



JOBSPOT APPLICATION

Graduation Project Presented by:

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Table of Contents

Chapter 1: Introduction	5
1.1 Introduction.....	7
1.2 Goals.....	7
1.3 Document Overview	7
1.4 Scope	8
1.4.1 Planning.....	8
1.4.2 Designing.....	8
1.4.3 Coding.....	8
1.4.4 Testing.....	9
1.4.5 Documentation.....	9
1.5 General Constraints	10
 Chapter 2: User Requirements	 11
2.1 Summary	13
2.2 Functional Requirements	13
2.2.1 Job Seeker activity.....	13
2.2.2 Company activity.....	17
2.2.3 Admin Activity.....	20
2.3 Non-Functional Requirements	23
2.4 Customer Related Specifications	25

2.5 Software Interface	26
2.6 Hardware Interface	26
Chapter 3: Software Design	27
3.1 Database Design	29
3.2 Class Diagram	30
3.3 Use-case Diagrams	34
3.4 Sequence Diagrams	44
3.5 Activity Diagrams	42
3.6 Architecture Diagrams	57
Chapter 4: Acceptance Criteria	60
4.1 Acceptance Criteria	62
4.2 Verification and Validation Methods Matrix	65
Chapter 5: Development Organization Requirements.....	66
5.1 Business Requirements	68
5.2 Cost Requirements	68
5.3 Relationship to future products	69
5.4 Special Considerations	70
5.5 Characteristics of the proposed software	70
5.6 Success criteria	70

Chapter 6: Results and Discussion	71
6.1 Results.....	72
6.1.1 Expected Results.....	73
6.1.2 Actual Result	74
6.2 Discussion	74
 Chapter 7: Future Work	 75

Chapter 1: Introduction

Introduction:-

In this chapter we are going to discuss and go deeper in the overview of the project and know more about its scope and limitations and explain some terminologies we will find throughout the document

Chapter Headlines:

- 1.1 Introduction
- 1.2 Goals
- 1.3 Document Overview
- 1.4 Scope
- 1.5 General Constraints

1.1 Introduction

First, our application is Application that works on all platforms for helping people to make finding jobs more easily or getting freelancing project

- Employers add post to search for specific employees
- Employees get notification about this job and if it suitable for him
- Employers can add freelance project
- User search for job and look at suitable location, level and category.

1.2 Goals

- Employers find suitable users
- User successfully find suitable job by using app
- The system stores the users' information that it needs in the job search (by using filter)

1.3 Document Overview

This document will describe in details solution components, requirements, functionalities, features, of the system, and the technologies used to implement the whole system.

1.4 Scope

The approximate work involved to finish the project is divided into these 5 phases: -

1.4.1 Planning:

- Collecting data about the project and the lack that made us in a need to the App.
- Determining the functional and non-functional requirements.
- Determining the resources of the team

1.4.2 Designing:

Determining the diagrams to be carried out within the project: -

- ERD Diagram
- Activity Diagram
- Class Diagram
- Use-case Diagram
- Architecture Diagram

1.4.3 Coding:

The main supposed functions to be coded in this app are: -

- Sign up
- Login
- View Profile
- View applied seekers

- Add Admin
- Block Company
- Update Password
- View Dashboard
- Delete Post
- Block Seekers
- Search
- Log out

1.4.4 Testing:

- Functional Testing
- Non-functional Testing

1.4.5 Documentation: -

The documentation should mainly include these main chapters: -

- Introduction: includes an overview of the project and limitations
- User Requirements: includes the functional and non-functional requirements also hardware and software interfaces
- Software Design: includes the app diagrams
- Acceptance Criteria: Includes Validation and Verification matrices and success criteria
- Development Organization Requirements: includes business analysis and requirements

- Project Implementation: includes user application and administrator system.
- Project Testing: includes testing types.

1.5 General Constraints

- **Time:** This is the main constraint in our project because we should set a specific time to finish the project, also we break down the project into tasks, and the task into smaller tasks and so on. We set time constraints for each task
- Learning new technologies may take much time
- **Indiscipline “Human factor”:** like being late in delivering tasks or attending meeting
- **Resource constraints:** we will need to use some tools to build our software like using flutter and dart using visual studio code. We need to use tools like firebase to support our back-end system. People resource is available

Chapter 2: User Requirements

User Requirements:-

In this chapter we are going to analyze and study the app also defining its strengths that solve some issues in other apps.

Chapter Headlines:

- 2.1 Summary
- 2.2 Functional Requirements
- 2.3 Non-Functional Requirements
- 2.4 Customer Related Specifications
- 2.5 Software Interface
- 2.6 Hardware Interface

2.1 Summary

Our goal is to make it easy for you to find job opportunities online quickly and save them some valuable time by trying to make the user interface easy to use and comfortable makes the fewest number of steps to search for job

As for business owners, we are Provide them with a way to find the suitable employees

2.2 Functional Requirements

2.2.1 Job Seeker activity:

FR1	Sign Up
Pre-condition	None
Description	System must allow seekers to create his account for the first time by filling (name, password, e-mail ... etc.
Post-condition	Job seeker sign up successfully and redirected to the home page.

FR2	Login
Pre-condition	Job seeker enters his/her username and password
Description	The first step for the user in the application which will let him/her enter the app after filling the data and System must allow user to login into the application after the authentication process has been performed.
Post-condition	Job seeker is logged in successfully and redirected to the home page.

FR3	Complete Profile
Pre-condition	Job seeker is logged in
Description	Allow user to complete his profile so the seekers can add (profile image, address, phone number).
Post-condition	Updated with new data

FR4	Upload CV
Pre-condition	Job seeker is logged in
Description	User can upload his CV to make employer see it.
Post-condition	Updated with new data.

FR5	Update Password
Pre-condition	Job seeker open page of update password
Description	This function allows the seekers to change his/her password
Post-condition	Update password successfully

FR6	Forget Password
Pre-condition	Job seeker requests to reset his/her password
Description	This function allows the seekers to change his/her password
Post-condition	An e-mail with the new password will be sent

FR7	View Profile
Pre-condition	Job seeker is logged in
Description	seeker can view his posts and all personal data in his profile such as profile picture, name, address ...etc.
Post-condition	Profile page will open.

FR8	Search
Pre-condition	Job seeker is logged in
Description	User can search for jobs he wants.
Post-condition	A list of jobs is displayed

FR9	Edit Profile
Pre-condition	Job seeker is logged in and the profile page is opened
Description	It allows the seekers to edit and change their personal information such as name, age, phone number ...etc.
Post-condition	Return to the profile page with new data.

FR10	Filtration
Pre-condition	Job seeker is logged in
Description	User can filter the results to get what jobs exactly he wants.
Post-condition	A list of jobs is displayed

FR11	Apply
Pre-condition	Job seeker is logged in and the profile page is opened
Description	User can apply for a job he wants.
Post-condition	Wait for company to respond.

FR12	View Company Profile
Pre-condition	Job seeker is logged in
Description	Seekers can view Company profile including (name, all posts...)
Post-condition	Company profile is displayed

FR13	View All jobs related to company
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Pre-condition	Seeker opens the home page
Description	Seekers can view posts of company in the app
Post-condition	All posts are displayed

FR14	View Matched Jobs
Pre-condition	Seeker opens the home page
Description	Seekers can view matched jobs post
Post-condition	All matched posts are displayed

FR15	View all company
Pre-condition	Seeker opens the home page and press company
Description	Seekers can all company
Post-condition	All company are displayed

FR16	Logout
Pre-condition	Seeker is logged in and request to logout
Description	It allows seeker to end the session and logout from the App
Post-condition	Exit the Application

2.2.2 Company activity:

FR17	Sign Up
Pre-condition	None
Description	System must allow employer (Company) to create his account for the first time with (name, password, e-mail).
Post-condition	Company sign up successfully and redirected to the home page.

FR18	Login
Pre-condition	Company enters his/her username and password
Description	Allow employer to login into the application after the authentication process has been performed
Post-condition	Company logged in successfully and redirected to the home page.

FR19	Create job post
Pre-condition	Company is logged in.
Description	Employer can create job and determines job position , job type and make users apply for it .
Post-condition	Job post added successfully

FR20	Update Password
Pre-condition	Employer open page of update password
Description	This function allows employer to change his/her password
Post-condition	Update password successfully

FR21	View All Jobs (History)
Pre-condition	Company is logged in.
Description	Employer can view all posts that he did not approve.
Post-condition	None

FR22	view applied seekers
Pre-condition	Company is logged in.
Description	Employer can view all applied seekers that includes some of his personal information such as name, profile picture ...etc.
Post-condition	Seeker profile is displayed

FR23	View Profile
Pre-condition	Company is logged in
Description	company view a personal data such as profile picture, name, address ...etc.
Post-condition	Profile page will open

FR24	Edit Profile
Pre-condition	Company is logged in and the profile page is opened
Description	It allows company to edit and change personal information such as name, email ...etc.
Post-condition	Return to the profile page with new data

FR25	Edit Job
Pre-condition	Company is logged in and the profile page is opened
Description	It allows company to edit jobs and change skills ,req. , details
Post-condition	Return to the page with new data

FR26	Change Seeker Status
Pre-condition	Company is logged in.
Description	It allows company to edit and change Seeker Status (accept, wait ,reject) .
Post-condition	Update Status

FR27	Logout
Pre-condition	company is logged in and request to logout
Description	It allows the company to end the session and logout from the App
Post-condition	Exit the Application

2.2.3 Admin activity:

FR28	Login
Pre-condition	Admin enters his/her username and password
Description	The first step for admin to start managing the system
Post-condition	Admin is logged in successfully and redirected to the home page

FR29	View Profile
Pre-condition	Admin is logged in
Description	Admin can view his/her personal data such as profile picture, name, address ...etc.
Post-condition	Profile page will open

FR30	Edit Profile
Pre-condition	Admin is logged in and the profile page is opened
Description	It allows admin to edit and change his/her personal information such as name, age, email ...etc.
Post-condition	Return to the profile page with new data

FR31	View All Posts
Pre-condition	Admin is logged in and Home page is opened
Description	Admin can view all the systems' posts that shared by Company
Post-condition	All the company' posts are displayed

FR32	Block Job seekers
Pre-condition	Admin is logged in.
Description	Admin can view and block a specific user
Post-condition	Seeker will be stopped from using app

FR33	View seekers who applied on company post
Pre-condition	Seeker profile is opened.
Description	Admin can view list of seekers and manage it.
Post-condition	A list of seekers are displayed.

FR34	View All Company
Pre-condition	Admin is logged in
Description	Admin can View all companies in application
Post-condition	List of companies are displayed

FR35	Block company
Pre-condition	Presence of the company Description
Description	It stops a specific company from using the app
Post-condition	company will be stopped from using app

FR36	Delete Post
Pre-condition	Admin selects the post that he/she wants to remove
Description	Admin can delete any of companies' posts from the system
Post-condition	Post is deleted successfully and disappeared the company profile

FR37	Add Admin
Pre-condition	Admin is logged in
Description	Admin can add another admin
Post-condition	List of admins are displayed

FR38	Add Skills
Pre-condition	Admin is logged in
Description	This function allows admin to add new skills
Post-condition	Skills is added successfully

FR39	Manage Feedback
Pre-condition	Admin is logged in
Description	This function allows admin delete a post or block a company
Post-condition	None

FR40	Logout
Pre-condition	Admin is logged in and request to logout
Description	It allows the Admin to end the session and logout from the App
Post-condition	Exit the Application

2.3 Non- Functional Requirements

Are the constraints, or the requirements imposed on the system .They specify the quality attribute of the software. Non-functional requirements deal with issues like, maintainability, performance, portability, security, reliability, and many more.

Non-Functional Requirements address vital issues of quality for software systems. If Non-Functional Requirements are not addressed properly, the results can include:

- Users, clients, and developers are unsatisfied.
- Inconsistent software.
- Time and cost overrun to fix the software which was prepared without keeping NFRs in mind. -There are many types of non-functional requirements we will explain some of them that we applied to our application

1-Correctness: The result of the functions should be accurate and pure by validating or testing the system.

2-Reliability: The application has the ability of fast recovering from failure.

3-Maintainability: Is the ability to maintain system bugs and issues with less loss that doesn't affect the services or stop it. With ability of detecting these bugs and solving it.

4-Performance: The performance of our application is high in terms of the quality of the result, the speed of response, and the speed of recovery from any failure.

5-Usability: Easy to use, does not require training, is understandable for all users and is also comfortable during use.

6-Availability: Easy to access and available when needed can be used in any time.

7-Portability: The application can work on many different platforms because it is developed by Flutter.

8-Security: The application protect user data, system identification, system authentication, etc.

9-Capacity: The maximum number of the concurrent users is unlimited users.

2.4 Customer Related Specifications

Mandatory requirements:

- 1- Job seekers can find job opportunities that suit their qualifications through a few clicks from his phone
- 2- Companies can find suitable employees to work in the jobs

Desirable requirements:

- 1- The app suggests suitable jobs for job seekers based on their skills and resume
- 2- When a company create a post that matches a Job seeker skills, the app will send a notification to alert you

Optional requirement:

- * App users (job seekers) can write feedback on the company
- * App users (job seekers) can update his/her password

2.5 Software Interface

1- Visual Studio 2017 data transmission

2- Install Flutter depends on these tools being available in your environment.

