

# Career Dao

A DEGITAL JOB SOLUTION FOR YOU

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# Declaration

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Title of Project	: Career Dao
Academic Session	: 2022
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#### **Abstract**

In this subcontinental region, there is no such famous platform where people can do job whatever type he/she want. Though there are some famous platforms for freelancing, they do not offer all sort of features that I am trying to offer and this will be a very much positive for the fresher who are searching for job according to their choice. The purpose of this documentation is to introduce Cakribazar web platform which is a concept of two-sided web platform where one is those who want job and another one is those who will provide job. These jobs can be remote or project based or offline job.

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#### Chapter 1: Introduction

#### 1.1. Project title Cakribazar

#### 1.2. Idea

This is an web application named Cakribazar. This application is committed to improving the quality of life of unemployed people at technical levels. This where people can find job without any third party bothering. Application like Bdjobs, Chakuri are third party for applying any job but here one kind of people can post any job if he/she/company needed and the other one will apply through this application and can get hired.

#### 1.3. Motivation

Human society is constantly working tirelessly for the progress of human civilization and the improvement of human life. Agreeing with this effort, so many freelancers from our country are working on platform like Fiverr, Upwork freelancer etc. and this platform are charging from them for their service. Again, some third party are harassing unemployed people for job and charging huge money and got cheated by those party. So, I thought If I could build a platform where our people can get their proper job solution even online or offline which could save huge money which are going to those foreign company and also people will not get harassed for job and any kind of blackmailing may not happen in future.

#### 1.4. Inspiring Survey

- 1.4.1.According to google, Bangladesh have over 6,50,000 freelancer and average income been around 15000 BDT.
- 1.4.2. Fiverr, Upwork and other marketplaces are taking around 20% means, 195 cores BDT from Bangladesh as charge per month.

#### 1.5. Goals of the project

The goal of this web application is digitalizing Bangladesh and reducing unemployment. By this application we can also save our money. By creating an account user can post job or search for a job and contact directly with the job provider so that we should not depend on third party application who submit our CV to company. User can do freelancing on project basis work as well as job. With a simple user interface user from every sector can handle this application.

#### 1.6. Scope:

Considering the overall system and features this application is meant to offer a easier and smart lifestyle by providing one a correct job profile. This will less one's harassed and make his/her perfect for his/her right job.

Again, if we think from the perspective of our country, we can save a lot on money by using this system. Our financial structure can be more effective if everyone gets the correct option.

#### 1.7. Overview

- 1.7.1. This is an web application named Career Dao
- 1.7.2. This where people can find job without any third party bothering
- 1.7.3. Here, one kind of people can post any job if it needed and the other one will apply through this application and can get hired
- 1.7.4. All can have online meeting through this site to report about each job or project
- 1.7.5.By saving a huge amount of money, this application can contribute to our GDP
- 1.7.6. This can digitalize out appointing system
- 1.7.7. Each job and project will have a record which will reduce internal corruption

#### 1.8. Stackholder

- 1.8.1.Admin
- 1.8.2.Staff
- 1.8.3.Company
- 1.8.4. Project Manager
- 1.8.5.Freelancer

# 1.9. Glossary

Here are some keywords that I used in this paper. Going through this will help you to understand those terms.

Sl no	Term	Definition
Term-01	Stakeholder	A stakeholder is a party that has an interest in a company and can either affect or be affected by the business. The primary stakeholders in a typical corporation are its investors, employees, customers, and suppliers.
Term-02	End-User	In product development, an end user (sometimes end-user) is a person who ultimately uses or is intended to ultimately use a product.
Term-03	Administrator	An Administrator provides office support to either an individual or team and is vital for the smooth-running of a business. Their duties may include fielding telephone calls, receiving and directing visitors, word processing, creating spreadsheets and presentations, and filing.
Term-04	Use Case	A use case is a written description of how users will perform tasks on your website. It outlines, from a user's point of view, a system's behavior as it responds to a request.
Term-05	SRS	A software requirements specification (SRS) is a document that describes what the software will do and how it will be expected to perform. It also describes the functionality the product needs to fulfill all stakeholders (business, users) needs.
Term-06	FR	Functional requirement
Term-07	NFR	Nonfunctional requirement

# 1.10. Project Planning

After the project has been defined and the project team has been selected, we are ready to enter the second phase in the project management life cycle.

Project planning is the heart of the project life cycle, and tells everyone involved where you are going and how you are going to get there. The basic processes of project planning that we considered are

- 1. Preparation of the work
- 2. Project schedule development
- 3. Resource planning
- 4. Budget planning

ID	Task	Working Date	Time (days)	Dependencies
T1	Requirement gather		7	
T2	Analysis		2	T1
Т3	Feasibility Study		4	T2
T4	Project proposal ready		5	T2
T5	Diagrams		5	T2
T6	UI creating		7	T2
Т7	Database implementation		1	
Т8	Include all info into documentation			
T9	Mid-Defense presentation		5	T2, T3, T4, T5, T6, T7
T10	API Creating			
T11	Integrate frontend with backend			
T12	Testing			
T13	Completing documentation			
T14	Final defense			

# Chapter 2: Requirement Specification

Requirement is something that is needed or that must be done. As we are deploying this webbased software, the requirements are given below are from scratch and if our customer need more we will obviously provide them after the next maintenance.

#### 2.1. Functional Requirements:

- 1. Functional authentication for all stakeholder
- 2. Logout
- 3. Company profile
- 4. Project manager profile
- 5. Personal profile
- 6. Job list view
- 7. Project list view
- 8. Job detail's view
- 9. Project detail's view
- 10. Job apply section
- 11. Project apply section
- 12. Rating & review
- 13. User resume create section
- 14. Bookmark job and project section
- 15. Community section
- 16. Community discussion section
- 17. FAQ
- 18. Live messaging system
- 19. Filtering section for related pages
- 20. Notification section
- 21. Admin can see the total jobs list & details which are posted
- 22. Admin can see the total projects list & details which are posted
- 23. Admin can see the total applied list & their details
- 24. Admin can see the popular fields at jobs & projects
- 25. Admin can approve a newly registered company by considering its all documents
- 26. Admin can ban a company if any suspicious activity detected
- 27. Admin can send any sort of emergency alert to any company
- 28. Admin can approve a newly registered project manager by considering his documents
- 29. Admin can ban a project manager if any suspicious activity detected
- 30. Admin can send any sort of emergency alert to any project manager
- 31. Admin can approve a job by considering its validity
- 32. Admin can approve a project by considering its validity
- 33. Admin can report on suspicious transaction
- 34. Admin can manage employee verification status depending on his/her ID/prove
- 35. Admin can manage every employee account

#### 2.2. Non-functional requirements:

- 1. Landing page
- 2. Trash box section
- 3. Remote desktop using facilities for remote job
- 4. Filtering any section depending on required condition
- 5. **Security:** The software must remain resilient in the face of attacks like DOS attack or SQLi and XSS/CSRF protected.
- 6. **Accessibility:** People with the widest range of capabilities can use the system.
- 7. **Availability:** The system is able to function during normal operating times.
- 8. **Confidentiality:** The system protects sensitive data and allows only authorized access to the data.
- 9. **Efficiency:** The data are maintained by the software system in terms of accuracy, authenticity and without corruption.
- 10. **Reliability:** The software system consistently performs the specified functions without failure.
- 11. **Safety:** The system prevents harm to people or damage to the environment.
- 12. **Survivability:** The system continues to function and recovers in the presence of a system failure.
- 13. **Usability:** The user is able to learn operate, prepare inputs and interpret outputs through interaction with a software system.

#### 2.3. User characteristics

#### Admin -

- 1.1. Manage jobs and project
- 1.2. Verify profile
- 1.3. Community control
- 1.4. Monitor every sort of user

#### Company -

- 1.1. Search for project
- 1.2. Post new project
- 1.3. Post new job
- 1.4. Apply for project
- 1.5. Verified profile
- 1.6. Freelancer and employee record
- 1.7. Live messaging
- 1.8. Online meeting
- 1.9. Community facilities

#### Project manager -

- 1.1. Search for project
  - 1.2. Apply for project
  - 1.3. Post new project
  - 1.4. Verified profile
  - 1.5. Freelancer record
  - 1.6. Live messaging
  - 1.7. Online meeting
  - 1.8. Community facilities

#### Employee -

- 1.1. Search for job
- 1.2. Apply for job
- 1.3. Apply for project
- 1.4. Verified job record
- 1.5. profile
- 1.6. Online meeting
- 1.7. Live messaging
- 1.8. Community facilities
- 1.9. Digital resume

# 2.4. System Requirement Specification

### 2.4.1. Authentication

Overview	
ID	SRS - 01
Requirement title	Functional Authentication
Requirement type	FR
Priority	High

### 2.4.2. Logout

Overview	
ID	SRS - 02
Requirement title	Logout
Requirement type	FR
Priority	High

### 2.4.3. Company profile

Overview	
ID	SRS - 03
Requirement title	Company profile
Requirement type	FR
Priority	High

### 2.4.4. Company profile edit

Overview	
ID	SRS - 04
Requirement title	Company profile edit
Requirement type	FR
Priority	High

### 2.4.5. Project manager profile

Overview	
ID	SRS - 05
Requirement title	Project manager profile
Requirement type	FR
Priority	High

### 2.4.6. Project manager profile edit

Overview	
ID	SRS - 06
Requirement title	Project manager profile edit
Requirement type	FR
Priority	High

# 2.4.7. Employee profile

Overview	
ID	SRS - 07
Requirement title	Employee profile
Requirement type	FR
Priority	High

# 2.4.8. Employee profile edit

Overview	
ID	SRS – 08
Requirement title	Employee profile edit
Requirement type	FR
Priority	High

#### 2.4.9. Job list

Overview	
ID	SRS – 09
Requirement title	Job list
Requirement type	FR
Priority	High

### 2.4.10.Project list

Overview	
ID	SRS – 10
Requirement title	Project list
Requirement type	FR
Priority	High

#### 2.4.11.Job details

Overview	
ID	SRS – 11
Requirement title	Job details
Requirement type	FR
Priority	High

# 2.4.12.Project details

Overview	
ID	SRS – 12
Requirement title	Project details
Requirement type	FR
Priority	High

#### 2.4.13.Featured Job list

Overview	
ID	SRS – 13
Requirement title	Featured Job list
Requirement type	FR
Priority	Medium

### 2.4.14.Featured Project list

Overview	
ID	SRS – 14
Requirement title	Featured project list
Requirement type	FR
Priority	Medium

# 2.4.15.Job applies

Overview	
ID	SRS – 15
Requirement title	Apply job
Requirement type	FR
Priority	High

# 2.4.16.Project applies

Overview	
ID	SRS – 16
Requirement title	Apply project
Requirement type	FR
Priority	High

### 2.4.17.Employee resume

Overview	
ID	SRS – 17
Requirement title	Create or update employee resume
Requirement type	FR
Priority	High

### 2.4.18.Company info

Overview	
ID	SRS – 18
Requirement title	Create or update company info
Requirement type	FR
Priority	High

# 2.4.19.Project manager detail

Overview	
ID	SRS – 19
Requirement title	Create or update project manager detail
Requirement type	FR
Priority	High

# 2.4.20.Community

Overview	
ID	SRS – 21
Requirement title	Community
Requirement type	FR
Priority	High

### 2.4.21.Create community

Overview	
ID	SRS – 22
Requirement title	Create new community
Requirement type	FR
Priority	High

### 2.4.22.Post in community

Overview	
ID	SRS – 23
Requirement title	Post in community
Requirement type	FR
Priority	High

# 2.4.23.Live message

Overview	
ID	SRS – 24
Requirement title	Live message
Requirement type	FR
Priority	Medium

# 2.4.24.FAQ

Overview	
ID	SRS – 25
Requirement title	FAQ
Requirement type	FR
Priority	Low

### 2.4.25.Notification

Overview	
ID	SRS – 26
Requirement title	Notification
Requirement type	FR
Priority	Medium

### 2.4.26.Applied list

Overview	
ID	SRS – 27
Requirement title	Applied list
Requirement type	FR
Priority	High

# 2.4.27.Apply detail

Overview	
ID	SRS – 28
Requirement title	Apply detail
Requirement type	FR
Priority	High

