



# **Daffodil International University**

Department of Software Engineering, FSIT

SWE-431 Project / Thesis

Project Documentation

Online Part Time Job Portal

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## **Declaration**

I hereby declare that, this project has been done by me under the supervision of **Mr. Iftekharul Alam Efat**, senior lecturer department of Software Engineering, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere.

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## Acknowledgement

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## **Chapter 1: Introduction**

## 1.1. Project Overview

In this present era, in our country the people are so increasing that the jobs for them are now decreasing. The companies want the part time people for in their short time job. At that time, it becomes difficult to find the people who are best enough to be hired. Companies want no job no payment. And jobseeker does not like unemployment & search suitable job. Now day's jobseeker like freelancing. Not to do depending job.

This project work as media for Employer & Jobseeker about the recruitment process which is done online. The recruitment process here is handled by the system. This project will allow the jobseeker to apply for a job to the company for interested vacancy which would be available at the company. The jobseeker will be having the account after registration. This project helps to connect to employer & jobseeker to find their perfect destination.

## 1.2. Project Purpose

The main purpose of this project named "Part Time Job Portal" is to make an automation system which might be helpful for millions of users who are unemployed & who are sufferer for assigned employee from different perspective by solving the jobless problems. So that's why I am going to develop such a project.

### 1.2.1. Background

Suddenly I think that, in our country we have lots of jobless people. But the other side there is not much work due to lack of manpower. That's the big problem for our country's people. Jobseeker cannot find their proper job. Employer also cannot found their best candidate for vacancy. Thousands of people are being suffering, but there is not any solution. So, considering that, we have brainstormed and thinking that our problem is going to solve their problems.

### 1.2.2. Benefits & Beneficiaries

Our system would be beneficial for some point of view. Now, I am mentioning those below:

- My system helps the jobless people for search a job
- It helps Employer for find out best candidate for their vacancy
- It would be helpful for that people who does not want to do more than the same job
- It will help them who loves to do freelancing
- It helpful that Employer who need part timer employee for specific work
- It will help them who like to do work for event
- It will help those who are not getting the job according to qualifications
- My system is a medium for coordinating qualified employees and employers
- It's an easiest medium for find job or search employee
- MY system will make a huge contribution to remove the country's unemployment

### 1.2.3. Goals

The main goals of my project are to develop a desktop application. As more than 70% of people are using internet, so my targeting to implement my system for internet base web application. My proposed systems are four stakeholders.

### 1.3. Stakeholders

There are four types of stakeholders in our system Such as:

- Employer
- Jobseeker
- General user

Now, I will write a brief description about stakeholders.

**Employer:** Employer who need to hair employee for specific work. It's very easy to find out employee bye our system. Employer can easily select employee bye search & visit employee profile, previous job history or post job for vacancy. Employer can download applicant resume, after finishing job employer can give rating employee for his work. Suppose an employer need 5 employees for 10 days for an event he can easily hair necessary employee by posting or visiting employee profile.

**Jobseeker:** Jobless people who need job specially who like freelancing or part time job. It's a very comfortable medium for find a job. Jobseeker creates a profile in our system upload his resume. Jobseeker applies against posted job likely or employer picked up. Jobseeker able to give rating employer after finishing job for employer behavior or payment. The most impotent after finishing job history are added automatically for helpful to next job.

**General user:** General user mean non-registers user. Non-register can visit our web side. See post job or jobseeker list & profile. They can easily create an account in our system & make a profile for preferable job.

### 1.4. Proposed System Model (block diagram)

Before going to develop a system, it is very important to have a system model. We have already prepared a system model. This model will clarify our proposed system in brief.

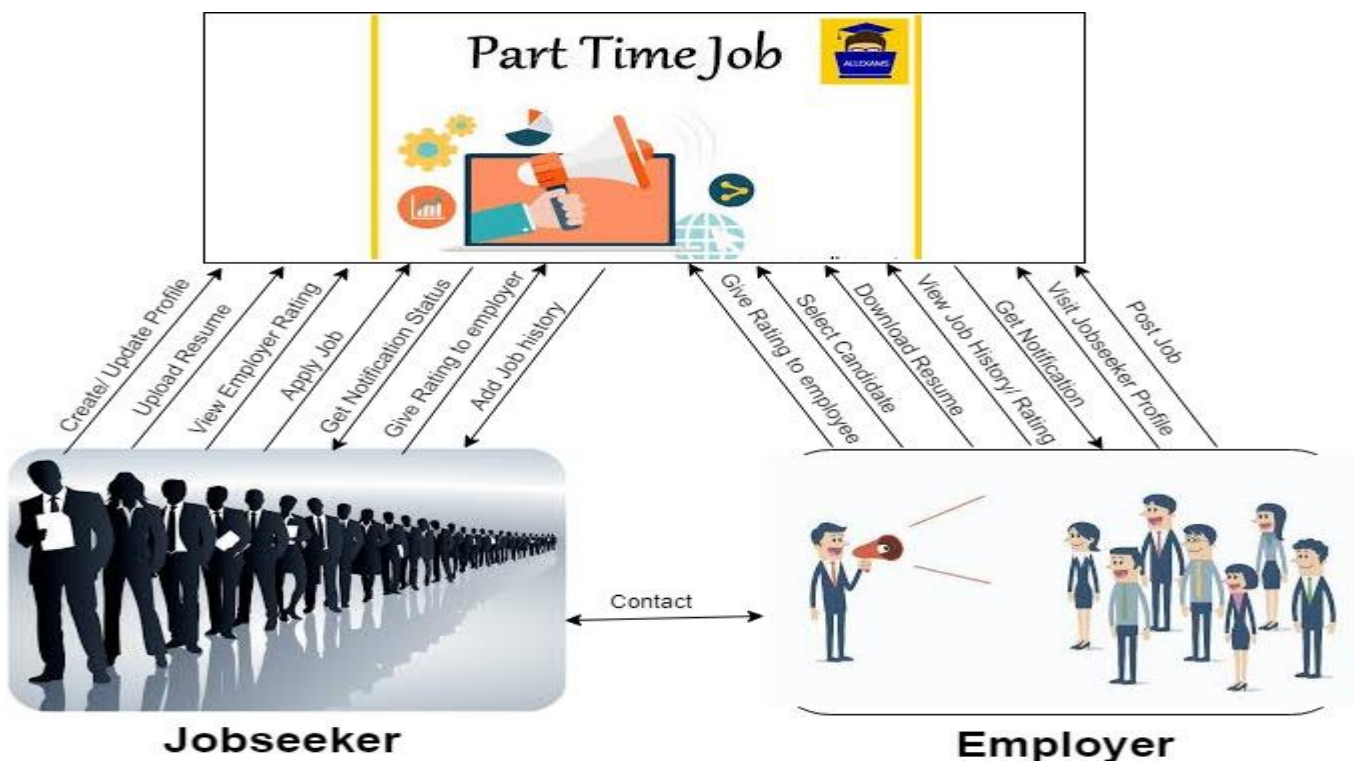


Figure 1.1: Proposed system model

## 1.1. Project Schedule

I need to prepare a scheduling plan to complete the project on time. It also refers to make communication with what task need to get done within timeframe.

### 1.1.1. Gantt chart

Gantt chart is mainly a production control tool. It remained us to complete my assigned tasks within a certain period of time. For developing software, it is mostly used. Now I will show a Gantt chart for my project.

Activities		W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10	W 11	W 12	W 13	W 14
<b>Planning</b>	Ideas														
	Problem Definition														
	Proposal Panning														
<b>Requirements</b>	Requirement Specification														
	Requirement Analysis														
<b>QA-1</b>	Quality Assurance														
<b>System design</b>	Design Specification														
	Interface Design														
	Database Design														
<b>Implementation</b>	Development System Modules														
	Development Functionality														
	Integrate System Modules														
<b>QA-2</b>	Test Cases														
<b>Testing</b>	Unit Testing														
	Black Box Testing														
<b>Delivery</b>	Software Release														
<b>Scheduled Time</b>															
<b>Buffered Time</b>															

Figure 1.2: Gantt chart

### 1.1.2. Release Plan/Milestone

The release plan or milestones are given below:

<b>Activities</b>	<b>Duration in week</b>	<b>Total week</b>
<b>Brainstorming</b>	Week 1	1
<b>Problem identification</b>	Week 1, Week 2	2
<b>Requirement specification</b>	Week 2	1
<b>Requirement analysis</b>	Week 2	1
<b>Design specification</b>	Week 4	1
<b>Interface design</b>	Week 4	1
<b>Database design</b>	Week 5	1
<b>Development System modules</b>	Week 5, Week 6, Week 7, Week 8	4
<b>Integrate System Modules</b>	Week 6, Week 7, Week 8	3
<b>Test case</b>	Week 2, Week 7, Week 8, Week 9, Week 10	5
<b>Unit testing</b>	Week 11, Week 12	2
<b>Black-box testing</b>	Week 13, Week 14, Week 15	3
<b>Resolve Issues</b>	Week 15	1
<b>Software release</b>	Week 16	1

## **Chapter 2: Software Requirement Specification**



## 2.1. Functional Requirements

Functional requirements are those which are related to the technical functionality of the system. In software engineering and systems engineering, a functional requirement defines a function of a system or its component, where a function is described as a specification of behavior between outputs and inputs.

### 2.1.1 Sing up Employer

<b>FR 01</b>	<b>Employer can Registration in this system</b>		
<b>Description</b>	When User go registration. There are two types of category of registration. One of Employer registration. If user select registration category is employer user give company name, address, phone, company logo etc.		
<b>Stakeholders</b>	Employer	<b>Priority</b>	High

### 2.1.2 Sing up Jobseeker

<b>FR 02</b>	<b>Jobseeker can Registration in this system</b>		
<b>Description</b>	The registration category is jobseeker registration. When user select registration, category is Jobseeker. User given his personal necessary information like user name, address, phone & upload his resume		
<b>Stakeholders</b>	Jobseeker	<b>Priority</b>	High

### 2.1.3 Log in

<b>FR 03</b>	<b>Register user can Log in to our system</b>		
<b>Description</b>	User will log in the system using user name, password & system will verify information with database. If user name, password incorrect user wouldn't log in this system.		
<b>Stakeholders</b>	Employer, Jobseeker.	<b>Priority</b>	High

### 2.1.4 Post job

<b>FR 04</b>	<b>Employer can Post job to our system</b>		
<b>Description</b>	Employer will post a job in this system given required information for hire employee. And the post is view in home page of the system.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.5 View Post

<b>FR 05</b>	<b>User can View Job Post to our system</b>		
<b>Description</b>	Jobseeker will see job post & post details where employers post in this system.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.6 Apply Job

<b>FR 06</b>	<b>Jobseeker can Apply job</b>		
<b>Description</b>	Jobseeker will apply job. Employer who posts job offer & Jobseeker will apply this job. Before apply job, Jobseeker must log in this system.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.7 Pick up Employee

<b>FR 07</b>	<b>Employer can Picked up employee in our system</b>		
<b>Description</b>	Employer can hair or pick up employee who already have a profile in this system and upload there resume without post. Employer will visit jobseeker profile & see previous job history, rating, etc.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Medium

### 2.1.8 Manage job

<b>FR 08</b>	<b>Employer can Manage Job Post</b>		
<b>Description</b>	Employer can manage job already they posted in the system. Like Employer will manage edit, delete post select candidate, accept, reject application, see applicant profile, download resume, etc.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.9 Search Job & Employee

<b>FR 09</b>	<b>Jobseeker can Search Job</b>		
<b>Description</b>	Jobseeker will search job, search by category in home page. Employer can search employee for vacancy in home page.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Low

### 2.1.10 Upload Resume

<b>FR 10</b>	<b>Jobseeker can Upload their Resume</b>		
<b>Description</b>	Jobseeker will upload his resume in this system. When Jobseeker signup jobseeker can upload his resume for find a better job.		
<b>Stakeholders</b>	Employer, Employee	<b>Priority</b>	Medium

### 2.1.11 Download Resume

<b>FR 11</b>	<b>Employer can Download Resume</b>		
<b>Description</b>	Employer will able to download applicant resume. When jobseeker apply against post. Then employer can download applicant resume.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Medium

### 2.1.12 Edit Profile

<b>FR 12</b>	<b>Jobseeker can Edit Profile</b>		
<b>Description</b>	Jobseeker able to edit or update their profile. Like name, address, phone number, update resume. Jobseeker can add or edit his education qualification.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Medium

### 2.1.13 Rating

<b>FR 13</b>	<b>Employer &amp; Employee can Give Rating</b>		
<b>Description</b>	After finish the job Employer & Employee give rating each other based on work experience, behavior, payment etc. Rating star shown jobseeker & employer profile.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.14 Job History

<b>FR 14</b>	<b>Add &amp; View Jobseeker Job history</b>		
<b>Description</b>	When a Jobseeker work under an employer. After finishing job employee job history add his profile automatically. Employer can see jobseeker previous job history by visiting jobseeker profile.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	High

### 2.1.15 Notification

<b>FR 15</b>	<b>Notification</b>		
<b>Description</b>	Employer gets notification when jobseeker applies against their posted job. Jobseeker got a notification about their application like application send, accept, reject.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Medium

### 2.1.16 Contact

<b>FR 16</b>	<b>Contact</b>		
<b>Description</b>	Employer contacts with jobseeker who are apply for job or pick up require candidate who already create their account. And Jobseeker contact with employer after got notification selected candidate.		
<b>Stakeholders</b>	Employer, Employee	<b>Priority</b>	Low

## 2.2. Data Requirements

Data requirements provide scope and level of detail to achieve the model objectives. An overall process flow can gather more detailed information. A process flow helps to build a model building process. We focus some of main points. Such as:

- The type of entity and their attributes
- Types of resources
- Routing decision
- Quantity of data
- What activity

## 2.3. Performance Requirements

It is very important to maintain performance of any software system. To ensure performance, we need to maintain some steps. Now, I will explain some perspective by which we are going to enhance the performance of our project.

### 2.3.1. Speed and Latency Requirements

Speed and latency requirements must be ensured while retrieving data from the cloud server.

<b>SLR 01</b>	<b>Search result must be faster.</b>		
<b>Description</b>	When jobseeker search a job or employer search an employee, then the search result must show within seconds.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	Medium

### 2.3.2. Precision or Accuracy Requirements

A result that is to be shown to the end user is needed to be accurate. Because wrong information destroyed a company or a career.

<b>PAR 01</b>	<b>Output result must be accurate</b>		
<b>Description</b>	When employer post a job for vacancy, accept/ reject applicant, rating, jobseeker profile information, job history must be according to the input value given by user.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	High

### 2.3.3. Capacity Requirements

The developed system by us must be capable to handle user data, provide accurate information, handling database, manage http request etc.

<b>CR 01</b>	<b>Capacity Requirements</b>		
<b>Description</b>	The system needs to handle thousands of data every moment. Store much data every moment.		
<b>Stakeholders</b>	Admin, Employer, Jobseeker,	<b>Priority</b>	low

## 2.4. Dependability Requirements

The term dependability is measured based on four dimensions. Such as:

- Availability
- Reliability
- Safety
- Security

### 2.4.1. Reliability & Availability Requirements

Now, I will discuss requirements which are related to reliability and availability.

<b>RAR 01</b>	<b>Reliability &amp; Availability Requirements</b>		
<b>Description</b>	The system must be available on 24 X 7. <ul style="list-style-type: none"><li>• Our system must be available all day long, every day in a week</li><li>• The system must be updated regularly</li><li>• System must be malware free</li></ul>		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	Low

### 2.4.2. Robustness or Fault-Tolerance Requirements

To ensure robustness and fault-tolerance facilities to the end users, it is urgent to ensure 0% crash. Moreover, it must show accurate results.

<b>RFTR 01</b>	<b>Robustness or Fault-Tolerance Requirements</b>		
<b>Description</b>	Thousands of users might hit our system at a time. All their requests must be handled without any fault & quick.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	Medium

### 2.4.3. Safety-Critical Requirements

There are no safety-critical requirements in our project.

## 2.5. Maintainability and Supportability Requirements

It is very important to provide after service or support to the end user

### 2.5.1. Maintenance Requirements

<b>MR 01</b>	<b>System maintain user information</b>		
<b>Description</b>	It is very important to maintain to update user information like user profile, post, application request etc.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	Low

### 2.5.2. Supportability Requirements

Our system has all of the below requirements related supportability.

- Testability
- Adaptability

- Maintainability
- Compatibility
- Configurability
- Serviceability
- Install ability

### 2.5.3. Adaptability Requirements

There are no adaptability requirements in our system software

### 2.5.4. Scalability or Extensibility Requirements

There are no adaptability requirements in our system software

## 2.6. Security Requirements

Making software security as this requirement is very important. Software security requirements almost like its functional requirement. Some security related requirements are given below:

- Log in by registered users
- Get access according to logged in user
- Handling encrypted passwords

### 2.6.1. Access Requirements

For accessing my system, there face some authentication and authorization techniques. Now I will provide an explanation below.

<b>AR 01</b>	<b>Application provides security mechanism.</b>		
<b>Description</b>	Every module is designed in such a way that it only gives access to the authorized and authenticated users.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	High

### 2.6.2. Integrity Requirements

My system ensures that all data Integrity & would never be exposed to the malicious modification or accidental destruction. For that reason, we will store our user passwords in central database.

### 2.6.3. Privacy Requirements

To ensure user privacy, the central database should be protected by the anonymous. Users are permitted to get access to those data which user are authorize & pass by login system.

## 2.7. Usability and Human-Interaction Requirements

I take many steps for my system user friendly, easy to usable for the end user

### 2.7.1. Ease of Use Requirements

Our system is easy to use and also easily understandable.

<b>EUR 01</b>	<b>Application must be usable for the end users.</b>		
<b>Description</b>	This system must enough easy for the employer & jobseeker to create new account, login, search job, select candidate, post job, apply job etc.		
<b>Stakeholders</b>	Employer, Jobseeker	<b>Priority</b>	Low

### 2.7.2. Personalization and Internationalization Requirements

There are not any personalization and internationalization requirements of my system. This first version of my application is only be operated by Bangladesh.

### 2.7.3. Understandability and Politeness Requirements

The system needs provide hints to users whether any error occurred or wrong. By reading those errors users can be able to operate the system easily or contract us.

### 2.7.4. Accessibility Requirements

There are no specific accessibility requirements associated to our system yet.

### 2.7.5. User Documentation Requirements

For my project this type of documentation written by the system engineers to make the development life cycle easier.