- Windows PowerShell 5.0 or newer (this is pre-installed with Windows 10)
- Git version control system

3- XAMPP

2.6 Hardware Interface

1- During the development, we will need laptops or pcs

2- After deployment to use the application you should use smartphones, pcs

3- User should be able to keep a stable internet connection

Chapter 3: Software Design

Software Design:-

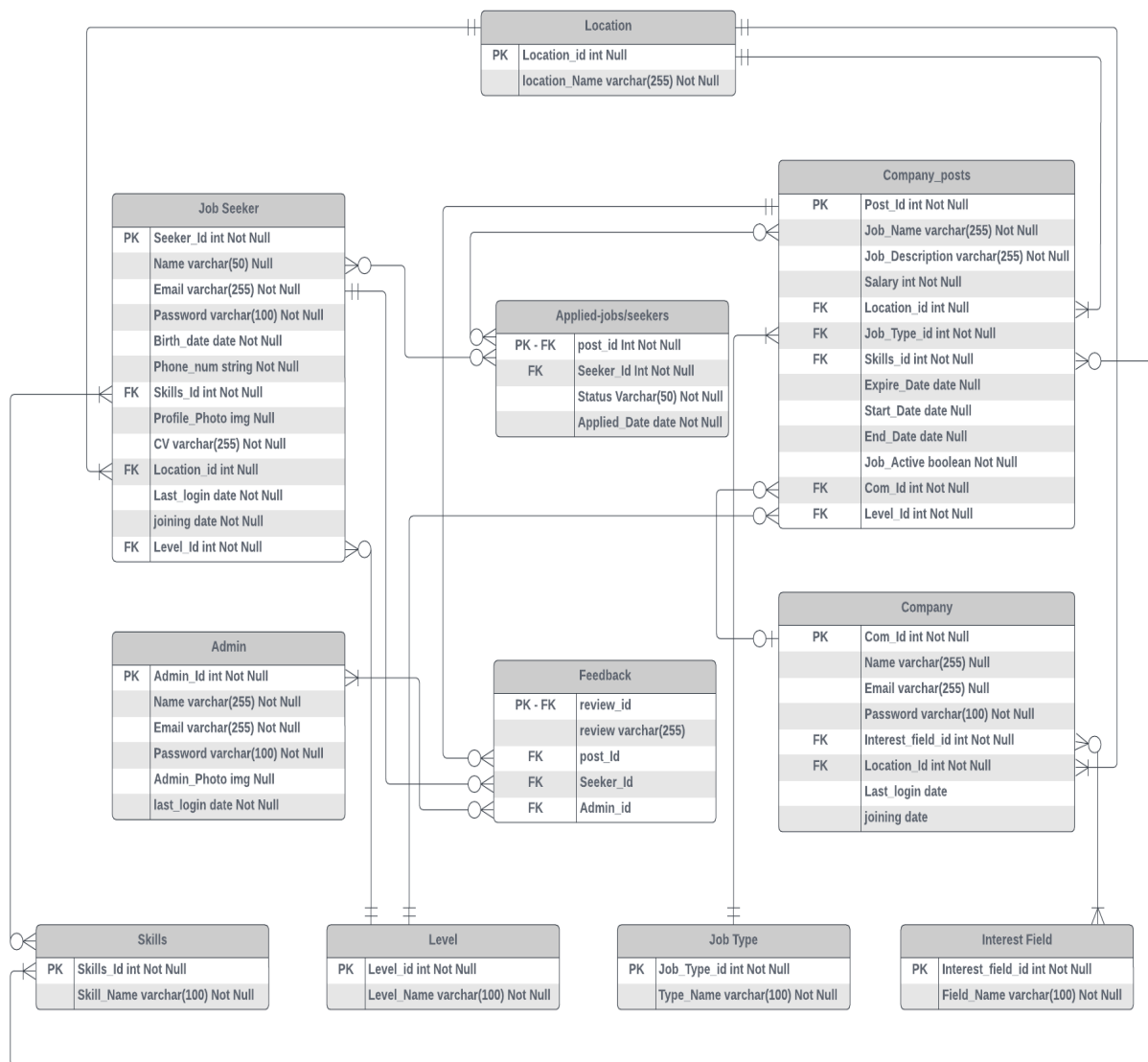
In this chapter we are going to discuss and go deeper in application's design and present its diagrams and database.

Chapter Headlines:

- 3.1 Database Design
- 3.2 Class Diagram
- 3.3 Use-case Diagrams
- 3.4 Sequence Diagrams
- 3.5 Activity Diagrams
- 3.6 Architecture Diagrams