# 2.4.28.Popular fields

Overview	
ID	SRS – 29
Requirement title	Popular fields
Requirement type	FR
Priority	High

### 2.4.29.Approve company, project manager & employee

Overview	
ID	SRS – 30
Requirement title	Approve company, project manager & employee
Requirement type	FR
Priority	High

### 2.4.30.**Report**

Overview	
ID	SRS – 31
Requirement title	Report
Requirement type	FR
Priority	High

### 2.4.31.Ban company, project manager & employee

Overview	
ID	SRS – 32
Requirement title	Ban company, project manager & employee
Requirement type	FR
Priority	Low

### 2.4.32.Approve job, project

Overview	
ID	SRS – 33
Requirement title	Approve job, project
Requirement type	FR
Priority	High

# 2.5. Non-functional requirements:

# 2.5.1. Landing page

Overview	
ID	SRS – 34
Requirement title	Landing page
Requirement type	NFR

### 2.5.2. Filtering

Overview	
ID	SRS – 35
Requirement title	Filtering
Requirement type	NFR

#### 2.5.3. Bookmark

Overview	
ID	SRS – 36
Requirement title	Bookmark job/project
Requirement type	FR

### 2.5.4. Remote desktop

Overview	
ID	SRS – 37
Requirement title	Remote desktop
Requirement type	NFR

### 2.5.5. Security

Overview	
ID	SRS – 38
Requirement title	Security
Requirement type	NFR

### 2.5.6. Accessibility

Overview	
ID	SRS – 39
Requirement title	Accessibility
Requirement type	NFR

### 2.5.7. Availability

Overview	
ID	SRS – 40
Requirement title	Availability
Requirement type	NFR

### 2.5.8. Confidentiality

Overview	
ID	SRS – 41
Requirement title	Confidentiality
Requirement type	NFR

# 2.5.9. Efficiency

Overview	
ID	SRS – 42
Requirement title	Efficiency
Requirement type	NFR

### 2.5.10.Reliability

Overview	
ID	SRS – 43
Requirement title	Reliability
Requirement type	NFR

#### 2.5.11.Safety

Overview	
ID	SRS – 44
Requirement title	Safety
Requirement type	NFR

#### 2.5.12.Survivability

Overview	
ID	SRS – 45
Requirement title	Survivability
Requirement type	NFR

#### 2.5.13.Usability

Overview	
ID	SRS – 46
Requirement title	Usability
Requirement type	NFR

#### 2.5.14.Trash box

Overview	
ID	SRS – 47
Requirement title	Trash box
Requirement type	NFR

### 2.6. Performance Requirements

#### 2.6.1. Speed and Latency Requirements

- 2.6.1.1. Dataset would be inserted in PostgreSQL Database.
- 2.6.1.2. UI design-build on the user fulfills table data set and show.

#### 2.6.2. Precisions or Accuracy Requirements

- 2.6.2.1. All user capable to show accurate page.
- 2.6.2.2. Admin can Update any information if needed.
- 2.6.2.3. Admin can manage the system.

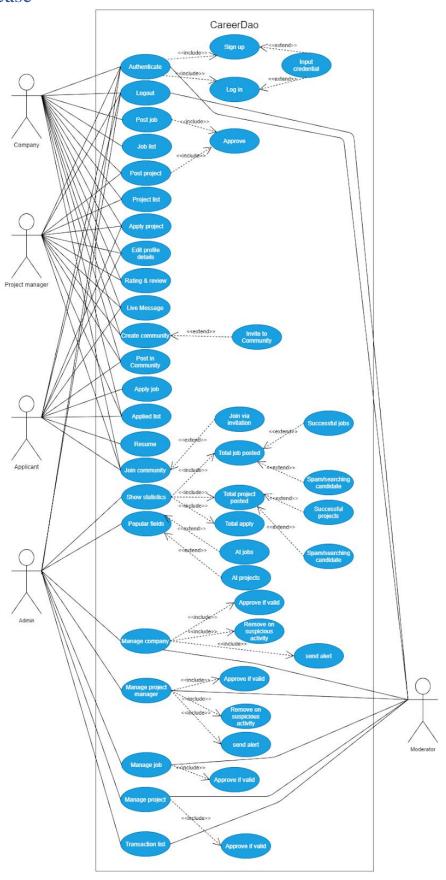
# Chapter 3: System Analysis, Design & Specification

### 3.1. Software specification:

The stages are given below:

- 3.1.1. **Feasibility studies:** the user's need is accessed to ensure that current technologies can adequately handle them, they are cost-effective and they are within the limits of the overall budget.
- 3.1.2. **Requirement's analysis:** This involves stipulating system requirements from existing systems, potential user's inputs and further analysis.
- 3.1.3. **Requirement's specification:** At this stage, all the information gathered so far is translated into a document that clearly states all the system requirements including the users' stated requirements and the detailed system functionalities.
- 3.1.4. **Requirement's validation:** This stage checks that the requirements developed are consistent and complete.

# 3.2. Use case



#### 3.3. Generalize Use Case

3.3.1. Use case: Stakeholder Authentication

#### Diagram:

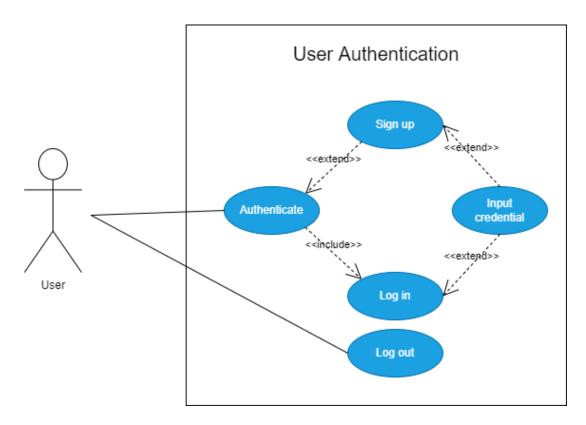


Figure: Use case diagram of stakeholder authentication

### **Description**

Every single user must pass this authentication step to use this system. If anyone comes to visit this, they can visit the landing pages without any sort of authentication but if anyone wants to use any service of this system, he/she must pass a valid authenticate.

Three types of authentications depending on user-

- 1. Registration: The new user who do not have any account in this system and want to use some service of this system then he/she should register himself/herself by filling up required credentials and then click register button.
- 2. Login: The existing user who create an account by registering themselves will authenticate themselves in this section and then click the login button.
- 3. Log out: The logged in user can logged themselves out whenever they need to do it.

#### 3.3.2. Use Case: Company Section

Diagram:

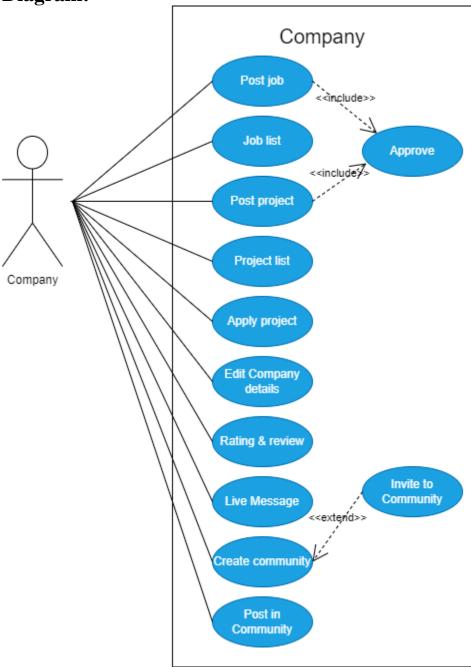


Figure: Use case diagram for Company

#### **Description**

A company profile can do multiple tasks like

- 1. A company can post a job or project
- 2. It can approve the appropriate applicant among all of the applications.
- 3. They can view their posted job or project list.
- 4. Even a company can apply for another project also.
- 5. They can review and rate other company, project manager or other applicant for their work.
- 6. Through this integrated live message system company can communicate anyone, joined this system, related to its work.
- 7. A company can create a community to discuss on a topic with other members who are in this community.
- 8. A company can send invitation link to others to join at specific community.
- 9. Obviously, it can post to any community where it is presented as member or host.
- 10. Company can update its details.

# Diagram:

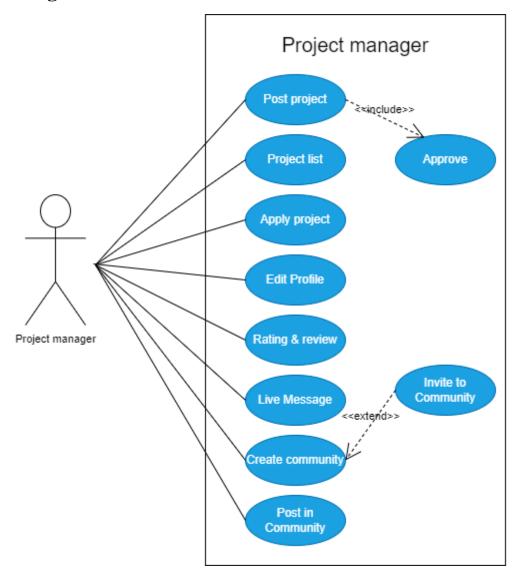


Figure: Use case diagram for project manager

### **Description**

A project manager can do multiple tasks like

- 1. He/she can post a project
- 2. He/she can approve the appropriate applicant among all of the applications.
- 3. He/she can view his/her posted project list.
- 4. Even a project manager can apply for another project also.
- 5. He/she can review and rate other company, project manager or other applicant for their work.
- 6. Through this integrated live message system, a project manager can communicate anyone, joined this system, related to work.
- 7. A project manager can create a community to discuss on a topic with other members who are in this community.
- 8. A project manager can send invitation link to others to join at specific community.
- 9. Obviously, he/she can post to any community where he/she is presented as member or host.
- 10. He/she can update his/her profile.

#### 3.3.4. Use Case: Applicant Section

### Diagram:

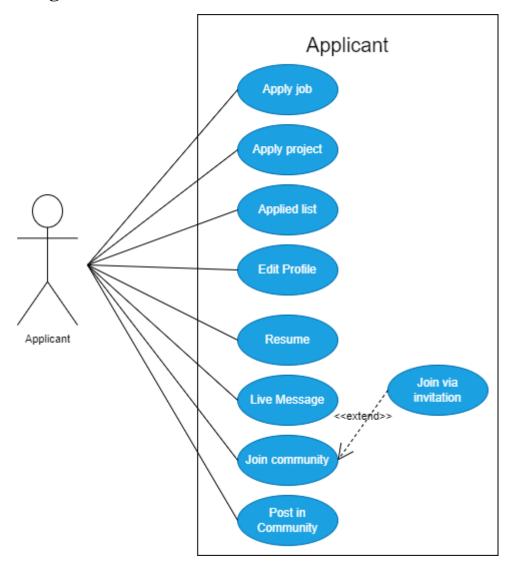


Figure: Use case diagram for applicant

### **Description**

An applicant has several options to choose like-

- 1. He/she can apply for a job or a project
- 2. He/she can view a circular list where he/she applied with each work status.
- 3. He/she can create a digital resume with all fields needed to make himself/herself perfect to be hired by other companies or project manager.
- 4. Through this integrated live message system, applicant can communicate anyone, joined this system, related to work.
- 5. An applicant can join a community to discuss on a topic with other members who are in this community by receiving an invitation link or with join request.
- 6. He/she can post to any community where he/she is presented as member.
- 7. He/she can update his/her profile.

