System saves his application to this particular job. 5. System, gives notification message to her regarding to application success. |
| Success Guarantees | User application to particular job will be saved in the system. Organization who submit this particular job able to see list of applicants for this particular job announcement. |
| Failure end condition | Application will not be saved. |

| | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Case Id | UC-11 |
| Use Case Name | Charge the Organization |
| Trigger | Billing Calculation is needed |
| Description | In order to calculate |
| Primary Actor | Administrator |
| Stakeholder and Interests | Administrator: who wants to get information regarding to billing information of particular organization. Organization, Contact Person wants to get detailed information for his payment. |
| Precondition | Administrator should be logged in to the system. |
| Main Success Scenario | <ol style="list-style-type: none"> 1. Administrator clicks Calculate Billing button. 2. System loads Billing operation page. |

| | |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <ul style="list-style-type: none"> 3. Administrator selects a particular organization from the list. 4. Administrator selects start and end date of particular period of calculation. 5. System calculates billing for selected criteria. 6. Administrator clicks print button. |
| Success Guarantees | Billing will be provided. |
| Failure end condition | Billing will not be generated. |

2.4 Unified Modelling Language (UML)

UML notation is collection of diagrams which is used for Object-oriented software program design; but it has since been extended to cover a wider variety of software engineering projects. Today, UML is accepted by the Object Management Group (OMG) as the standard for modelling software development.

“The Unified Modelling Language (UML) is a general-purpose, developmental, modelling language in the field of software engineering that is intended to provide a standard way to visualize the design of a system.”^[i]

2.4.1 UML - Use Case Diagram:

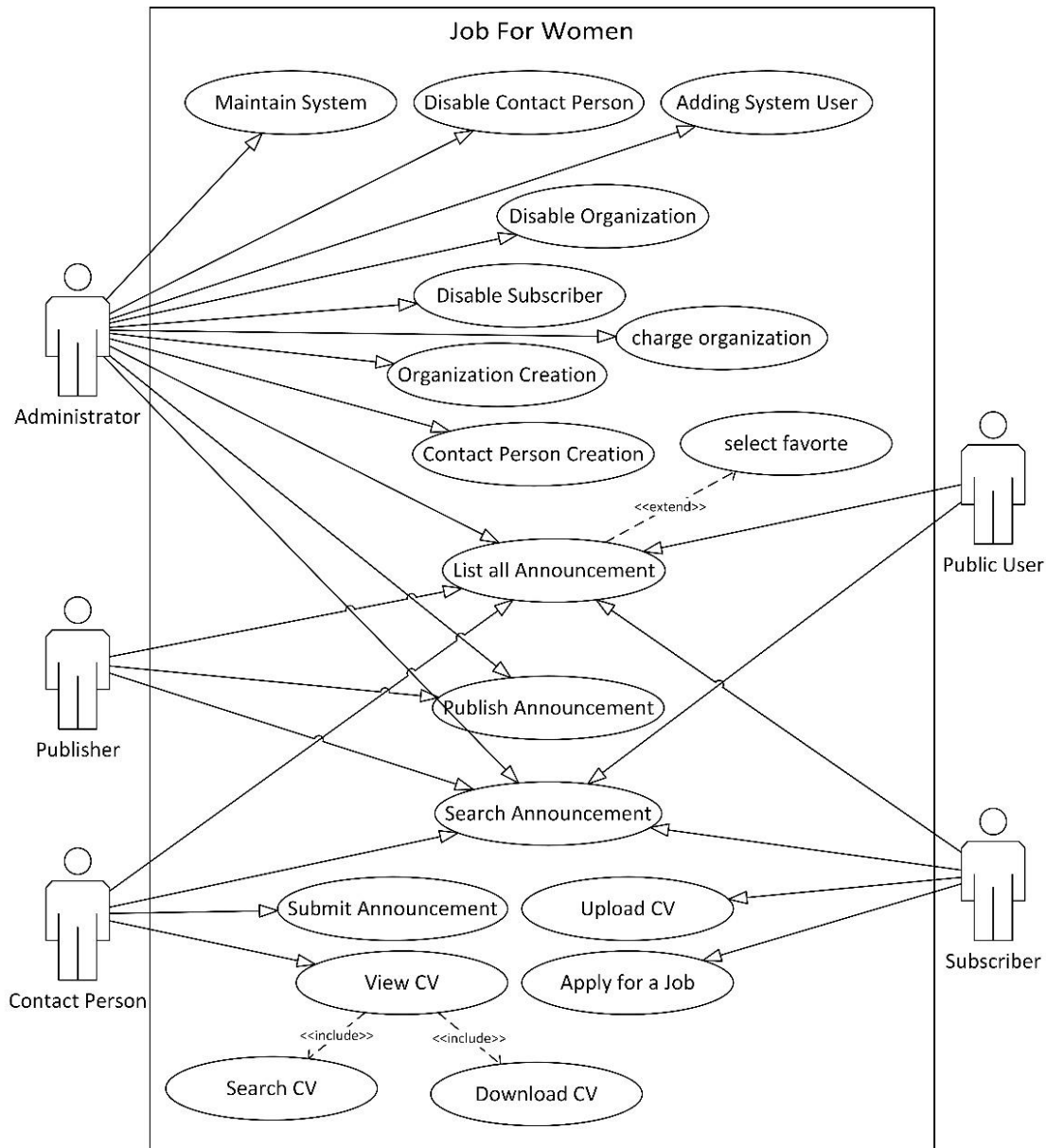


Figure 2: UML Use case diagram for Job for Women Application

2.4.2 UML – Class Diagram:

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modelling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.

The purpose of class diagram is to model the static view of an application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction.

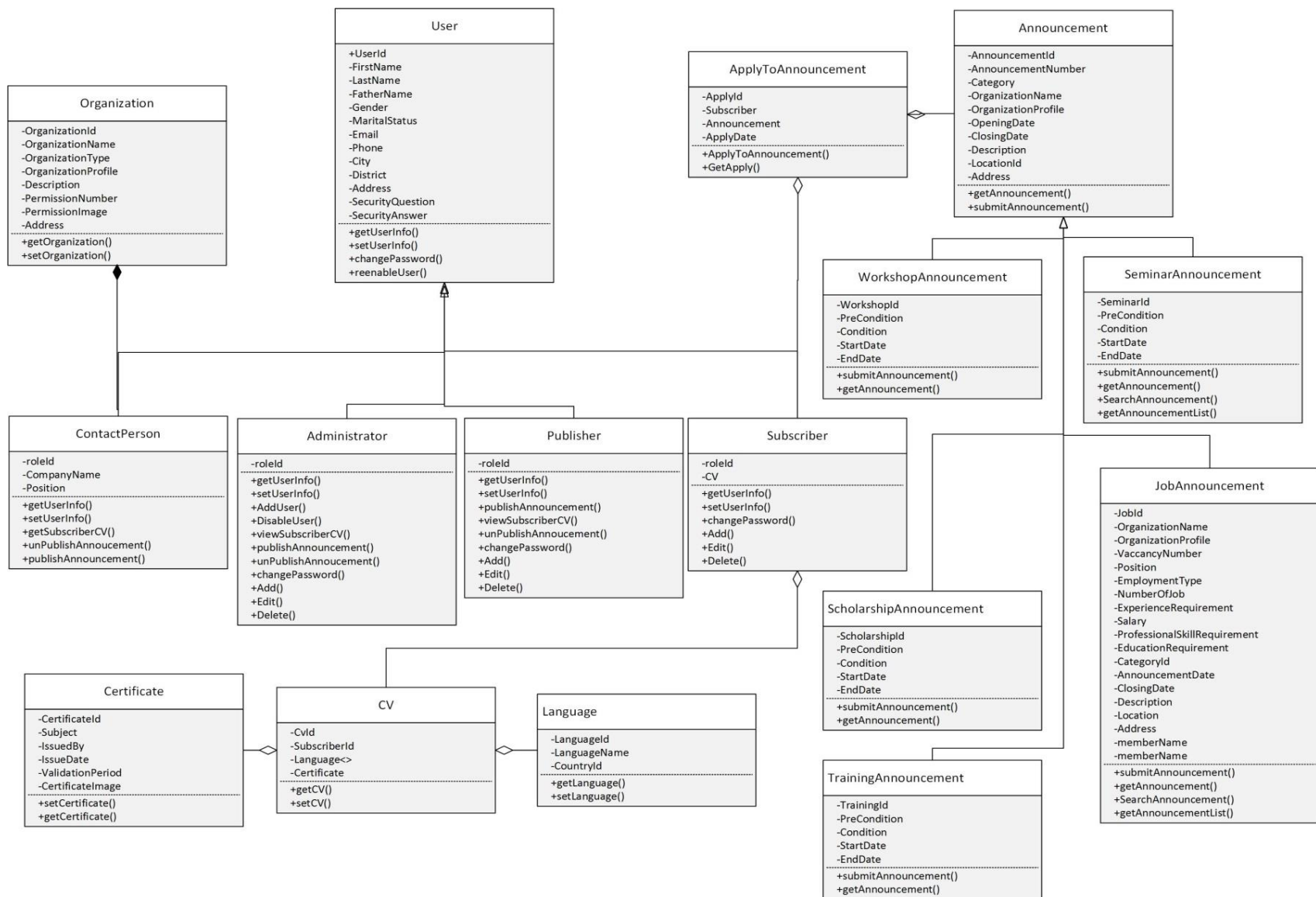


Figure 3: UML Class Diagram

3.1.3 UML – Sequence Diagram:

To depict interaction between objects in a sequential order we use UML Sequence diagrams. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram. Sequence diagrams describe how and in what order the objects in a system function.