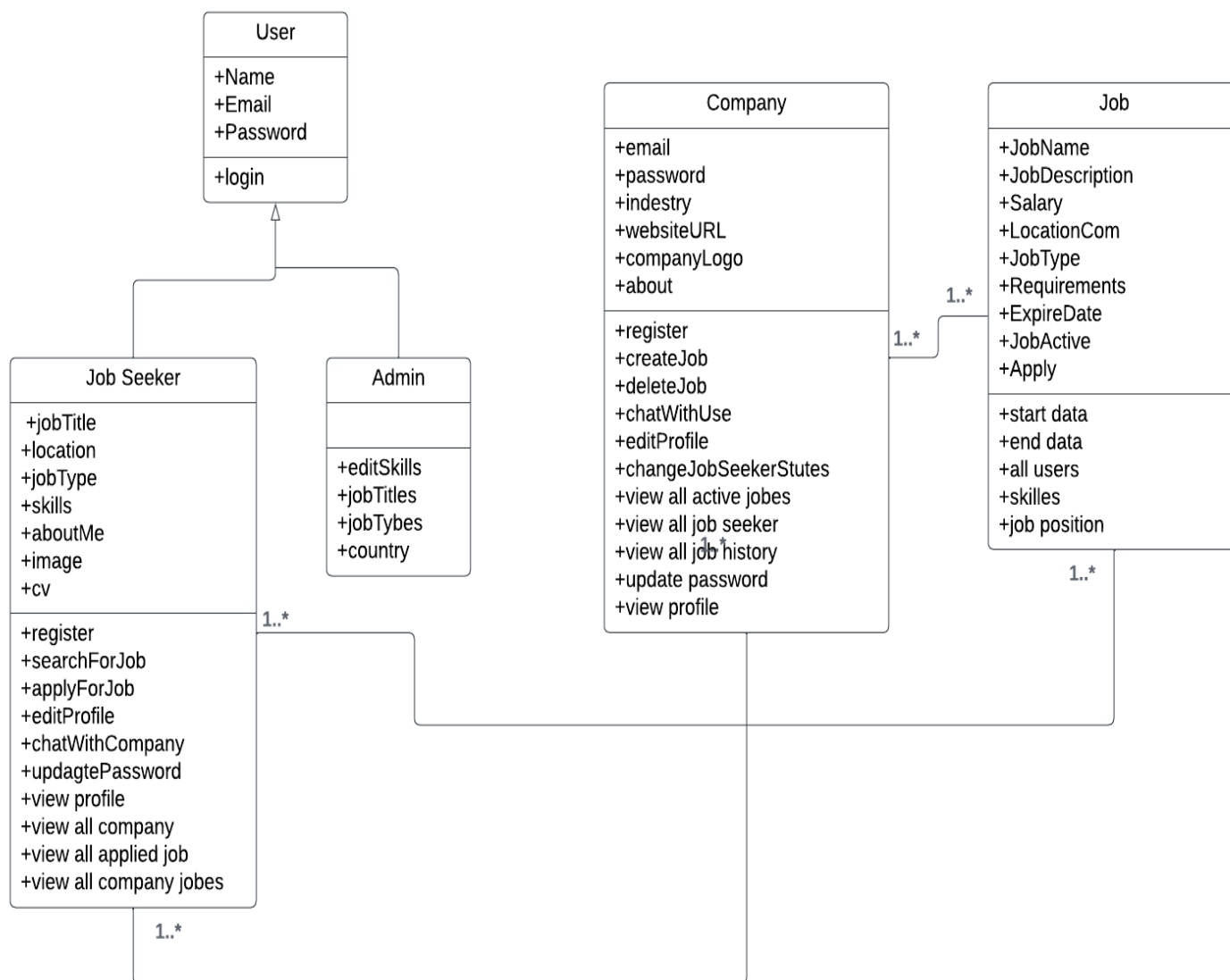
3.1 Database Design

ERD Diagram

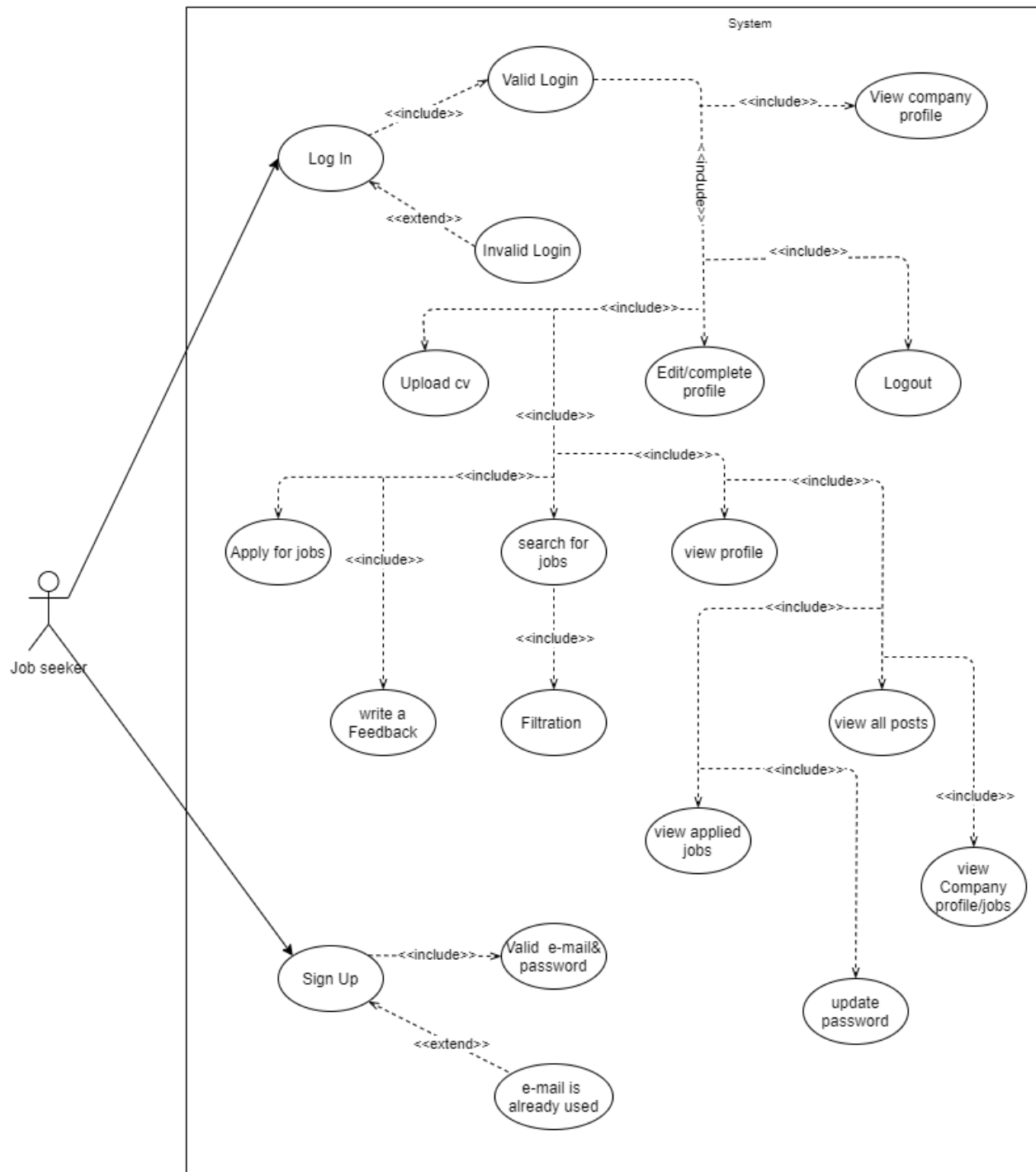


3.2 Class Diagram

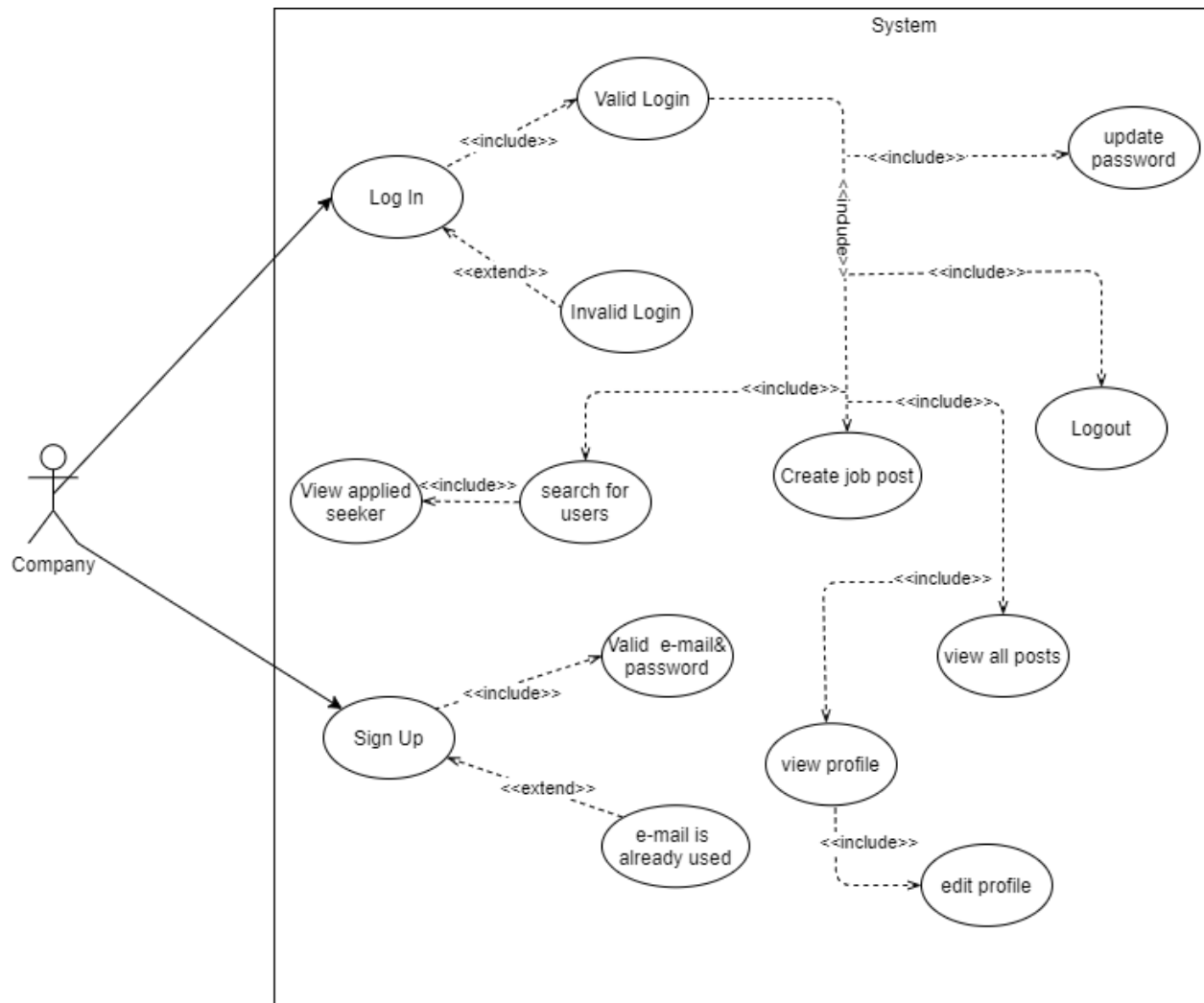
Class Diagram



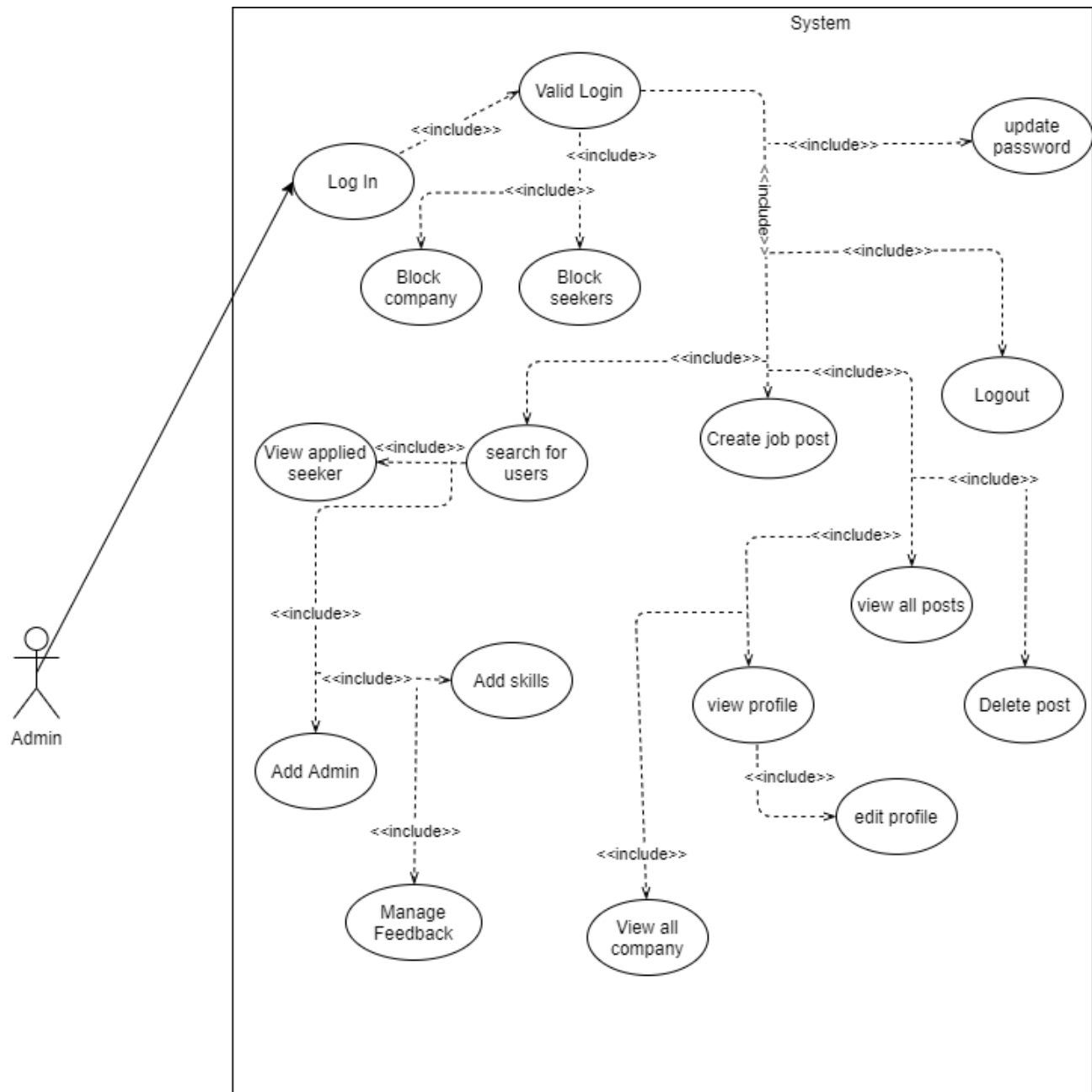
3.3 Use-case Diagrams



3.3 Use-case Diagrams (Cont.)

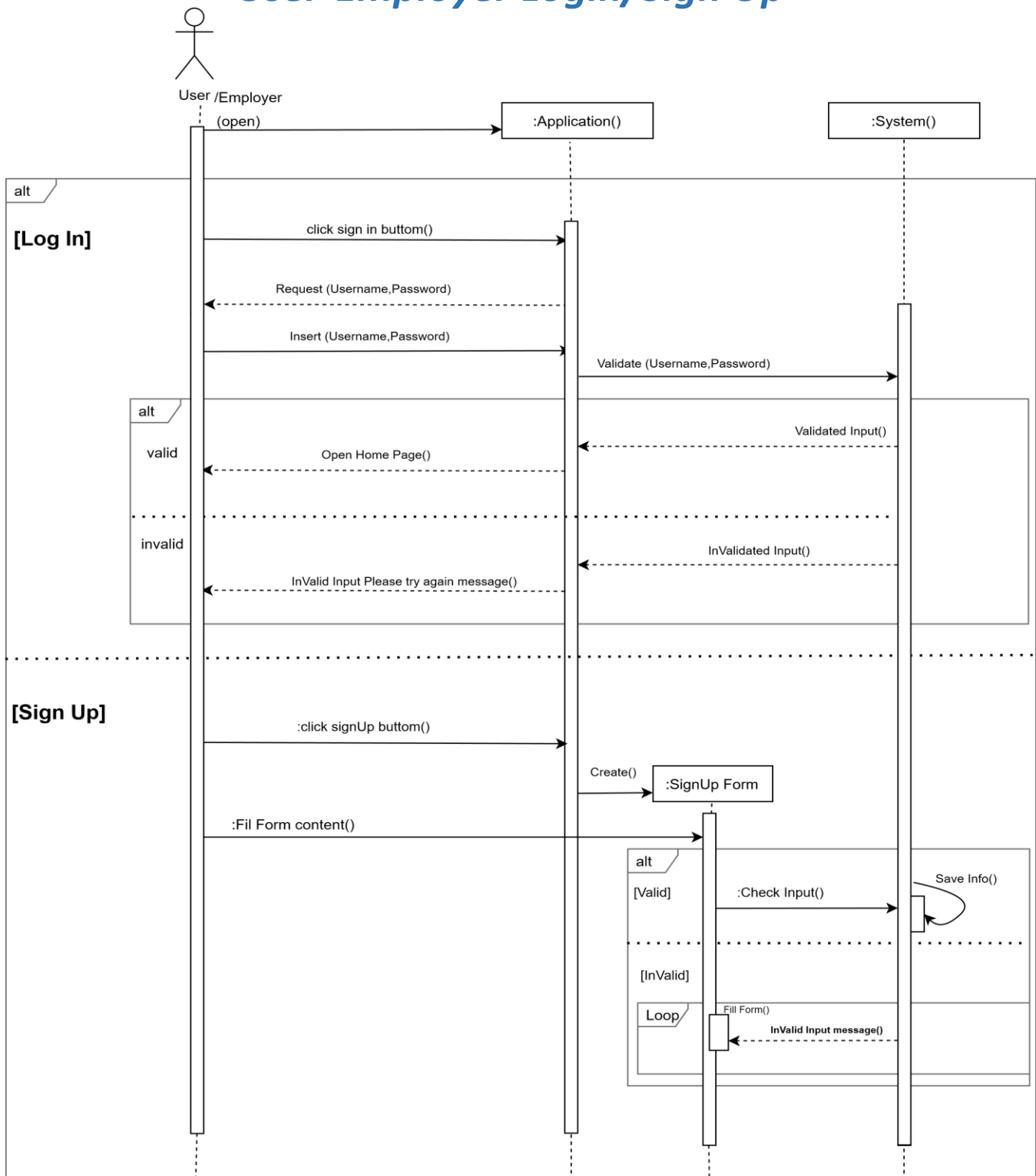