## Diagram:

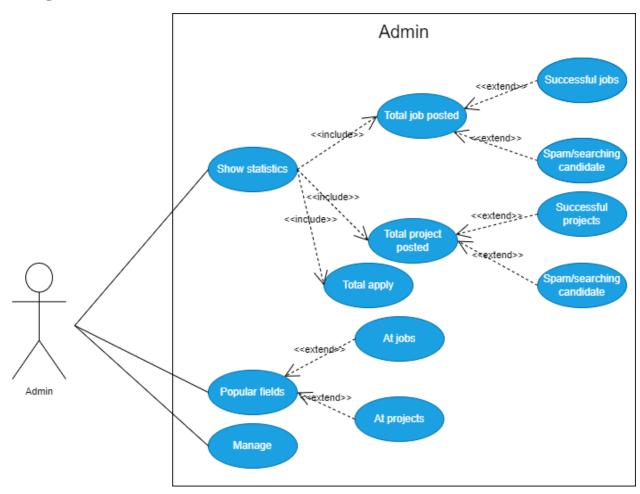


Figure: Use case diagram for admin

# Description

An applicant has several options to choose like-

- 1. Check statistics to observe the system.
  - a. Total job posted
    - i. Successful jobs
    - ii. Jobs that still searching candidate
  - b. Total project posted
    - i. Successful projects
    - ii. projects that still searching candidate
  - c. Total applies
- 2. Popular field
  - a. At jobs
  - b. At projects
- 3. Manage

## Diagram:

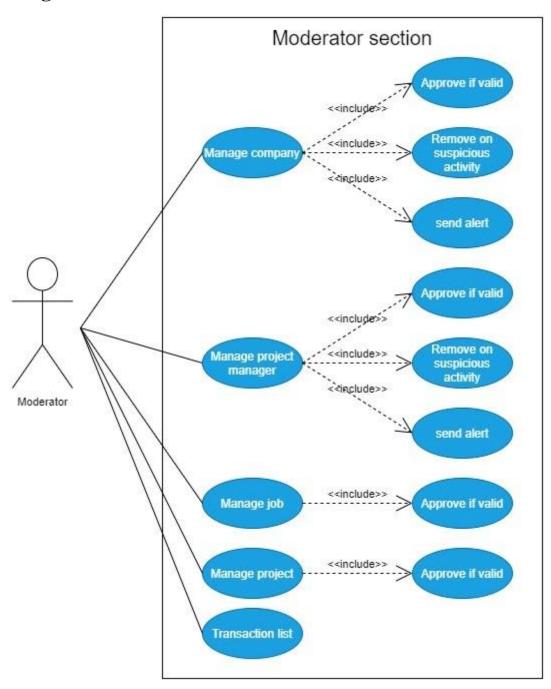


Figure: Use case diagram for admin-manage section

### **Description**

An applicant has several options to choose like-

- 1. Manage company
  - a. Approve if all info and documents are valid
  - b. Ban on suspicious activities
  - c. Send any emergency alert
- 2. Manage project manager
  - a. Approve if all info and documents are valid
  - b. Ban on suspicious activities
  - c. Send any emergency alert
- 3. Manage job
  - a. Approve if job is valid and not suspicious
- 4. Manage project
  - a. Approve if project is valid
- 5. View Transaction list
  - a. Send report on suspicious transaction
  - b. Check report feedback from related account
- 6. Manage applicant account
  - a. Non-verified applicant
  - b. Manage document for verify

## 3.4. Use Case Flow, Stakeholder, Conditions

#### 3.4.1. Authentication

Overview	
Use case	Authentication
Description	Authenticate real user of this system by considering given credentials
Actors	All stakeholder like admin, company, project manager, employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be on login or sign-up page and should be at unauthenticated state</li> </ol>
Basic Flow	STEP-1: Visit Landing page STEP-2: Click on login if have an account otherwise, click on sign up STEP-3: Input all credentials correctly STEP-4: click on login or signup button
Post condition	Logged you in the system as a valid user and will be shown a landing page from where one can visit each page as he/she need

## 3.4.2. Logout

Overview	
Use case	Authentication
Description	Logged out an authenticated user
Actors	All stakeholder like admin, company, project manager, employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Stakeholders must be logged in the system</li> </ol>
Basic Flow	STEP-1: Click on logout
Post condition	Logged out an authenticated user from the system

# 3.4.3. Company profile

Overview	
Use case	Company section
Description	Company details information show
Actors	All stakeholder like admin, company, project manager, employee
Initial status and pre- condition	1. Stable internet connection
Basic Flow	STEP-1: Click on company name
Post condition	Selected company details will be shown on a page

# 3.4.4. Company profile edit

Overview	
Use case	Company section
Description	Company details information update
Actors	Company
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company</li> </ol>
Basic Flow	STEP-1: Click on update info STEP-2: Update desired info STEP-3: Click on update button
Post condition	Updated info of the company will be shown on a page

# 3.4.5. Project manager profile

Overview	
ID	SRS - 05
Description	Project manager details information show
Actors	All stakeholder like admin, company, project manager, employee
Initial status and pre- condition	1. Stable internet connection
Basic Flow	STEP-1: Click on project manager name
Post condition	Selected project manager details will be shown on a page

# 3.4.6. Project manager profile edit

Overview	
Use case	Project manager section
Description	Project manager details information update
Actors	Project manger
Initial status and pre- condition	<ul><li>3.5. Stable internet connection</li><li>3.6. Must be logged in as a project manager</li></ul>
Basic Flow	STEP-1: Click on update info STEP-2: Update desired info STEP-3: Click on update button
Post condition	Updated info of the project manager will be shown on a page

# 3.4.7. Employee profile

Overview	
Use case	Employee section
Description	Employee details information show
Actors	All stakeholder like admin, company, project manager, employee
Initial status and pre- condition	1. Stable internet connection
Basic Flow	STEP-1: Click on employee name
Post condition	Selected employee details will be shown on a page

# 3.4.8. Employee profile edit

Overview	
Use case	Employee section
Description	Employee details information update
Actors	Employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a employee</li> </ol>
Basic Flow	STEP-1: Click on update info STEP-2: Update desired info STEP-3: Click on update button
Post condition	Updated info of the employee will be shown on a page

## 3.4.9. Job list

Overview	
Use case	Employee, admin section
Description	All jobs which will take candidate will be shown as list
Actors	Employee, company, admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an employee, company, admin</li> <li>Click on available jobs</li> </ol>
Basic Flow	STEP-1: Scroll down to see one's desired job
Post condition	All apply able jobs will be presented to actors as listed

# 3.4.10.Project list

Overview	
Use case	Company, project manager, Employee, admin section
Description	All Projects which will take candidate will be shown as list
Actors	Admin, company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an employee, admin, company, project manager</li> <li>Click on available projects</li> </ol>
Basic Flow	STEP-1: Scroll down to see one's desired project
Post condition	All apply able projects will be presented to stakeholder as listed

### 3.4.11.Job details

Overview	
Use case	Employee, admin section
Description	One single job will be shown to stakeholder with its all details like about the job, what is the responsibility, where should employee work at, what about the experience, is the job remote or offline etc.
Actors	Employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an employee, admin</li> </ol>
Basic Flow	STEP-1: Click on specific job Requirement title
Post condition	With all details the clicked job will be presented to actors

# 3.4.12.Project details

Overview	
Use case	Employee, project manager, company, admin section
Description	One single project will be shown to actors with its all details like what about the project, what should employee do, before when employee should submit it and so on
Actors	Admin, company, project manager and employee
Initial status and pre- condition	<ul><li>3.7. Stable internet connection</li><li>3.8. Must be logged in as an employee or project manager or company or admin</li></ul>
Basic Flow	STEP-1: Click on specific project Requirement title
Post condition	With all details the clicked project will be presented to actors

### 3.4.13.Featured Job list

Overview	
Use case	Company section
Description	Show all jobs by listed which posted by logged in company
Actors	Company
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company</li> </ol>
Basic Flow	STEP-1: Click on featured jobs
Post condition	All jobs which posted by logged in company will be presented to stakeholder as listed

# 3.4.14.Featured Project list

Overview	
Use case	Company, project manager section
Description	Show all jobs by listed which posted by logged in company or project manager
Actors	Company, project manager
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager</li> </ol>
Basic Flow	STEP-1: Click on featured projects
Post condition	All projects which posted by logged in company or project manager will be presented to stakeholder as listed

# 3.4.15.Job applies

Overview	
Use case	Employee section
Description	Show all required fields for filling up to apply a job
Actors	Employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an employee</li> </ol>
Basic Flow	STEP-1: Click on apply button from a job detail STEP-2: Fill all the requirements to apply and click apply
Post condition	A redirected page will be shown with all detail of apply and with the status of the result of appointment

# 3.4.16.Project applies

Overview	
Use case	Company, project manager, employee section
Description	Show all required fields for filling up to apply a job
Actors	Company, project manager, employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on apply button from a project detail STEP-2: Fill all the requirements to apply and click apply
Post condition	A redirected page will be shown with all detail of apply and with the status

# 3.4.17.Employee resume

Overview	
Use case	Employee section
Description	Show all necessary field to complete one's resume
Actors	Employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an employee</li> </ol>
Basic Flow	STEP-1: Click on resume section STEP-2: Fill all the requirements to create an appropriate resume
Post condition	A refreshed page will be shown with all information

# 3.4.18.Company info

Overview	
Use case	Company section
Description	Show all necessary field to complete company's info
Actors	Company
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company</li> </ol>
Basic Flow	STEP-1: Click on company info STEP-2: Fill all the requirements to become a proper company
Post condition	A refreshed page will be shown with all information

# 3.4.19.Project manager detail

Overview	
Use case	Project manager section
Description	Show all necessary field to complete manager detail
Actors	Project manager
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a project manger</li> </ol>
Basic Flow	STEP-1: Click on project manager detail section STEP-2: Fill all the requirements to become a proper project manager to get projects from market place
Post condition	A refreshed page will be shown with all information

# 3.4.20.Community

Overview	
Use case	Company, project manager, employee section
Description	Community details with all activities
Actors	Company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on community section
Post condition	All community will be shown as a list with small details about the community

# 3.4.21.Create community

Overview	
Use case	Company, project manager, employee section
Description	Create new community to add new discussion with people
Actors	Premium Company, project manager, employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a premium company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on create community STEP-2: Fill up all the required fields to create a community STEP-3: Click on the create button
Post condition	New community with proper details and also with an invitation link will be shown up to user

# 3.4.22.Post in community

Overview	
Use case	Company, project manager, employee section
Description	Post anything related to specific community
Actors	Premium company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a premium company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on create new post STEP-2: Fill up all the required fields to post something STEP-3: Click on the post now button
Post condition	All post of that community will be shown as a list with details

# 3.4.23.Live message

Overview	
Use case	Company, project manager, employee section
Description	Discuss about project or job related any topic via this live message system so that company or project manager or even the employee need not to take any help from other third party help to talk with each other
Actors	Company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on chat STEP-2: Type message and attach any attachment if needed STEP-3: Click on the send button
Post condition	Chat of both people will be displayed nicely

# 3.4.24.FAQ

Overview	
Use case	Company, project manager, employee section
Description	This is all about frequently asked common question by any user from their aspect
Actors	Company, project manager, employee and any guest user
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on FAQ section to the question and answer
Post condition	Answer with each relevant question will be shown

### 3.4.25.Notification

Overview	
Use case	Company, project manager, employee section
Description	Notification on different activities like accepting new project, job or even any sort of notification from admin also
Actors	Company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on notification icon
Post condition	View all sort of notification and can click on one to see any details about that issue

# 3.4.26.Applied list

Overview	
Use case	admin section
Description	All applied list of employees who applied for job, project and also the applied list of company and project manager who applied for project
Actors	admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on view applied list option
Post condition	View list of employees, company and project manager who applied for a job or project

# 3.4.27.Apply detail

Overview	
Use case	admin section
Description	Detail of specific applied job or project and applied actor
Actors	admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on details button at the end of the row of the list
Post condition	Detail data of specific applied job or project and applied actor

# 3.4.28.Popular fields

Overview	
Use case	admin section
Description	Detail of popular field on job and project
Actors	admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on popular fields to see where people are interested for jobs and also at projects
Post condition	Show fields name depending on jobs and projects

# 3.4.29. Approve company, project manager & employee

Overview	
Use case	admin section
Description	Approve company, project manager and employee depending on their proper id prove
Actors	admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on manage to approve each newly registered company, project manager and employee depending on their given ID prove
Post condition	Status will be changed to verified for company, project manager or employee

# 3.4.30.Report

Overview	
Use case	admin section
Description	Send a report notification to a company or project manager or employee for any transaction or activities if it seems suspicious to admin
Actors	admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on manage to report a company, project manager and employee on their activities and transactions
Post condition	Redirect to report list to check defending reply from specific actor about that activity for which he/she got a report