- Actors
- Lifelines
- Messages
- Synchronous messages
- Asynchronous Messages
- Self-Message

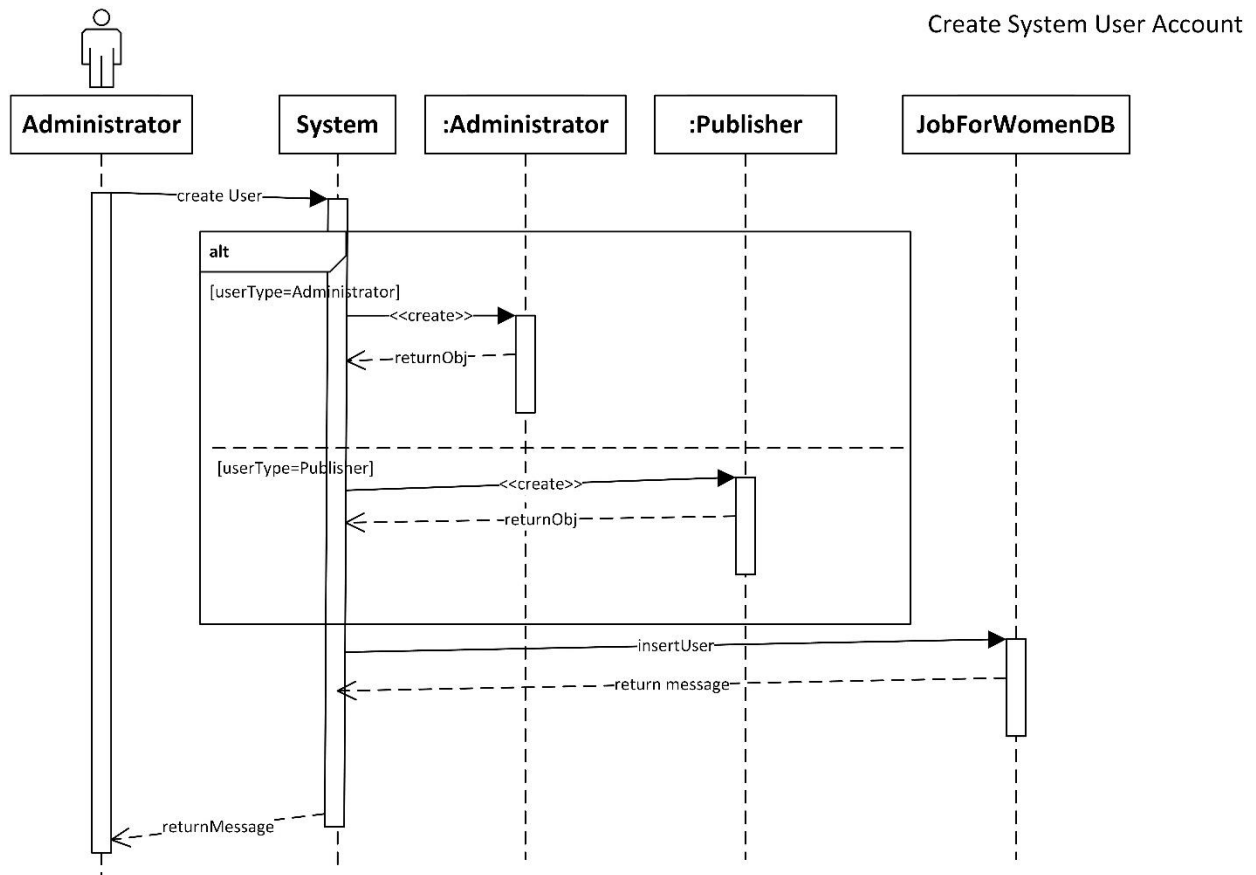


Figure 4: Create System User Account

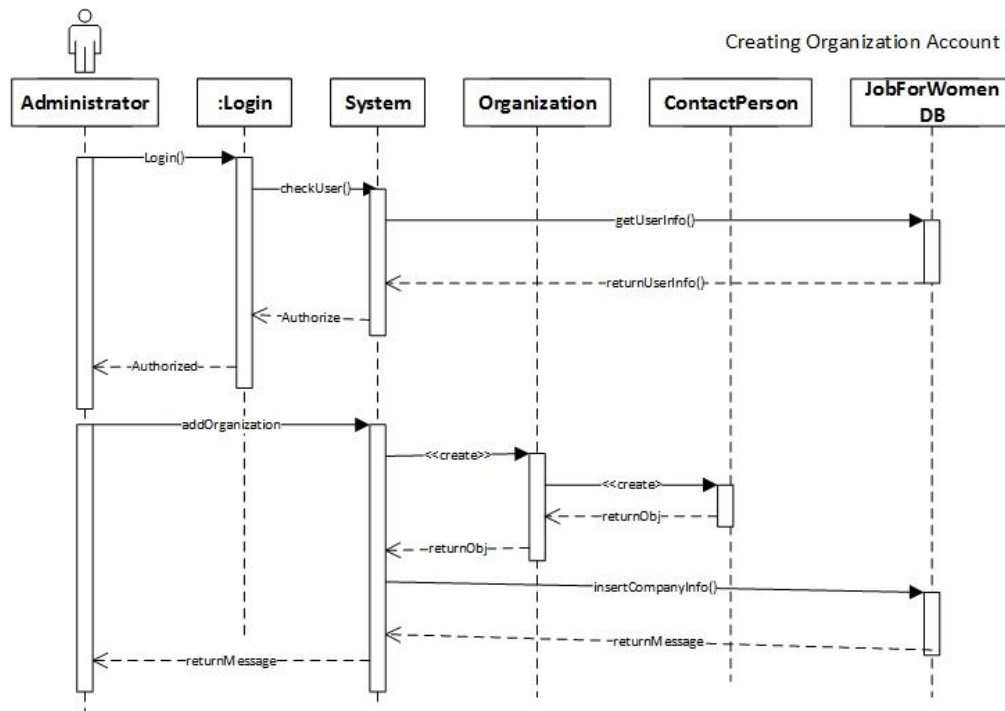


Figure 5: Create Organization Account

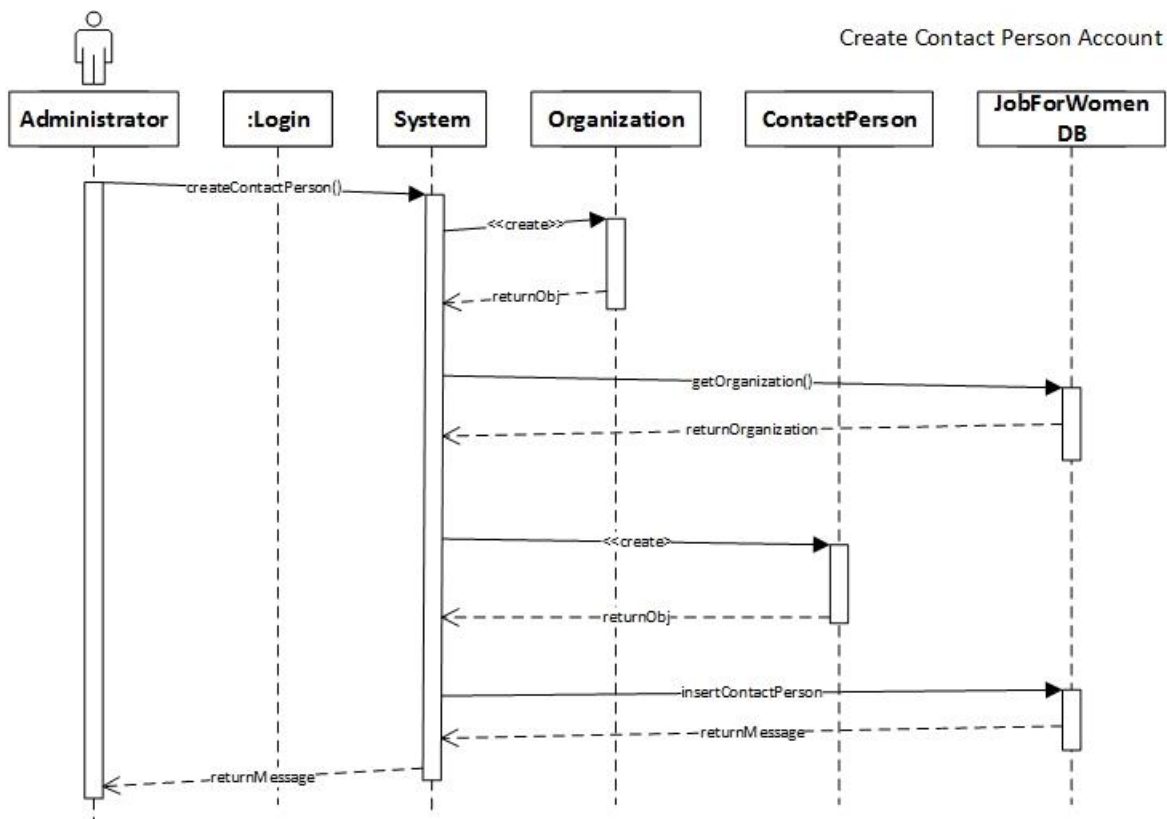


Figure 6: Create Contact Person Account