<b>UDR 01</b>	<b>The system engineer documentation.</b>		
<b>Description</b>	To develop my application named part time job portal firstly I have made a system analysis documentation.		
<b>Stakeholders</b>	System analysts or software developers.	<b>Priority</b>	Low

### 2.7.6. Training Requirements

There are no training requirements for my system

## 2.8. Look and Feel Requirements

For Look and feel requirements this system will needs better user interface to display the end user.

### 2.8.1. Appearance Requirements

Employer, Jobseeker must know which input fields are required and which are not. For that reason, I will use labels for all input fields. Input fields might be text type, radio, checkbox etc.

<b>AR 01</b>	<b>Labels of mandatory fields must be bold.</b>		
<b>Description</b>	The mandatory field's label must be bold and all input fields must have placeholder to make it easier for the users.		
<b>Stakeholders</b>	Employer, Jobseeker, Admin	<b>Priority</b>	Low

### 2.8.2. Style Requirements

This system application must be stylist. For web application like desktop, extensive markup language or php is used. Style makes the system profitable.

<b>SR 01</b>	<b>The appearance must be controllable using php file.</b>		
<b>Description</b>	For desktop application style sheet files are php. So, all style sheets must be controllable by the php file.		
<b>Stakeholders</b>	Software developer.	<b>Priority</b>	Low

## 2.9. Operational and Environmental Requirements

Operational and environmental requirement refers to the capabilities, performance measurements, process measurements of effectiveness, measures of sustainability, measurements of technical performances etc.

### 2.9.1. Expected Physical Environment

There are no expected physical requirements in my system.

### 2.9.2. Requirements for Interfacing with Adjacent Systems

There are no requirements for interfacing with adjacent system for my project.

### 2.9.3. Release Requirements

This project must be release within 15 April 2019.

## 2.10. Legal Requirements

The terms and condition of my application is that, third-party software or person is not allowed to use my data for their business purpose.

### 2.10.1. Compliance Requirements

There are no specific compliance requirements for our system.

### 2.10.2. Standards Requirements

For development this project must follow the software development life cycle (SDLC) standards.



## **Chapter 3: System Analysis**

### 3.1. Use Case Diagram

We have use case diagram. And there are three actors. Each actor plays different role. And those are already indicated to this use case diagram. This diagram will clarify our system in brief.

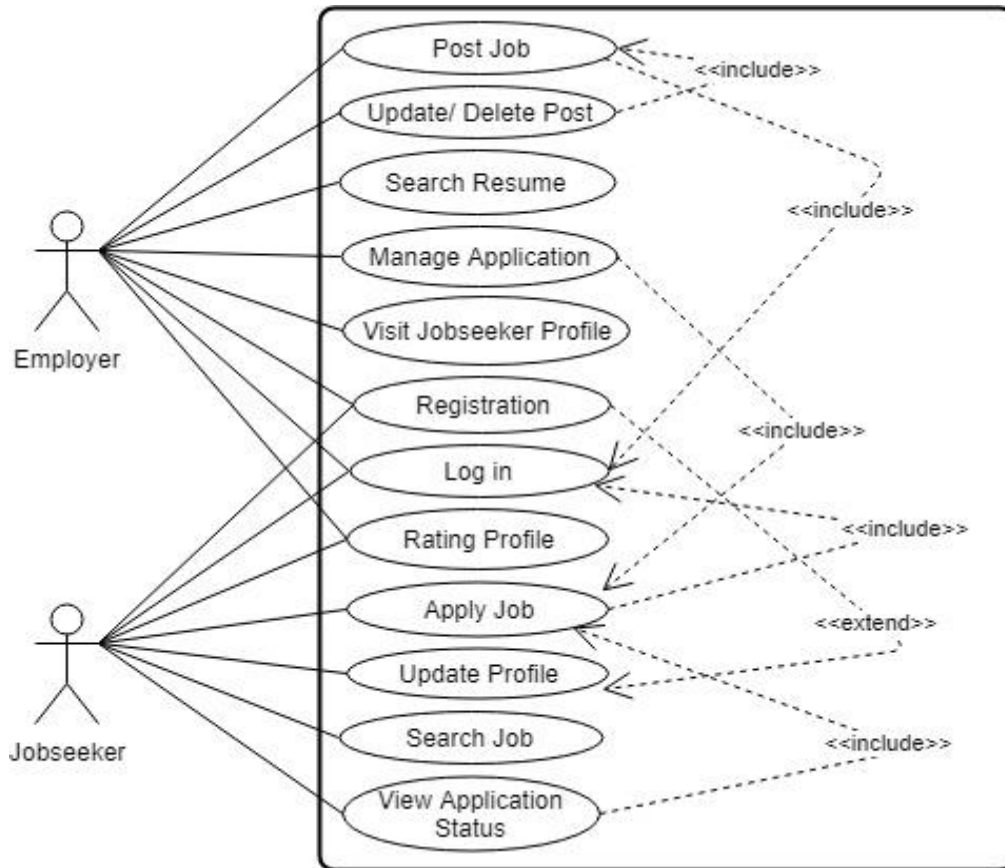


Figure 3.1: Use Case diagram for "Part Time Job Portal"

### 3.2. Use Case Description (for each use case)

#### 3.2.1. Post Job

Use Case Title	Post Job
Goal	Employer post job for hire employee
Pre-Condition	<ul style="list-style-type: none"><li>• User must be authenticated</li><li>• User type must be Employer</li><li>• Employer must provide proper information</li></ul>
Success End Condition	Employer will find best candidate Employee will find best job
Failure End Condition	Employer not found candidate for vacancy.
Primary Actor	Employer
Secondary Actor	Jobseeker
Trigger	Click Profile drop down menu there have post a job option

<b>Description / Main Success Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Employer post job.
	2	Employee see the post details & Apply for job
	3	Employer will get notification who are applied
	4	Employer accept or reject candidate
	5	Jobseeker get notification on his status
<b>Alternative Flow</b>	<b>Step</b>	<b>Branching Action</b>
	1	Employer will be picked up candidate without post.
<b>Quality Requirements</b>	<b>Step</b>	<b>Requirement</b>
	1	Employer get notification within 5 min
	2	Selected employee get notification within 1 hour

### 3.2.2. Update/ Delete Post

<b>Use Case Title</b>	<b>Update/ Delete Post</b>	
<b>Goal</b>	Employer will Update post if correction or delete post for needed.	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>• User must be authenticated</li> <li>• User type must be Employer</li> <li>• Employer must post a job in our system</li> </ul>	
<b>Success End Condition</b>	Employer represent proper information Jobseeker get correct information	
<b>Failure End Condition</b>	Employer will not update his post if he needed Jobseeker will not get correct information.	
<b>Primary Actor</b>	Employer	
<b>Secondary Actor</b>	Jobseeker	
<b>Trigger</b>	There has an update option	
<b>Description / Main Success Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Employer go to my account menu
	2	If need any correction employer click update option
	3	Edit the necessary information in this from to provide
	4	Then chick submit button
	5	If need to delete post click delete option & ok for confirm.
	6	Updated post & view correct information
<b>Alternative Flow</b>	N/A	
	Information replace properly.	

### 3.2.3. Manage Applications

<b>Use Case Title</b>	<b>Manage Applications</b>
<b>Goal</b>	Employer will manage application.
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>• User must be authenticated</li> <li>• User type must be Employer</li> <li>• Employer must post a job in our system</li> <li>• Jobseeker must apply job</li> </ul>
<b>Success End Condition</b>	Employer will see candidate list who are apply & accept or reject application. Employer will find best candidate.
<b>Failure End Condition</b>	Employer cannot able to manage applicant.
<b>Primary Actor</b>	Employer

<b>Secondary Actor</b>	Jobseeker	
<b>Trigger</b>	View Applications menu in drop down menu by clicking profile	
<b>Description / Main Success Scenario</b>	Step	Action
	1	Employer post job
	2	Jobseeker apply against the job posted
	3	Employer see applicant list who are apply
	4	Employer able to visit applicant profile, download applicant resume
	5	Employer able to accept or reject candidate
	6	Employer see application status.
<b>Alternative Flow</b>	N/A	
<b>Quality Requirements</b>	N/A	

#### 3.2.4. Search Job/ Resume

<b>Use Case Title</b>	<b>Search Job/ Resume</b>	
<b>Goal</b>	Jobseeker search a better job & Employer can search Resume	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>• Jobseeker must create a profile in this system</li> <li>• Employer must post job</li> </ul>	
<b>Success End Condition</b>	Jobseeker will find a best job Employer will find best candidate	
<b>Failure End Condition</b>	Jobseeker don't find proper job; Employer don fill up vacancy.	
<b>Primary Actor</b>	Jobseeker	
<b>Secondary Actor</b>	Employer	
<b>Trigger</b>	There has a search box above the post	
<b>Description / Main Success Scenario</b>	Step	Action
	1	Jobseeker create a profile and upload resume
	2	Employer post job.
	3	Employee write job title or select job category in search box
	4	Chick search icon
	5	Jobseeker see the job post what he wants
	6	Employer fined the needed employee profile.
	7	Jobseeker find his best job; Employer find the best employee
<b>Alternative Flow</b>	Step	Branching Action
	1	Search by scroll down
<b>Quality Requirements</b>	N/A	

#### 3.1.1. Visit Jobseeker Profile Details

<b>Use Case Title</b>	<b>Visit Jobseeker Profile Details</b>	
<b>Goal</b>	User able to visit Jobseeker profile	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>• User must visit our web side</li> <li>• Jobseeker must create a profile in this system</li> </ul>	
<b>Success End Condition</b>	Employer visit jobseeker profile & get idea for choice an employee for vacancy	
<b>Failure End Condition</b>	Employer cannot see employee profile details for needed	
<b>Primary Actor</b>	Employer	
<b>Secondary Actor</b>	Employee	

<b>Trigger</b>	Click on Employee profile or name.	
<b>Description / Main Success Scenario</b>	Step	Action
	1	In home page right side on our system shown seeker list
	2	User can visit jobseeker profile
	3	Below the profile user can see jobseeker details like previous job history, rating, accomplishment, personal & contact information.
	4	Or when jobseeker apply against a post employer able to visit that employee profile by click on employee name
	5	Employer can see jobseeker details
<b>Alternative Flow</b>	Step	Branching Action
	1	By download employee resume
<b>Quality Requirements</b>	N/A	

### 3.1.2. Apply Job

<b>Use Case Title</b>	<b>Apply Job</b>	
<b>Goal</b>	Jobseeker apply for get a better job	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>Jobseeker must be authenticated</li> <li>Employer must post a job</li> </ul>	
<b>Success End Condition</b>	Employee will get a best job Employer will find best candidate	
<b>Failure End Condition</b>	Employee don't find any job	
<b>Primary Actor</b>	Jobseeker	
<b>Secondary Actor</b>	Employer	
<b>Trigger</b>	Call to action button name "Apply"	
<b>Description / Main Success Scenario</b>	Step	Action
	1	Employer post job.
	2	Jobseeker see the post details
	3	Jobseeker apply for job
	4	Employer will get notification who are applied
	5	Employer accept or reject candidate
	6	Jobseeker get notification on his status
	7	Jobseeker get best job
<b>Alternative Flow</b>	Step	Branching Action
	1	Employer will be picked up candidate without post.
<b>Quality Requirements</b>	Step	Requirement
	1	Notification work properly

### 3.1.3. Rating

<b>Use Case Title</b>	<b>Rating</b>	
<b>Goal</b>	Employer & Employee give rating each other	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>User must be authenticated</li> <li>User type must be Employer or Employee</li> <li>Jobseeker apply job &amp; must accepted by employer</li> </ul>	
<b>Success End Condition</b>	Employee & Employer get the feedback of his work, behavior Next time other employee easily finds his best job, To help Employer find their best candidate	
<b>Failure End Condition</b>	Employee & Employer cannot get the feedback Don't get help to find job & candidate	

<b>Primary Actor</b>	Employer, Employee	
<b>Secondary Actor</b>	Admin	
<b>Trigger</b>	There has Star for rating	
<b>Description / Main Success Scenario</b>	Step	Action
	1	Employer post job
	2	Employee apply against the job posted
	3	Employer accept application
	4	Employee work according to contract
	5	After finishing the job employer give rating to employee
	6	Employee also give rating to employer for his behavior, payment, etc.
<b>Alternative Flow</b>	N/A	
<b>Quality Requirements</b>	N/A	

#### 3.1.4. Update Profile Details

<b>Use Case Title</b>	<b>Update Jobseeker Profile</b>	
<b>Goal</b>	Jobseeker can update his profile details	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>Jobseeker must log in this system</li> </ul>	
<b>Success End Condition</b>	Jobseeker represent updated information Employer get proper information	
<b>Failure End Condition</b>	Jobseeker Profile shown backdated Employer will not get proper information.	
<b>Primary Actor</b>	Jobseeker	
<b>Secondary Actor</b>	Employer	
<b>Trigger</b>	There have update option on My Profile	
<b>Description / Main Success Scenario</b>	Step	Action
	1	Jobseeker go to My Profile
	2	Click update button like upload profile picture, update information, add/ update accomplishment
	3	Edit or fill up the necessary information
	4	Then Submit
	5	Updated Profile are shown
<b>Alternative Flow</b>	N/A	
<b>Quality Requirements</b>	N/A	

#### 3.1.5. View Status

<b>Use Case Title</b>	<b>View Status</b>	
<b>Goal</b>	Jobseeker can see his application status	
<b>Pre-Condition</b>	<ul style="list-style-type: none"> <li>Jobseeker must be authenticated</li> <li>Jobseeker must apply for job</li> </ul>	
<b>Success End Condition</b>	Jobseeker will see his application send, accept or reject status to help for make decision	
<b>Failure End Condition</b>	Jobseeker are confused about application	
<b>Primary Actor</b>	Employer, Jobseeker	
<b>Secondary Actor</b>		
<b>Trigger</b>	Go "Job Applied" menu there have status bar	
<b>Description / Main Success</b>	Step	Action
	1	Employer post job

<b>Scenario</b>	2	Jobseeker apply against the job posted
	3	Employer accept/ reject candidate or not
	4	Application send or Accepted/ Rejected information are shown at status bar
	5	Jobseeker get a clear message
<b>Alternative Flow</b>	N/A	
<b>Quality Requirements</b>	N/A	

### 3.3. Activity Diagram (for each use case)

I have prepared some activity diagram according to my use case. These activity diagrams are properly referring the flow of the individual conditions of my project.

#### 3.3.1. Post Job

The very initial step of an employer to post job for search employee for vacancy. Employer can easily post in this system & jobseeker will apply against this post for job. Now I will figure out the activity diagram below.

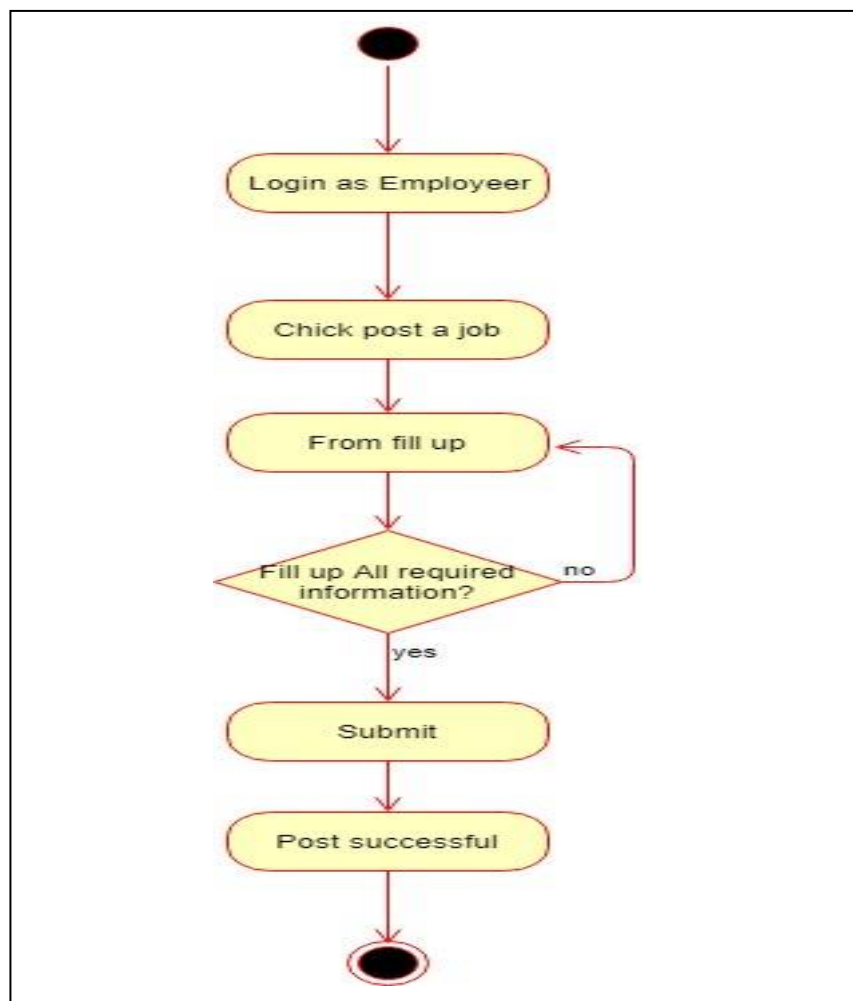


Figure 3.2: Post Job

### 3.3.2. Apply Job

This is very important for jobseeker. Jobseeker applies against post for job. Now I will figure out the activity diagram below.