# 3.4.31.Ban company, project manager & employee

Overview	
Use case	admin section
Description	Ban company, project manager and employee depending on their suspicious activities or disobeying term & condition
Actors	admin
Initial status and pre- condition	<ul><li>3. Stable internet connection</li><li>4. Must be logged in as an admin</li></ul>
Basic Flow	STEP-1: Click on manage to ban each company, project manager and employee on their activities that violates terms & conditions
Post condition	Ban list of company or project manager or employee will be shown with new banned company or project manager or employee

# 3.4.32.Approve job, project

Overview	
Use case	admin section
Description	Approve any job or project after checking its validity
Actors	Admin
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as an admin</li> </ol>
Basic Flow	STEP-1: Click on manage to approve job or project after finding it valid and anyone will not be cheated who will apply
Post condition	Redirect to project or job list after approving otherwise admin will be redirected to rejected job or project list

### 3.4.33.Bookmark

Overview	
Description	Bookmark any job or project or any community post to checking it later
Actors	Company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on project manager detail section STEP-2: Click the bookmark icon to list a job or project or any post at your job list
Post condition	Item will be added on bookmark list

# 3.4.34.Remote desktop

Overview	
Use Case	Remote Desktop
Description	Remote desktop facilities to those who are hired for remote job
Actors	Company, project manager and employee
Initial status and pre- condition	<ol> <li>Stable internet connection</li> <li>Must be logged in as a company or project manager or an employee</li> </ol>
Basic Flow	STEP-1: Click on remote job to use the computer of company or the project manager's computer to do the job
Post condition	Use another person computer to do one's job for any emergency or in remote job section

# 3.5. Activity Diagram

# 3.5.1. Authentication

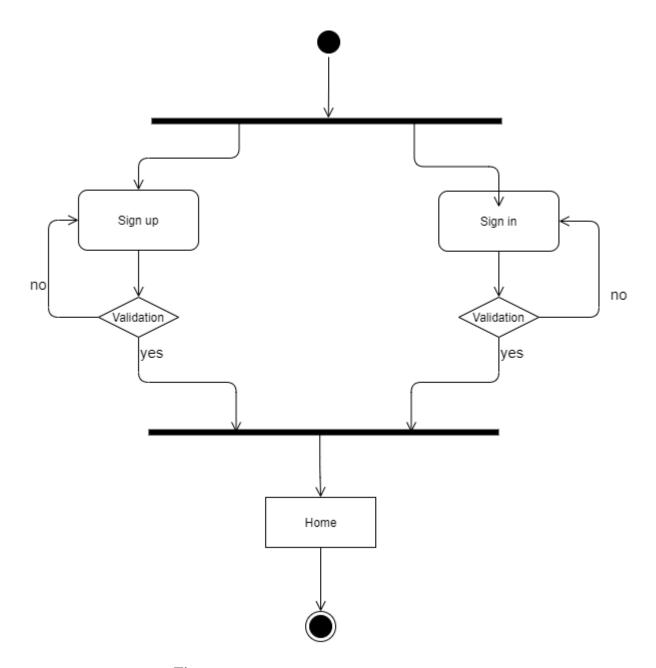


Figure: Activity Diagram (Authentication)

## 3.5.2. Logout

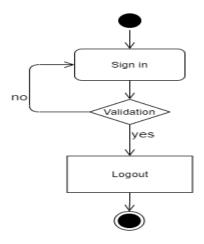


Figure: Activity Diagram (Logout)

## 3.5.3. Post new job

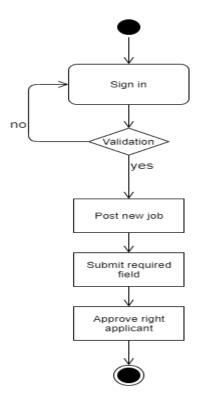


Figure: Activity Diagram (post new job)

## 3.5.4. Post new project

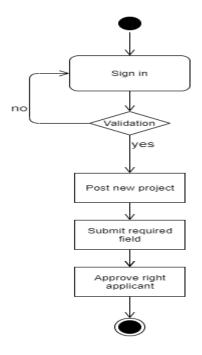


Figure: Activity Diagram (post new project)

### 3.5.5. Job list

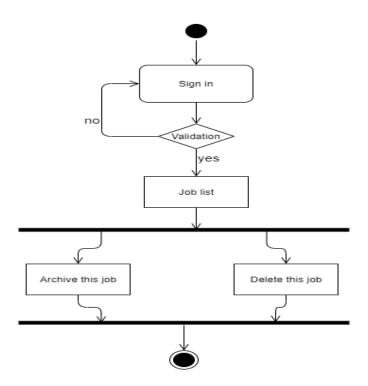


Figure: Activity Diagram (Job list)

## 3.5.6. Project list

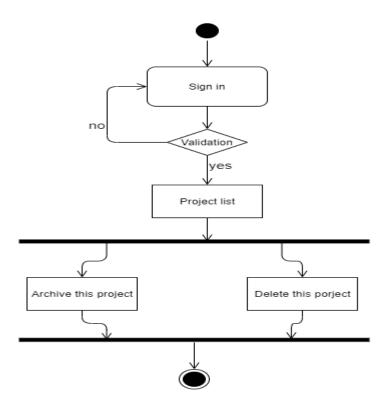


Figure: Activity Diagram (project list)

# 3.5.7. Apply Job

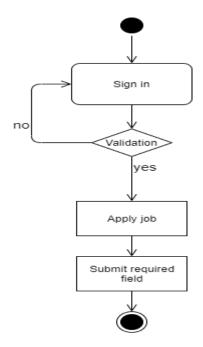


Figure: Activity Diagram (apply job)

## 3.5.8. Apply Project

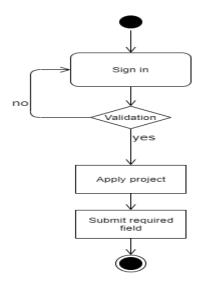


Figure: Activity Diagram (apply project)

## 3.5.9. Applied list

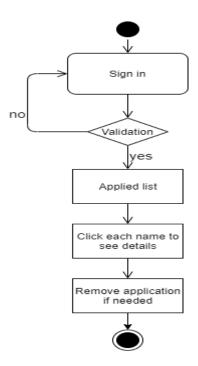


Figure: Activity Diagram (applied list)

### 3.5.10.Profile section

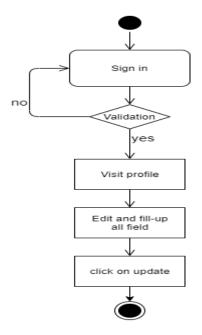


Figure: Activity Diagram (profile section)

# 3.5.11.Submitting comment

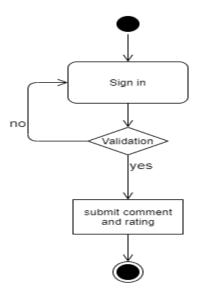


Figure: Activity Diagram (commenting)

### 3.5.12.Creating and updating resume

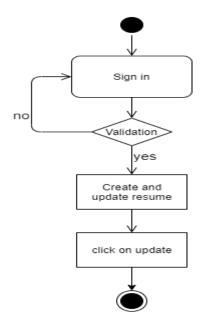


Figure: Activity Diagram (create and updating resume)

### 3.5.13.Creating community

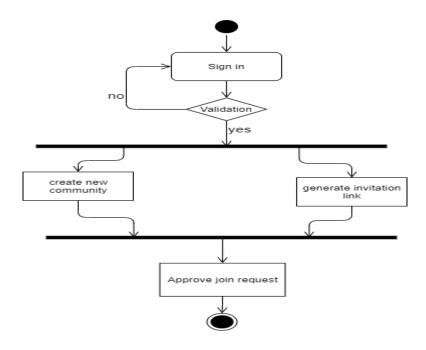


Figure: Activity Diagram (community creating)

## 3.5.14. Joining Community

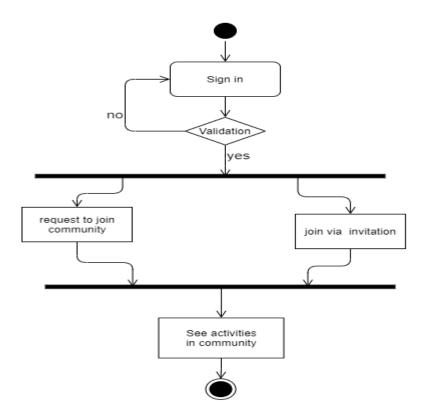


Figure: Activity Diagram (joining community)

## 3.5.15.Post in community

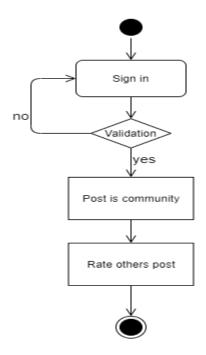


Figure: Activity Diagram (post in community)

## 3.5.16.Live messaging

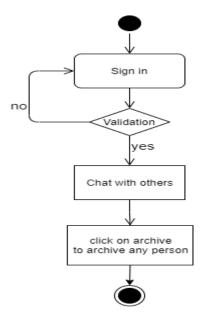


Figure: Activity Diagram (live messaging)

## 3.5.17.Remote support

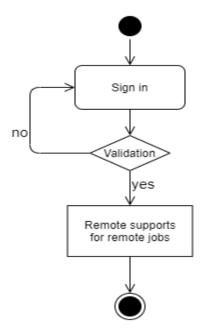


Figure: Activity Diagram (remote support)

## 3.5.18.Online meeting

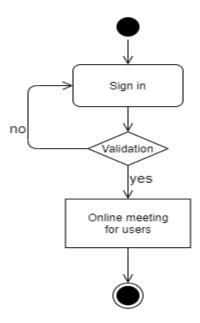


Figure: Activity Diagram (online meeting)

## 3.5.19.Manage projects, jobs, applied list

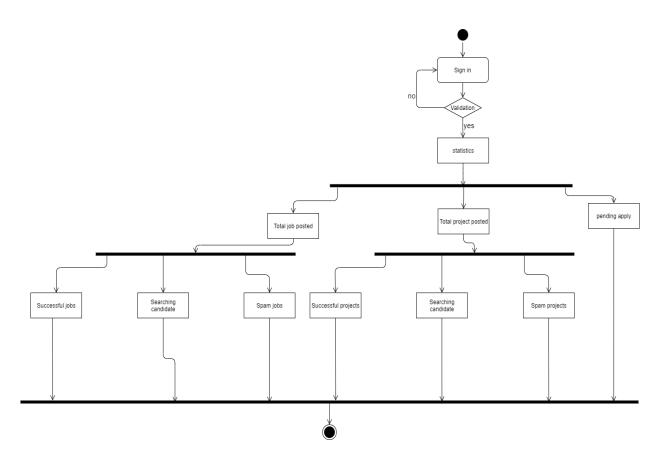
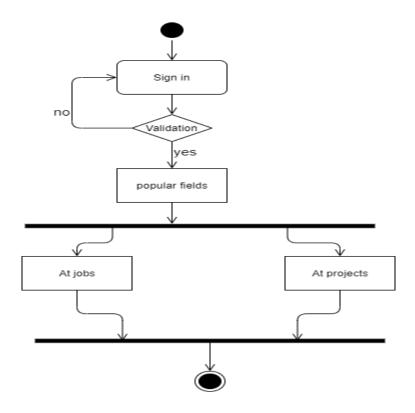


Figure: Activity Diagram (Manage projects, jobs, applied list)

## 3.5.20.See popular jobs



**Figure:** Activity Diagram (popular job)

# 3.5.21. Verify company

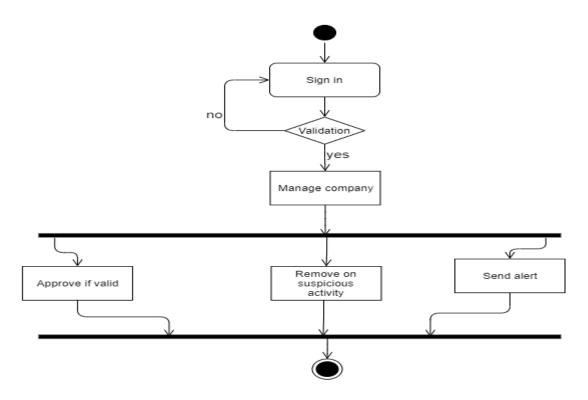


Figure: Activity Diagram (verify company)