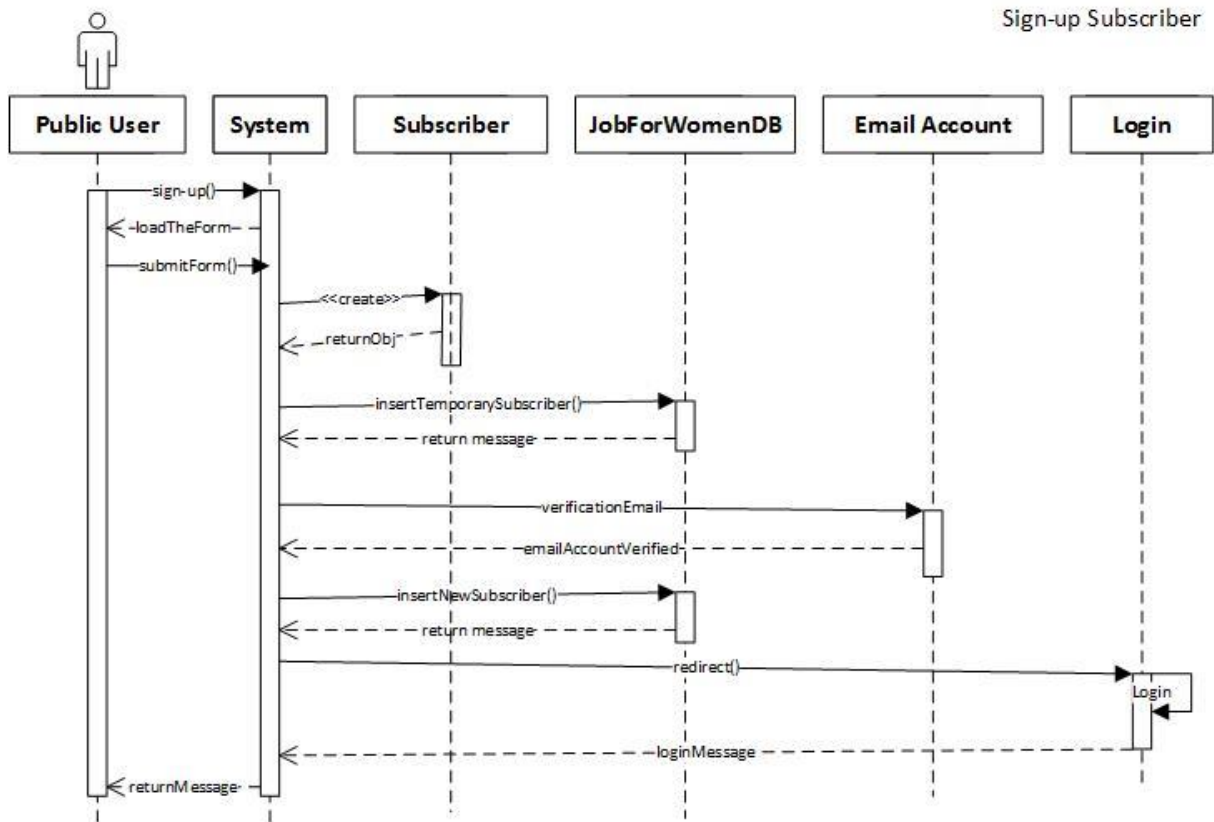


Figure 7: Sign-up Subscriber

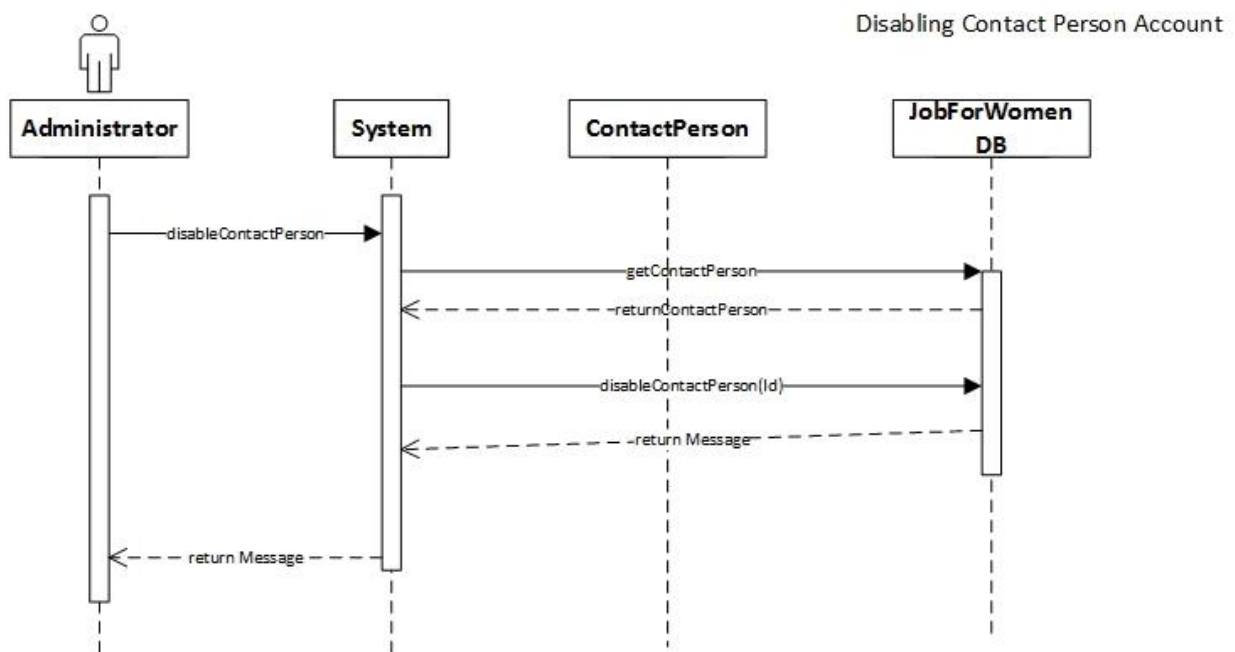


Figure 8: Disabling Contact Person Account

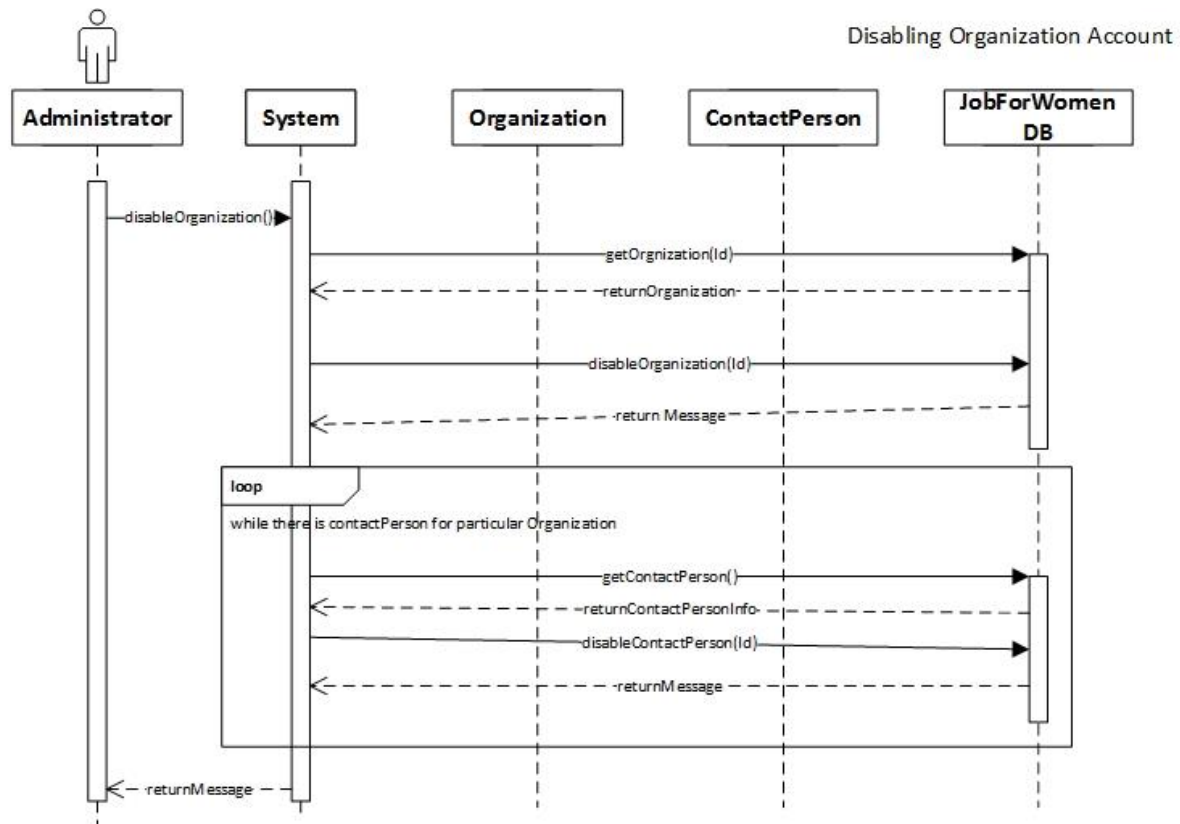


Figure 9: Disabling Organization Account

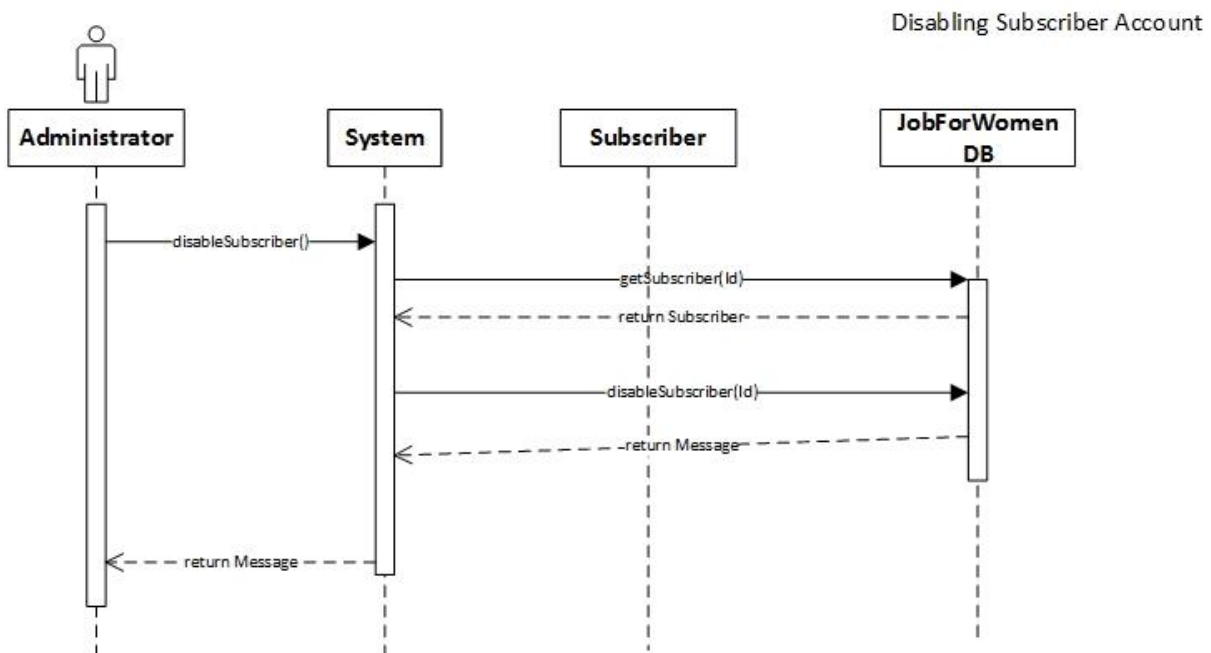


Figure 10: Disabling Subscriber Account

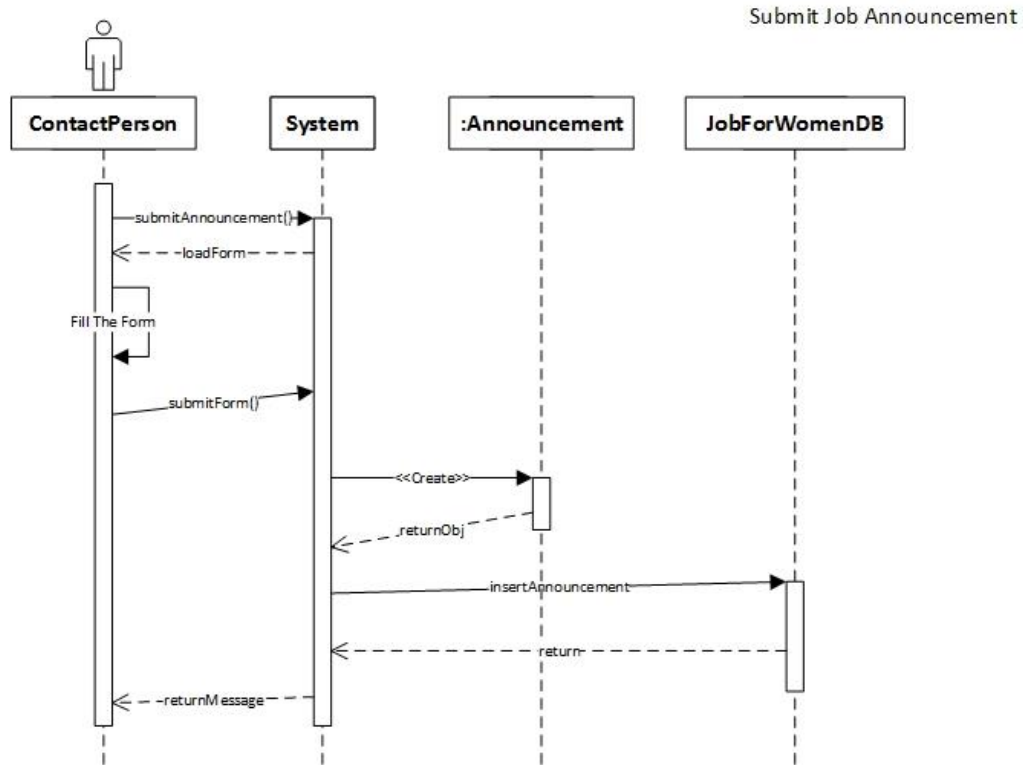