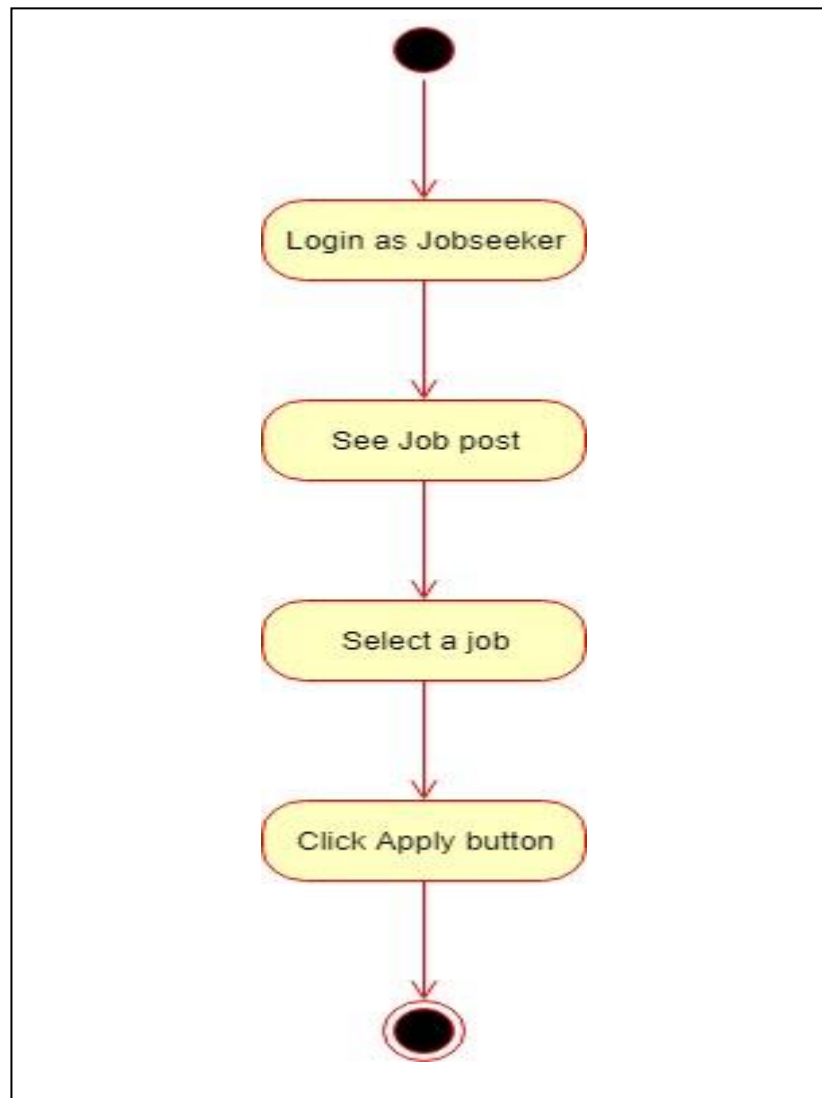


Figure 3.3: Apply Job



### 3.3.3. Manage Application

After complete apply process this is very important for employer to choose candidate or manage application. When jobseeker applies against post employer can see the applicant list in view application page. Employer able to visit applicant profile & see previous job history, rating, etc. Finally, employer choice candidate by accept or reject. Now I will show the activity diagram of how employer accept or reject candidate.

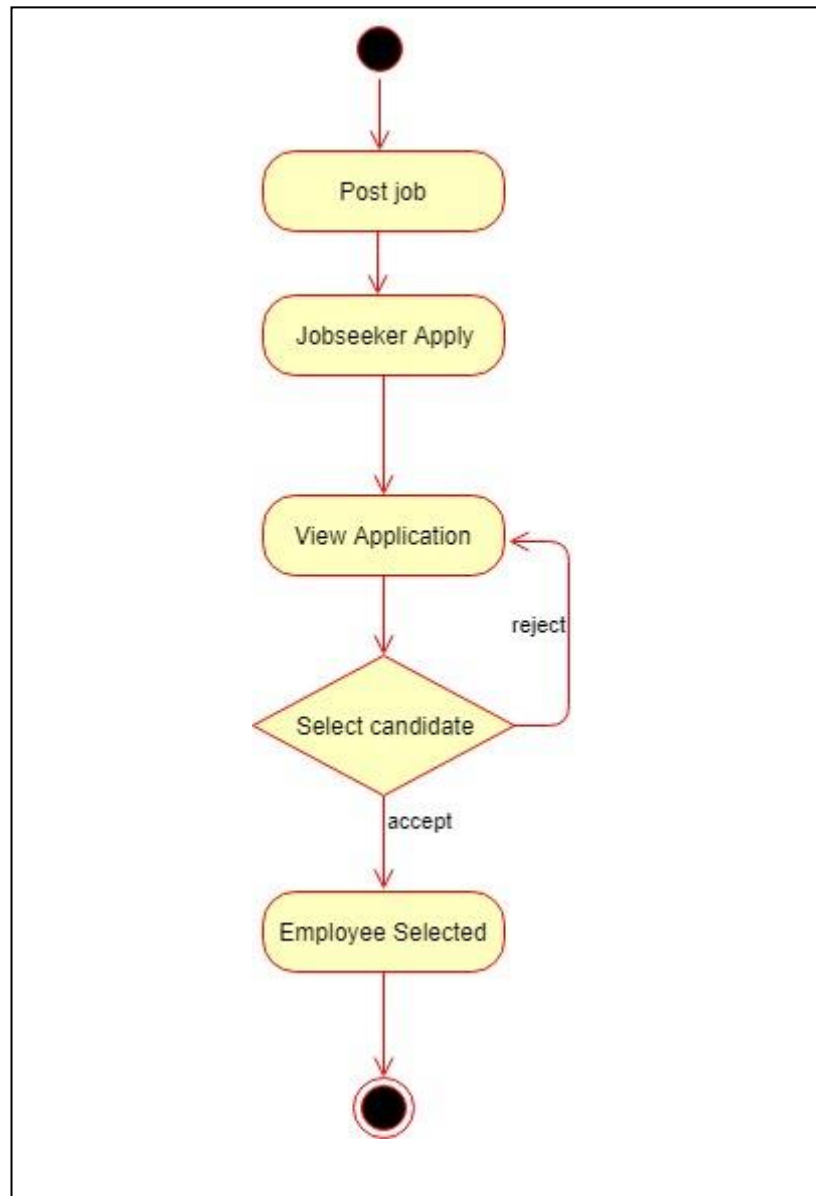


Figure 3.4: Accept/ Reject Application

### 3.1.1. View Job History

Employer can see employee previous job history by visiting employee profile. This is helpful for employer when employer select an employee for vacancy. Now I will figure out the activity diagram below.

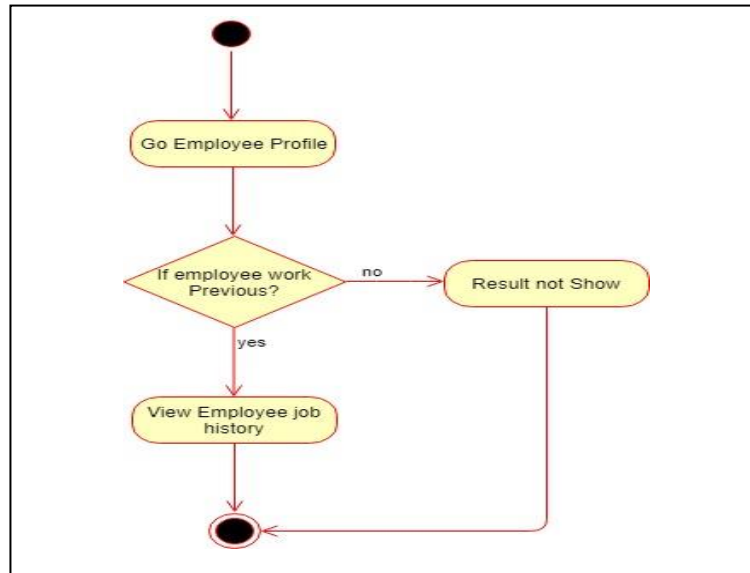


Figure 3.5: View Job History

### 3.1.2. Update/ Delete post

When employer post job. But if he needs to edit or update post. He will do this easily. Now I will figure out the activity diagram below.

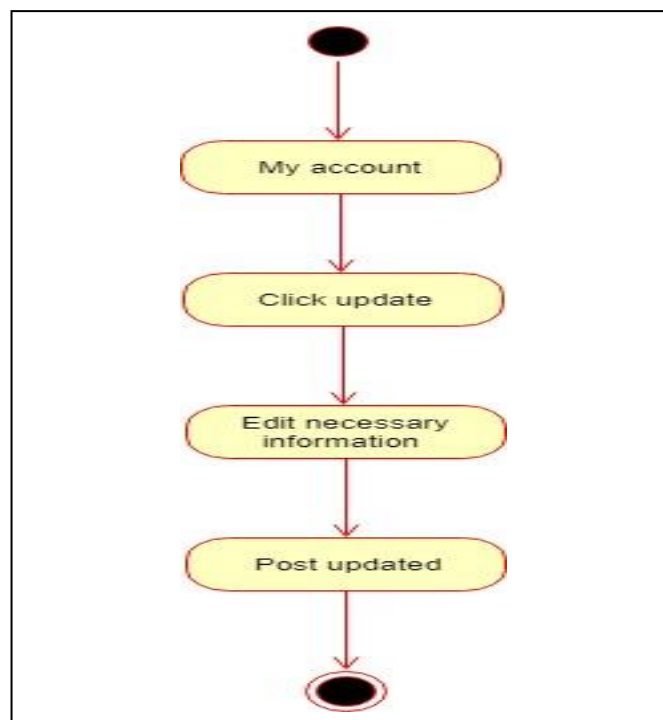


Figure 3.6: Update Post

### 3.1.3. Download Resume

When employer select a candidate, he will able to download applicant resume. Before download resume jobseeker must apply job. Now, I will show the activity diagram of the download resume process.

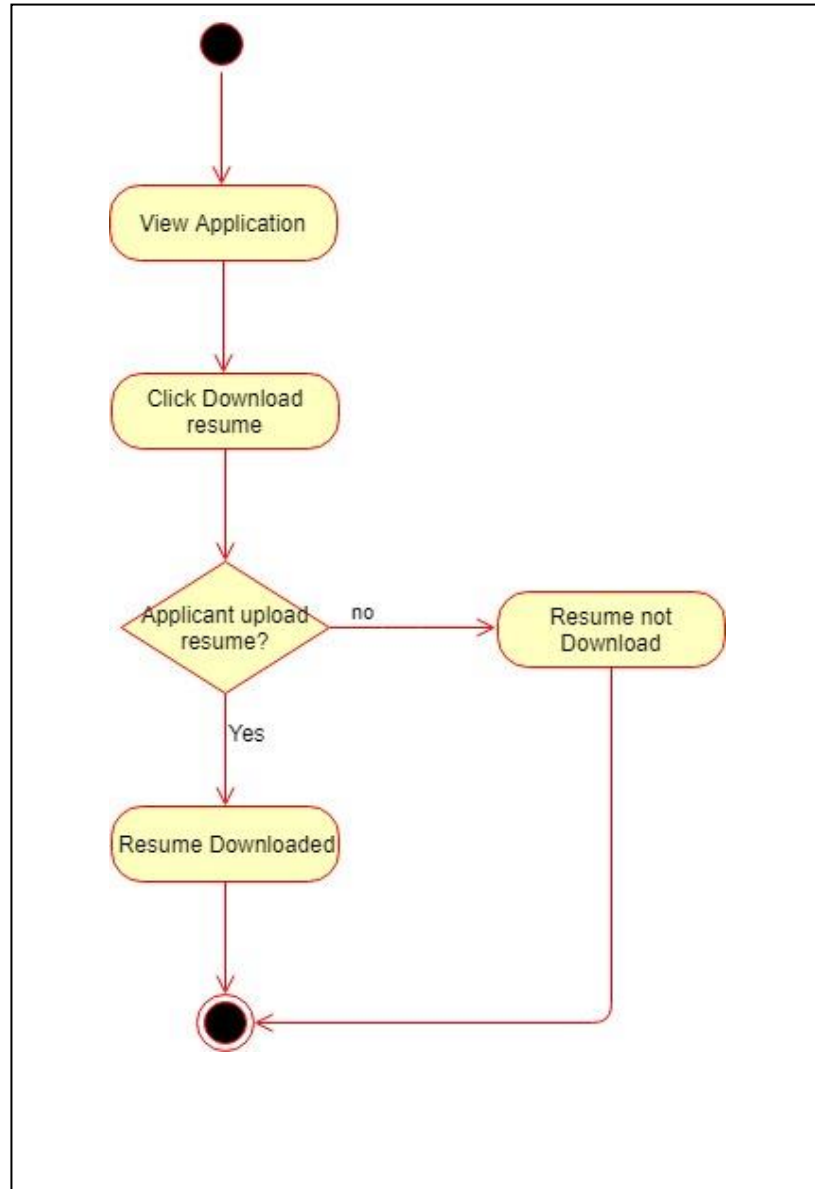


Figure 3.7: Download Resume

#### 3.1.4. Rating to Employee

Employer can give rating to employee. When a jobseeker applies for job, then accept by employer. Finishing the job & complete payment employer give rating to employee based on his work experience behavior. Now I will figure out the activity diagram of rating to employee below.

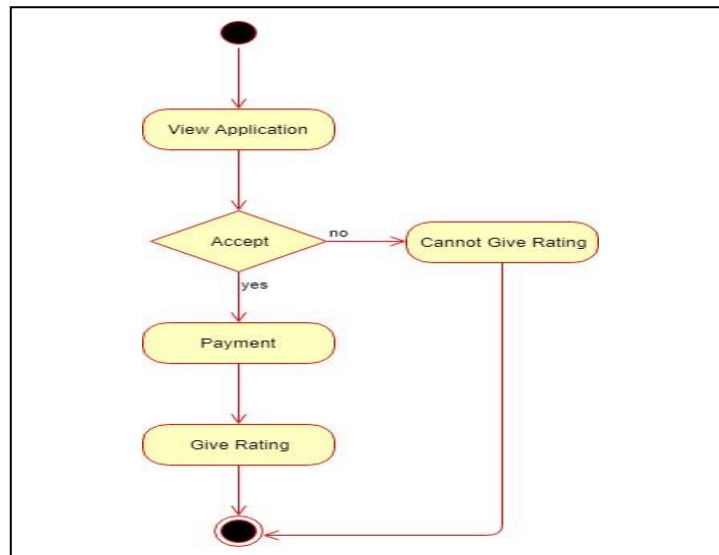


Figure 3.8: Activity diagram of Rating to Employee

#### 3.1.5. Rating to Employer

Employee also can give rating to employer. When a jobseeker joining a job. After finishing the job employee give rating to employer based on his work experience, employer's behavior, payment. Now I will figure out the activity diagram of rating to employer below.

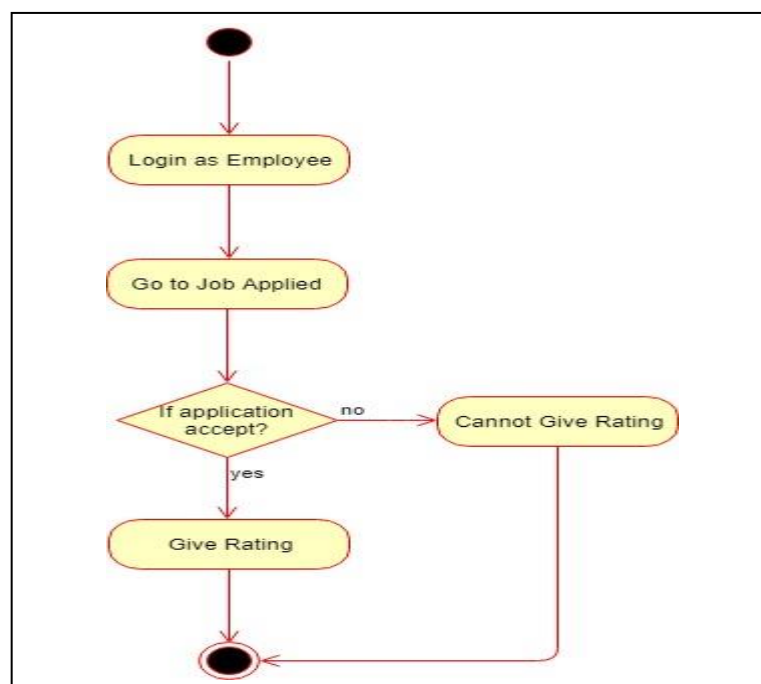


Figure 3.9: Activity diagram of Rating to Employer

### 3.1.6. Update Profile Details

Jobseeker can add or update his profile details like update basic information, profile picture, educational qualification. Jobseeker login and go to my account and blow this page add / update option. Choose photo or fill up from and submitted for updated. Now I will figure out the activity diagram of how to update profile below.

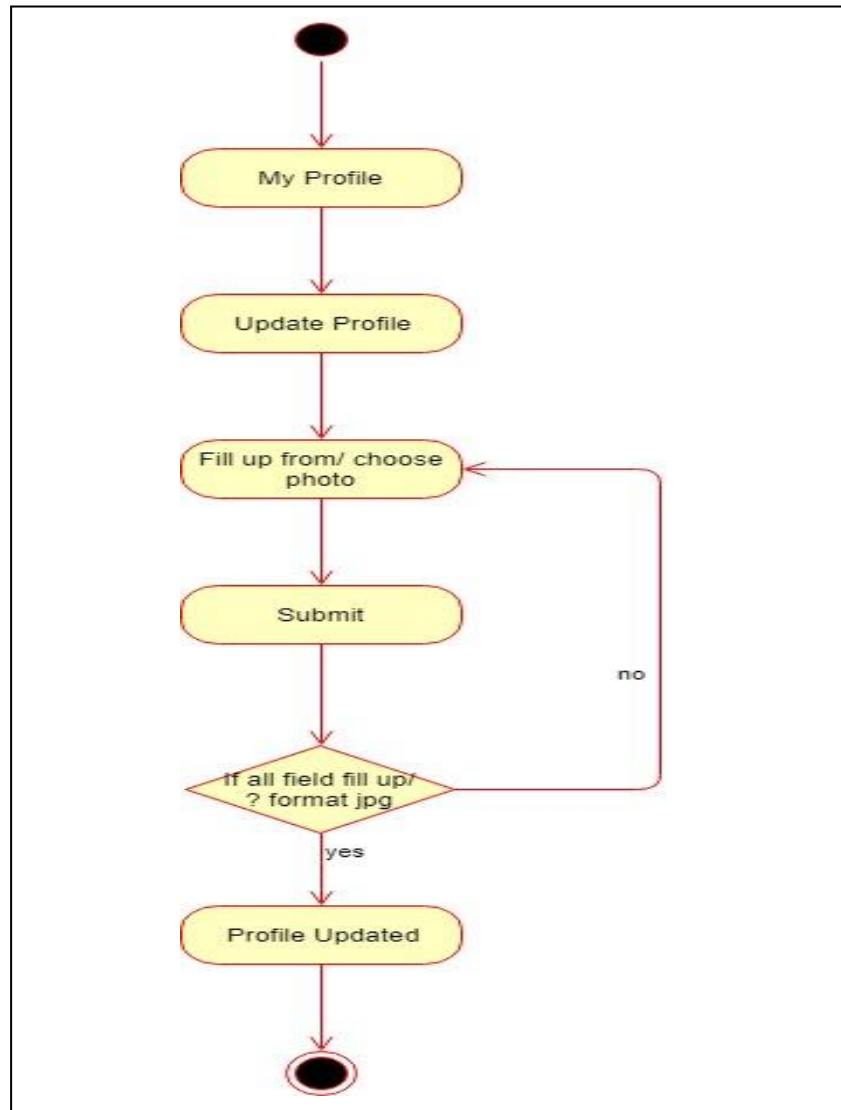


Figure 3.10: Add Educational Qualification

### 3.1.7. Search Job

Jobseeker can search job by typing keyword or select job category or by scroll down in our home page of our system. User type keyword in the search box & click search icon or select job category on the drop-down mane. Now I will figure out the activity diagram of search job below.