3.3 Use-case Diagrams (Cont.)

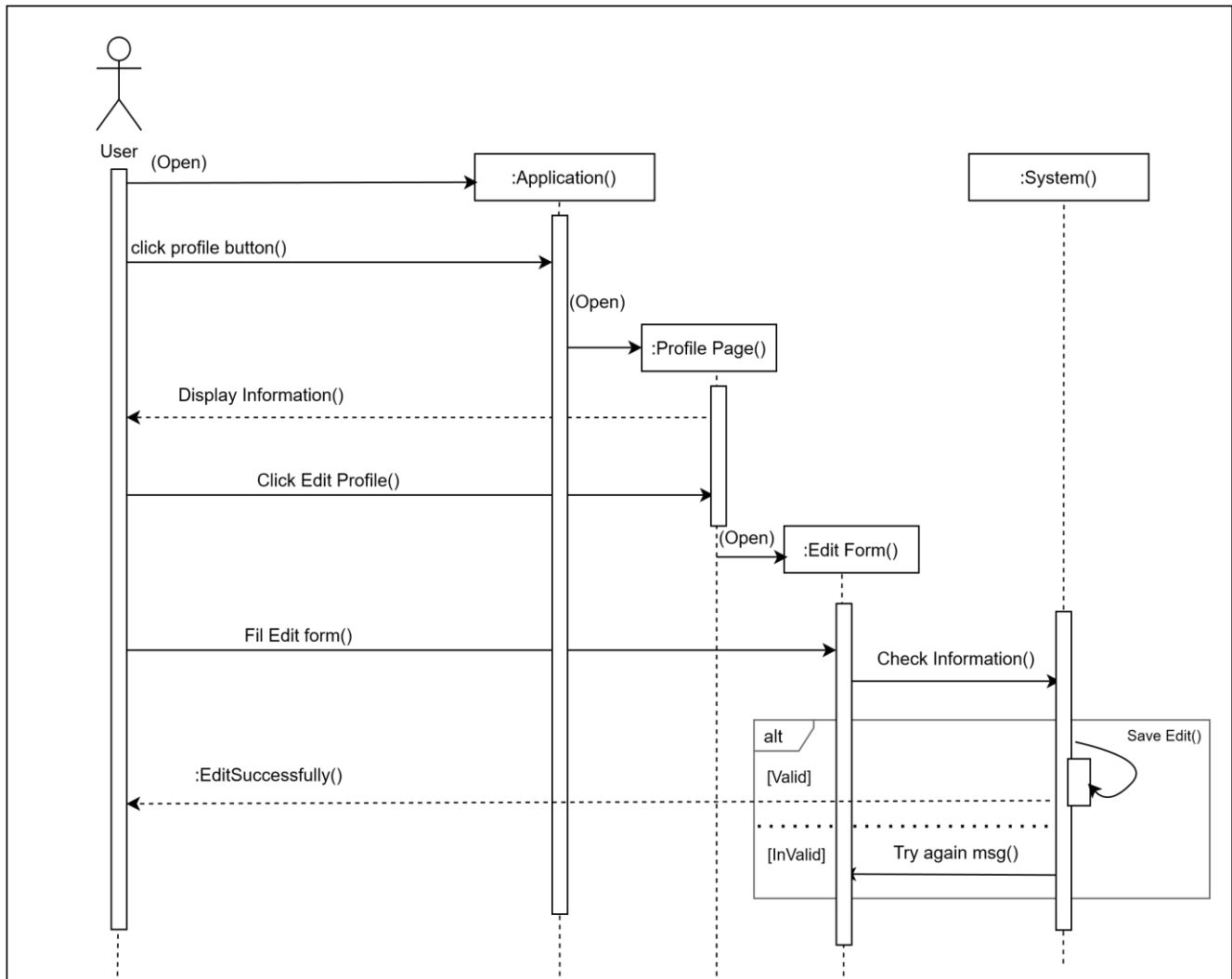


3.4 Sequence Diagrams

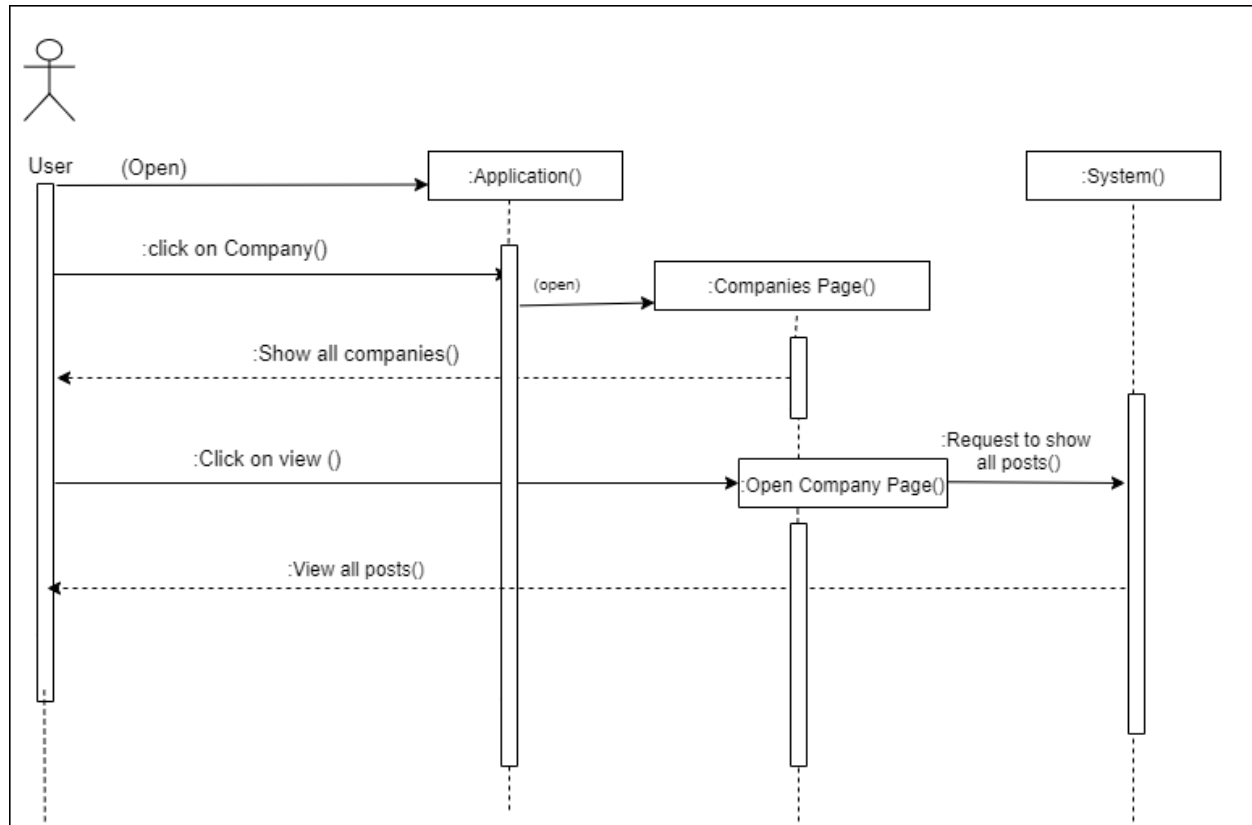
"User-Employer Login/Sign Up"



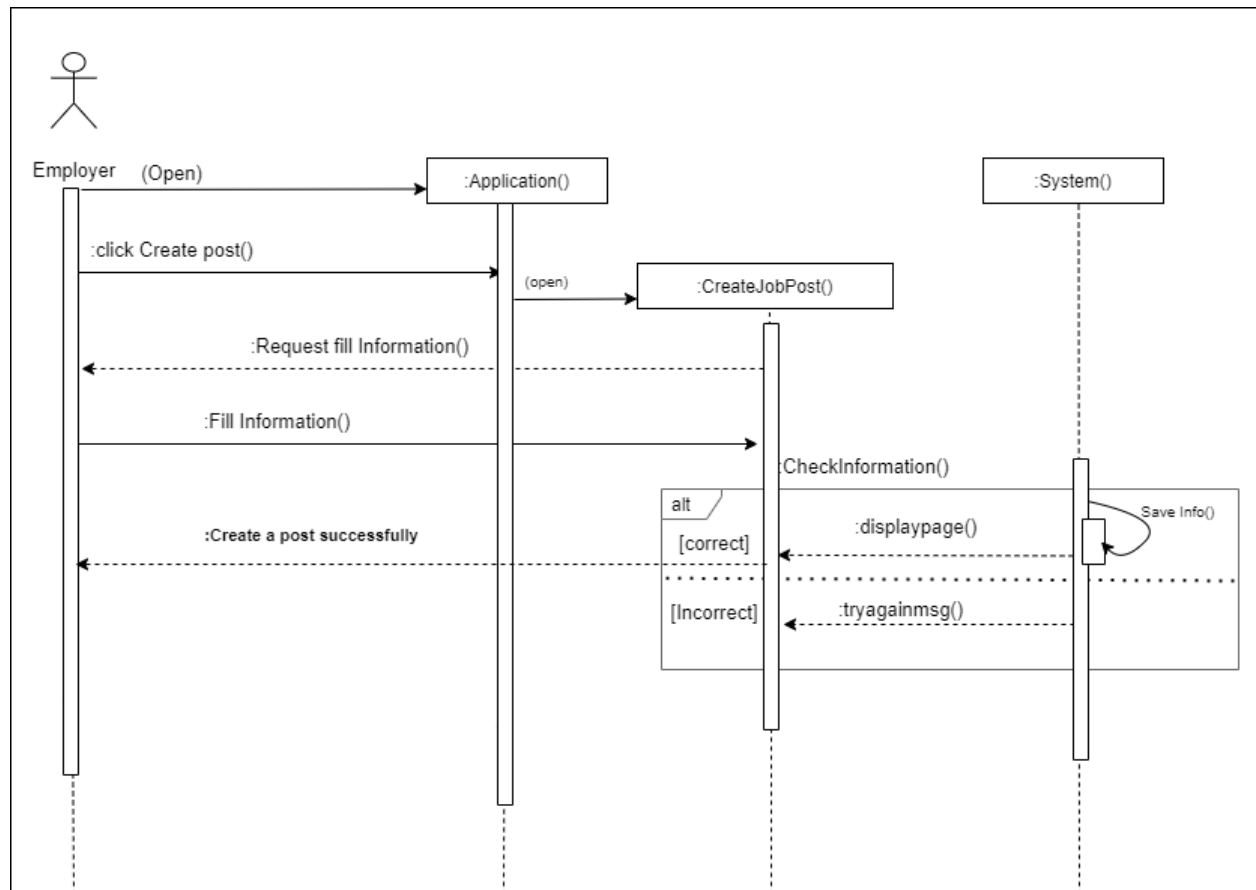
"User setup profile"



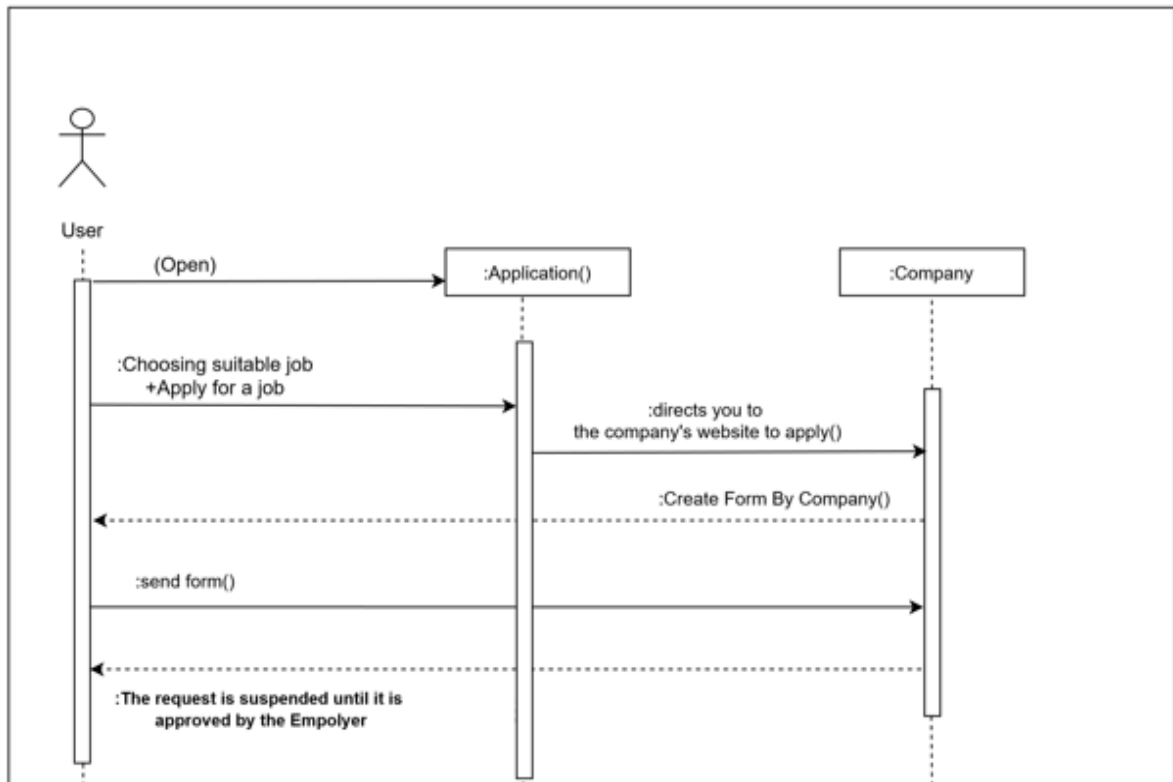
All Companies with all posts (User)