Figure 11: Submit Job Announcement

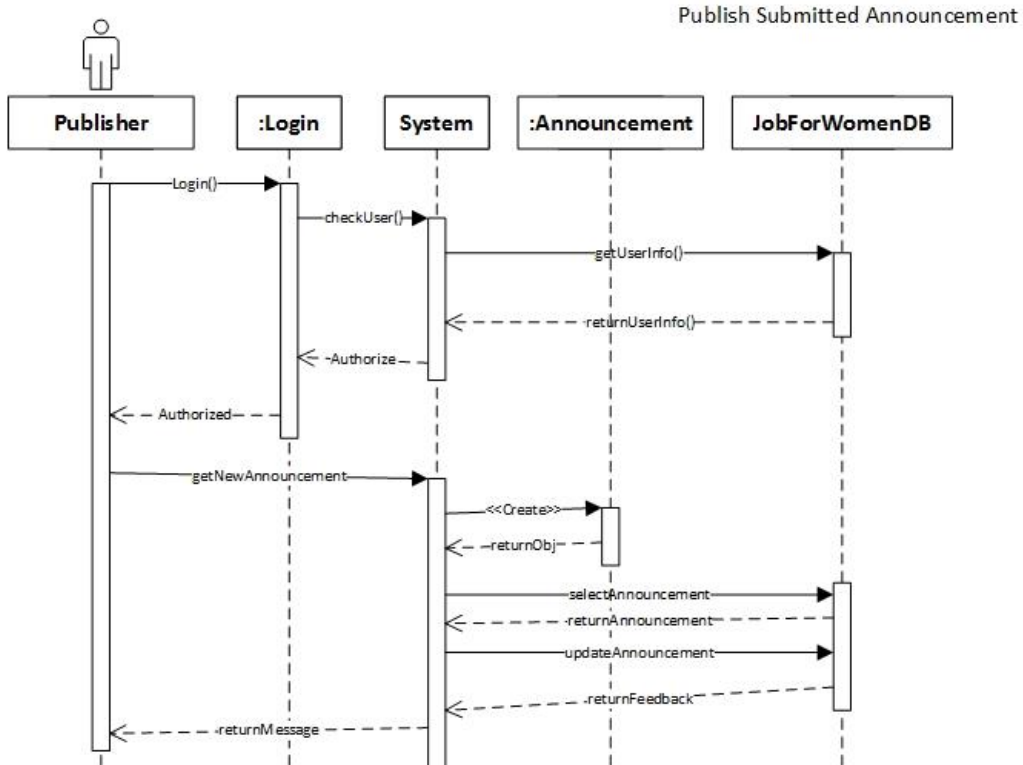


Figure 12: Publish Submitted Announcement

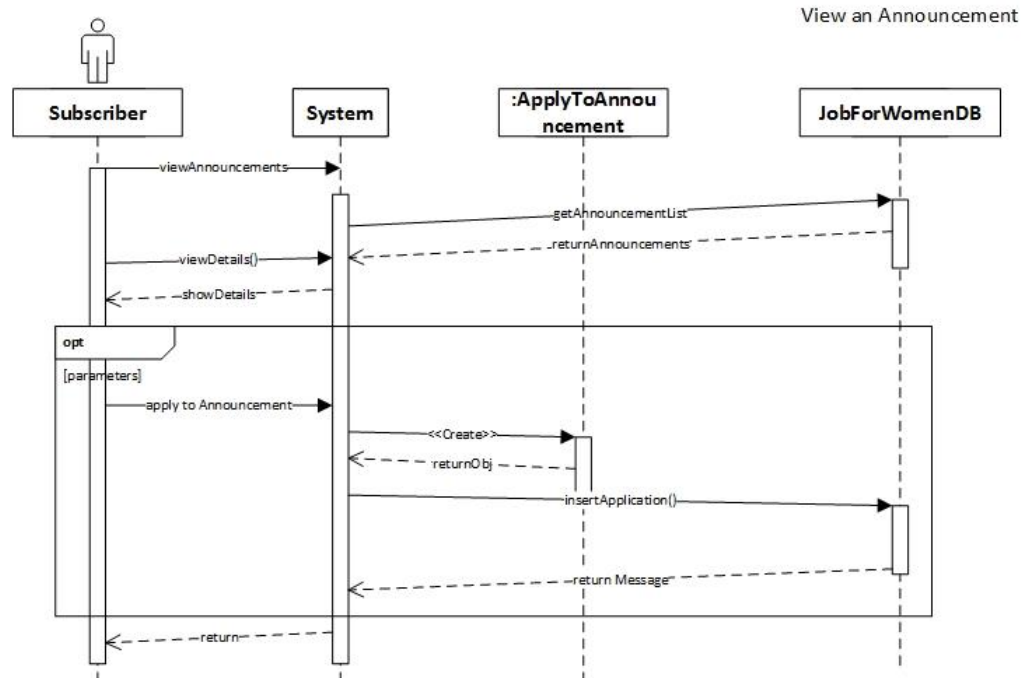


Figure 13: View an Announcement

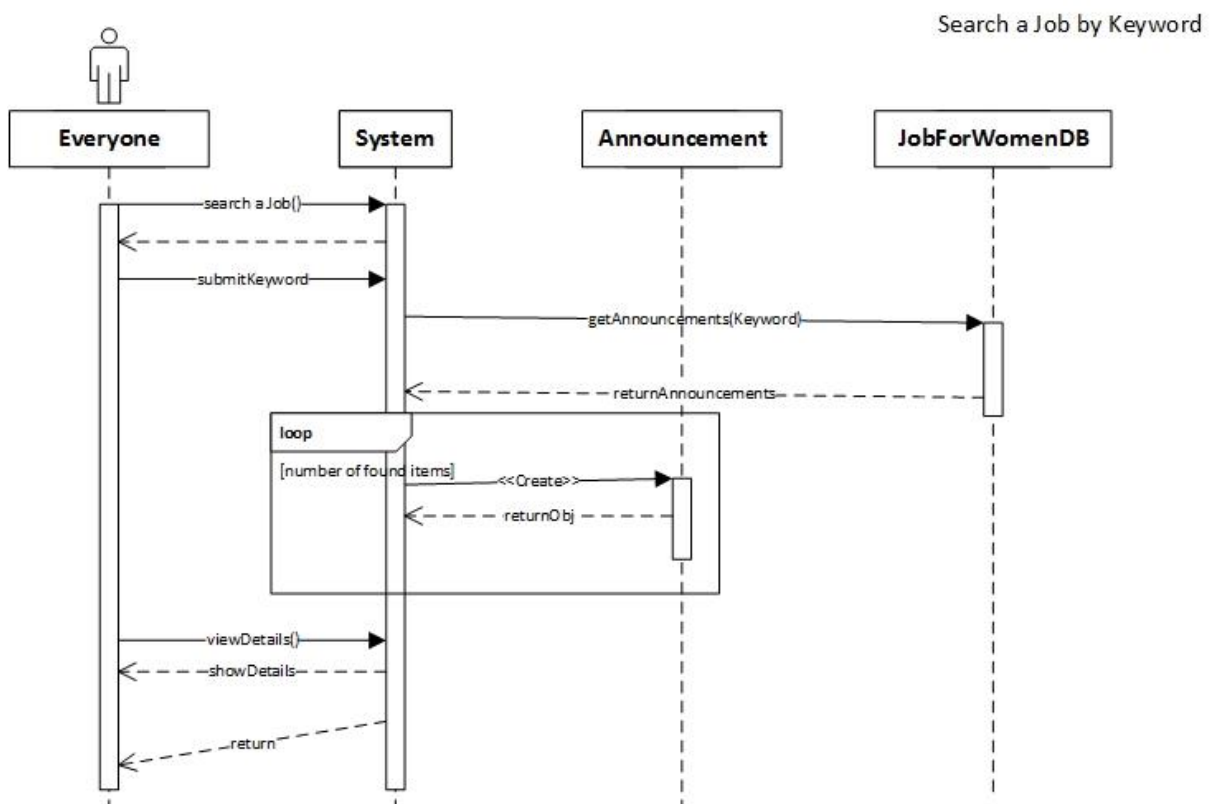


Figure 14: Search a Job by Keyword

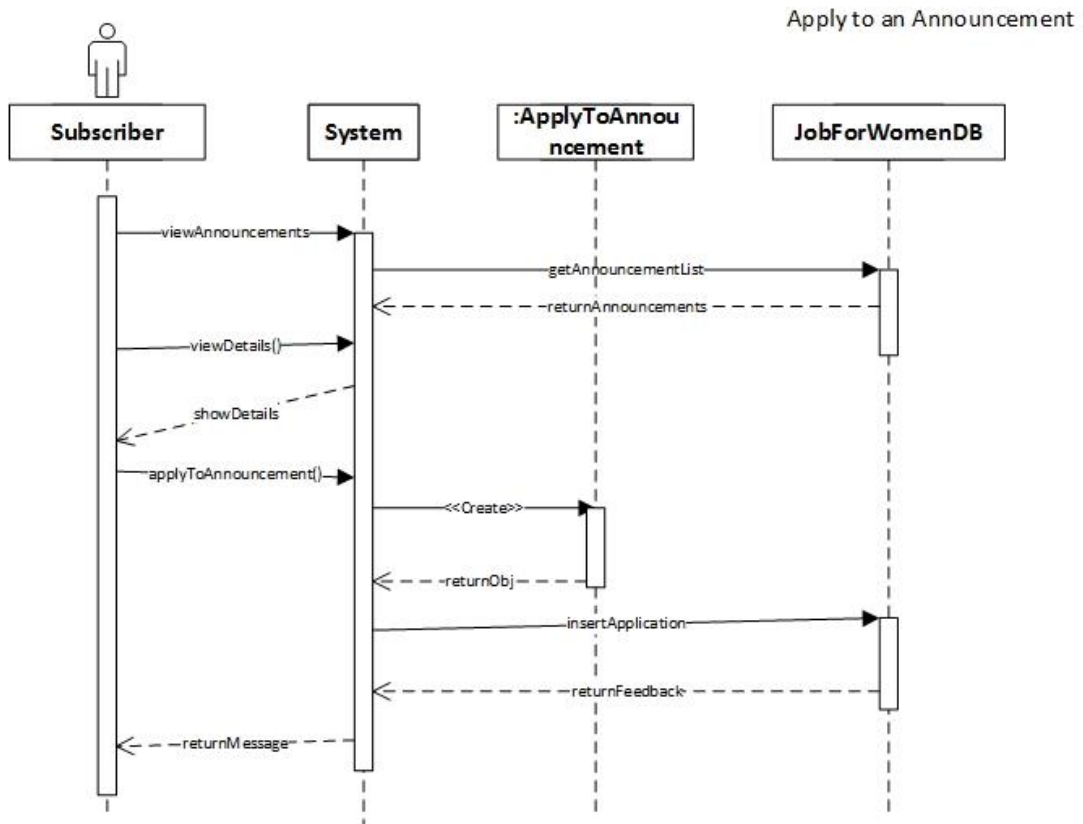


Figure 15: Apply to an Announcement