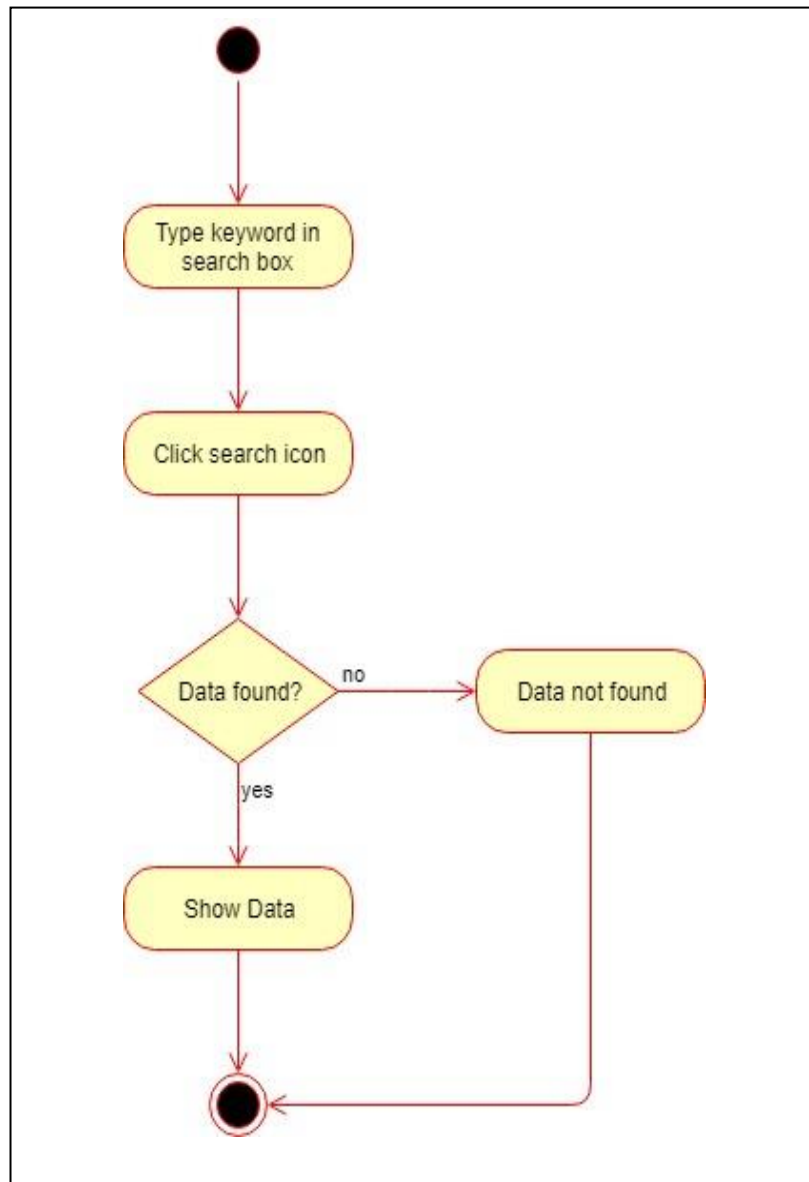


Figure 3.11: Search Job

### 3.4. System Sequence Diagram

Mainly sequence diagrams understand us how the data will be followed in any application. Now we are going to show some sequence diagrams.

#### 3.4.1. Post Job

Job posed by employer

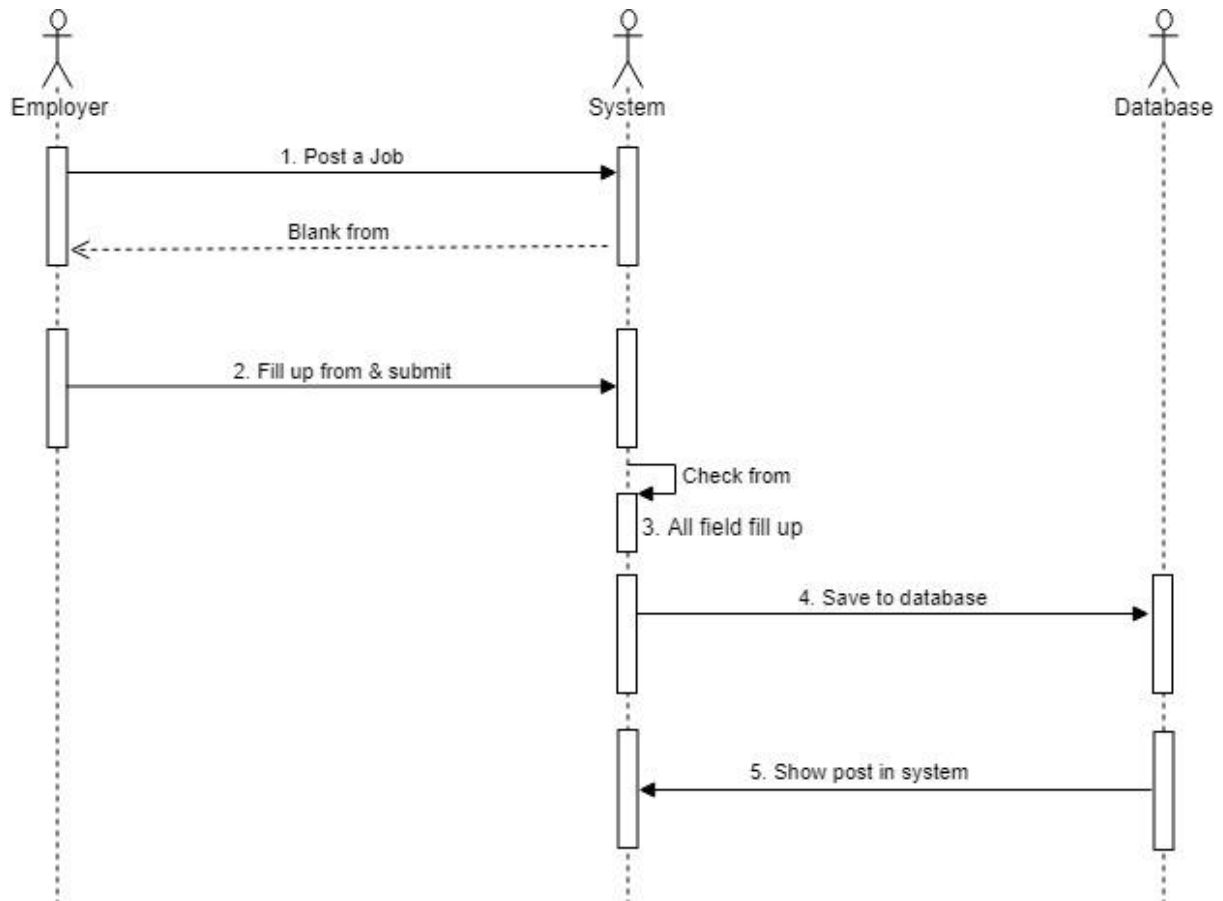


Figure 3.12: Sequence diagram of Post Job

### 3.4.2. Apply job

Apply job by jobseeker. Now I will figure out the sequence diagram of apply job is given below.

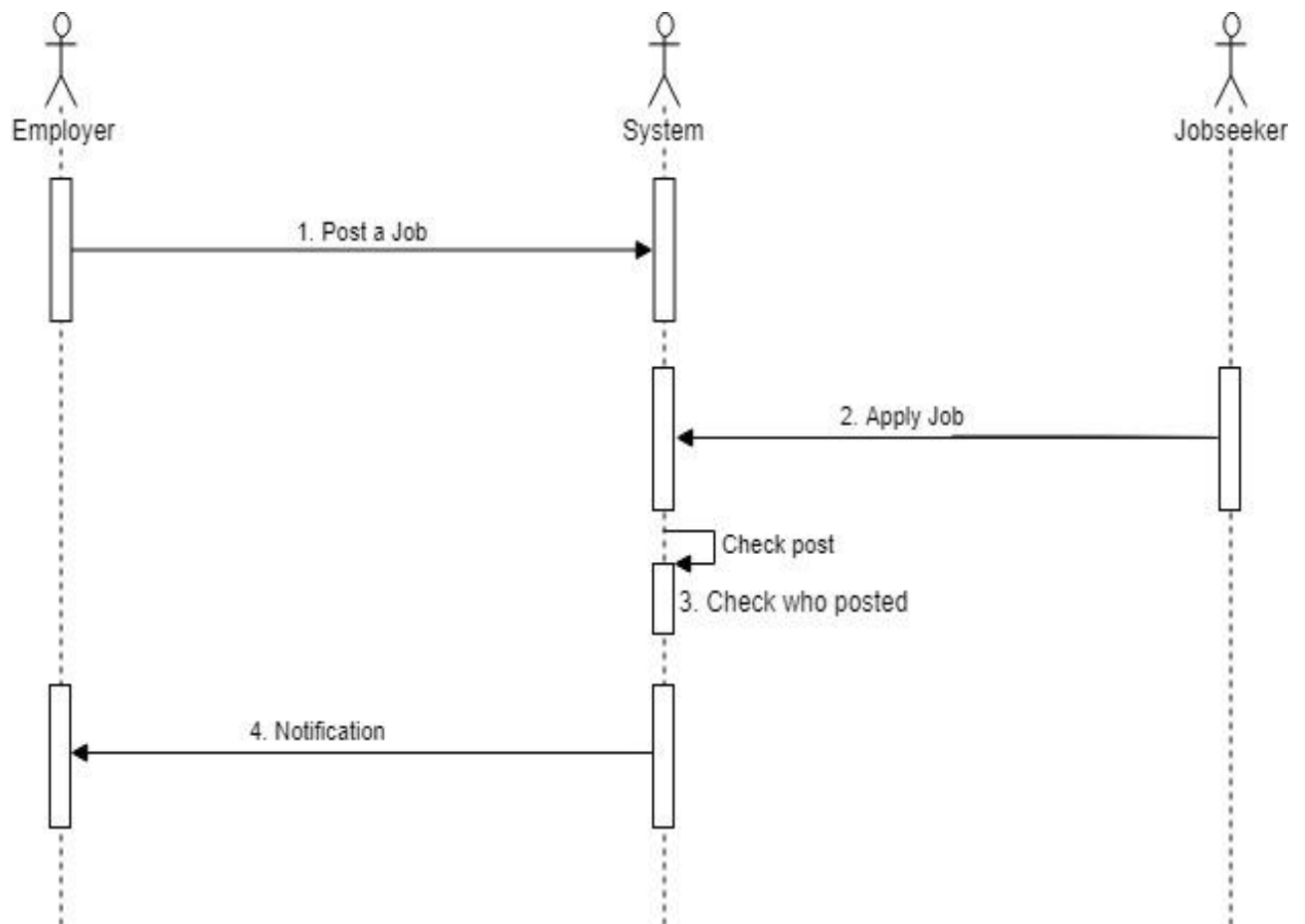


Figure 3.13: Sequence diagram of Apply Job



### 3.4.3. Accept/ Reject Application

Employer can accept or reject a applicant. Now I will describe the process of accept or reject by sequence diagram is given below.

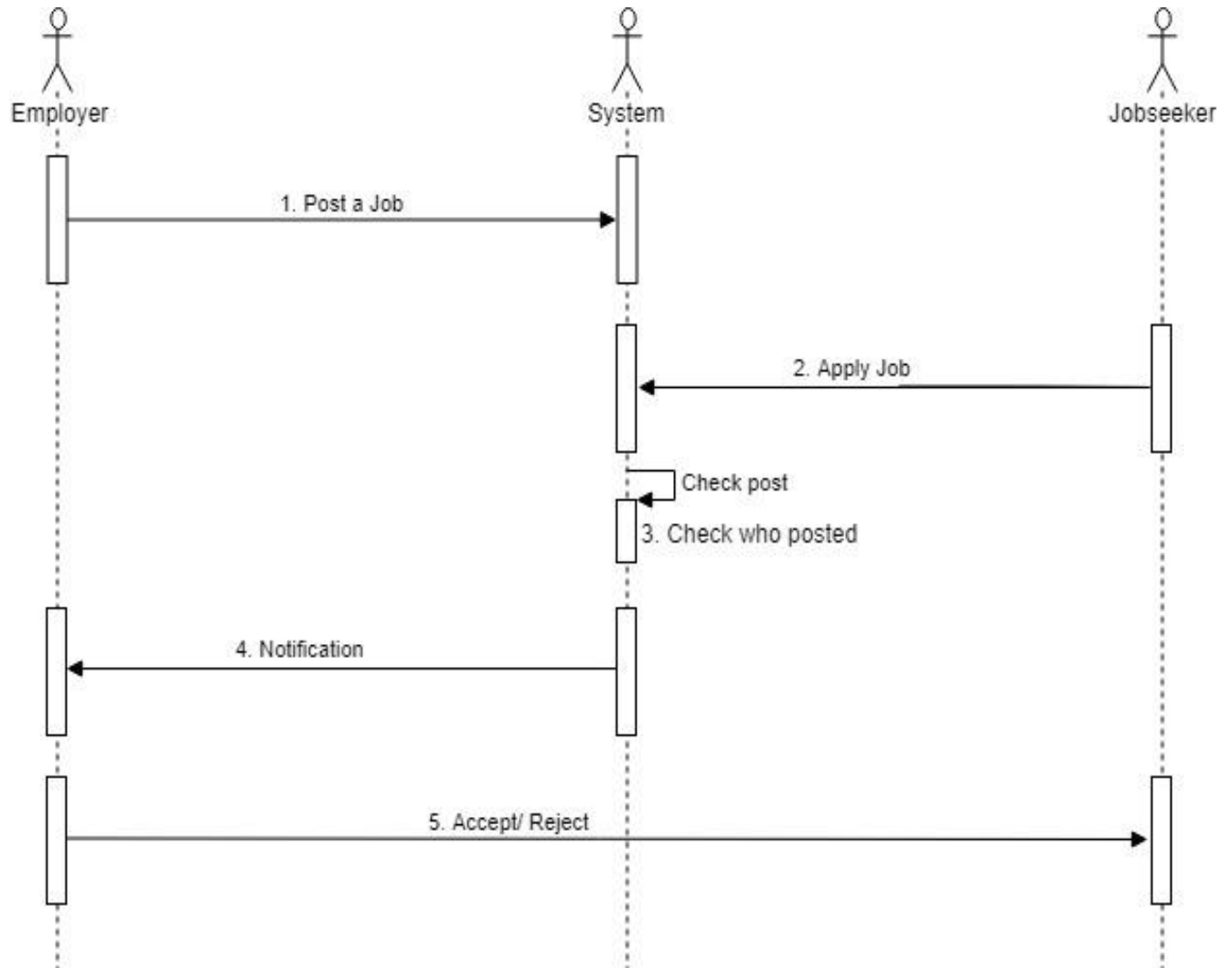


Figure 3.14: Sequence diagram Accept/ Reject Application

### 3.4.4. Job History

Previous job history added employee profile automatically. Employer can see any employee previous job history by visiting employee profile. Now I will figure out the sequence diagram of job history system is given below.

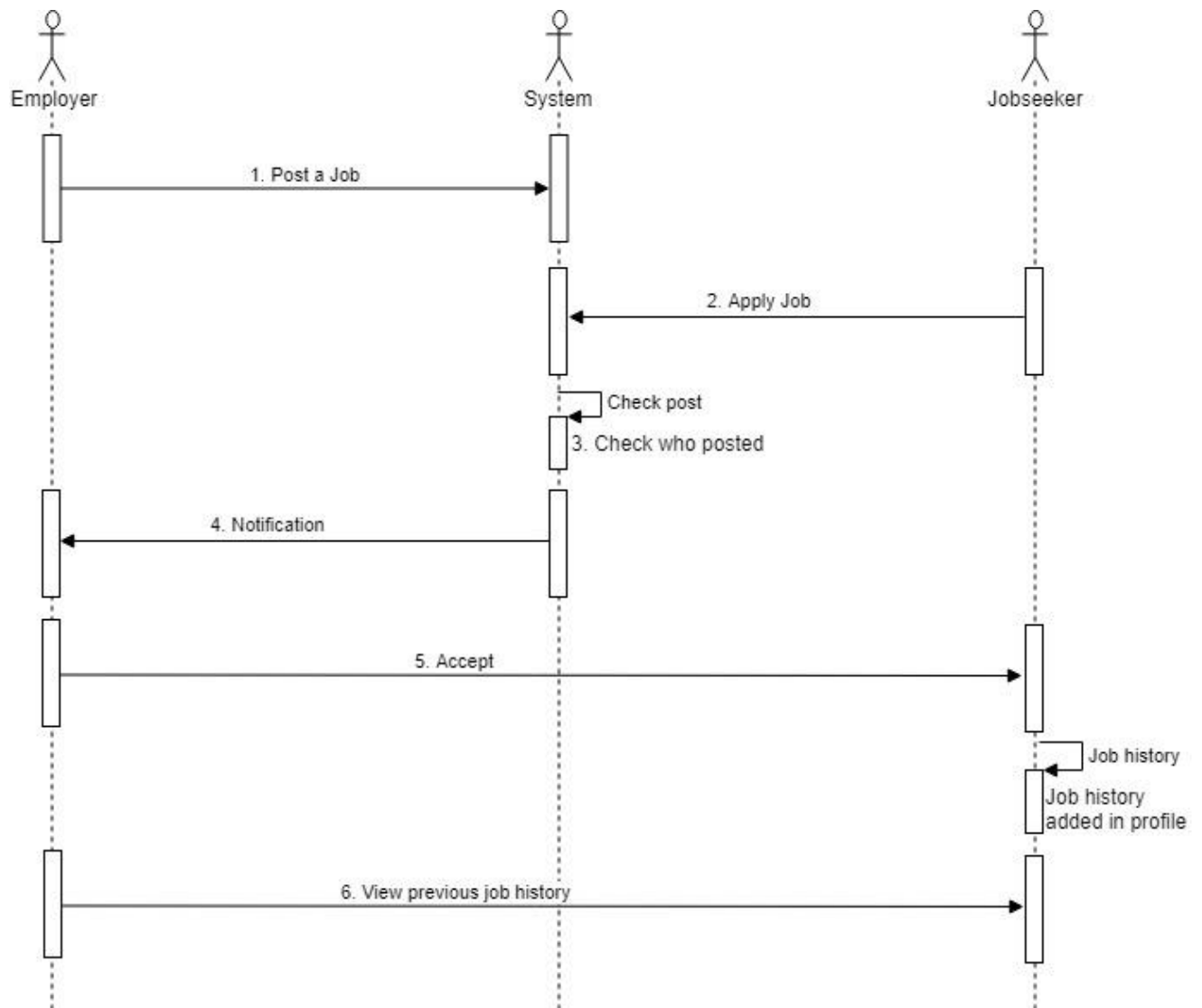


Figure 3.15: Sequence diagram Job History

### 3.4.5. Search Job

Jobseeker search job to find out the best job.