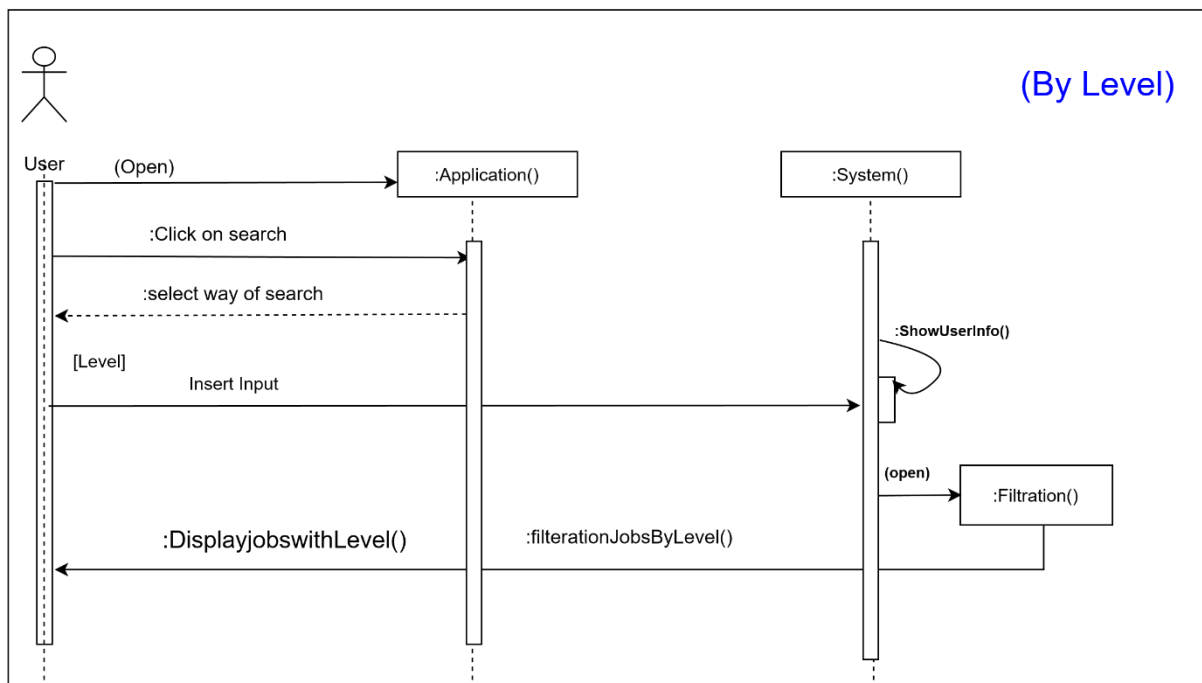
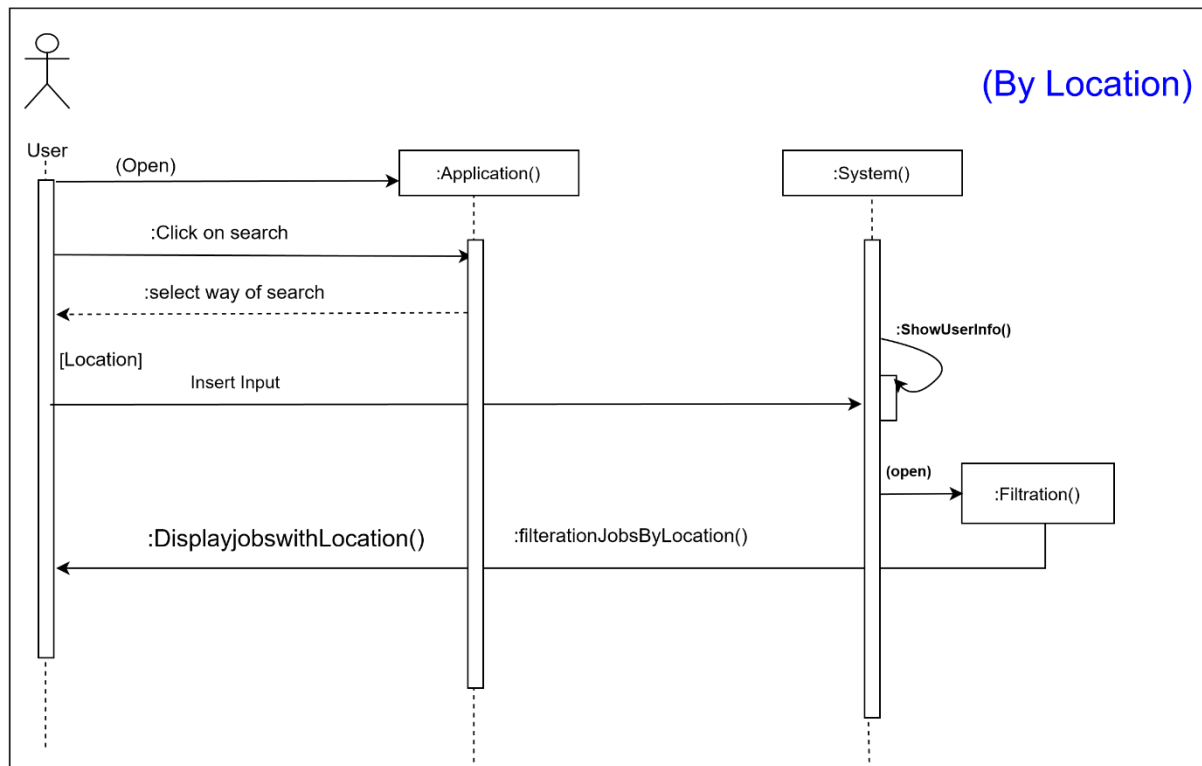
"Company Create a job post"

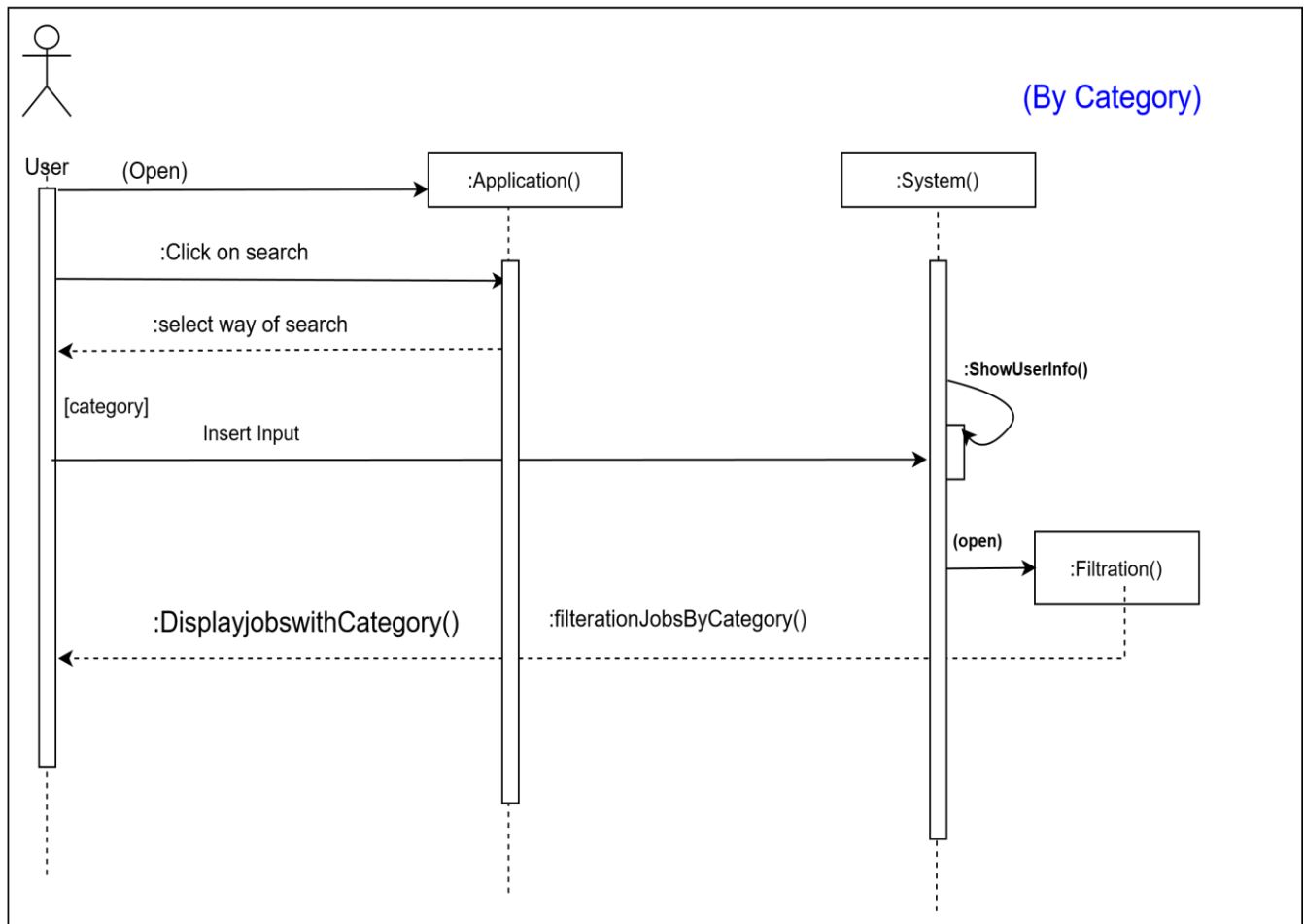


"Apply For Job"

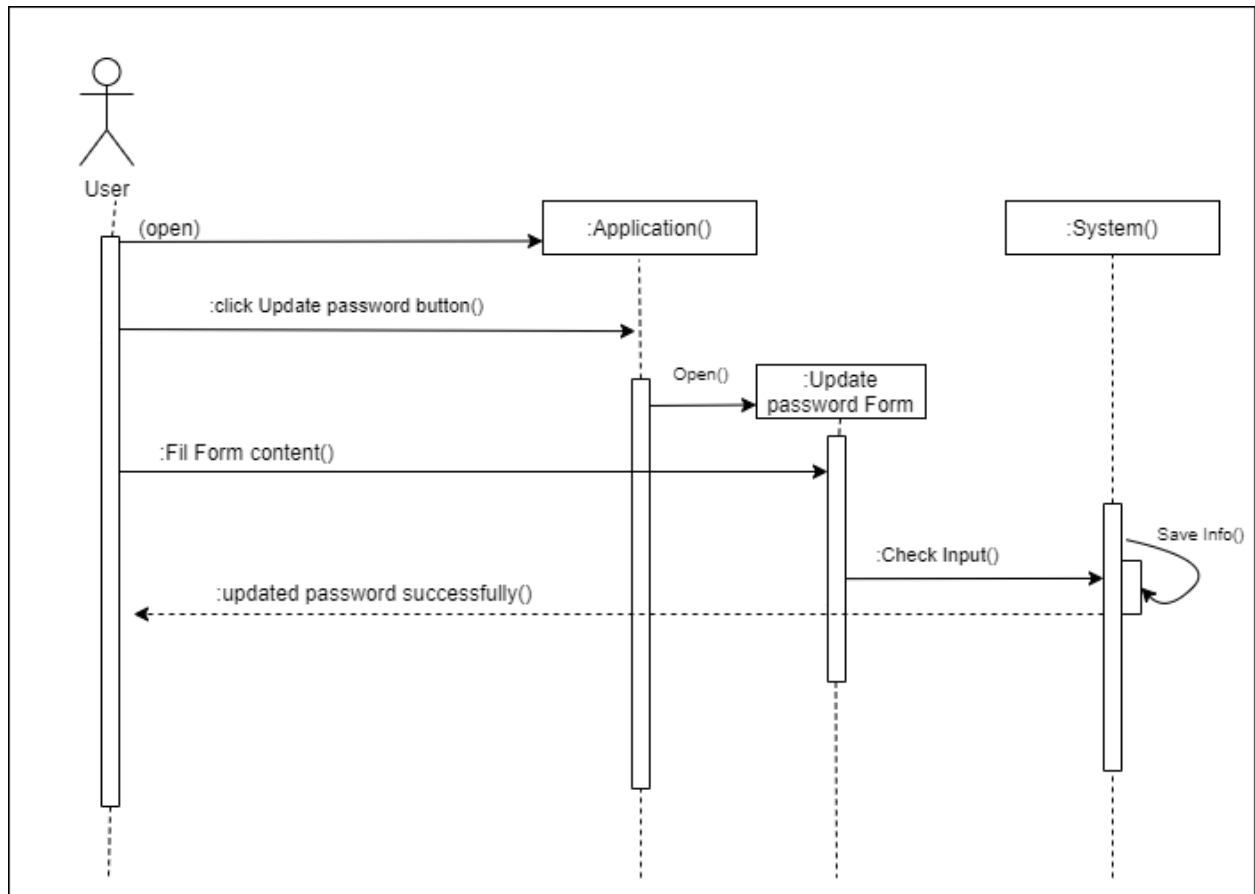


"Search with Filtration Jobs (Users)"