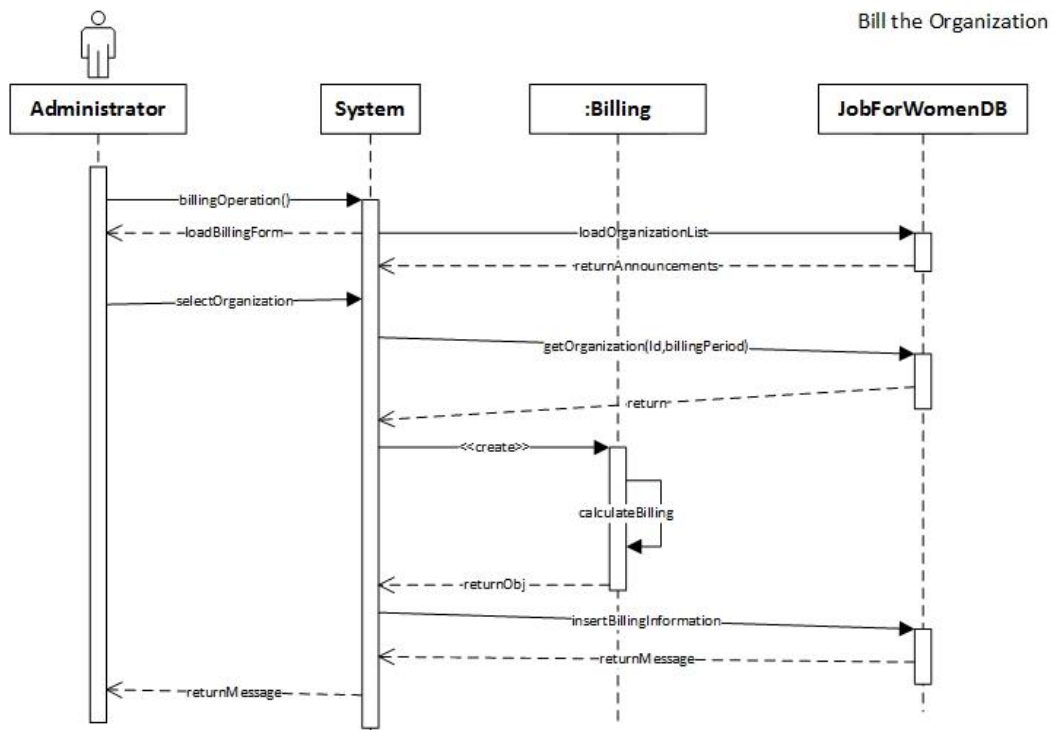


Figure 16: Bill the Organization

2.5 Entity-Relationship Diagram:

An entity–relationship model (ER model for short) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.

In software engineering, an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure which can be implemented in a database, typically a relational database.