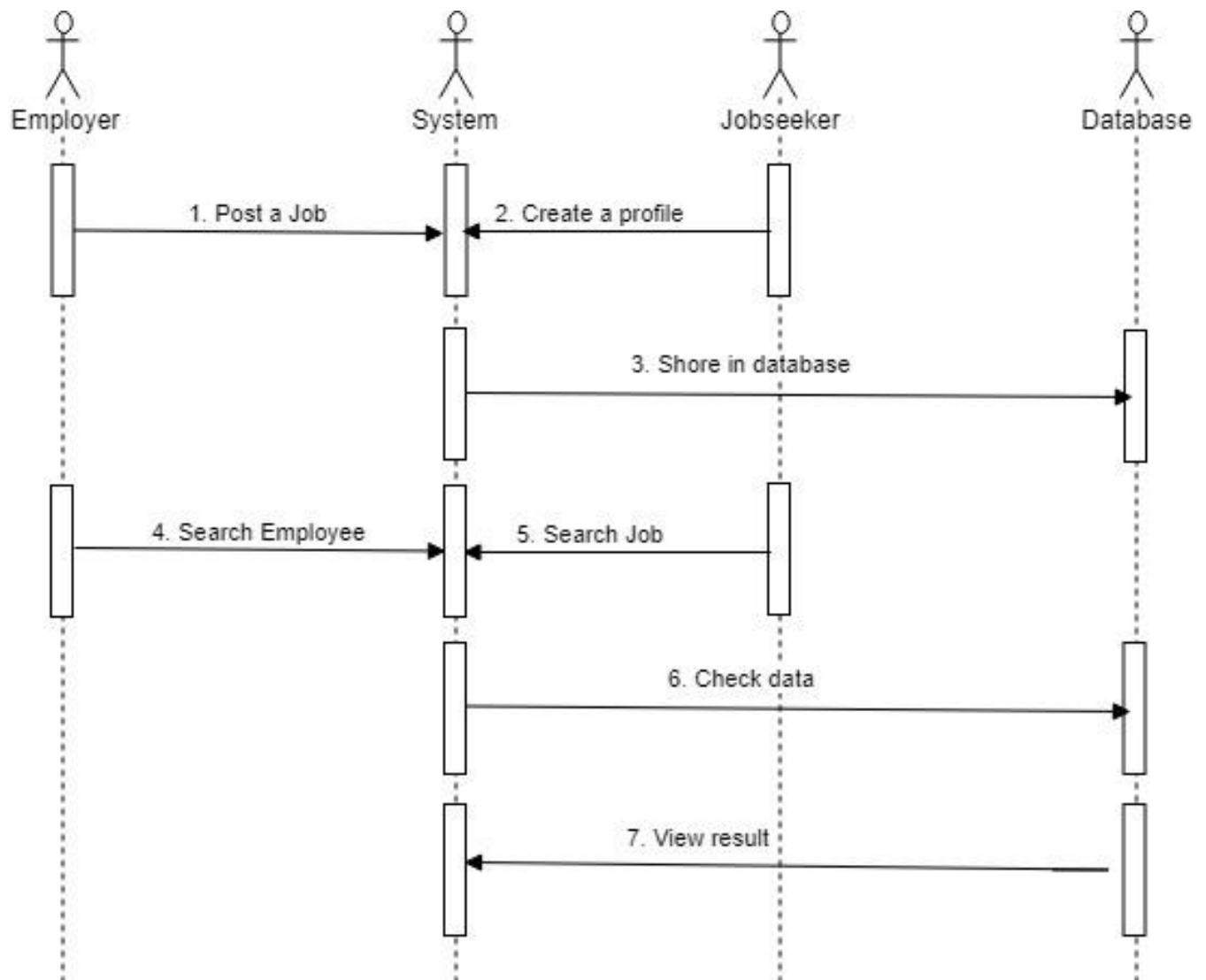


Figure 3.16: Sequence diagram how to search a job

### 3.4.6. Rating

Employee & Employer can give rating each other in my system. Now I will figure out the sequence diagram of rating system is given below.

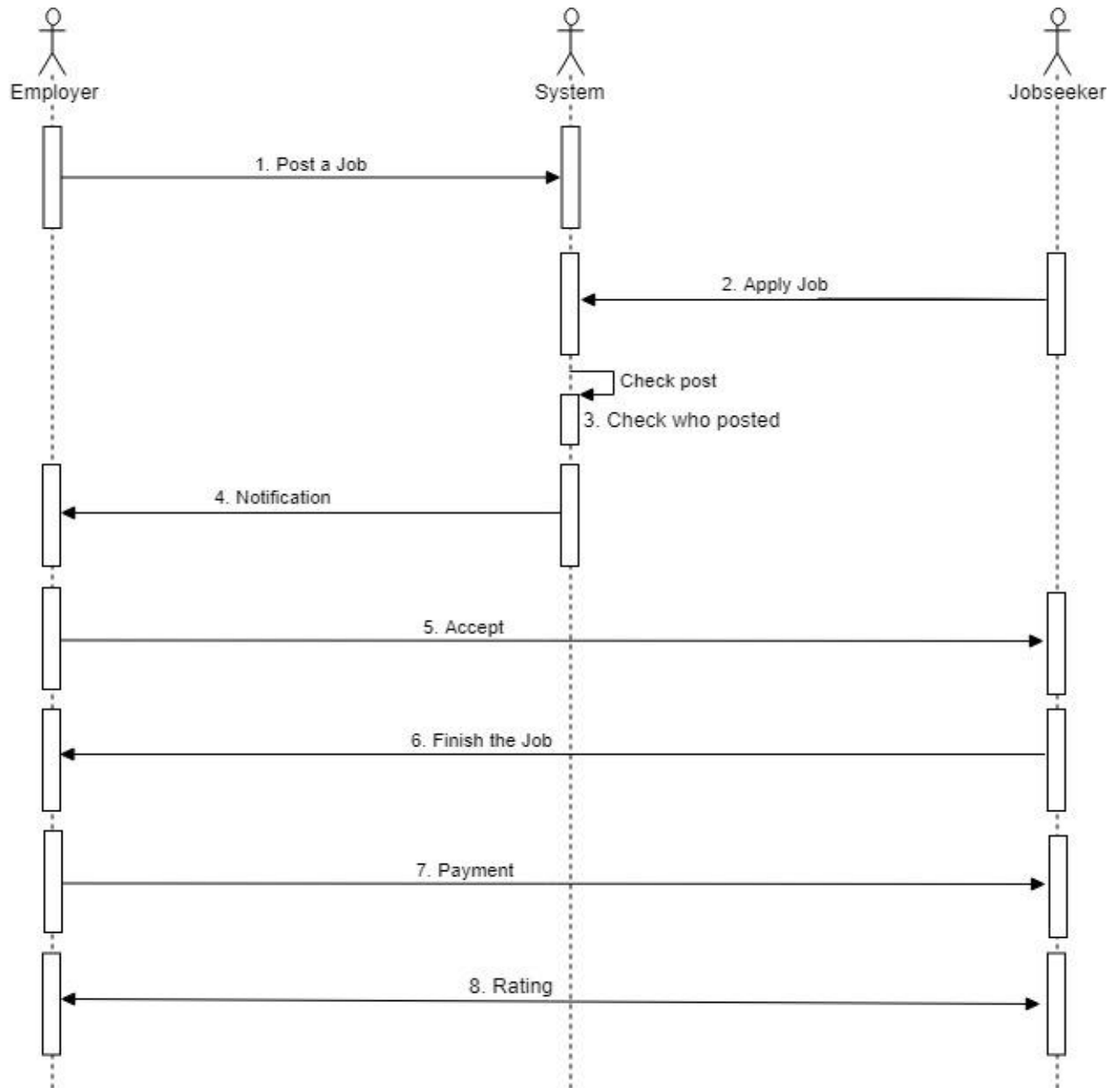


Figure 3.17: Sequence diagram of how to give rating

## **Chapter 4: System Design Specification**

### 4.1. Class Responsibilities Collaboration (CRC) Cards

Class Responsibilities Collaboration (CRC) card is brainstorming tool which is used for easily understand class design.

#### 4.1.1. Employer Card

Employer	
<ul style="list-style-type: none"><li>• Employer can login</li><li>• Employer can post job</li><li>• Employer can search employee</li><li>• Employer can download applicant resume</li><li>• Employer can visit jobseeker profile</li><li>• Employer can see Jobseeker job history</li><li>• Employer can accept application</li><li>• Employer can reject application</li><li>• Employer can give rating to employee</li></ul>	<ul style="list-style-type: none"><li>• Post</li><li>• Rating</li></ul>

Figure 4.1: CRC Card of Employee Class

#### 4.1.2. Jobseeker Card

Jobseeker	
<ul style="list-style-type: none"><li>• Jobseeker can login</li><li>• Jobseeker can apply job</li><li>• Jobseeker can search job</li><li>• Jobseeker can update profile</li><li>• Jobseeker can upload resume</li><li>• Jobseeker can add accomplishment</li><li>• Jobseeker can give rating to employer</li></ul>	<ul style="list-style-type: none"><li>• Post</li><li>• Apply Job</li><li>• Job Search</li><li>• Rating</li><li>• Job history</li></ul>

Figure 4.2: CRC Card of Jobseeker Class

#### 4.1.3. Post Card

Post	
<ul style="list-style-type: none"><li>• Post can view home page</li><li>• Post update</li><li>• Post delete</li><li>• Apply against post</li></ul>	<ul style="list-style-type: none"><li>• Employer</li><li>• Jobseeker</li><li>• Apply Job</li><li>• Job Search</li></ul>

Figure 4.3: CRC Card of Post Class

#### 4.1.4. Apply Job Card

Apply Job	
<ul style="list-style-type: none"><li>• Apply job by jobseeker</li><li>• View status</li></ul>	<ul style="list-style-type: none"><li>• Jobseeker</li><li>• Employer</li></ul>

Figure 4.4: CRC Card of Apply Job Class

#### 4.1.5. Job History Card

Job History	
<ul style="list-style-type: none"><li>• Job history add in jobseeker profile</li><li>• Job history view in jobseeker profile</li></ul>	<ul style="list-style-type: none"><li>• Jobseeker</li></ul>

Figure 4.5: CRC Card of Job history Class

#### 4.1.6. Rating Card

Rating	
<ul style="list-style-type: none"><li>• Rating given by Employer</li><li>• Rating given by Jobseeker</li><li>• Rating show in profile</li></ul>	<ul style="list-style-type: none"><li>• Employer</li><li>• Jobseeker</li></ul>

Figure 4.6: CRC Card of Rating Class

#### 4.1.7. Job Search Card

Job search	
<ul style="list-style-type: none"><li>• Job search by employee</li><li>• Job search by category</li></ul>	<ul style="list-style-type: none"><li>• Employer</li><li>• Post</li></ul>

Figure 4.7: CRC Card of Job search Class

## 4.2. Sequence Diagram

## 4.3. Class Diagram

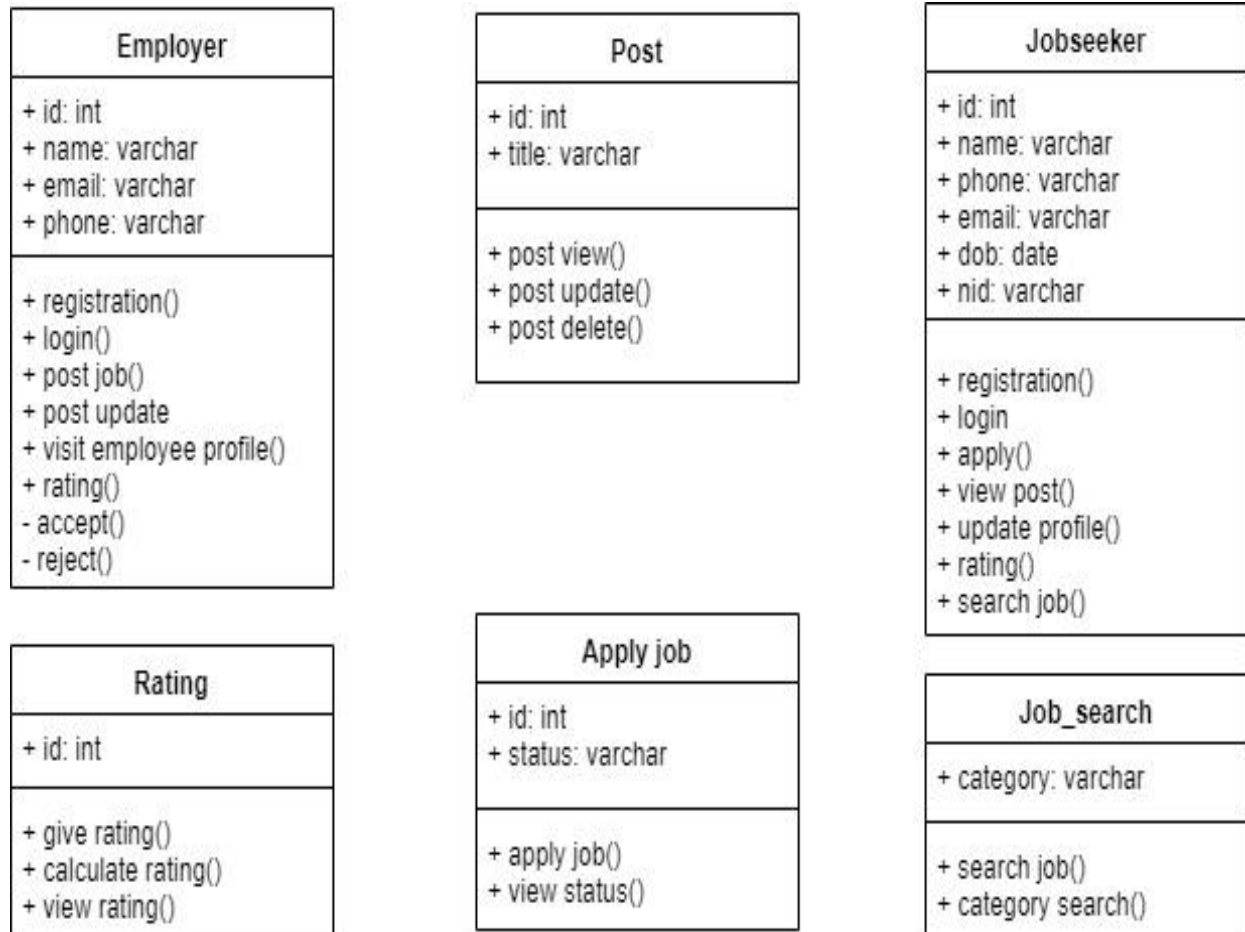


Figure 4.8: Class Diagram



#### 4.4. Database Design Diagram

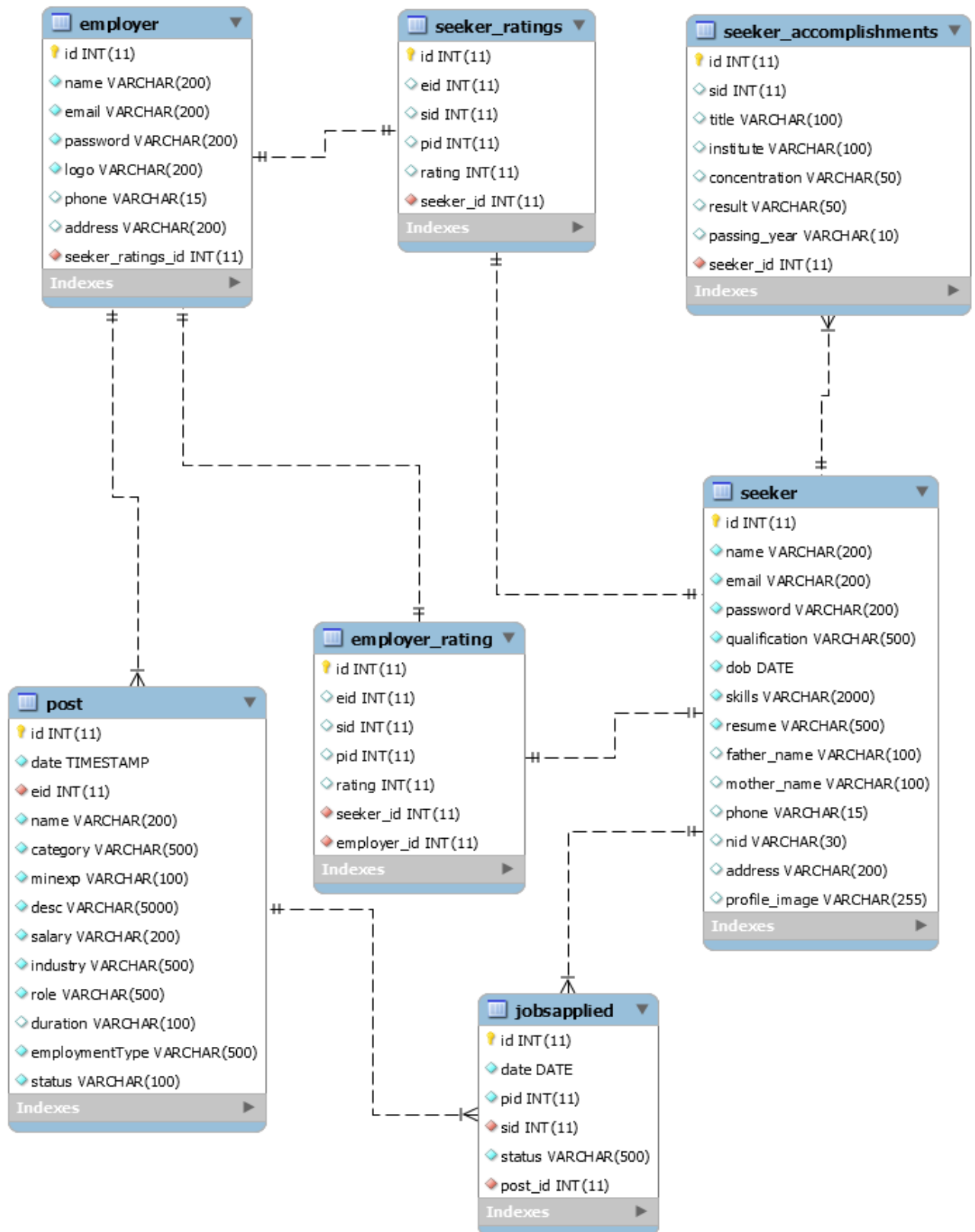


Figure 4.9: Database Diagram

## 4.5. Development Tools & Technology

Software development tools are used to develop software. Now I discuss about some tool and technology which used to develop my software.