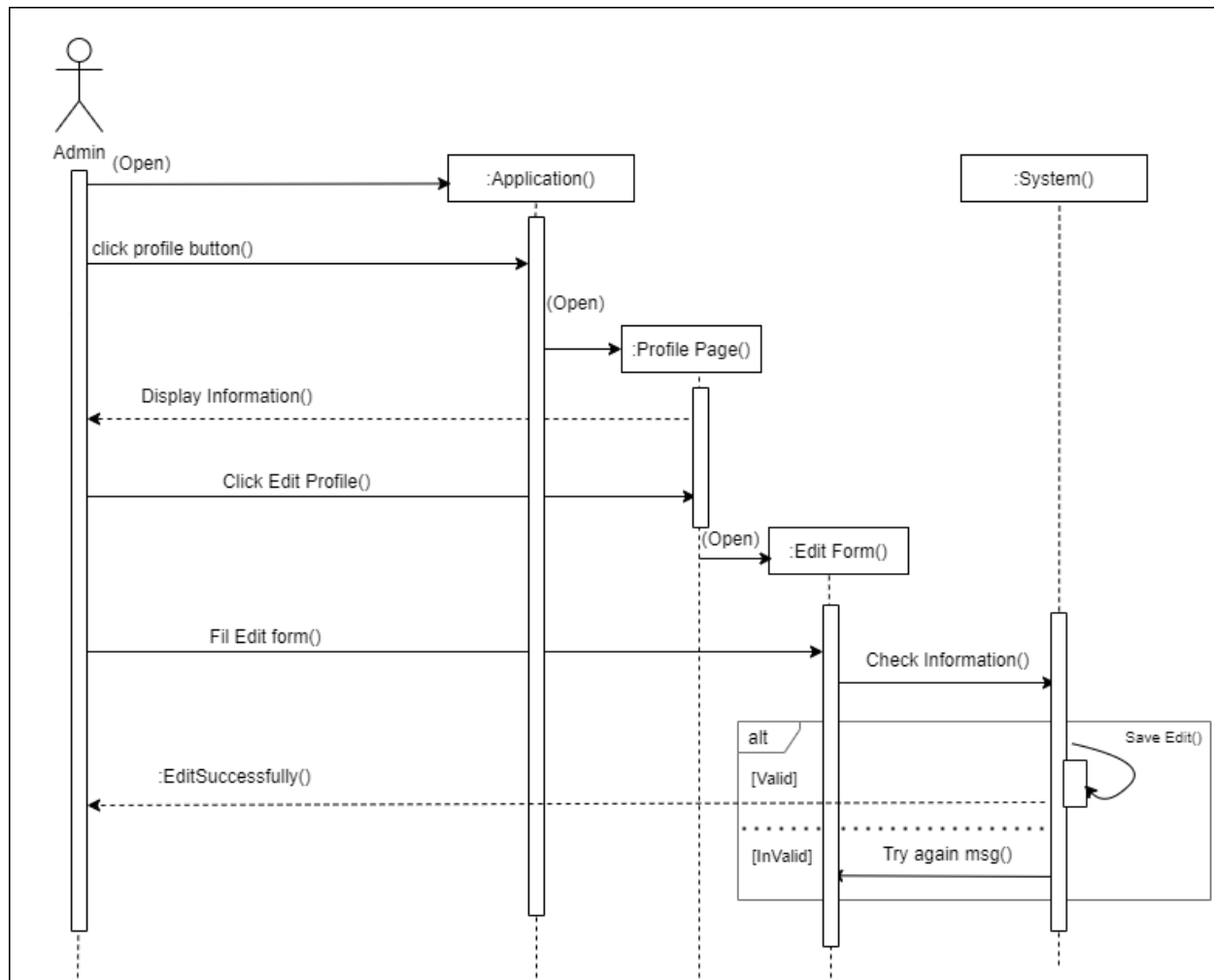




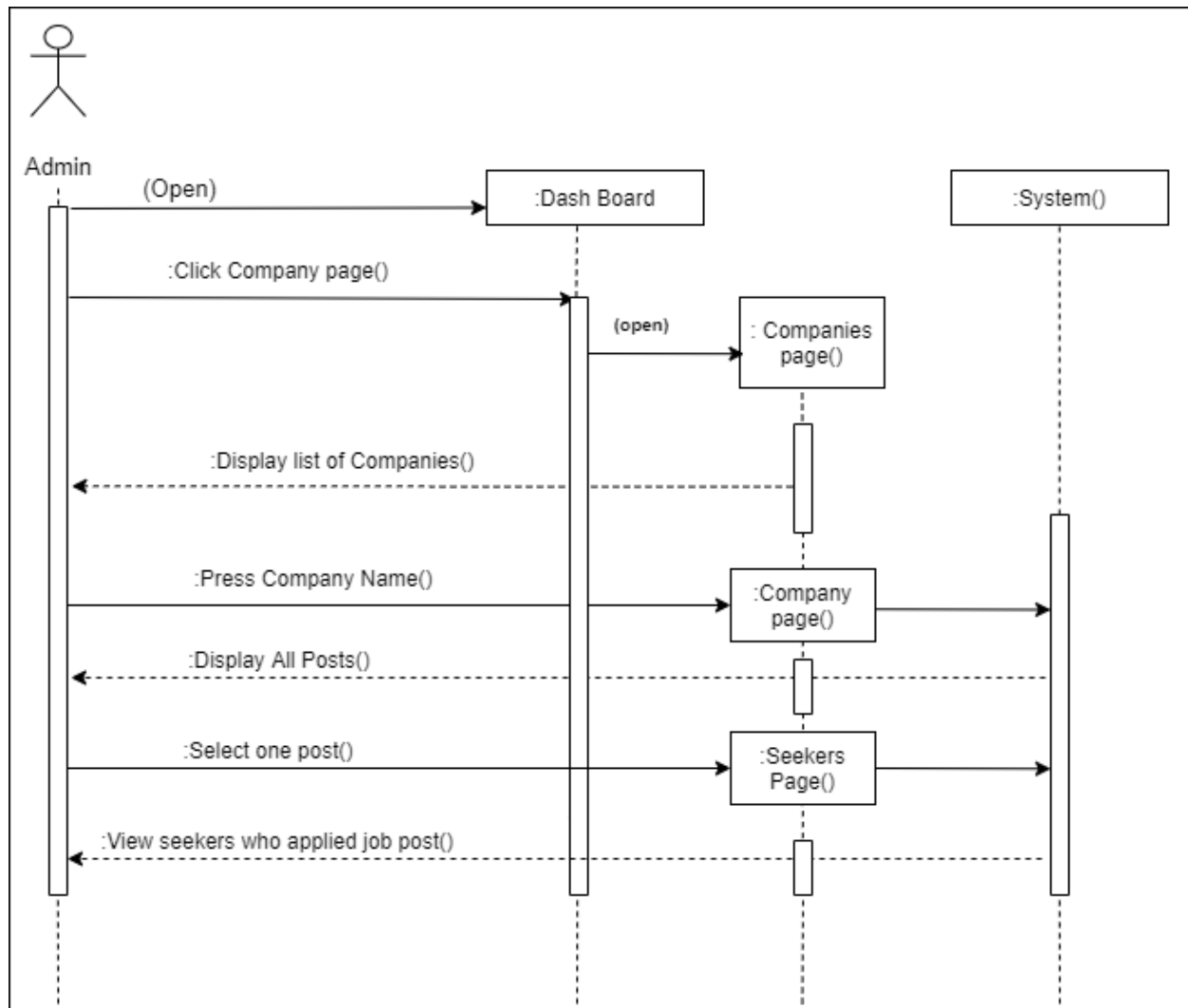
Update password



“View and Edit Profile (Admin)”

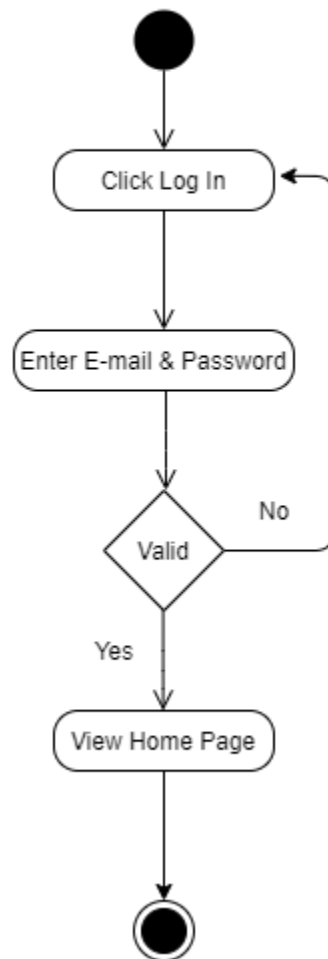


“View (All Companies, All Posts, All Job Seekers) (Admin)”