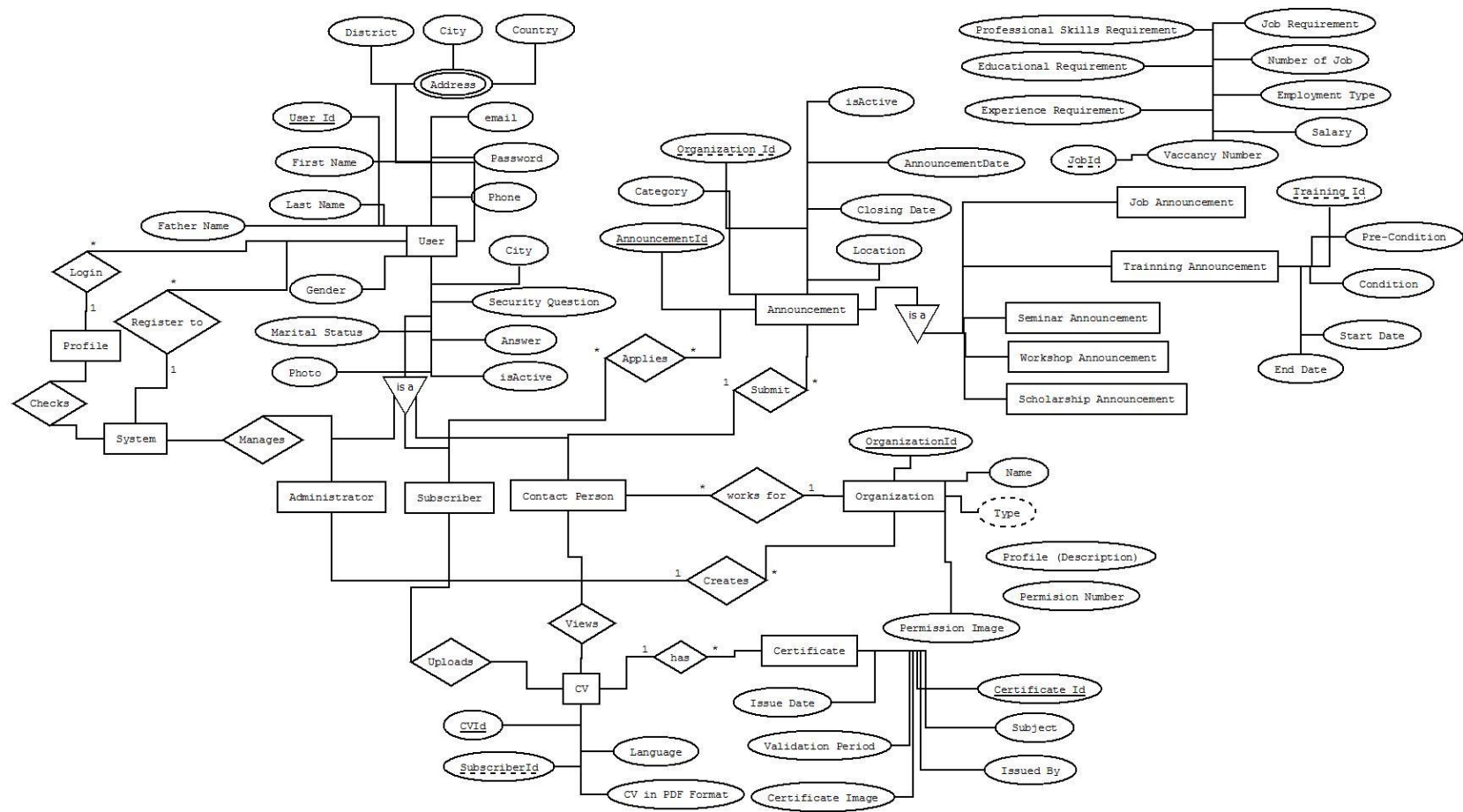


Figure 17: Entity-Relationship (ER) Diagram

Database Diagram

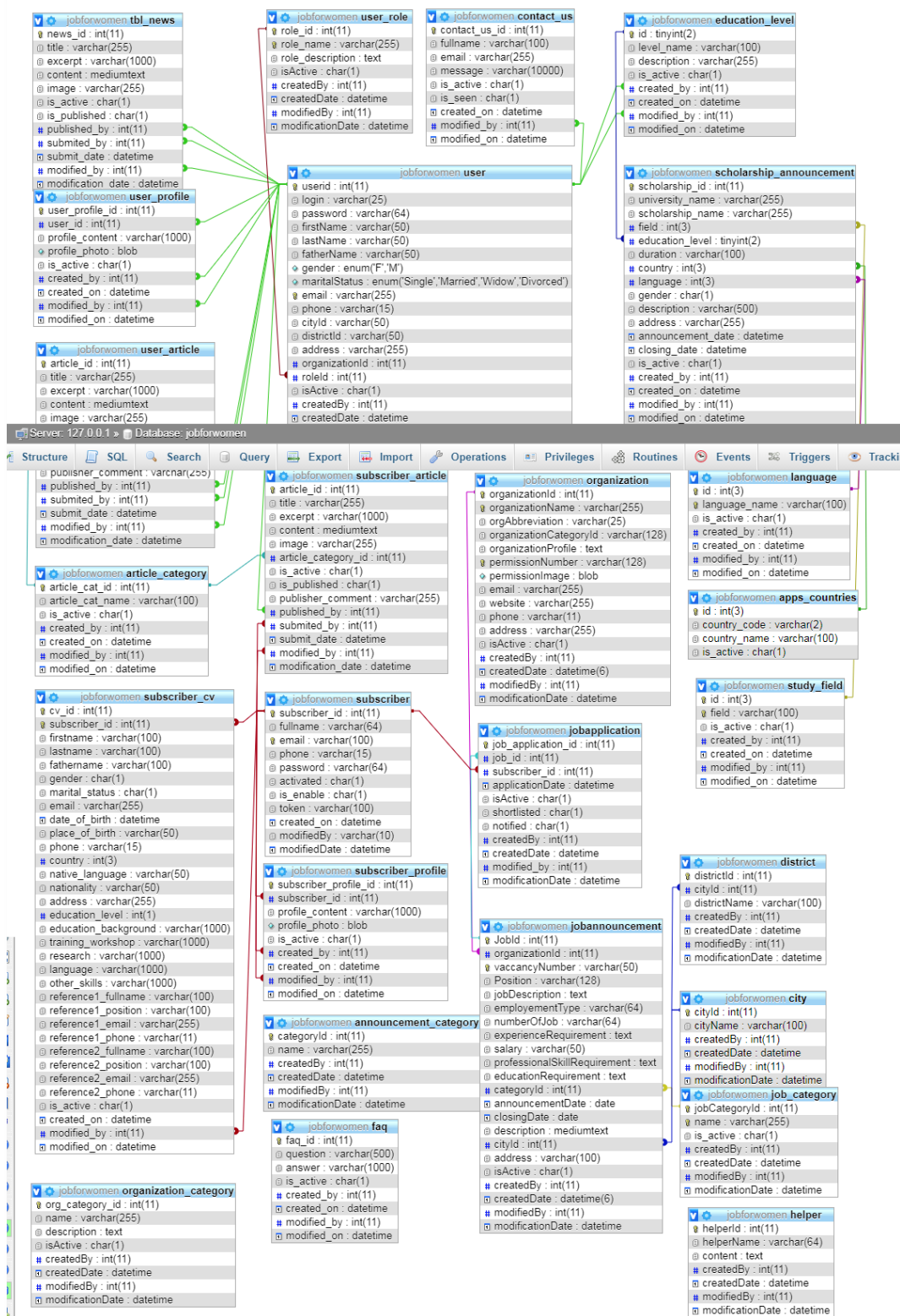


Figure 18: Database Diagram for Job for Women Web Application

Chapter 3

In this chapter we are going to provide implementation methods which are used to prepare this web application.