### 4.5.1. User Interface Technology

User interface is very importance of an application. For gain a better software user interface includes using good image, graphics, typography, style sheets, etc. Plays a vital role.

#### 4.5.1.1. *Framework*

In my project I did not use any framework. In my project I have used server-side programming language named PHP. This is a scripting language.

#### 4.5.1.2. *jQuery UI*

I used jQuery JavaScript library in my project because jQuery light weight & makes easier to understand and work with.

#### 4.5.1.3. *CSS framework or Twitter Bootstrap*

After completing markup, cascading style sheets are designed. I used CSS because CSS describes the style of an HTML document. I have used Twitter Bootstrap framework. This framework is an open source front-end framework toolkit for developing with HTML, CSS, and JS. This framework supports almost every browser. Like Google Chrome, Mozilla Firefox, Opera, Internet Explorer etc. By Bootstrap easily make responsive design.

### 4.5.2. Implementation Tools & Platforms

It is very important to determine which tools and platforms are the best match of my requirements. After making a proper decision, I am using PHP that is a server-side scripting language.

#### 4.5.2.1. *Integrated Development Environment*

There is a lot of PHP editors available that are maintained on Windows, Linux, and Mac and are obtainable for free download. For my project I used Sublime text & Notepad++ editor. It is a lightweight, accepted and a competing tool for the PHP editors.

#### 4.5.2.2. *Web Server*

We have used apache server. It is free and open source server to use. It supports a wide range of features and most of them are already implemented as compiled modules. This module can extend the main features or core functionality.

#### 4.5.2.3. *Database Server*

I used MySQL database server. It is a free to use. It supports a wide range of features and I have worked with MySQL server before. So, working with this server will be easier to me.

## **Chapter 5: System Testing**

### 5.1. Testing Features

Feature testing can be considered as making a perfect application by change to add or modify the new functionality to the existing project. Almost every feature and functionality have different so I set a new test is written for testing purpose.

#### 5.1.1. Features to be tested

Features	Priority	Description
Login	2	User must be authenticated by login
Logout	1	Session must be destroyed after logout
Post Job	3	Employer must post in this system properly
Apply Job	3	Jobseeker must apply against post properly
Accept/ Reject	3	Employer must accept or reject application properly
Download Resume	2	Employer download applicant resume easily
Update Jobseeker Profile	2	Jobseeker must update his own profile properly
Add Accomplishment	1	Jobseeker must add educational qualification properly
Job history Add/ View	3	Previous job history add jobseeker profile & employer must Can view job history properly.
Rating	3	Employer & jobseeker must give rating each other properly & Rating view in own profile.
<b>Technological Features</b>		
Database	1	Database will be used at almost every operation. So, this is why, this part must be controlled tightly.

Here, 1= Low Priority; 2= Medium Priority; 3= High Priority.

## 5.2. Testing Strategies

Testing strategy is to be considered as purpose of testing process. It is also the indicator of test levels that are to be performed on the whole software development life cycle. Different kinds of testing strategies need to test.

### 5.2.1. Test Approach

To complete the test process, testers must take some approach. There is mainly two test approach.

- **Automation testing:** Automation testing is a name of testing technique by which test engineers prepare some scripts according to test plan and after that they use suitable tools to perform testing of the software. Nowadays, almost every software company follows the approach of automation testing.
- **Manual testing:** Manual testing is also a name of technique of testing by find out the bugs or vulnerability in an application. In this process, test engineers manually test and execute the test cases without having any automation tools.

#### 5.2.1.1. *Black Box Testing*

Black box testing is a method by which test engineers test the software without having knowledge of the internal architecture of the application that need to be tested. Black box testing can be both functional and non-functional. Now I discuss two types of black box testing in blow.

- **Equivalent Class Partitioning:** In this technique input data is to be divided into groups. Those groups of data are expected to perform as similar behavior. The main advantage of equivalent class partitioning is to reduce the total number of test cases from infinite to finite.
- **Boundary Value Analysis:** Boundary value analysis is a name of software testing by which input data can be included within a boundary range. Following this strategy, test engineers firstly define the boundary value. After that they take a specific boundary and then write the test cases that will be go through the application for testing purpose.

#### 5.2.1.2. *White Box Testing*

White box testing is opposite to the black box testing. In black box testing, the internal architecture is not known to the testers but in white box testing the software architecture is known to the tester. Here some white box testing techniques below

- Statement Coverage
- Branch Coverage
- Path Coverage

### 5.2.2. Pass/Fail Criteria

Pass or fail criteria will be set by the test engineers. Those data that are worked well will consider as pass criteria. And rest of input data will be considered as fail criteria. Now I will give the pass / fail criteria below.

- System crash will not be considered as pass case.
- If any criteria pass 100% times, then it will be considered as pass criteria only.
- If data can't be displayed to the application properly, then it to be considered as fail criteria.

### 5.2.3. Suspension and Resumption

## 5.3. Testing Schedule

Test Phase	Time
Testing plan create	1 week
Test specification	2 weeks
Unit testing	During development time
Component test	1 week
Test Phase	Time
Integration testing	1 week
Validating use cases	1 week
Testing user interfaces	1 week
Load testing	1 week
Performance testing	1 week
Release to production	1 week

### 5.3.1. Traceability Matrix

Project Manager			Business Analyst Lead		
QA Lead			Target Implementation Date		
BR#	Category / Functionality / Requirement	Requirement Description	Use Case Reference	Test Case Reference	Comments
BR-1	Functional	Post Job	Use case 3.1.1	Test case 5.6.2	
BR-2	Functional	Apply Job	Use case 3.1.12	Test case 5.6.3	
BR-3	Functional	Search Job	Use case 3.1.16	Test case 5.6.11	
BR-4	Functional	Accept/ Reject Application	Use case 3.1.5, 3.1.6	Test case 5.6.4	
BR-5	Functional	Download Resume	Use case 3.1.8	Test case 5.6.5	
BR-6	Functional	View Job History	Use case 3.1.10	Test case 5.6.7	
BR-7	Functional	Rating	Use case 3.1.11	Test case 5.6.6, 5.6.9	
BR-8	Functional	Update Profile	Use case 3.1.14	Test case 5.6.8	
BR-9	Non functional	Reliability	N/A	N/A	

## 5.4. Testing Environment

Testing environment means to prepare the environment with hardware and software so that test engineers can be able to execute test cases as required. For making the environment for testing, some key area needs to setup. Those are:

- Test data
- Database server
- Browser
- System and application
- Network

## 5.5. Test Cases

We know there is a chance to have some fault or break holes in any application. This is very common scenario. So proper testing must be needed. For testing our application, I have prepared some test cases. Now, I am going to provide them.

### 5.5.1. Log in

<b>Test case #1</b>			<b>Test case name:</b> Log in		
<b>System:</b> Part Time Job Portal			<b>Sub System:</b> Employer, Jobseeker.		
<b>Designed by:</b> Redwan Ahmed			<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>			<b>Executed date:</b>		
<b>Short description:</b> The registered users need to login to the application. And before that our application will check the authentication and authorization.					
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• Users are always redirected to the login page whether they have not authenticated by our application while entering into the dashboard.</li><li>• Assume that, the email is 'rfl@gmail.com' and password is '1234'</li></ul>					
Step	Email	Password	Expected result	Pass/Fail	Comment
1	abc@gmlo.com	420	Invalid	Pass	
2	nei@gmail.com		Password can't be blank	Pass	
3		143	Email can't be blank	Pass	
4	rfl@gmail.com	1234	Successfully login to the application and redirected to the dashboard	Pass	
<b>Post-conditions:</b> Employer, Jobseeker will successfully login to the system.					

### 5.5.2. Post Job

<b>Test case #2</b>		<b>Test case name:</b> Post Job		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employer need to post job in our system.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	All information not provide/ all field not fill up.	System push employer to provide all required data to the from	Pass	
2	All required field fill up, all information provided properly	Post successfully	Pass	
<b>Post-conditions:</b> After providing information to the system, it will be posted in dashboard of our system.				

### 5.5.3. Apply Job

<b>Test case #3</b>		<b>Test case name:</b> Apply Job		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Jobseeker needs to apply job against post in our system.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be jobseeker</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	User click the Apply button	Job applied successfully	Pass	
<b>Post-conditions:</b> After click apply button of a post, the application will be sent to employer.				



#### 5.5.4. Accept/ Reject Application

<b>Test case #4</b>		<b>Test case name:</b> Accept/ Reject Application		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employer accept or reject application in our system.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Employer click accept option	"Accepted" view in application status bar	Pass	
2	Employer click reject option	"Rejected" view in application status bar	Pass	
3	Employer not click any option	"Sent" view in application status bar	Pass	
<b>Post-conditions:</b> After accept or reject application, employer select candidate & jobseeker get a notification of his application status.				

#### 5.5.5. Download Resume

<b>Test case #5</b>		<b>Test case name:</b> Download Resume		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employer need to download applicant resume.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li><li>• Jobseeker must apply against post.</li></ul>				
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	Employer click download resume option	A doc file is downloading.	Pass	
<b>Post-conditions:</b> After download applicant resume employer see applicant uploaded full resume.				

#### 5.5.6. Rating to Employee

<b>Test case #6</b>		<b>Test case name:</b> Rating to employee		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employer needs to give a rating to employee.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li><li>• Jobseeker must apply against post &amp; accepted by employer</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Employer give rating 7	System push employer to value must less than or equal 5	Pass	
2	Employer give rating 0	System push employer to value must greater than or equal 5	Pass	
3	Employer give rating 4	Rating given	Pass	
<b>Post-conditions:</b> After give rating to employee, employer publishes his satisfaction of employee. Employee gets a rating on his profile.				

#### 5.5.7. View Job History

<b>Test case #7</b>		<b>Test case name:</b> View Job history		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employer needs to see jobseeker previous job history				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be visiting our system</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Employer visit jobseeker profile	In jobseeker profile employer see jobseeker previous job history.	Pass	
<b>Post-conditions:</b> After view jobseeker previous job history employer get an idea on employee for selection candidate.				

#### 5.5.8. Add Accomplishments

<b>Test case #8</b>		<b>Test case name:</b> Add Accomplishments		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employee need to add his educational qualification on his profile.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be Jobseeker</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	All field not fill up.	System push employer to fill out the all field	Pass	
2	All required field fill up, all information provided properly	Accomplishments details added	Pass	
<b>Post-conditions:</b> After add accomplishments jobseeker provide his Educational Qualification.				

#### 5.5.9. Rating to Employer

<b>Test case #9</b>		<b>Test case name:</b> Rating to employer		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Employee needs to give a rating to employer.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li><li>• Employer must accept application.</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Employee give rating 7	System push employee to value must less than or equal 5	Pass	
2	Employee give rating 0	System push employee to value must greater than or equal 5	Pass	
3	Employee give rating 5	Rating given	Pass	
<b>Post-conditions:</b> After give rating to employer, employee publishes his satisfaction of employer. Employee gets a rating on his profile for his behavior, payment.				

#### 5.5.10. Job History Add/ View

<b>Test case #10</b>		<b>Test case name:</b> Job history Add/ View		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> When Employer accept an application job history add employee profile automatically.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User must be authenticated by our system</li><li>• User type must be employer</li><li>• Jobseeker must apply against post.</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Employer reject application	Job history not added employee profile	Pass	
2	Employer don't accept or reject application	Job history not added employee profile	Pass	
3	Employer accept application	Job history added employee profile	Pass	
<b>Post-conditions:</b> After add job history in employee profile. Then a employee will show his experience, for get a better job & employer easily selection candidate.				

#### 5.5.11. Search Job

<b>Test case #11</b>		<b>Test case name:</b> Search Job		
<b>System:</b> Part Time Job Portal		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Redwan Ahmed		<b>Designed date:</b> 17-April-2019		
<b>Executed by:</b>		<b>Executed date:</b>		
<b>Short description:</b> Jobseeker can search job by category, type keyword.				
<b>Pre-conditions:</b> <ul style="list-style-type: none"><li>• User visit our website</li></ul>				
Step	Action	Response	Pass/Fail	Comment
1	Type Accounting job & click search icon	Bank related job are shown	Pass	
2	Select IT Jobs in Job by category box & search	IT related job are shown	Pass	
<b>Post-conditions:</b> After search job a jobseeker find out his better job for carrier.				

## **Chapter 6: User Manual**

## 6.1. Login System

User need to login to our system for using this website. But before that they need to be authenticated by our application. First of all, they need to go to the login page and fill up the required information. After that they will get access. Now I will provide the screenshot of login page below.

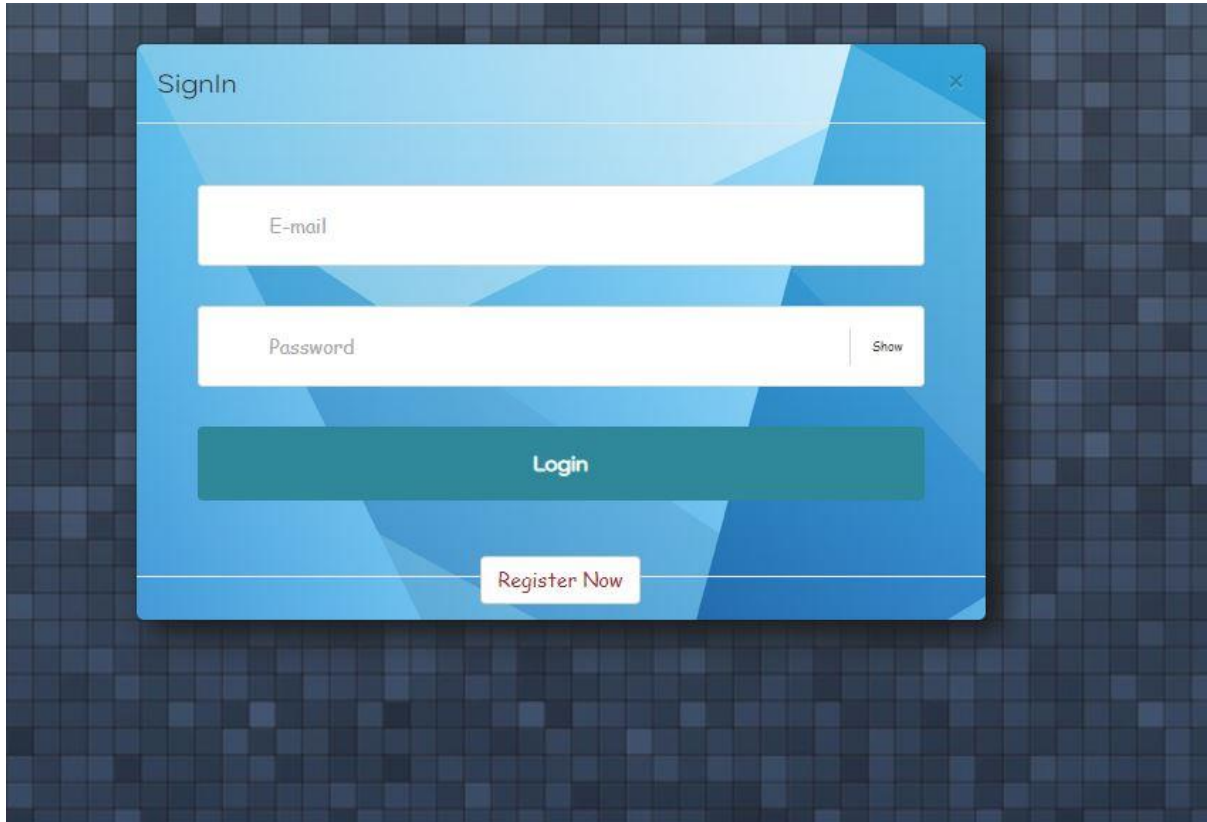


Figure 6.1: Login page

## 6.2. How can Employer Registration

Employer need to login first to get access to our all features. But if the user has not signed up before then they need to employer register to our system first. For registration purpose, user needs to go to the registration page & select employer register. After that, they need to provide necessary information which as required. And create an account. Then employer able to login to our system. Now I will provide the snapshot of the employer registration page below.