# 3.5.22. Verify Project manager

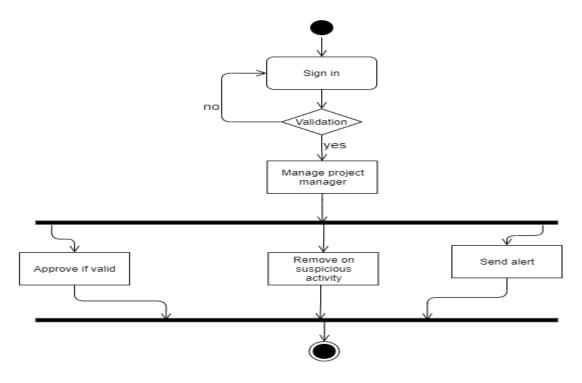


Figure: Activity Diagram (verify project manager)

## 3.5.23. Verify jobs

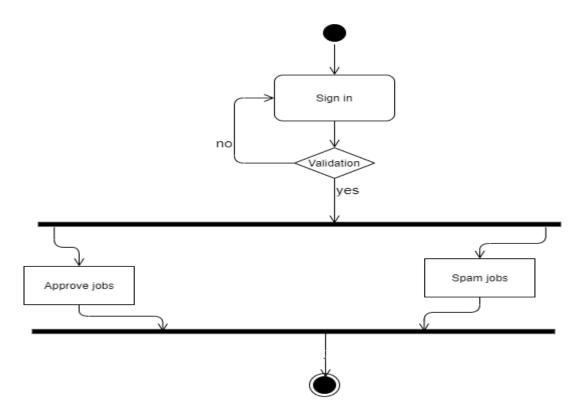


Figure: Activity Diagram (verify jobs)

# 3.5.24. Verify projects

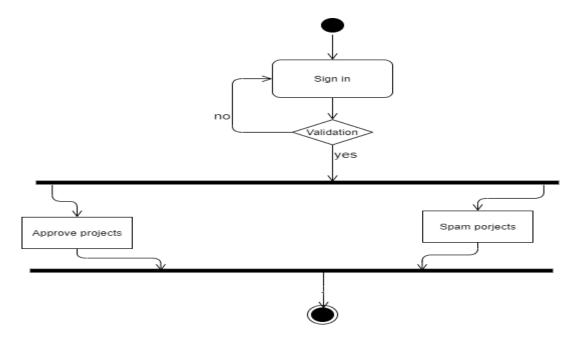


Figure: Activity Diagram (verify projects)

# 3.6. Sequence Diagram

# 3.6.1. Sign Up

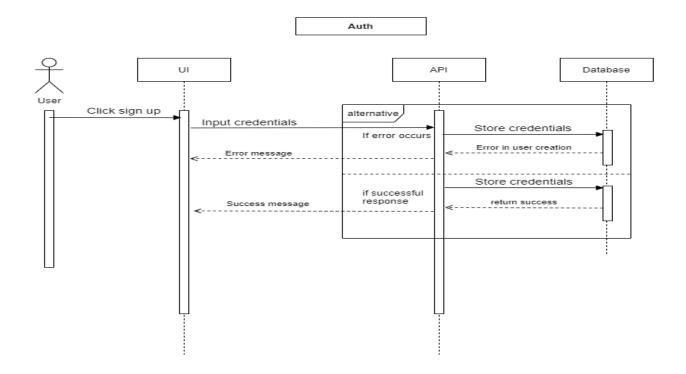


Figure: Sequence Diagram (Sign up)

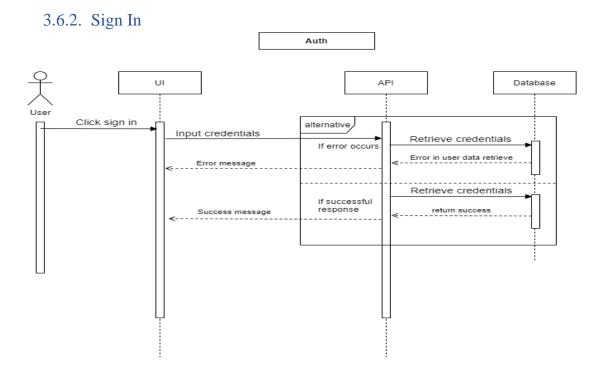


Figure: Sequence Diagram (Sign in)

### 3.6.3. Log out

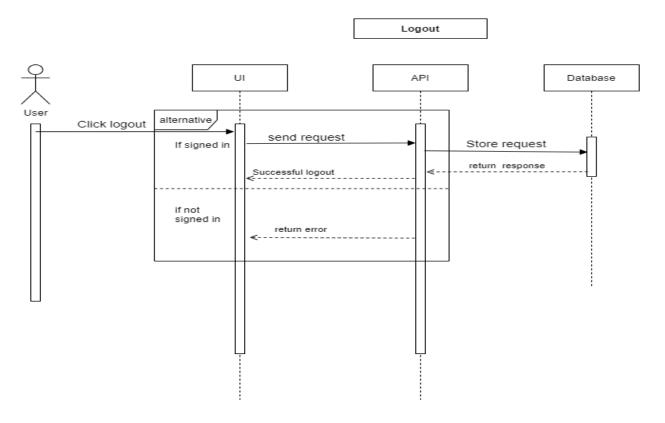


Figure: Sequence Diagram (Log out)

### 3.6.4. Post a job

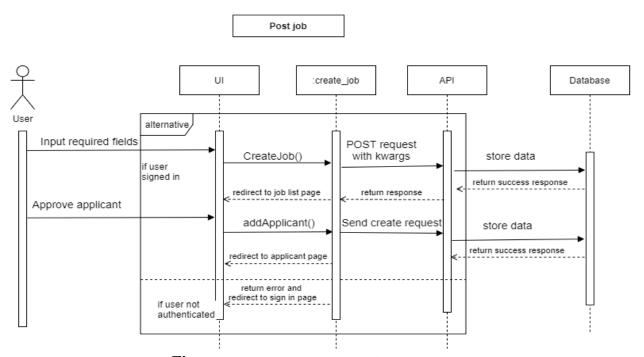


Figure: Sequence Diagram (post job)

#### 3.6.5. Post a project

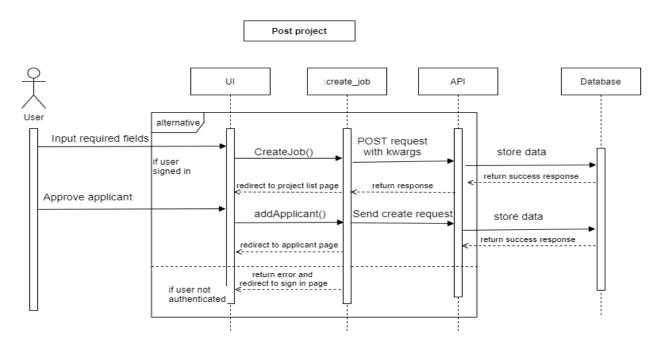


Figure: Sequence Diagram (post project)

#### 3.6.6. Job list

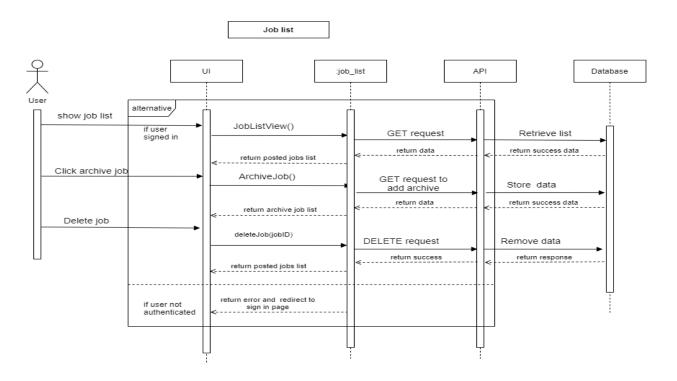


Figure: Sequence Diagram (job list)

### 3.6.7. Project list

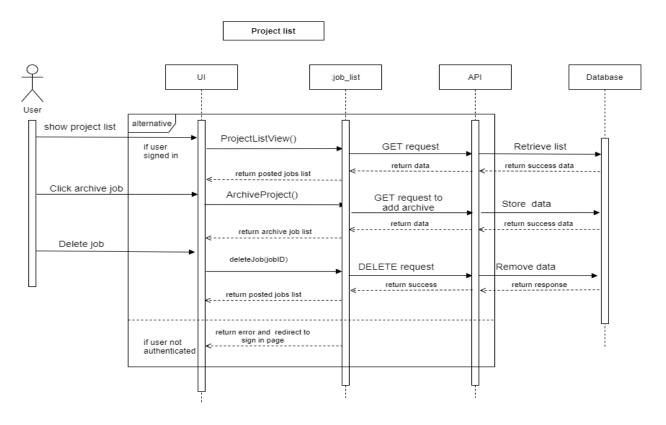


Figure: Sequence Diagram (project list)

### 3.6.8. Apply job

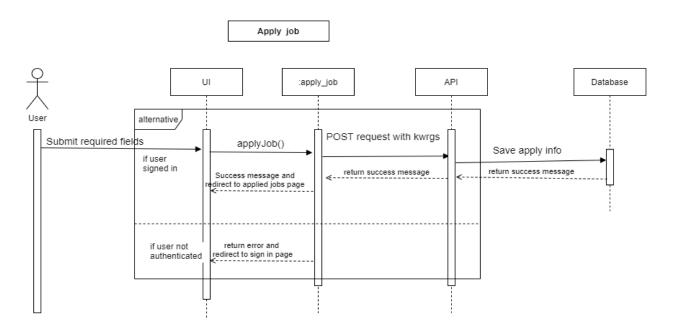


Figure: Sequence Diagram (apply job)

### 3.6.9. Apply project

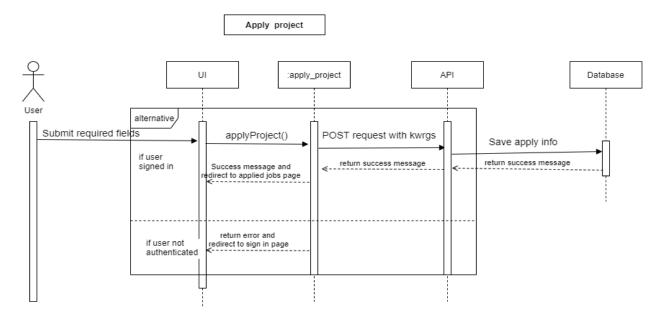


Figure: Sequence Diagram (apply project)

#### 3.6.10.Create new community

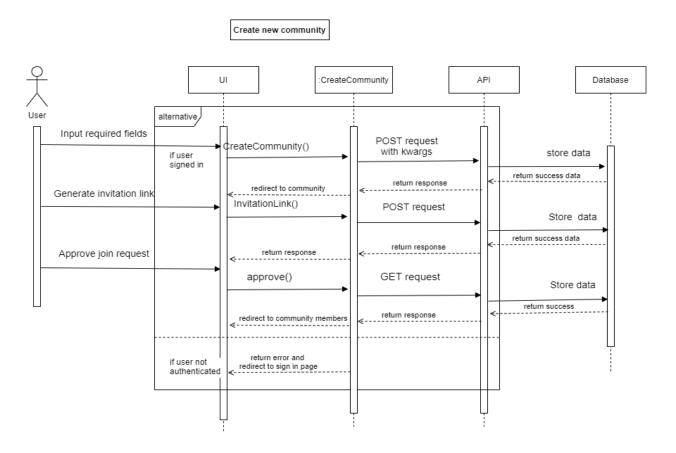


Figure: Sequence Diagram (create community)

#### 3.6.11.Edit details

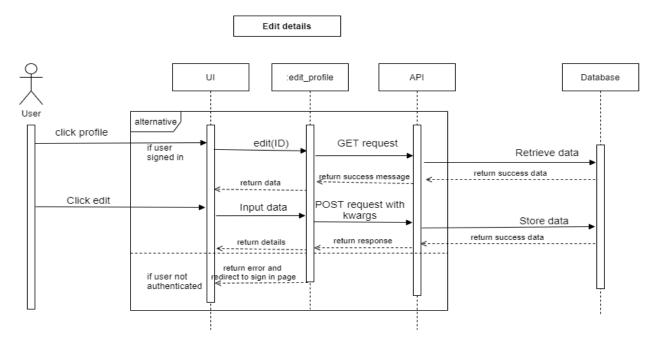


Figure: Sequence Diagram (edit details)