3.1 System Implementation

To implement system as a web application, we developed the system in windows PC. Since this application is developed by PHP scripting language, we used open source distribution of Apache, MySQL, and PHP environment for MS. Windows, XAMPP. MVC, Model–View–Controller, architectural pattern has been used for design purpose. For the ease of understanding the implementation of this application we are going to describe each building block of application.

3.1.1 Used Languages and Libraries:

- **XAMPP:**

XAMPP is an easy to install Apache distribution containing MariaDB, PHP, and Perl. [\[iii\]](#) XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages.

Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. [\[iii\]](#)

- **PHP:**

PHP, Hypertext Preprocessor, is a server-side scripting language designed for Web development, and also used as a general-purpose programming language. [\[iv\]](#)

- **HTML:**

HTML, Hyper Text Markup Language, is not a programming language; it is a markup language that defines the structure of your content. HTML consists of a series of elements, which you use to enclose, or wrap, different parts of the content to make it appear a certain way, or act a certain way. The enclosing tags can make a word or image hyperlink to somewhere else, can italicize words, and can make font bigger or smaller, and so on. [\[v\]](#)

- **JavaScript:**

JavaScript is the Programming Language for the Web which can update and change HTML and CSS as well as it can calculate, manipulate and validate data. [\[vi\]](#)

- **CSS:**

CSS, Cascading Style Sheets, is the language for describing the presentation of Web pages, including colors, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers.

CSS is independent of HTML and can be used with any XML-based markup language. The separation of HTML from CSS makes it easier to maintain sites, share

style sheets across pages, and tailor pages to different environments. This is referred to as the separation of structure (or: content) from presentation. [\[vii\]](#)

- **jQuery:**

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript. [\[viii\]](#)

- **Bootstrap:**

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with Bootstrap Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery. [\[ix\]](#)

- **AJAX:**

AJAX, Asynchronous JavaScript And XML, is a set of Web development techniques using many Web technologies on the client side to create asynchronous Web applications. With Ajax, Web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behavior of the existing page. By decoupling the data interchange layer from the presentation layer, Ajax allows Web pages, and by extension Web applications, to change content dynamically without the need to reload the entire page.

In practice, modern implementations commonly utilize JSON instead of XML due to the advantages of JSON being native to JavaScript. [\[x\]](#)

- **JSON:**

JSON, JavaScript Object Notation, is a lightweight data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. It is based on a subset of the JavaScript Programming Language.

JSON is a text format that is completely language independent but uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others. These properties make JSON an ideal data-interchange language. [\[xi\]](#)

- **MVC:**

MVC, Model–View–Controller, is an architectural pattern commonly used for developing user interfaces that divides an application into three interconnected parts. This is done to separate internal representations of information from the ways information is presented to and accepted from the user.

The MVC design pattern decouples these major components allowing for efficient code reuse and parallel development. [\[xii\]](#)

3.1.2 Folder Structure

As mentioned, MVC model separates user interface from data manipulation part. According to this design pattern some main folders created to combine related files. As depicted in the below screenshot, there are five folders and 3 files inside of main folder.

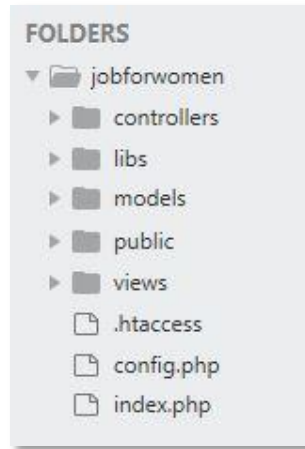


Figure 19: Folder Structure of Source codes

a) Files:

- **.htaccess** : This file is used to redirect any request made through browser to **index.php** file of main folder.
- **config.php**: This file is used to define some constant values which are required while application life cycle.
- **index.php**: This file is the main file which is run if any request to page happen. Inside to this file all necessary files included then one object of “bootstrap” class has been created which runs the pages.

b) Folders:

i. Public:

This folder includes publicly accessible folders and files such as CSS, JS and image folder and their corresponding files.

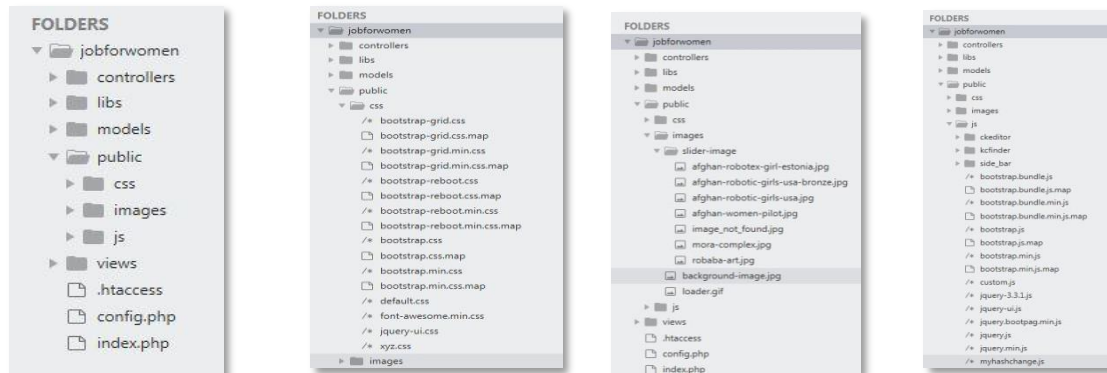


Figure 20: Folder Structure of Source codes -Public Folder

ii. Libs:

The “Libs” folder which stands for “Library”, includes all base file of our system.

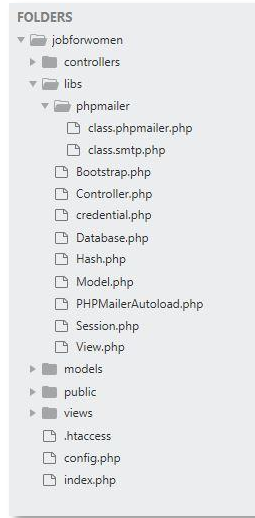


Figure 21: Folder Structure of Source codes-Libs

iii. Models:

This folder contains files which has interaction to database.

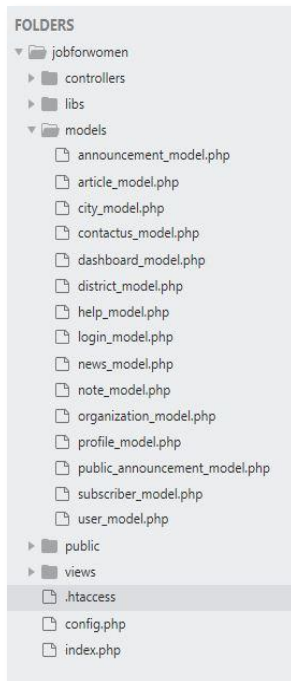


Figure 22: Folder Structure of Source codes - Models

iv. Views:

This folder contains all user interface folders which includes html and its corresponding javascript files display contents for user.



Figure 23: Folder Structure of Source codes - Views

v. Controllers:

This folder contains controller files. Each of these files contains functions (methods) which act as the controller point between corresponding view and model files.

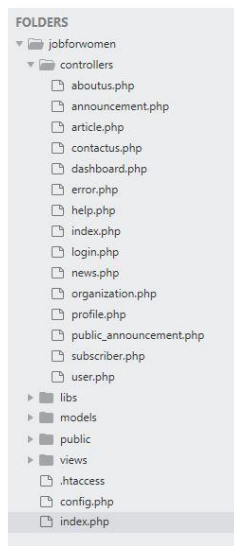


Figure 24: Folder Structure of Source codes - Controllers

3.2 System Installation

To publish this website in localhost environment, follow below mentioned instructions step by step.