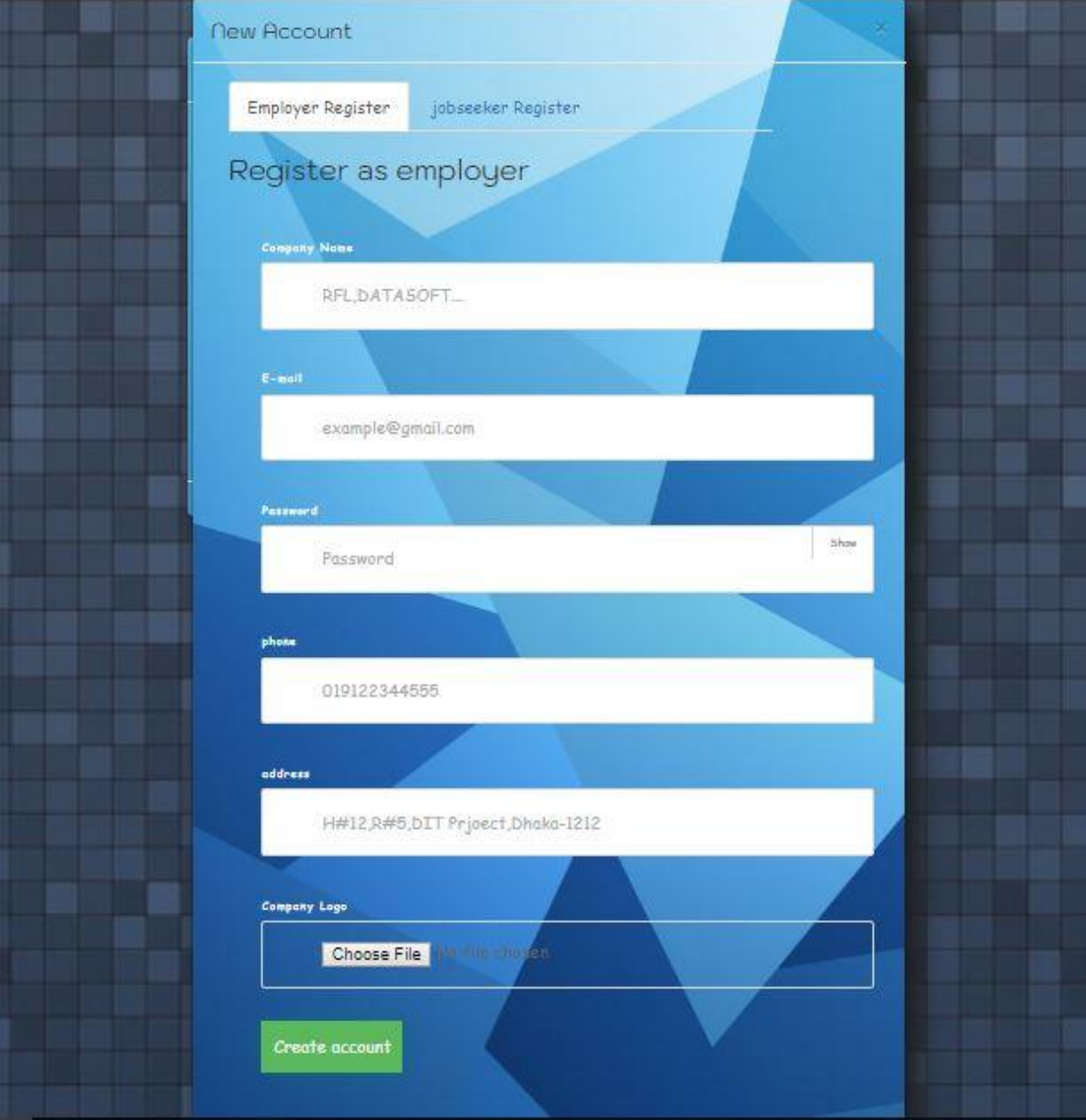
The image shows a web application interface for creating a new account. At the top, there's a 'New Account' header with a close button. Below it, two tabs are visible: 'Employer Register' (which is active) and 'jobseeker Register'. The main heading is 'Register as employer'. The form contains several input fields: 'Company Name' with the value 'RFL,DATASOFT...', 'E-mail' with 'example@gmail.com', 'Password' with 'Password' and a 'show' toggle, 'phone' with '019122344555', and 'address' with 'H#12,R#5,DIT Prjoeet,Dhaka-1212'. There is also a 'Company Logo' section with a 'Choose File' button and the text 'No file chosen'. At the bottom, there is a green 'Create account' button. The background of the form is a blue geometric pattern.

Figure 6.2: Employer Registration page

### 6.3. Jobseeker Registration page

Jobseeker need to login first to get access to our all features like apply job, search job, upload resume etc. But if the user has not signed up before then they need to jobseeker register to our system first. For registration purpose, user needs to go to the registration page & select jobseeker register. After that, they need to provide necessary information which as required & create an account. Jobseeker upload his resume when register. Then jobseeker able to login in our system. Now I will provide the snapshot of the employer registration page below.

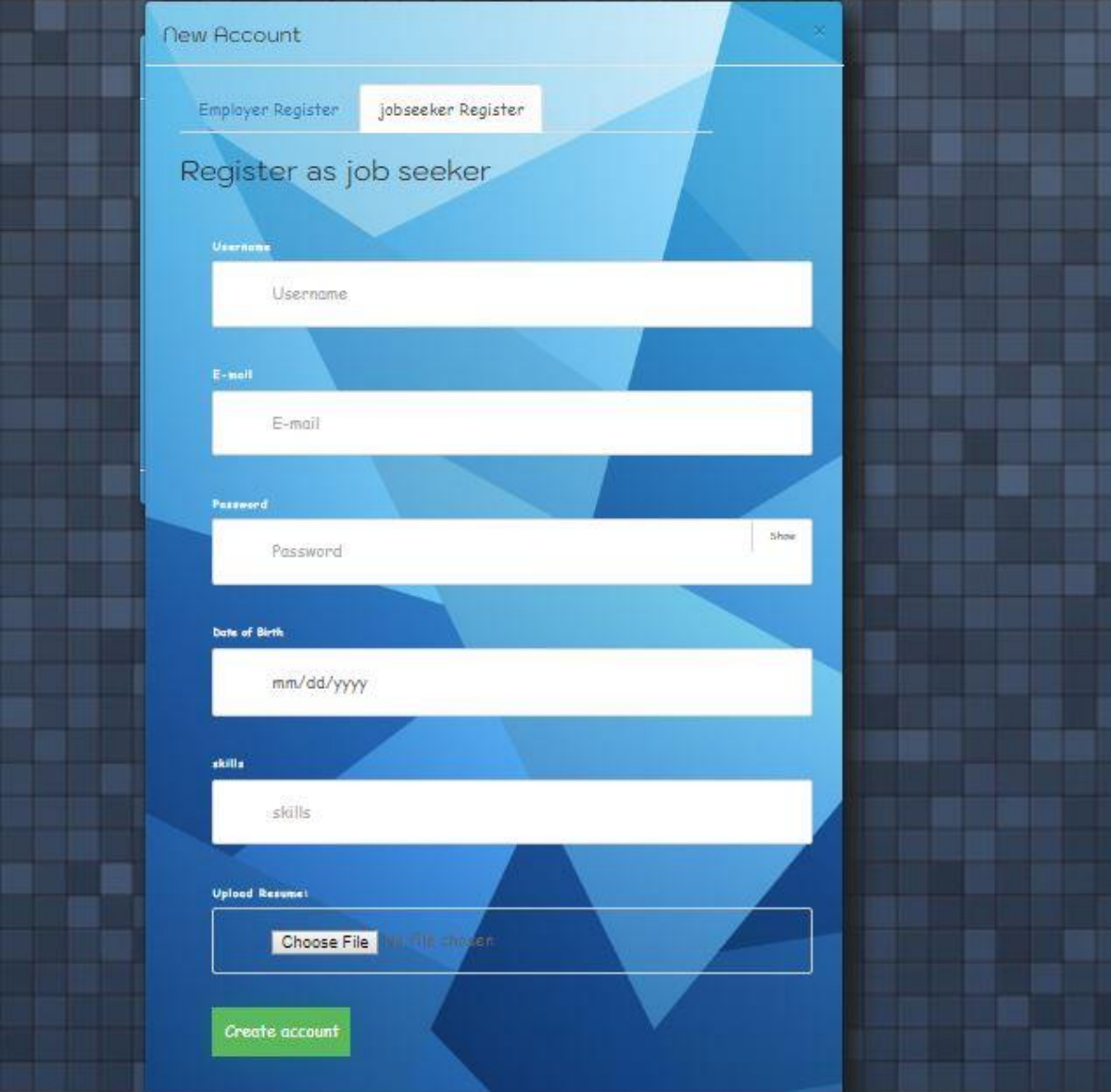
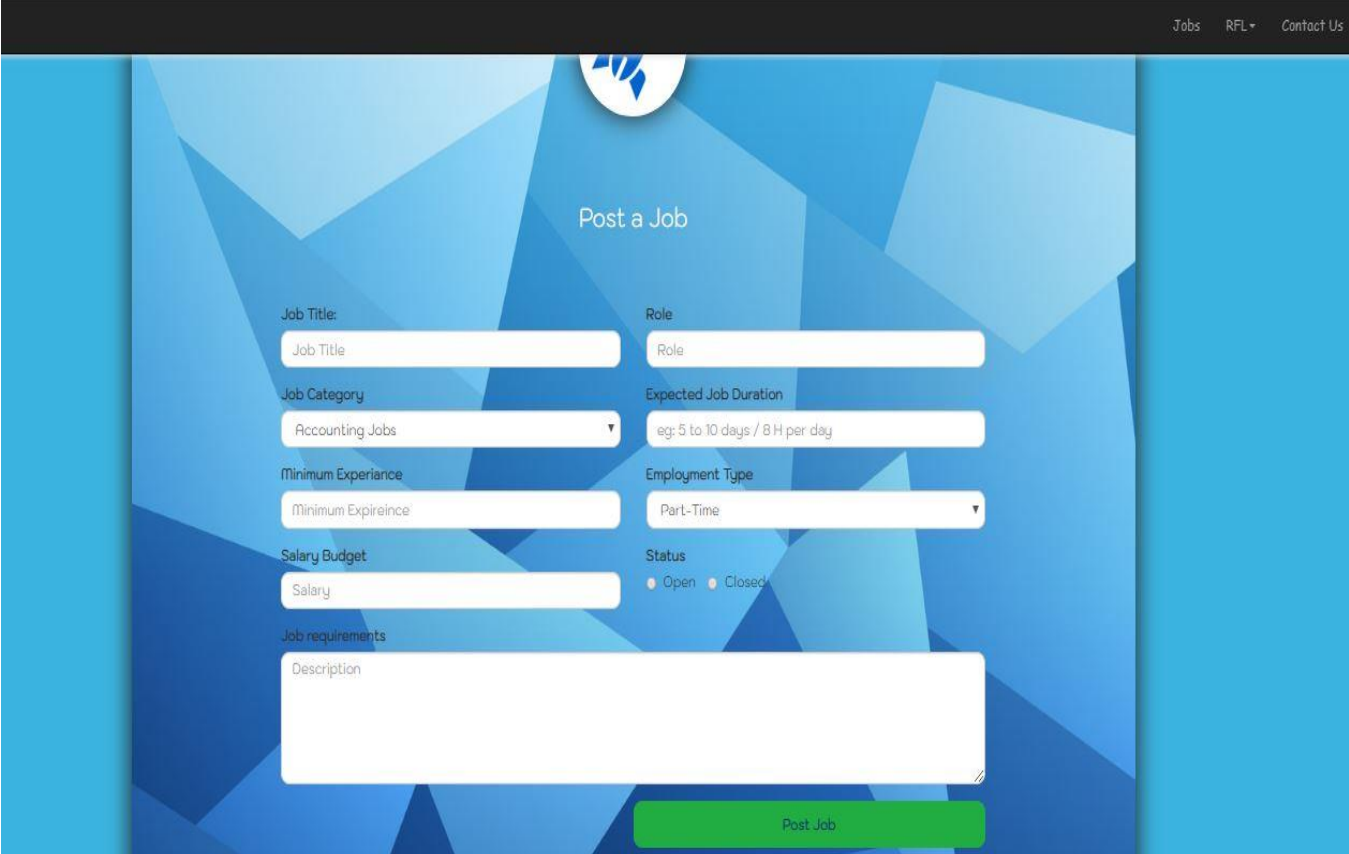
The image shows a web application window titled "New Account" with a close button (X) in the top right corner. Inside the window, there are two tabs: "Employer Register" and "jobseeker Register", with the latter being the active tab. Below the tabs, the heading "Register as job seeker" is displayed. The registration form consists of several input fields: "Username" with a placeholder "Username", "E-mail" with a placeholder "E-mail", "Password" with a placeholder "Password" and a "Show" button to its right, "Date of Birth" with a placeholder "mm/dd/yyyy", and "skills" with a placeholder "skills". Below these fields is an "Upload Resume" section containing a "Choose File" button and the text "No file chosen". At the bottom of the form is a green "Create account" button. The background of the window features a blue geometric pattern.

Figure 6.3: Jobseeker Registration page



#### 6.4. How the Employer can Post a Job

Employer can post job for need employee for vacancy. Employer click username & view a drop-down menu then choice post a job option. Employer get a form about job post. Employer give all necessary information & fill up from properly. Then employer clicks “Post Job” button. If post successfully employer get successfully message. Now I will provide the snapshot of the employer post a job below.



The screenshot shows a web application interface for posting a job. The header is dark blue with links for 'Jobs', 'RFL', and 'Contact Us'. The main content area has a blue geometric background. The form is titled 'Post a Job' and contains the following fields:

- Job Title:** A text input field with the placeholder 'Job Title'.
- Role:** A text input field with the placeholder 'Role'.
- Job Category:** A dropdown menu with 'Accounting Jobs' selected.
- Expected Job Duration:** A text input field with the placeholder 'eg: 5 to 10 days / 8 H per day'.
- Minimum Experience:** A text input field with the placeholder 'Minimum Experience'.
- Employment Type:** A dropdown menu with 'Part-Time' selected.
- Salary Budget:** A text input field with the placeholder 'Salary'.
- Status:** Two radio buttons labeled 'Open' and 'Closed'.
- Job requirements:** A large text area with the placeholder 'Description'.

A green button labeled 'Post Job' is located at the bottom right of the form.

Figure 6.4: Post Job page

## 6.5. Procedure of Update/ Delete Post

Employer can update post if needed. Employer click username & view a drop-down menu then choice My Account option. In My Account page employer get a list of his job posted. Employer can update or delete like needed by clicking update or delete option. If employer need delete post he just clicks delete option & ok for confirmation. Then post deleted. If employer need update post he click update option & get from like post a job. Edit all necessary information in from properly. Then employer clicks Post Job. If update successfully employer get successfully message. Now I will provide the snapshot of the update/ delete page below.

The screenshot displays the 'Jobs Posted' interface. On the left, the user profile for 'RFL' is visible with the email 'rfl@gmail.com'. The main section, titled 'Jobs Posted:', contains a table of job listings. The table has columns for Post Id, Title, Desc, Min Experience, Salary, Status, Update, and Delete. There are three job entries listed.

Post Id	Title	Desc	Min Experience	Salary	Status	Update	Delete
12	Manager	seeker must be BBA complited. at least 1 year experianced'	1 year	20000	open		
14	Casher for Showroom	Employee Qulafication Minimam HSC We need 10 employee for our brand	N/A	15000	open		
15	Computer Operator	Vacancy 04 Educational Requirements Minimum Bachelor degree in any discipline Job Responsibilities Note - Only for	1 year	10000	open		

Figure 6.5: Update/ Delete Post page

## 6.6. Download Resume

Employer can download applicant resume. Before download resume jobseeker must apply against post. Employer click username & view a drop-down menu then choice View Application option. Employer get an applicant list. Now employer able to download applicant resume by clicking "Download resume" option. Now I will provide the snapshot of the download resume page below.

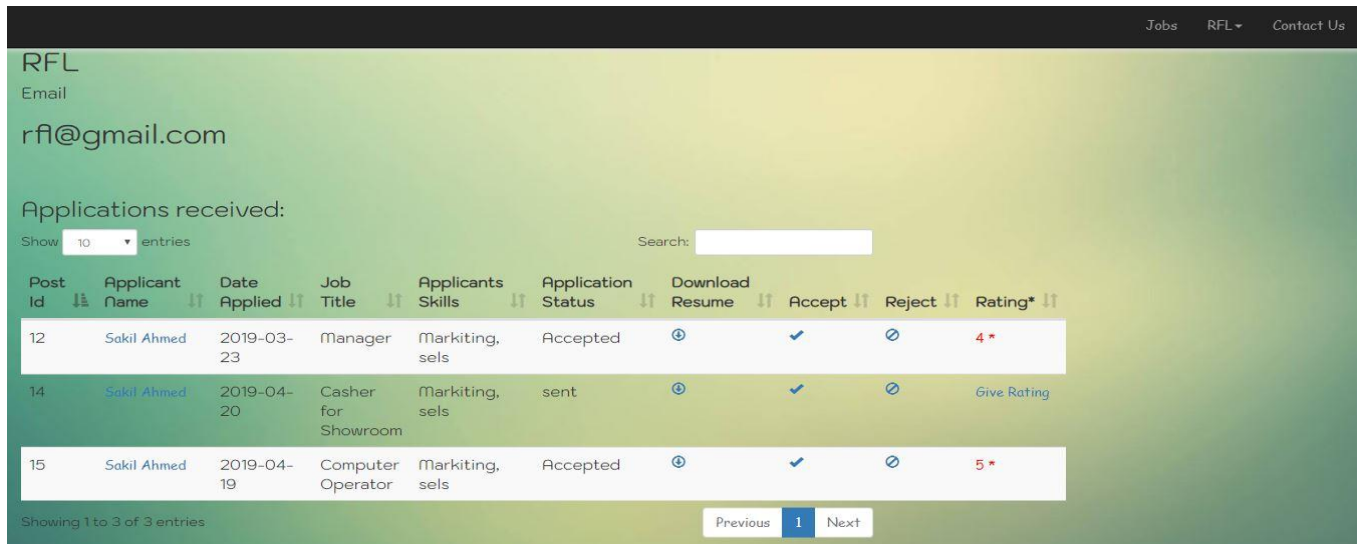


Figure 6.6: Download Resume page

## 6.7. Accept/ Reject Application procedure

Employer accepts or rejects application. Before accept or reject jobseeker must apply against post. Employer clicks username & view a drop-down menu then choice View Application option. Employer gets an applicant list. Now employer accept or reject by clicking Accept; Reject option. Then click "ok" for confirmation. Status bar shown the accepted, rejected information. Now I will provide the snapshot of the accept or reject page below

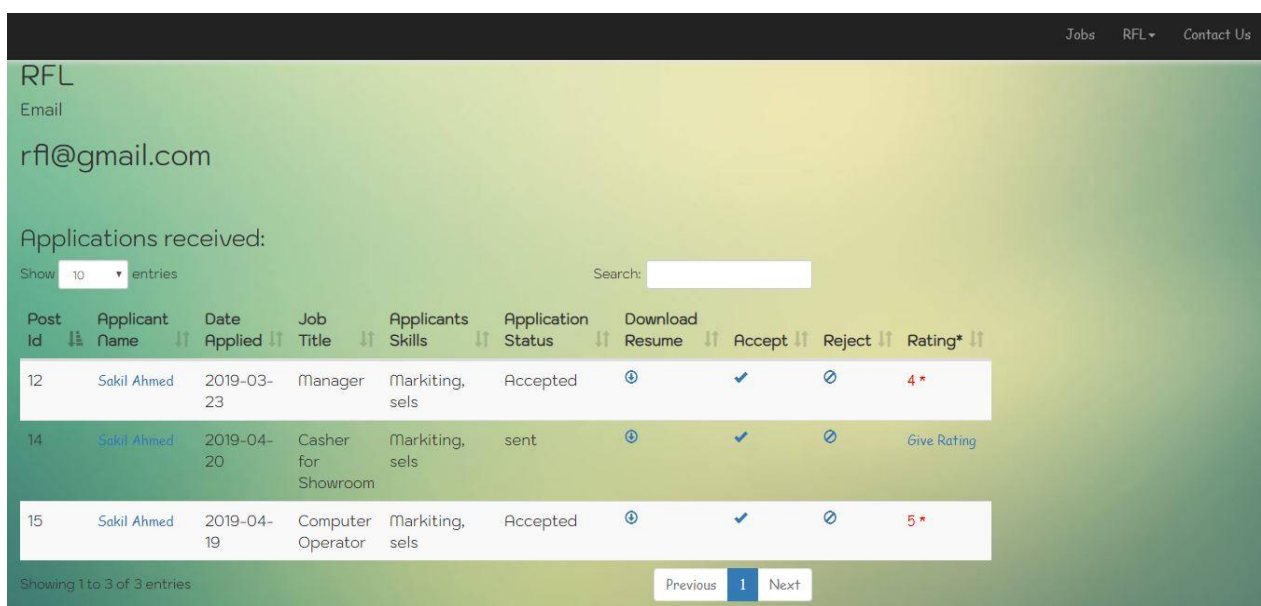


Figure 6.7: Accept/ Reject Application page

## 6.8. How Employer give Rating to Employee

Employer can give rating to employee. Before given rating, jobseeker must apply against post. Employer clicks username & view a drop-down menu then choice View Application option. Employer gets an applicant list. Now employer accepts application by clicking Accept option. If employer accept application then employer can give rating to employee by clicking "Give Rating". Then he goes to rating page, now type or select rating number. Rating number type must be 1 to 5 & click the radio box "I am agree" and submit. Now I will provide the snapshot of the rating to employee page below.