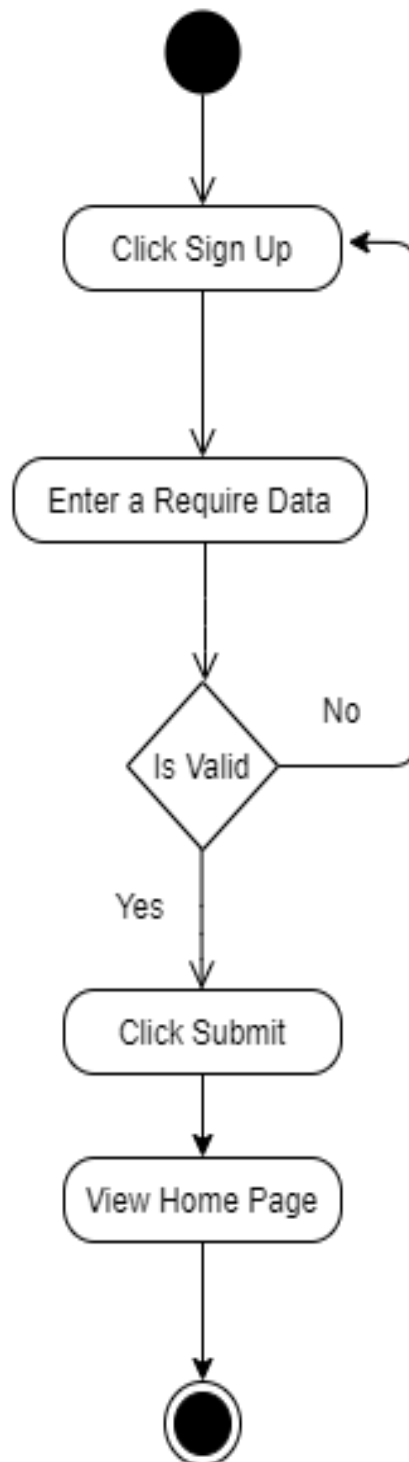


3.5 Activity Diagrams

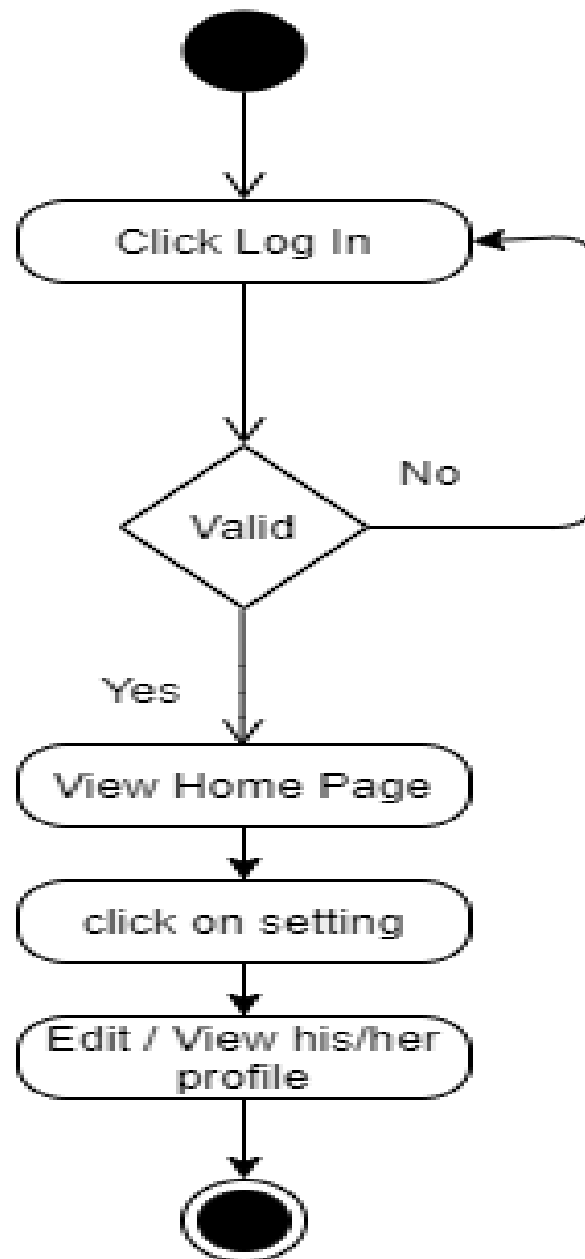
Job Seeker & Company & Admin Log In



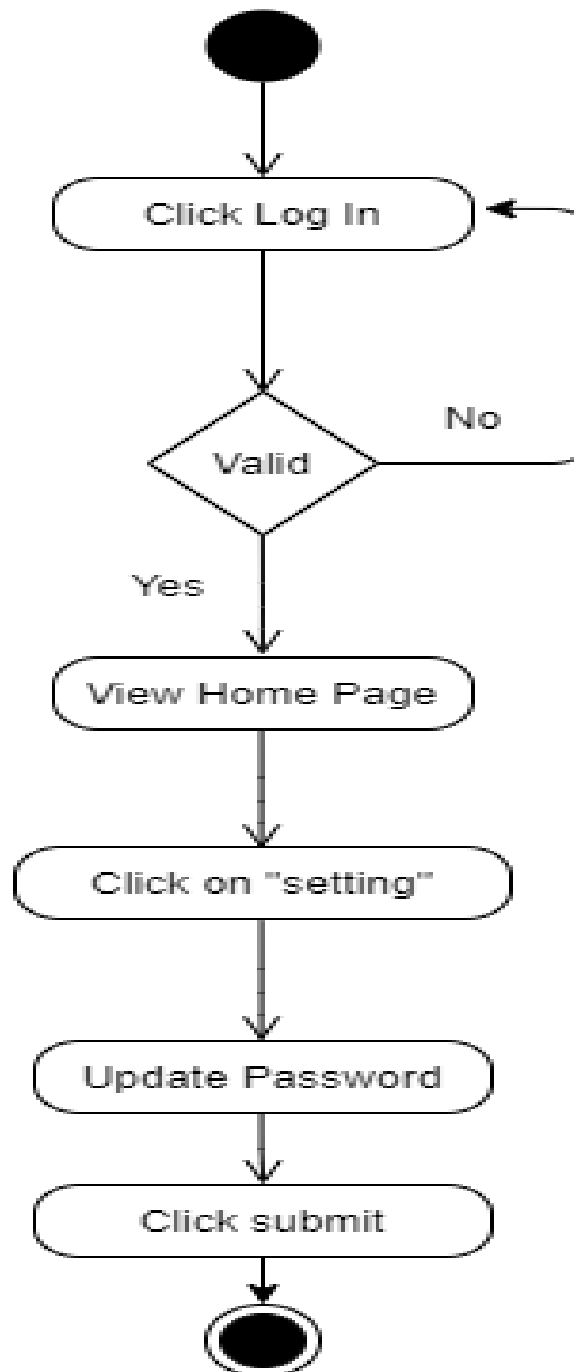
Job Seeker & Company Sign Up



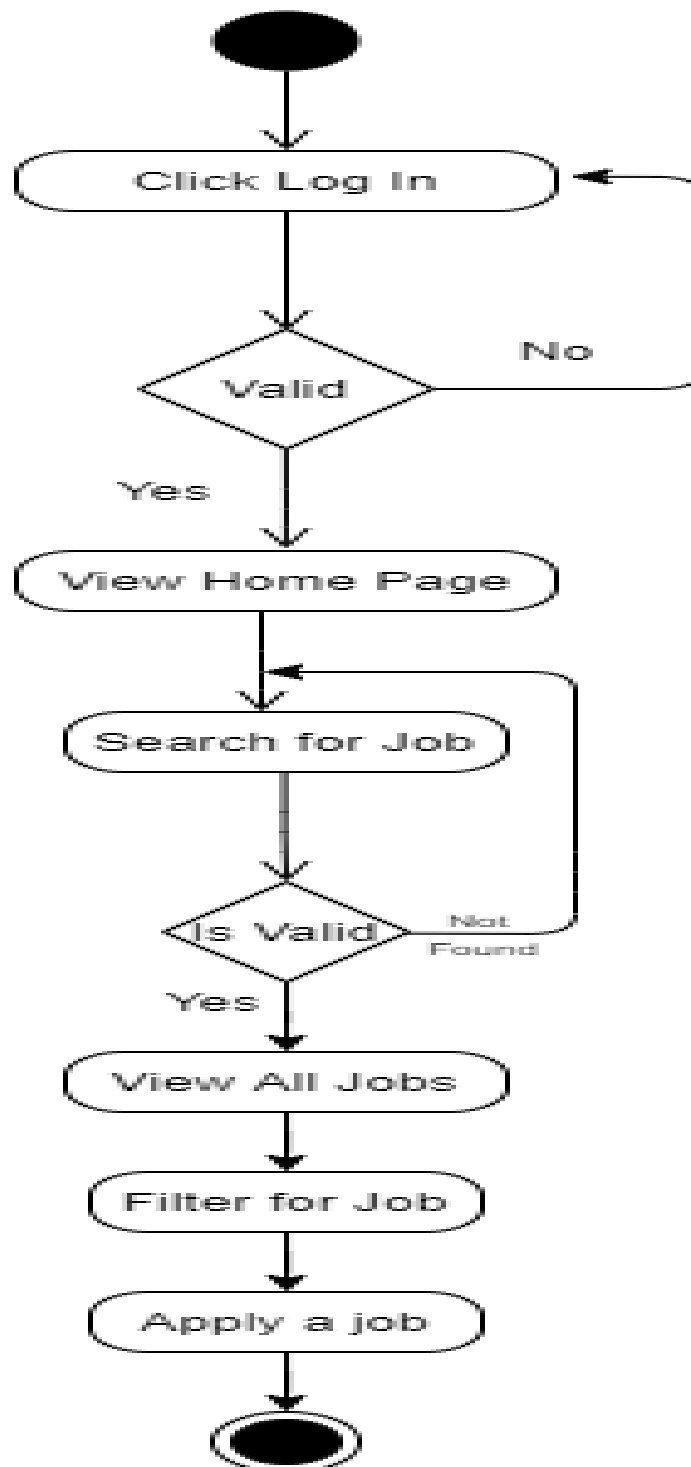
Edit / View profile



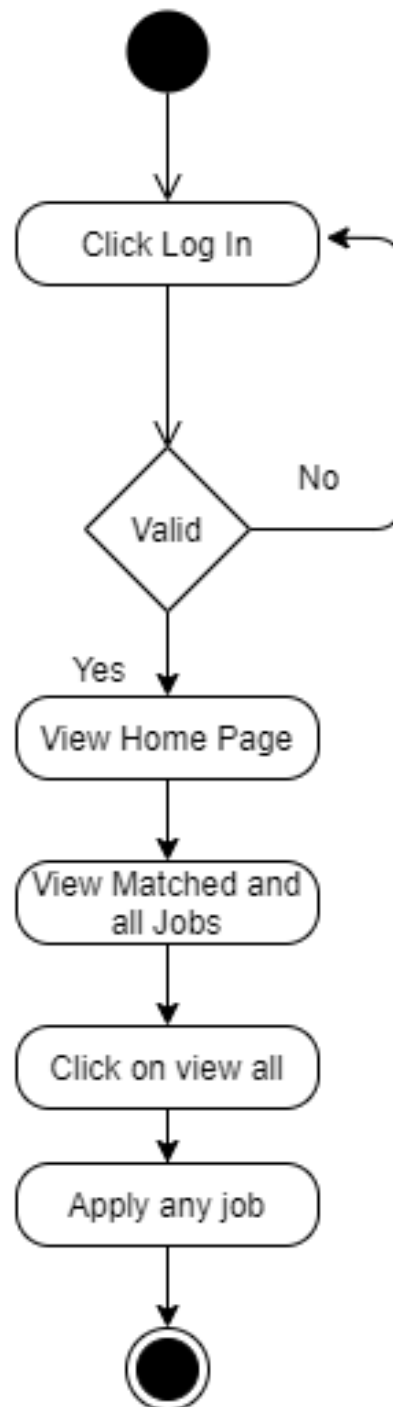
Update Password



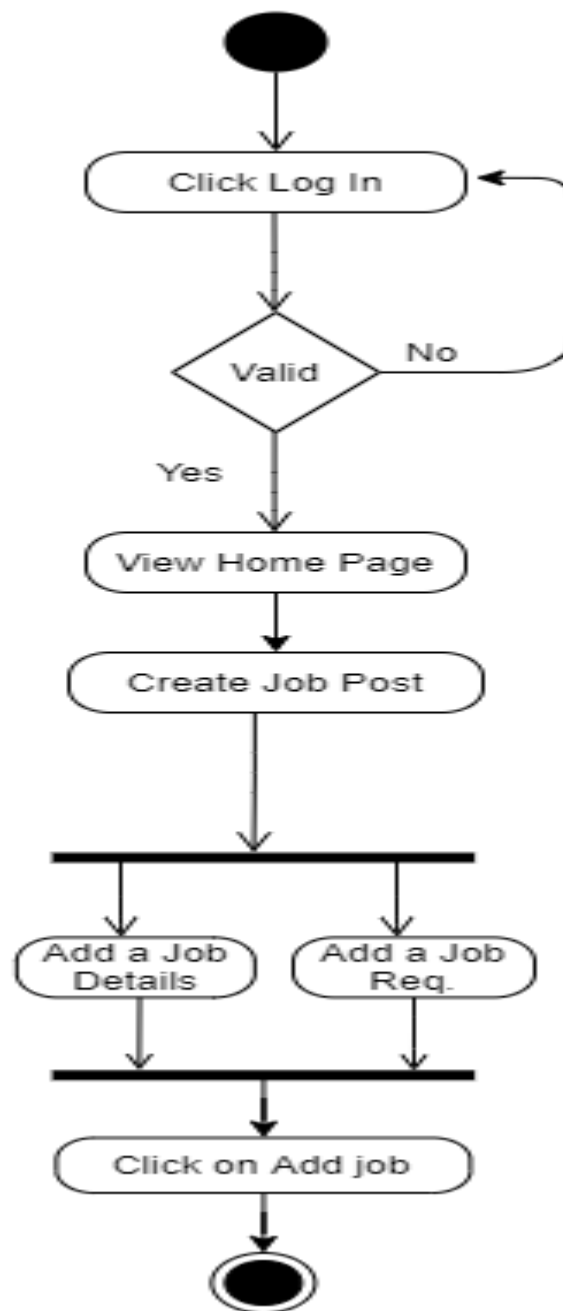
Search



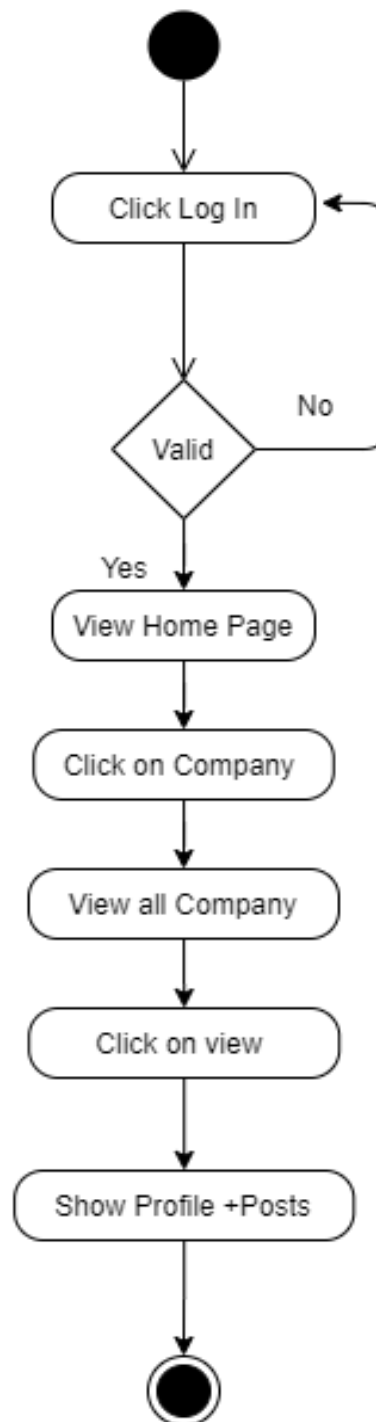
Matched and all Jobs



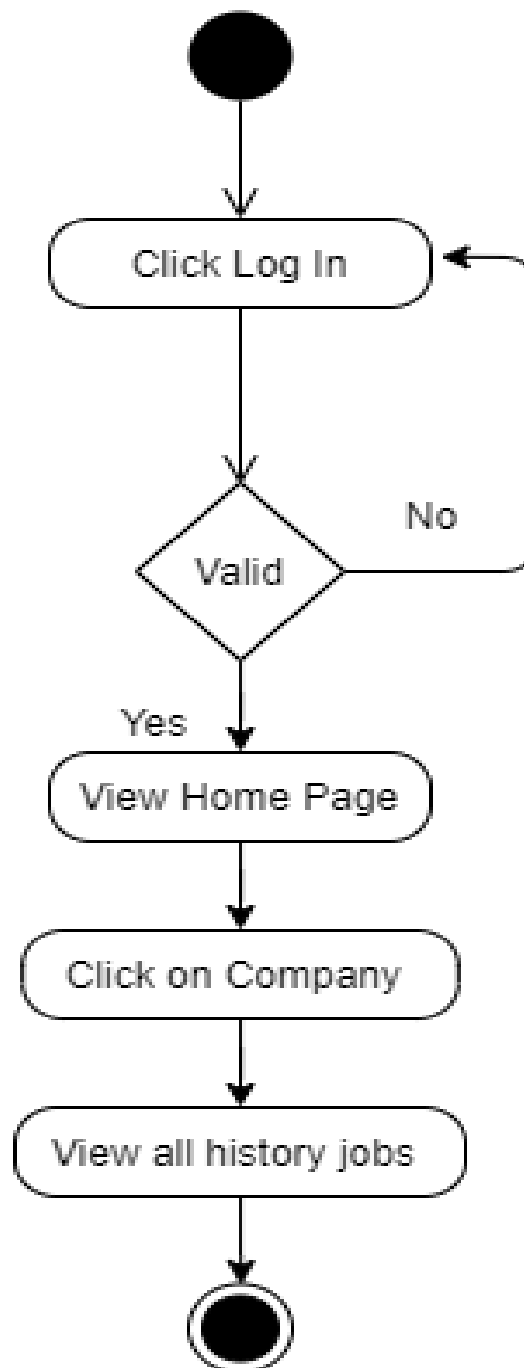
Create Job Post



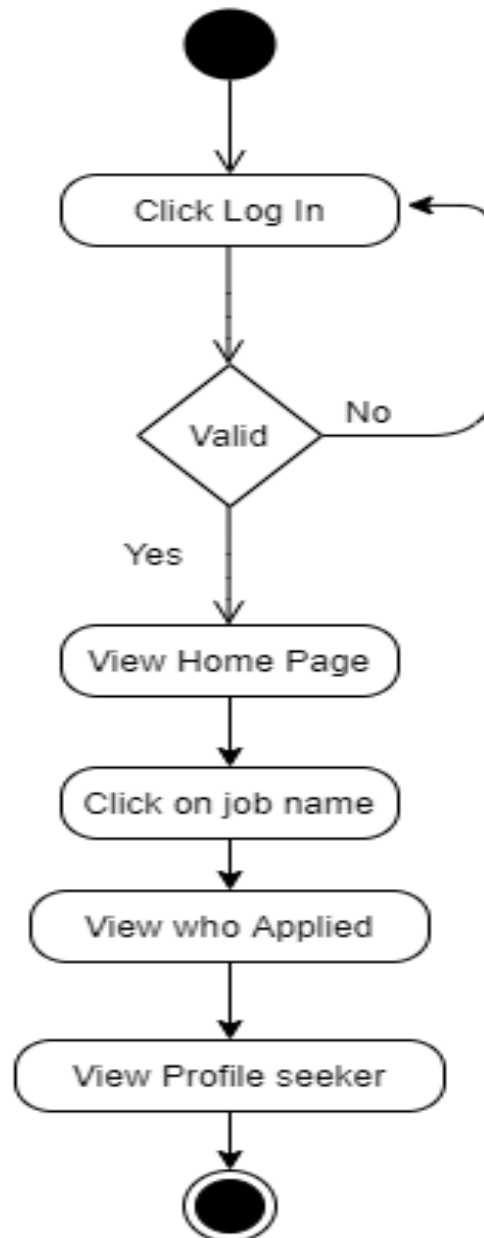
View Company (Profile, Posts)