1. Install XAMP in target machine.
2. Unzip “*jobforwomen*” folder in your desktop.
3. Copy this folder and paste it into the htdocs folder (C:\xampp\htdocs).
4. Run XAMPP application select “start” button for Apache and Mysql services.
5. Go to your browser such as google chrome, put the “http://localhost/phpmyadmin/” in URL section and press enter.
6. Click the “Databases” tab and in the *Create database* section write your database name as “*jobforwomen*” and select collation type as “*utf8mb4_unicode_ci*” then click “Create” button.



Figure 25: Databases tab in phpMyAdmin

7. Click the “import” tab, “importing into current server” page will be loaded.



Figure 26: Import tab in phpMyAdmin

Job for Women

"easiest way to be recruit"

Job for Women

- Home
- Jobs
- Scholarships
- Trainings
- Workshops
- Seminars
- Events
- Articles
- News
- About Us
- Contact Us

Sign Up

Full Name

Full Name

Email *

Email Address

Phone *

Phone

Password

Password

Password Confirm

Password Confirm

I have read and accept [Terms and Conditions](#)

Sign Up

Figure 28: Subscriber signup

Job for Women

"easiest way to be recruit"

Job for Women

- Home
- Jobs
- Scholarships
- Trainings
- Workshops
- Seminars
- Events
- Articles
- News
- About Us
- Contact Us

System Users Login

Login

Login Name

Password

Password

Login

Figure 29: System Users' login

Job for Women
"easiest way to be recruit"
 Dear Baseera Ruin You are logged in to our system.To logout click Logout

Job for Women

- Home
- Users
- Organizations
 - Create Organization
 - List Organization
 - Search Organization
 - Create Contact Person
 - List Contact Person
- Jobs
- Scholarships
- Trainings

Add New Organization

Organization Name *

Organization Abbreviation *

Organization Type *

Permission Number *

Organization Profile

Email *

Phone *

Figure 30: Add new organization account

Job for Women
"easiest way to be recruit"
 Dear Baseera Ruin You are logged in to our system.To logout click Logout

Job for Women

- Home
- Users
- Organizations
- Jobs
- Scholarships
- Trainings
- Workshops
- Seminars
- Events
- Subscribers

Add New Contact Person

Organization *

Login Name *

Password Confirm

First Name

Last Name

Father Name *

Gender ☐ Female ☐ Male

Marital Status

Figure 31: Add new contact person

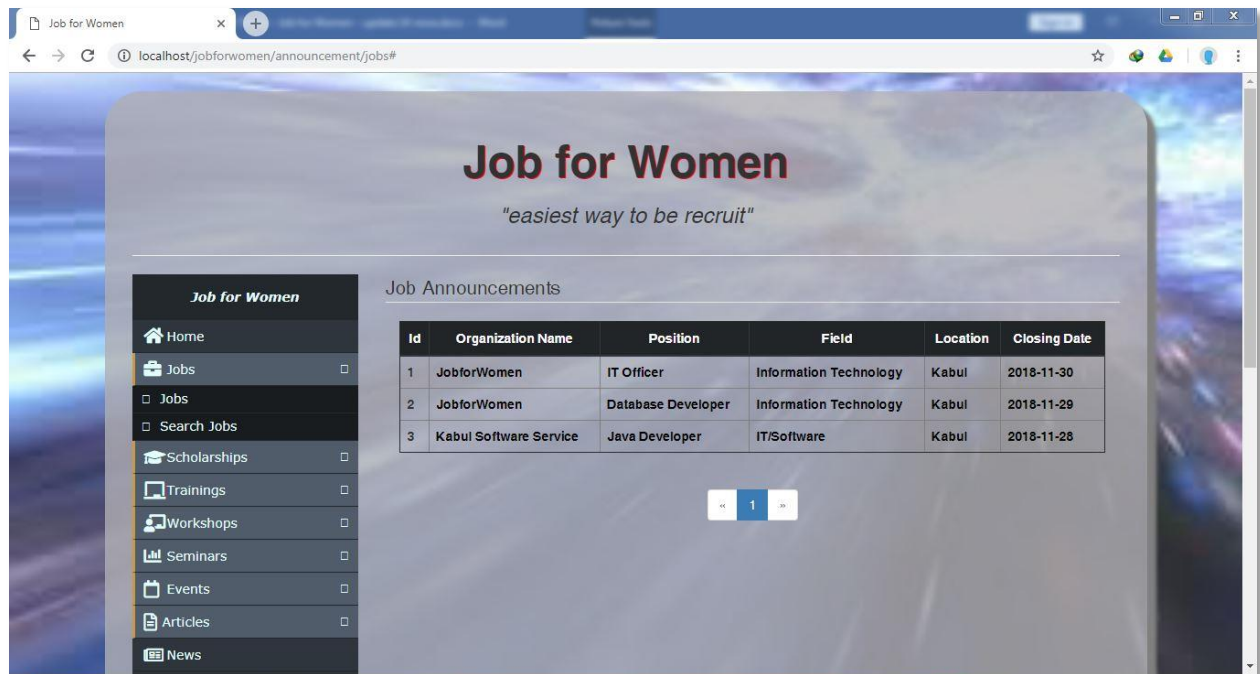


Figure 32: List of Announced Jobs

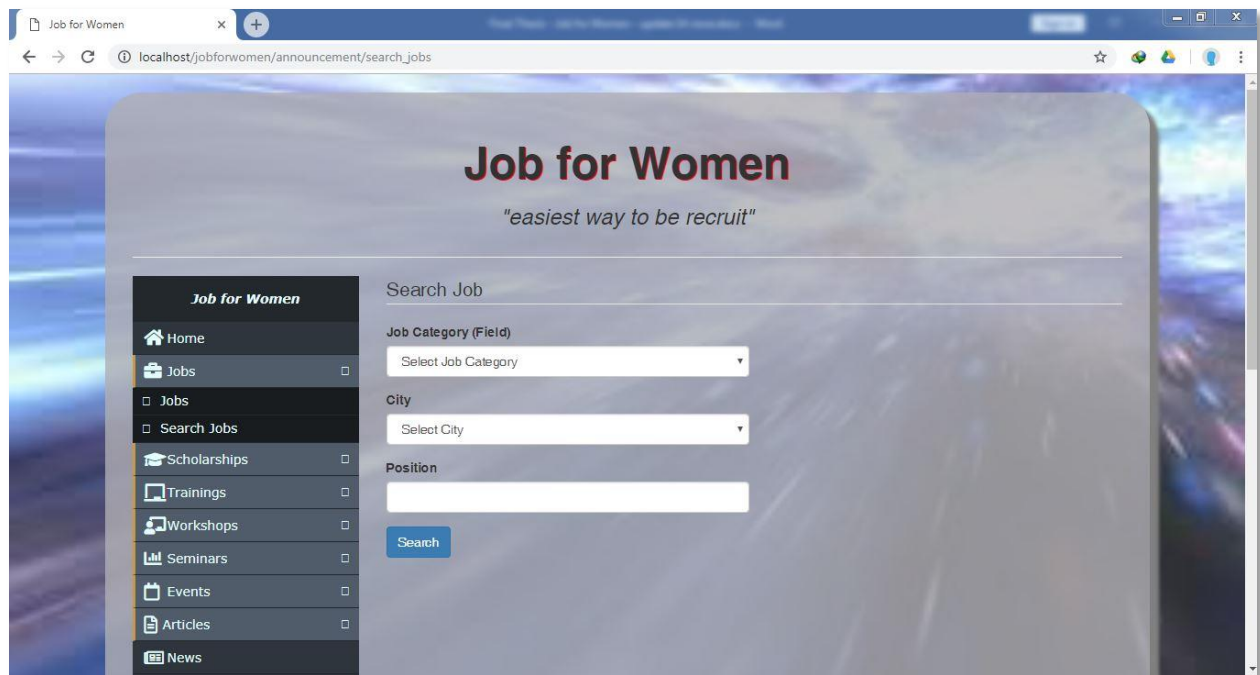


Figure 33: Search particular job

Conclusion:

As we have already mentioned in previous sections, we have searched and visited some poor people especially women who are not able to find a suitable jobs or women who cannot get awareness's to participate to education programs. After that we have decided to prepare this project as our final project for a hypothetical organization which acts as a bridge of coordination between organizations and women.

We believe that each reality was just an idea in the past therefore we hope that this project will be implemented and appeared in real life to provide opportunities for Afghan Women.

References:

- i. https://en.wikipedia.org/wiki/Unified_Modeling_Language
- ii. <https://www.apachefriends.org/download.html>
- iii. <https://en.wikipedia.org/wiki/XAMPP>
- iv. <https://en.wikipedia.org/wiki/PHP>
- v. https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/HTML_basics
- vi. https://www.w3schools.com/whatis/whatis_js.asp
- vii. <https://www.w3.org/standards/webdesign/htmlcss>
- viii. <https://jquery.com/>
- ix. <http://getbootstrap.com/>
- x. [https://en.wikipedia.org/wiki/Ajax_\(programming\)](https://en.wikipedia.org/wiki/Ajax_(programming))
- xi. <https://www.json.org/>
- xii. <https://en.wikipedia.org/wiki/Model%E2%80%93view%E2%80%93controller>