#### 3.6.12.Remote facilities

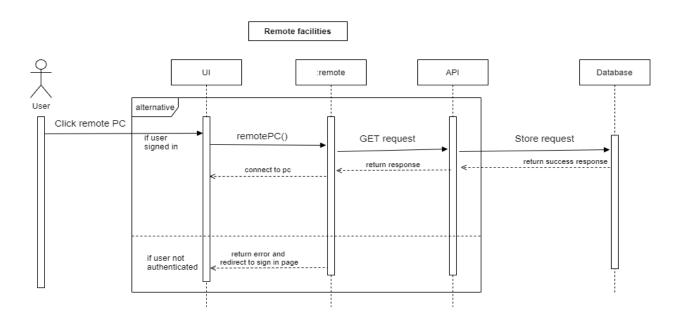


Figure: Sequence Diagram (Remote facilities)

## 3.6.13.Online meeting

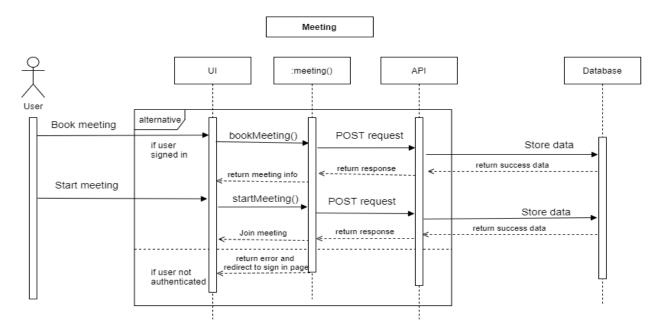


Figure: Sequence Diagram (Online Meeting)

## 3.6.14.Rating & review

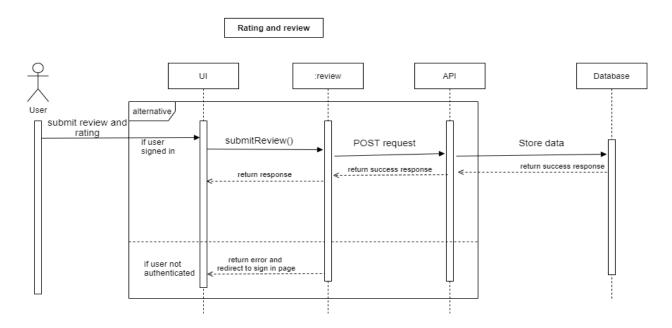


Figure: Sequence Diagram (rating and review)

## 3.6.15. Applied list

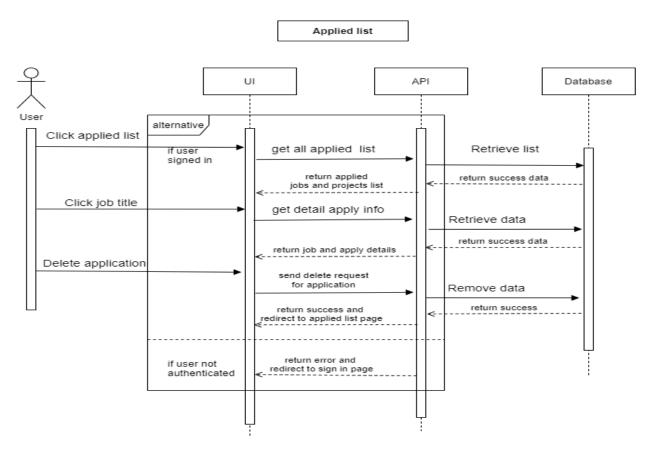


Figure: Sequence Diagram (applied list)

#### 3.6.16.Join community Join community Database UI API Click on alternative join request add member to Send request if user signed in request list return success response return response Click on join via invitation send invitation add member to community return response and return success response redirect to community return error and if user not redirect to sign in page authenticated

Figure: Sequence Diagram (join community)

## 3.6.17.Post in community

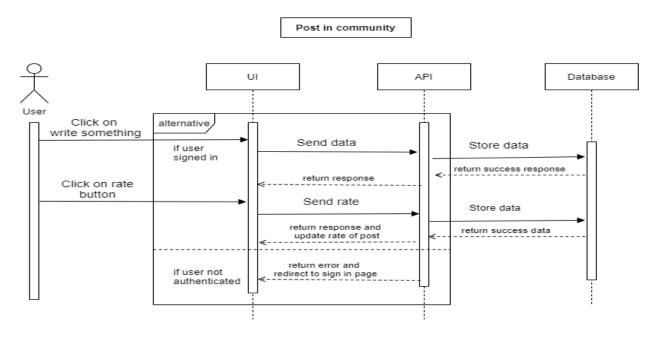


Figure: Sequence Diagram (post in community)

### 3.6.18.Resume

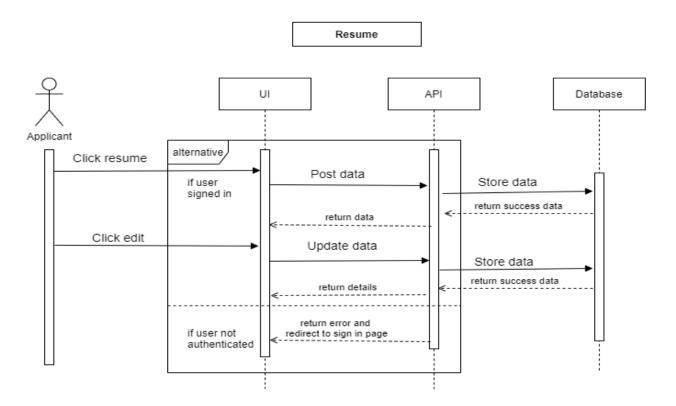


Figure: Sequence Diagram (Resume)

### 3.6.19. Manage Company

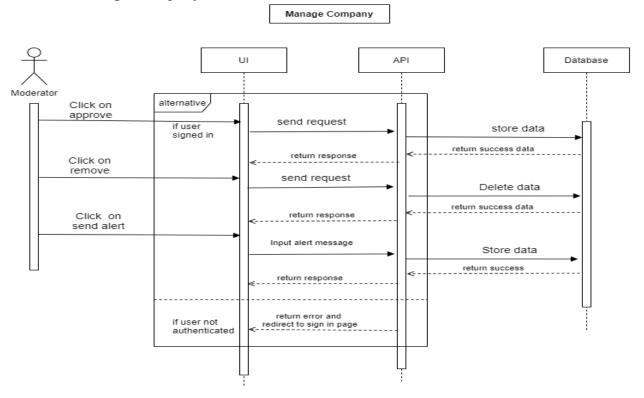
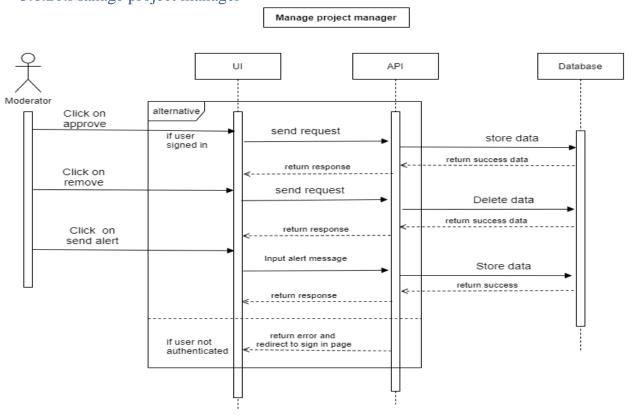


Figure: Sequence Diagram (Manage company)

## 3.6.20. Manage project manager



**Figure:** Sequence Diagram (manage project manager)

## 3.6.21.Manage job

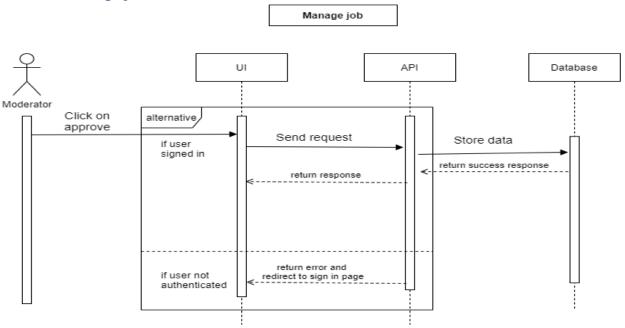


Figure: Sequence Diagram (manage job)

## 3.6.22.Manage project

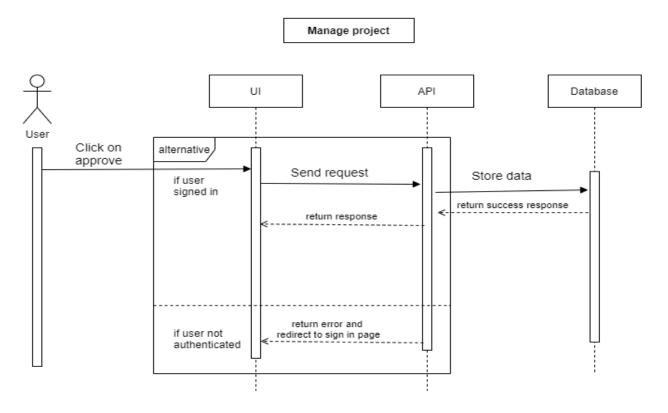


Figure: Sequence Diagram (manage project)

### 3.6.23. Statistics

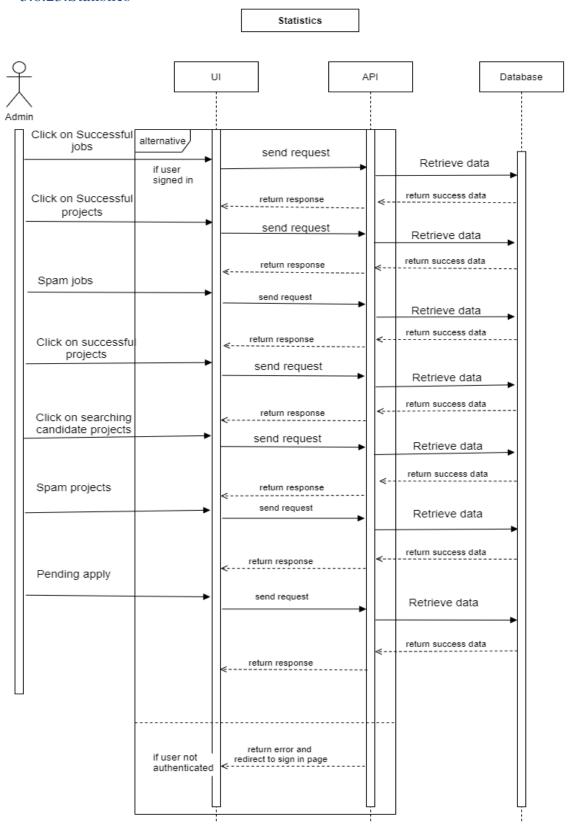


Figure: Sequence Diagram (statistics)

## 3.6.24.Popular fields

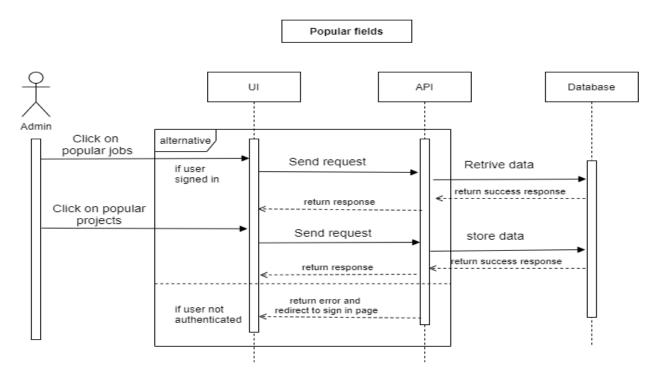


Figure: Sequence Diagram (popular fields)