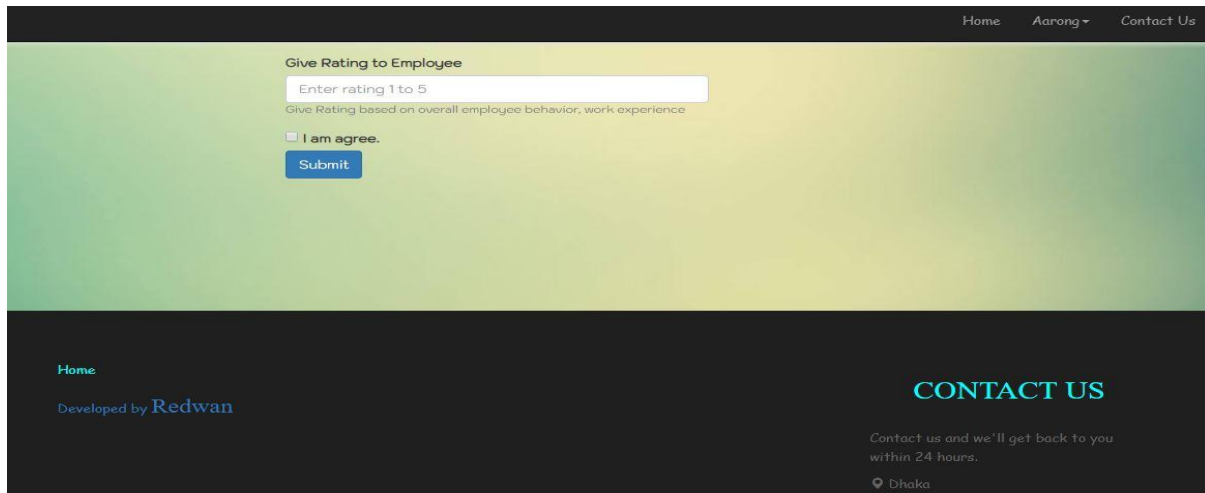


Figure 6.8: Rating to Employee page

## 6.9. How Employee Give Rating to Employer Procedure

Jobseeker can give rating to employer. When jobseeker apply a job and if employer accept the application then employer give rating to employer. Employee clicks username & view a drop-down menu then choice Job Applied option. Employer gets an application list already he applies that. Now click "Give rating" that application is accepted by employer. Then he goes to rating page, now type or select rating number. Rating number type must be 1 to 5 & click the click box "I am agree" and submit. Now I will provide the snapshot of the rating to employer page below.

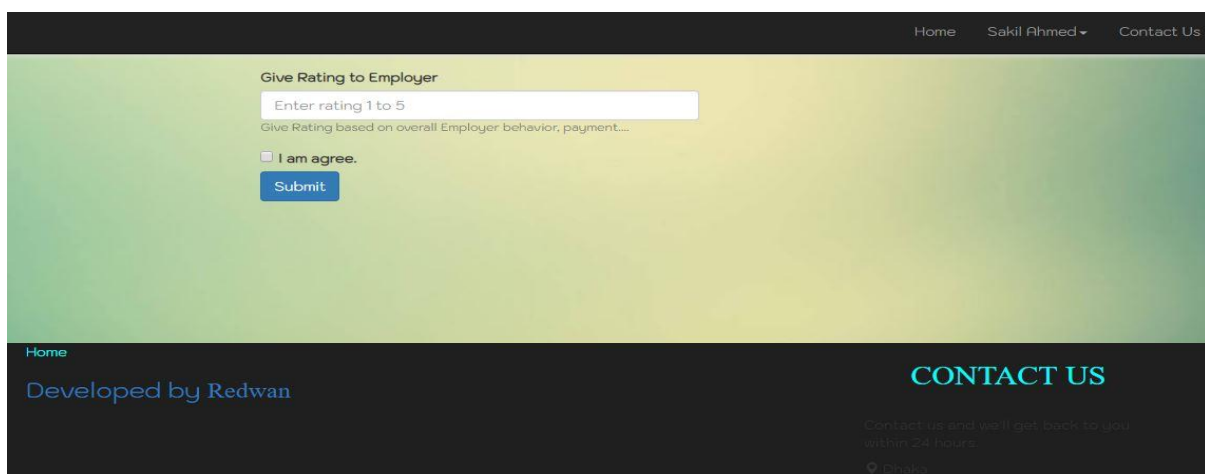


Figure 6.9: Rating to Employer page

## 6.10. How Jobseeker can Apply Job

Jobseeker apply for need a job. When Employer post a job. Jobseeker see this post in home page. If jobseeker want apply, just click the call to action button "Apply". Jobseeker can apply in home page & also can apply visit post details. If apply successfully jobseeker get a message. Now I will provide the snapshot of the apply page below.

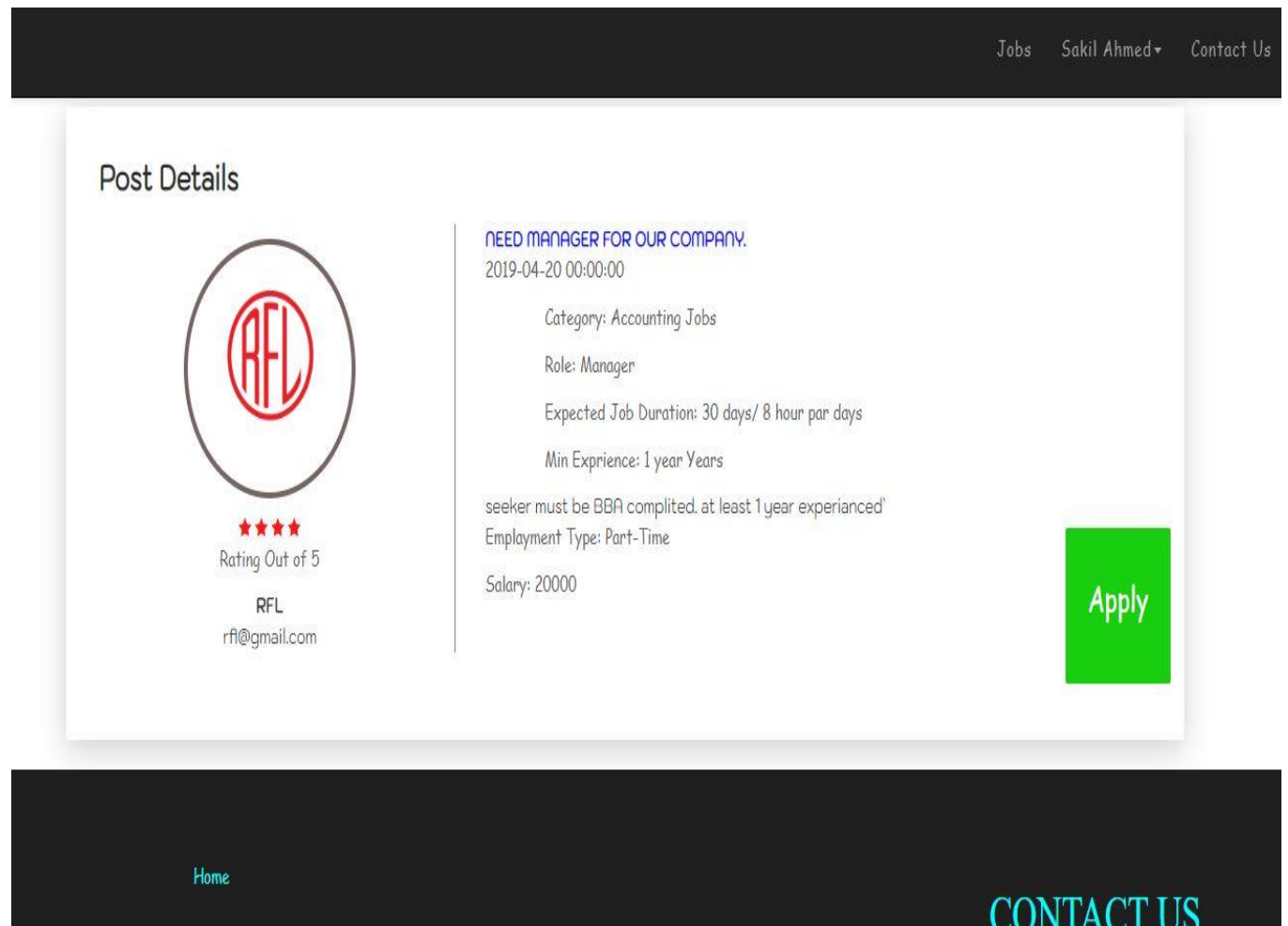


Figure 6.10: Apply Job

### 6.11. How Jobseeker can Update Profile

Jobseeker can update profile & profile picture if any needed. Jobseeker click username & view a drop-down menu then choice My Profile option. Jobseeker get his profile. Now jobseeker can update profile by clicking update profile image, update info. When click update profile image jobseeker get image upload option. Choice image & submit. When jobseeker click update info then he gets a form. Now jobseeker edit, fill up form as he like & submit. Now I will provide the snapshot of the Update Profile procedure below.

Jobs Sakil Ahmed+ Contact Us

Update Profile Image

**About**

Hello! I am Sakil Ahmed.

Experienced on Markiting, sels.

Update Info

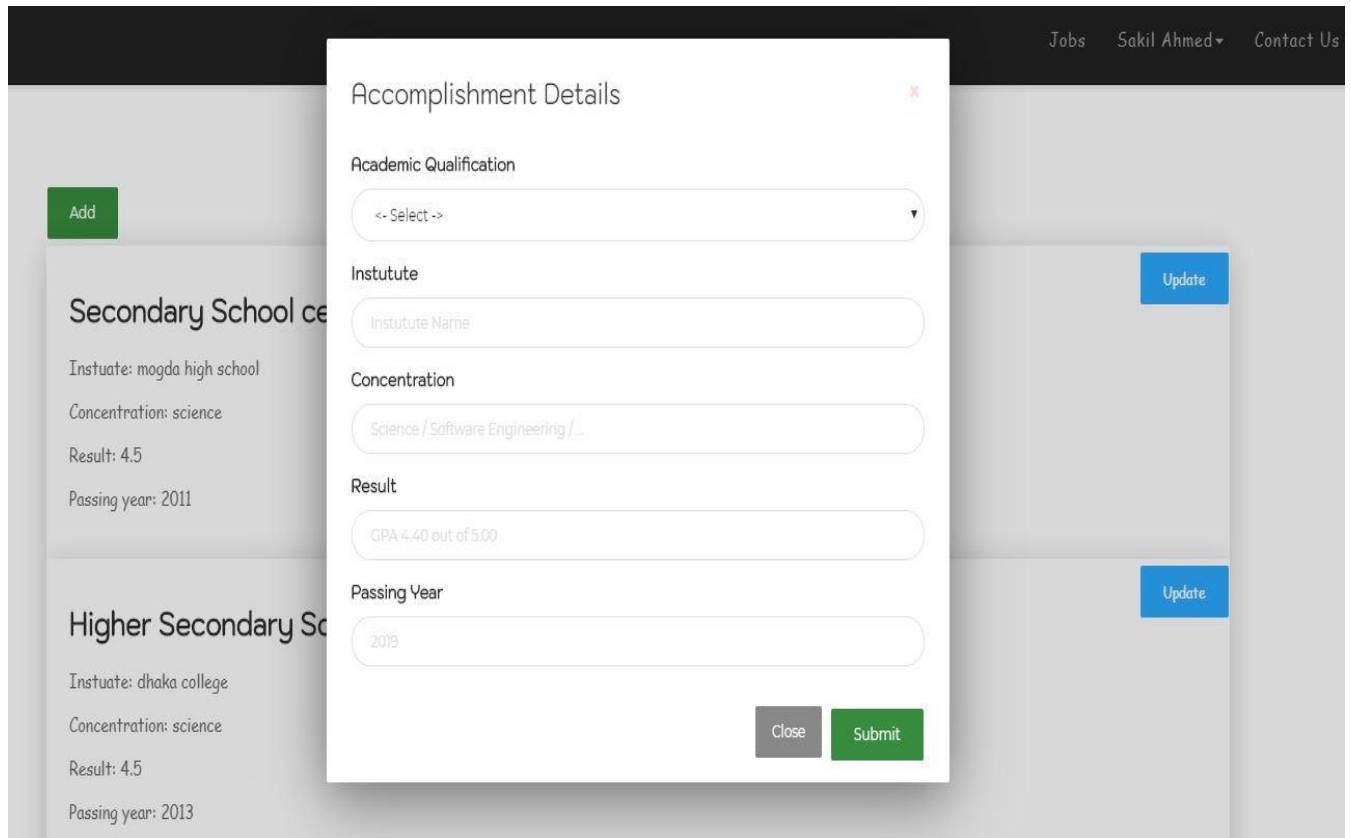
**Basic Informations**

NAME:	Sakil Ahmed	EMAIL:	sakil@gmail.com
FATHER'S NAME:	kadir	PHONE:	0191113343511
MOTHER'S NAME:	hasna	ID:	109801711003480179
DATE OF BIRTH:	1995-06-05	SKILLS:	Markiting, sels
ADDRESS:	badda, dhaka-1212		

Figure 6.11: Update Profile

## 6.12. How to Add Jobseeker's Educational Qualification

Jobseeker can add educational qualification. Jobseeker click username & view a drop-down menu then choice My Profile option. Jobseeker get his profile. Now jobseeker can add qualification by clicking "Add" button in accomplishments table. When click jobseeker get a form, now jobseeker fill out all field submit. Now I will provide the snapshot of the Add accomplishments page below.



The screenshot shows a web application interface with a dark header containing links for 'Jobs', 'Sakil Ahmed', and 'Contact Us'. A modal window titled 'Accomplishment Details' is open, featuring a close button (X) in the top right corner. The form contains the following fields:

- Academic Qualification:** A dropdown menu with the placeholder text '<- Select ->'. Below it, the text 'Institute' is visible.
- Institute Name:** A text input field with the placeholder text 'Institute Name'.
- Concentration:** A text input field with the placeholder text 'Science / Software Engineering / ...'.
- Result:** A text input field with the placeholder text 'GPA 4.40 out of 5.00'.
- Passing Year:** A text input field with the placeholder text '2019'.


At the bottom right of the modal, there are two buttons: a grey 'Close' button and a green 'Submit' button. In the background, a table of accomplishments is partially visible, showing entries for 'Secondary School ce' and 'Higher Secondary Sc'. Each entry includes details like 'Institute: mogda high school', 'Concentration: science', 'Result: 4.5', and 'Passing year: 2011'. Green 'Add' buttons are next to the first entry, and blue 'Update' buttons are next to the second entry.

Figure 6.12: Add Accomplishments



### 6.13. How Jobseeker View their Application Status

Jobseeker can see his application status. Jobseeker clicks username & view a drop-down menu then choice "Jobs Applied" option. Jobseeker gets his application list already he applies that. And see application status like accepted, rejected or sent status in status columns. Now I will provide the snapshot of the Application Status page below.



Jobs Applied by you:

Show 10 entries

Search:

User Name: Sakil Ahmed  
Email: sakil@gmail.com

Post Id	Company Name	Job Title	Date Applied	Min Experience	Salary	Status	Rating	Give Rating
9	Audenberg Technologies	errtet	2019-04-11	5	354345	sent		
12	RFL	Manager	2019-03-23	1 year	20000	Accepted	3 *	Give Rating
14	RFL	Casher for Showroom	2019-04-20	N/A	15000	sent		
15	RFL	Computer Operator	2019-04-19	1 year	10000	Rejected		
16	Aarong	Sales Executive	2019-04-19	N/A	15000	Accepted		Give Rating
17	Aarong	Driver	2019-04-19	3	15000	Accepted		Give Rating

Showing 1 to 6 of 6 entries

Previous 1 Next

Figure 6.13: View Application Status page



## **Chapter 7: Project Summary**

### 7.1. GitHub Link

### 7.2. Project Summary

I have started to develop this project from January. After that I have proposed the design. And then start my work. I have designed the database diagram. After that, I have prepared user interface html pages. The interface of my project is very simple and easy to understand. After completing that, I have started to write the core functionality of the project.

And then I work for the important task is testing. It is also known as quality assurance also.

### 7.3. Limitations

For developing this project, I have faced some limitations like.

**Payment Method:** In my project, there is not having any payment method directly by user cannot make their payment through our application. Only web base desktop application: We have desktop version for part time job portal web platform. So, to using our system user need desktop or laptop and must connected to internet.

### 7.4. Obstacles & Achievements

For finishing this project, I face big challenges. Before starting this project, I didn't know the proper flow of software development life cycle. By developing this project, I have learnt to know how to have a row requirement from clients, system analysis, database design and many things. My supervisor helps me a lot from the very beginning of the development of this project. There are some other obstacles and achievements also like Rating & Job history. I face a big problem to do rating. In our community employer assigned an employee after interview. That was the big challenge for me.

### 7.5. Future Scope

I will do this project for Android OS and for iOS platform in future. So that this project can reach more people. Also, I will add approval system for Employer registration and payment system after finishing job.

### 7.6. References

I have gained some knowledge from some platforms. For making my project successful those resources help me a lot.

<https://www.youtube.com/watch?v=0ITBCK0JOHE>

<https://www.w3schools.com/php/default.asp>

<https://www.draw.io/>

<https://jquery.com/>

<https://www.sublimetext.com/>

<https://php.net/>