### 3.6.25. Transaction list

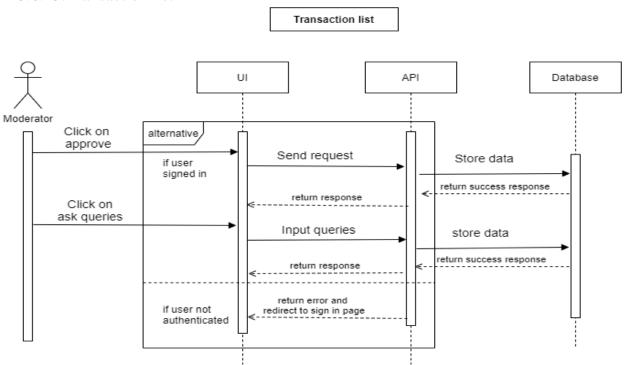


Figure: Sequence Diagram (transaction list)

### 3.6.26.Resume

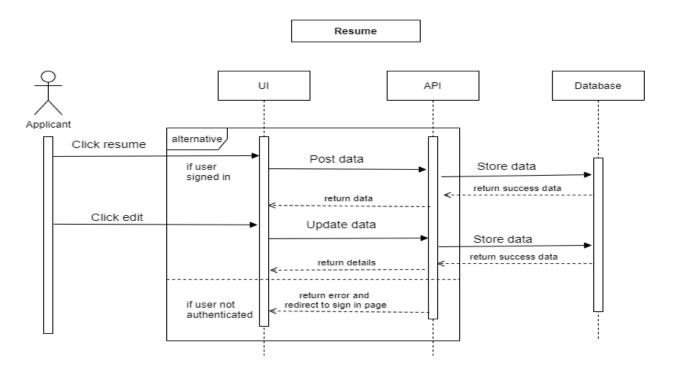


Figure: Sequence Diagram (resume)

# 3.7. Entity Relationship Diagram

# 3.7.1.Full diagram

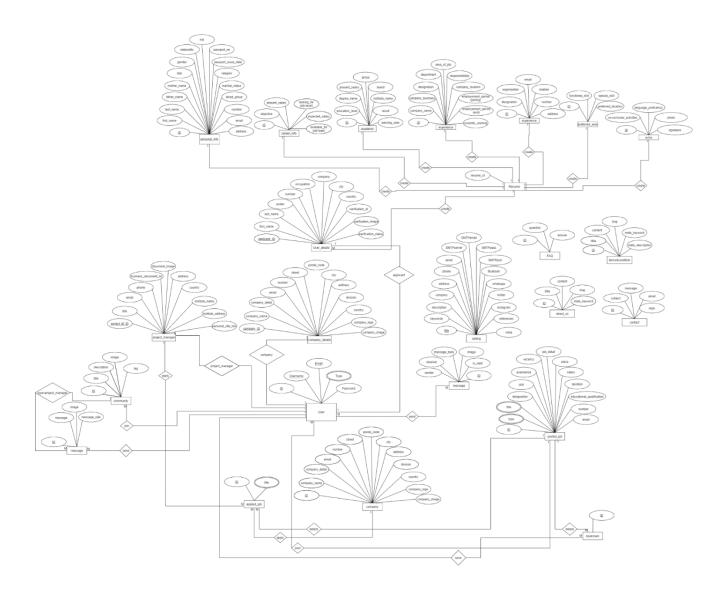


Figure: Entity Relationship Diagram

## 3.7.2. Normalize ER Diagram

### 3.7.2.1. Part-1

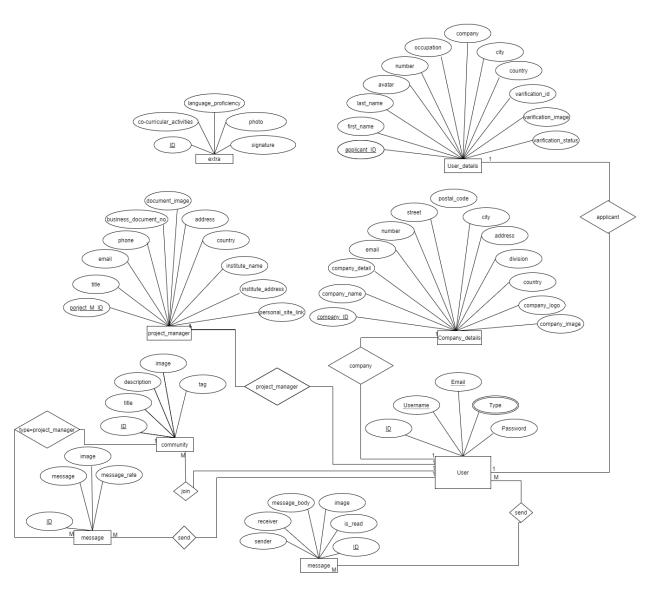
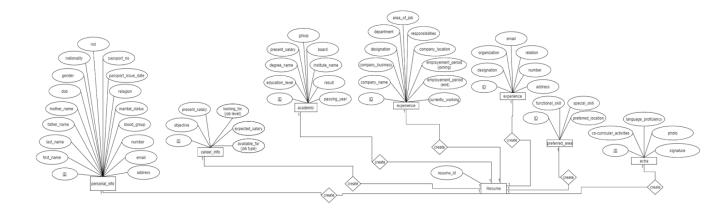


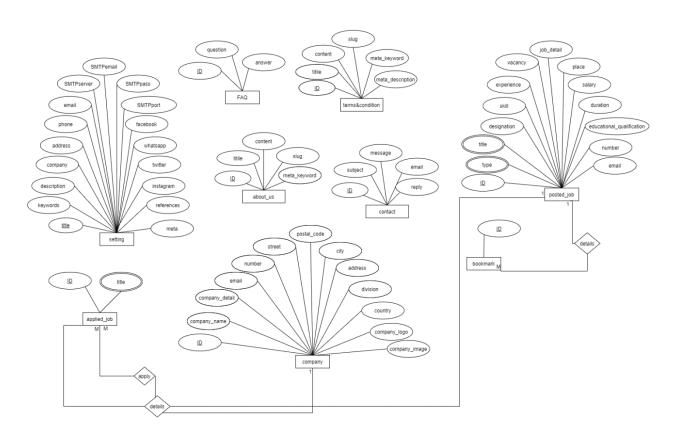
Figure: Entity Relationship Diagram(part-1)

## 3.7.2.2. Part-2



**Figure:** Entity Relationship Diagram(part-2)

## 3.7.2.3. Part-3



**Figure:** Entity Relationship Diagram(part-3)

# 3.8. Class Diagram

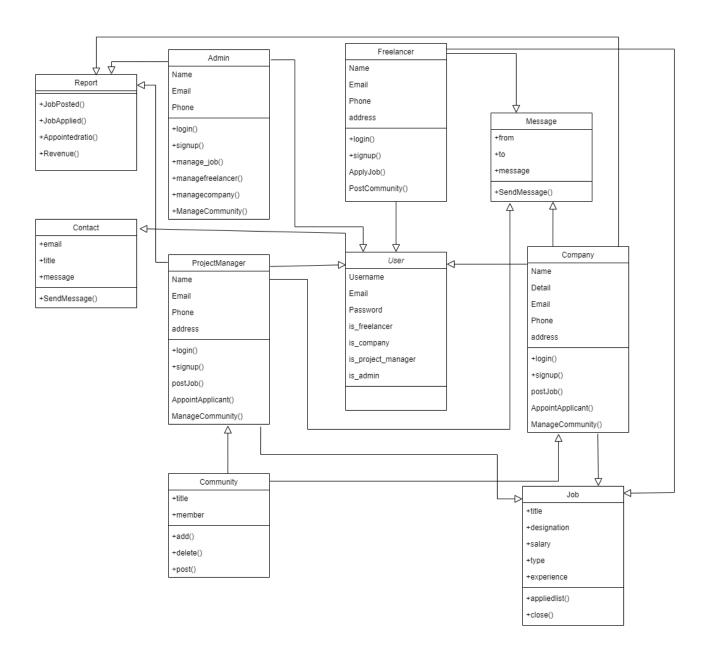


Figure: Class Diagram

# **CHAPTER 4: System Testing**

## 4.1. Introduction

This website is built for public purpose. Several types of users can use this system with many facilities. For maintaining standard quality, various kind of testing process is required. Such as-

- Functional Testing
- Unit Testing
- Integration Testing
- System Testing
- Acceptance Testing

## 4.2. Feature to be Tested

Number	Title	Description	Priority
I.	Sign up	If user wants to manage site, then user has to register first	High
II.	Sign in	If user is registered then he/she can sign in to access the features	High
III.	Post job	Verified companies or project manager can post jobs or projects.	High
IV.	Manage Profile	User can manage its profile with proper info	High
V.	Apply job	Verified applicant can apply for suitable jobs or projects	High
VI.	Create community	New community can be created to discuss on several topic	Medium
VII.	Logout	The session must be destroyed after logout	High

# 4.3. Test Case

# 4.3.1. Sign up

TC-	Sign up					
Test Sl no.	Description	Input	Output	Expected output	Status	comment
1	Using new email	Type(applicant) Email(xyz@gmail.com ) Username(xyz) Password(123)	Success Response	Success Response	Pass	
2	Using used email	Type(applicant) Email(xyz@gmail.com ) Username(xyz) Password(123)	Error Response	Error Response	pass	

# 4.3.2. Sign in

TC-	Sign in					
Test Sl no.	Description	Input	Output	Expected output	Status	commen t
1	Using Invalid credentials	Type(applicant) Email(xyz@gmail.com) Username(xyz) Password(123)	Error Response	Error Response	Pass	
2	Using valid credential	Type(applicant) Email(xyz@gmail.com) Username(xyz) Password(123)	Success Response	Success Response	pass	

# 4.3.3. Post job

TC-3	Post job					
Test Sl no.	Description	Input	Output	Expected output	Status	comment
1	Using Invalid info	Title(xyz) Description(xyz) Company(xyz) Salaray(123450)	Invalid Response	Invalid Response	Pass	Unverified
2	Using valid info	Title(xyz) Description(xyz) Company(xyz) Salaray(123450)	Success Response	Success Response	pass	Verified

# 4.3.4. Manage Profile

TC-3	Manage profile					
Test Sl no.	Description	Input	Output	Expected output	Status	comment
1	Fill up all info incorrectly	Full name(xyz) Description(xyz) Qualification(xyz) Experience(5 years)	Success Response	Invalid Response	Pass	Unverified
2	Fill up all info correctly	Full name(xyz) Description(xyz) Qualification(xyz) Experience(5 years)	Success Response	Success Response	pass	Verified

# 4.3.5. Apply job

TC-3	Apply job					
Test Sl	Description	Input	Output	Expected output	Status	comment
no.						
1	Using Invalid info	Title(xyz) Description(xyz) Company(xyz) Salaray(123450)	Invalid Response	Invalid Response	Pass	
2	Using valid info	Title(xyz) Description(xyz) Company(xyz) Salaray(123450)	Success Response	Success Response	pass	

# 4.3.6. Create community

TC-	Create community					
2						
Test	Description	Input	Output	Expected	Status	comment
Sl	<del> </del>			output		
no.						
1	Input valid	Name(xyz)	Success	Success	Pass	
	credential	Invit-	Response	Response		
		link( <u>www.xyz.com</u> )	_	_		
		Topic(xyzabc)				
2	Input valid	Name(xyz)	Invalid	Invalid	pass	
	credential/miss	Invit-link()	Response	Response		
	any field	Topic()	Î	_		

# 4.3.7. Log out

TC-2	Log out					
Test	Description	Input	Output	Expected output	Status	comment
Sl no.						
1	Must be Logged in state and visit logged out url	NUL L	Success Response	Success Response	Pass	
2	Not logged in state and visit on logged out url	NUL L	Invalid Response	Invalid Response	pass	

## 4.4. Testing Environment (hardware/software requirements)

Testing environment means to prepare the environment with hardware and software so that test engineers can be able to execute test cases as required. Besides hardware and software usage, network configuration might be needed to execute test plans.

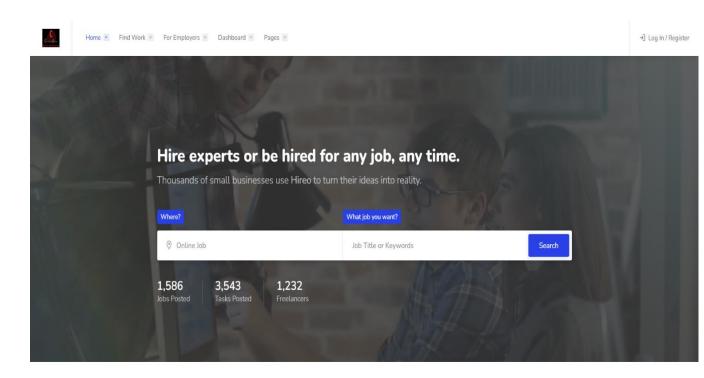
- 1. Browser: -Google Chrome, Firefox.
- 2. AMD Ryzen 7 3700x, Ram# 24GB, GPU-GTX1660Ti, SSD-480GB, HDD-2TB.

# Chapter 5: Application UI & User Manual

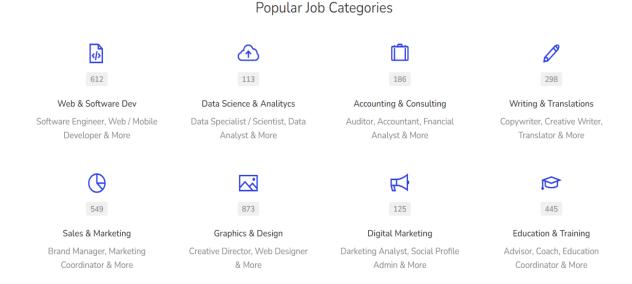
# 5.1. Authentication

Log In	Register			×	Log In	Register		×
	Let's crea	ate your acco	ount!			We're alad to	o see you again!	
② Free	elancer @	Project Mngr	合 Company				account? Sign Up!	
	Email Address					Email Address		
( <u>a</u> )	Jsername							
<b>⊕</b> F	Password				·	Password		
<b>∂</b> F	Repeat Password				Forgot Pa	ssword?		
		Register					Log In	
		or —					or —	
<b>f</b> Re	gister via Facebook	G+ Re	gister via Google+		f	Log In via Facebook	G+ Log In via Google+	

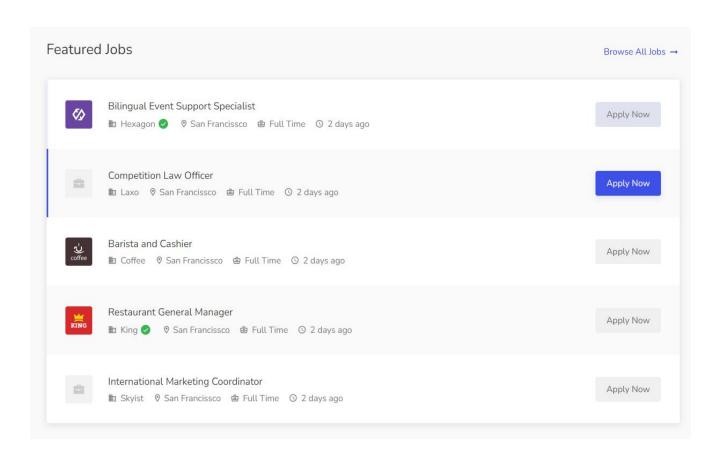
# 5.2. Landing page



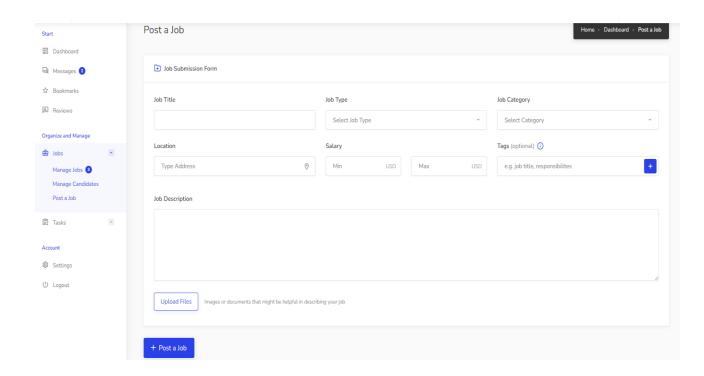
## 5.3. Popular categories



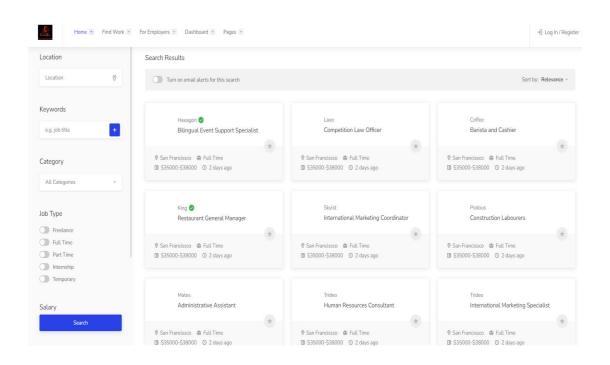
### 5.4. Featured Jobs



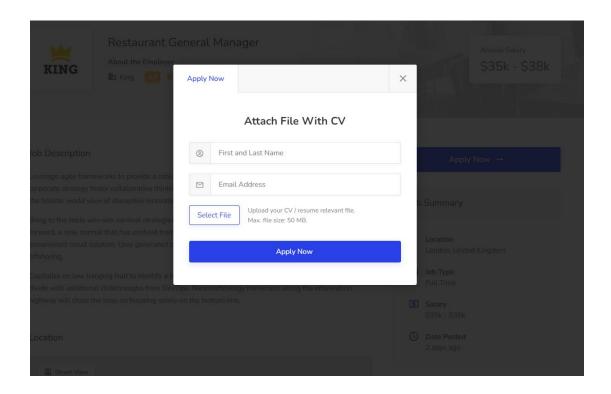
# 5.5. Post a job



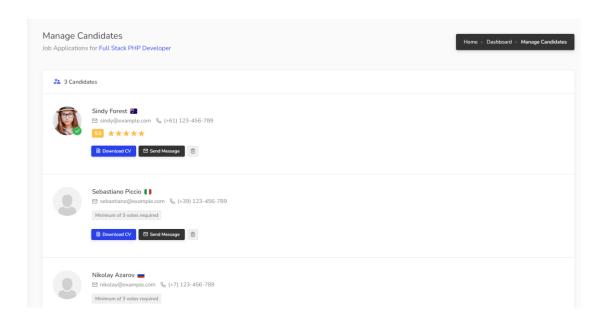
## 5.6. Job list



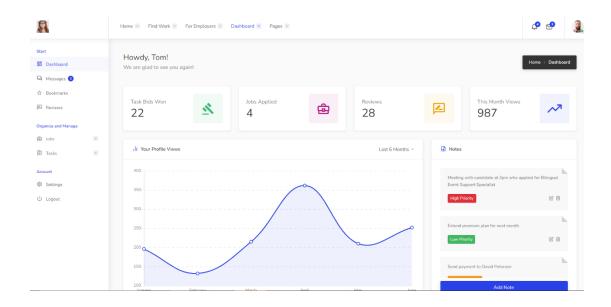
# 5.7. Apply Job



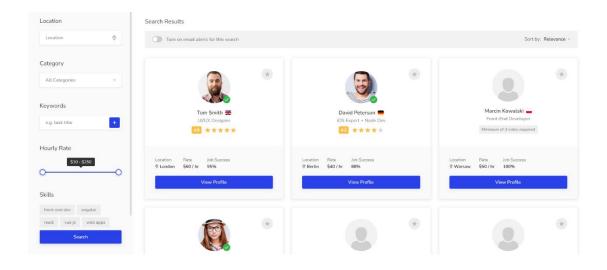
# 5.8. Applicant List



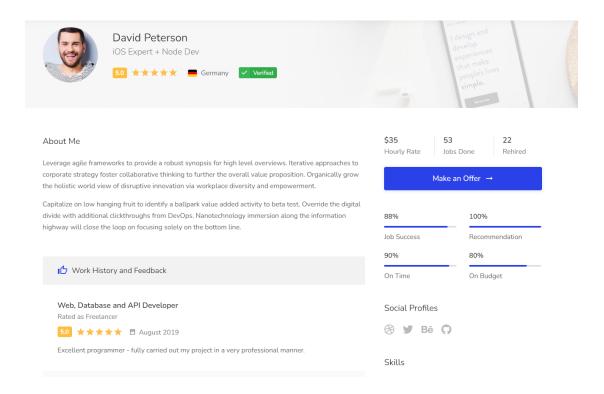
## 5.9. Dashboard



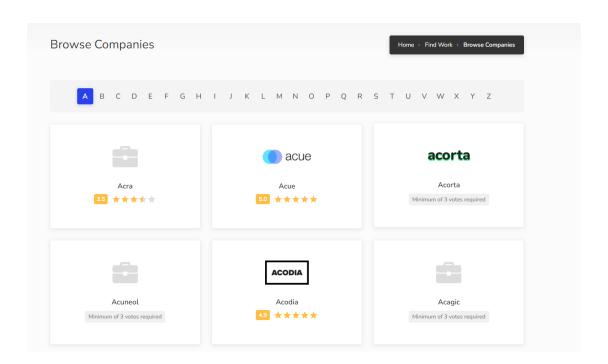
## 5.10. Hire Freelancer



### 5.11. Freelancer Profile



## 5.12. Browse Company



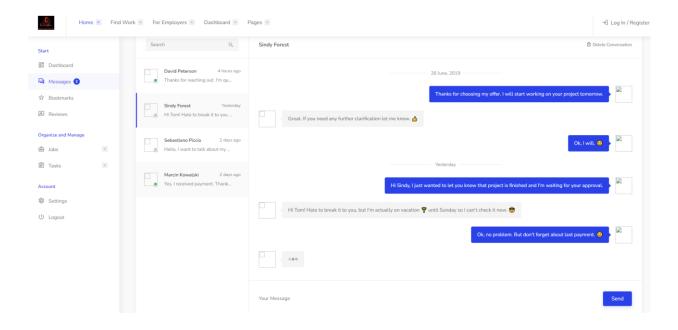
## 5.13. Invoice

Order: #00124 Issued: 20/08/2019 Due 7 days from date of issue

## Invoice

Supplier			Customer			
Hireo Ltd. 21 St Andrews Lane			John Doe			
			36 Edgewater Street			
London, CF44 6ZL, UK			Melbourne, 2540, Australia			
Description		Price	VAT (20%)	Total		
Standard Plan		\$49.00	\$9.80	\$58.80		
Total Due	\$58.80					
www.example.com	office@exam		123) 123-456			

# 5.14. Live messaging



## Chapter 6: Conclusion

#### 6.1. Limitations

The main limitation of this application is optimization. If day after day the database size may become larger and this could be a issue with optimization and also some security issue may endanger this application.

### 6.2. Obstacles

- Learning new technology and new environment is a big issue
- Single handed work was not enough to do this project
- It's very difficult to complete a project like this huge is a great issue
- To collect requirements is very tough one that I did

### 6.3. Achievement

- Successfully built a project.
- Learnt a new technology.
- Deploy a project is a new experience.
- Learned the real-life experience by uploading project on the live server.
- Know about document and the development process.

### 6.4. Future Scope

Though the system was developed as much as needed and its work properly. But I have to add something features to make the systems fulfillment. The future work will include some major changes, such as-

- Online meeting
- Community discussion
- Work bidding system
- Emailing every confirmation

### 6.5. Reference

To work with this project I have studied over some website to learn their facilities and limitations. My target is to provide something newer which can help every day life. But I want to give a great credit to these web application-

### 6.5.1. Upwork

• Name: Upwork

• Visit: www.upwork.com

• Company: Upwork Global Inc.

• Country: California, U.S

#### 6.5.2. Fiverr

• Name: Fiverr

• Visit: www.fiverr.com

• Company: Fiverr International Ltd.

Country: Israel

### 6.5.3. PeoplePerHour

Name: PeoplePerHour

• Visit: www.peopleperhour.com

• Company: PeoplePerHour

Country: UK

### 6.5.4. Naukri.com

• Name: Naukri.com

• Visit: <u>www.naukri.com</u>

• Company: Naukri.com

Country: India

### 6.5.5. Bdjobs.com

• Name: Bdjobs.com

• Visit: www.bdjobs.com

• Company: Bdjobs.com Ltd.

Country: Bangladesh