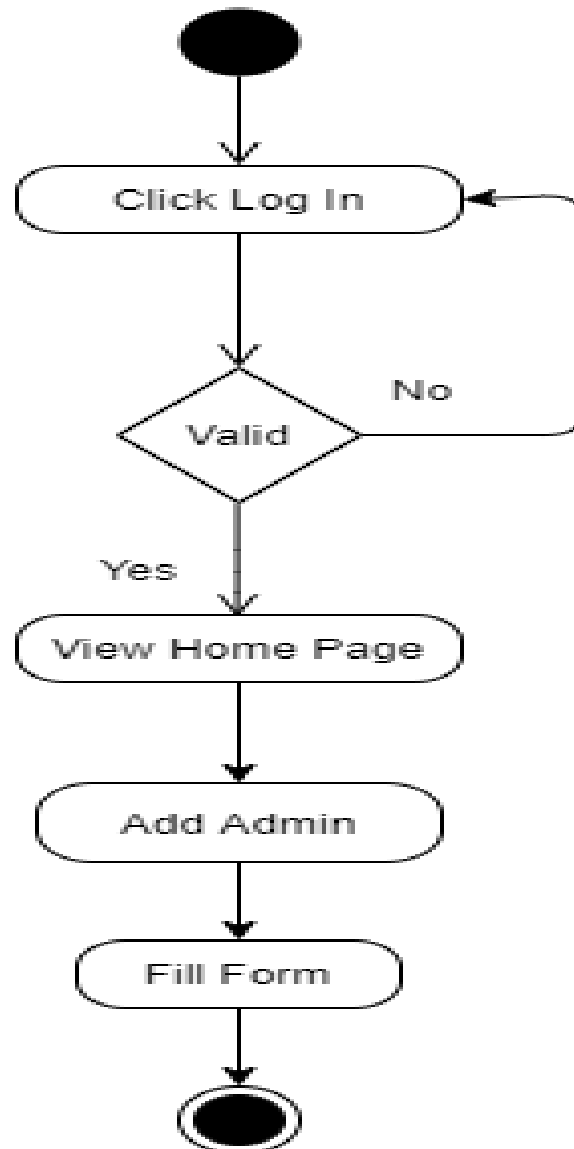
View History Jobs



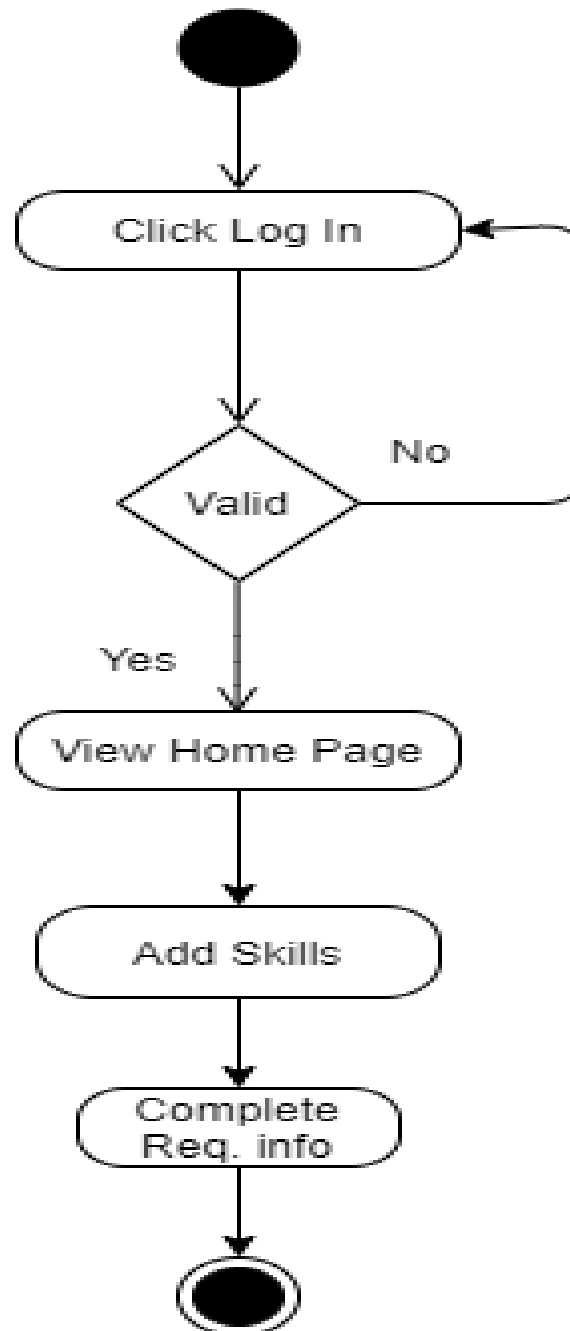
View who Applied



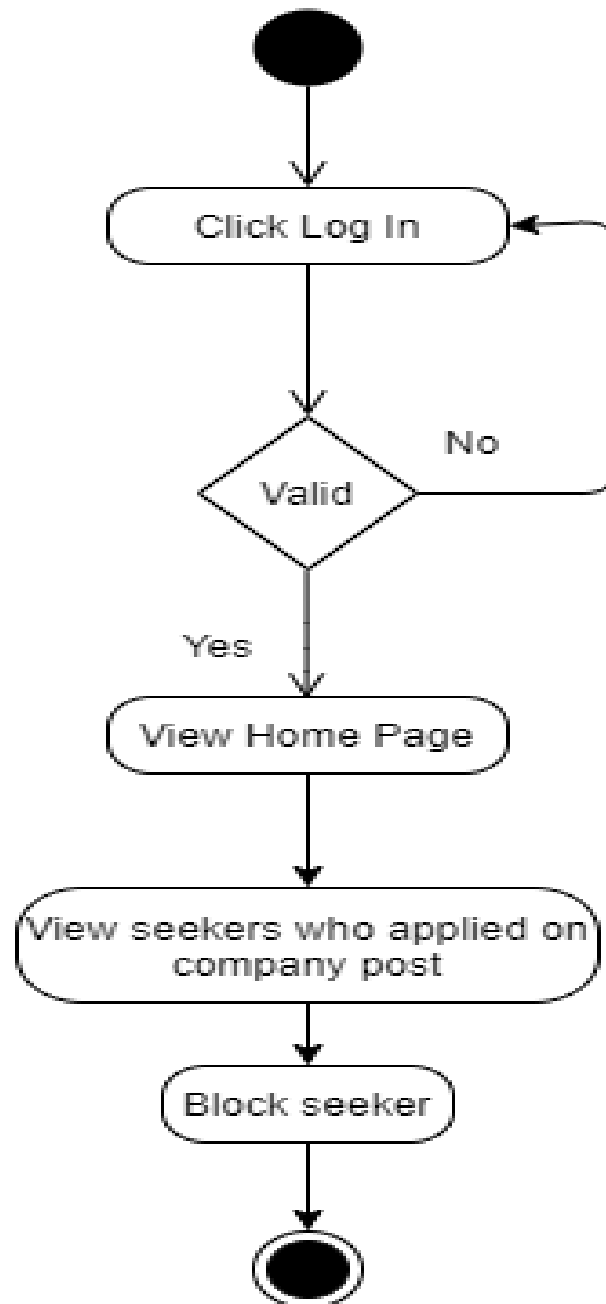
Add Admin



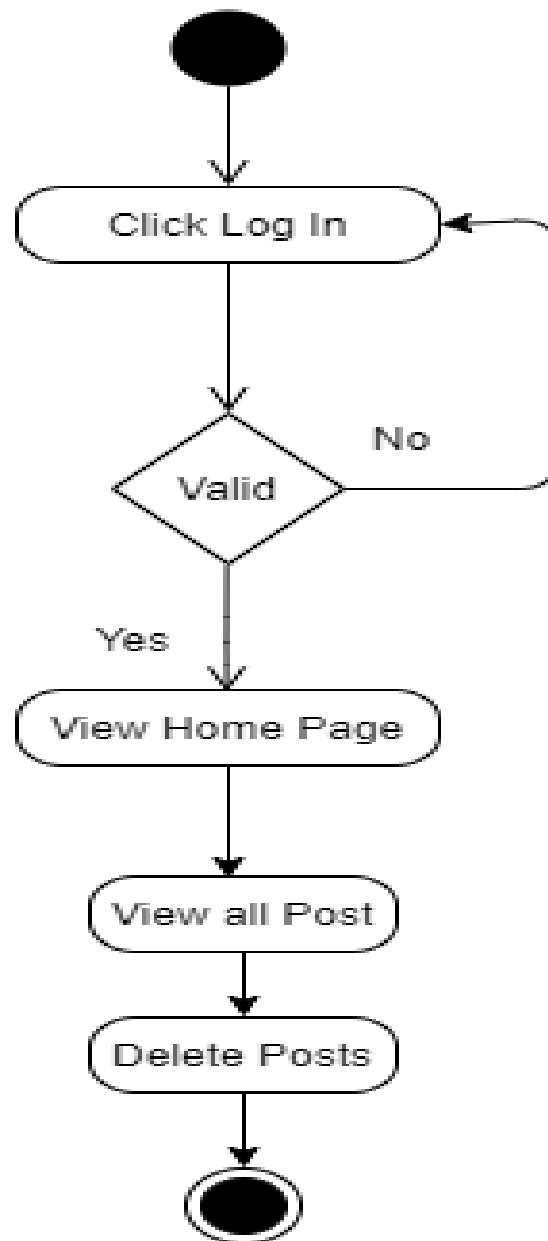
Add Skills



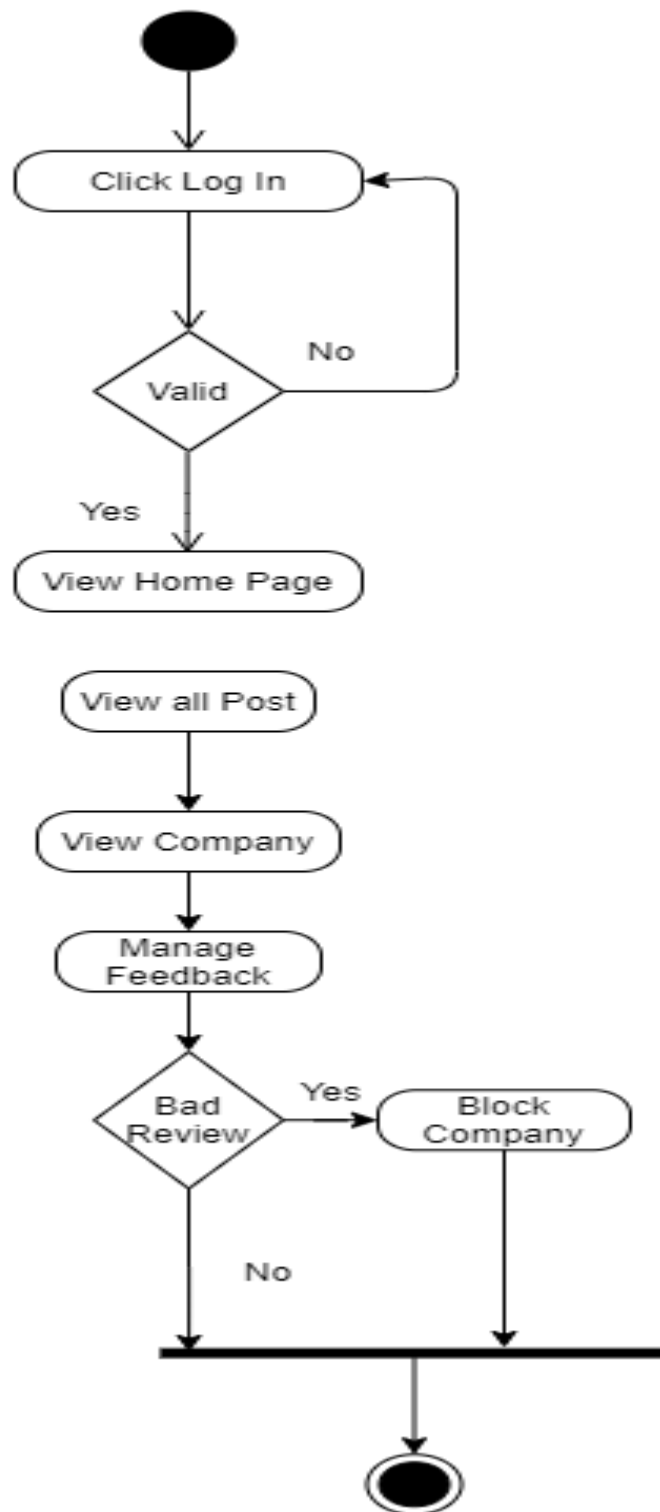
Block seeker



Delete Posts



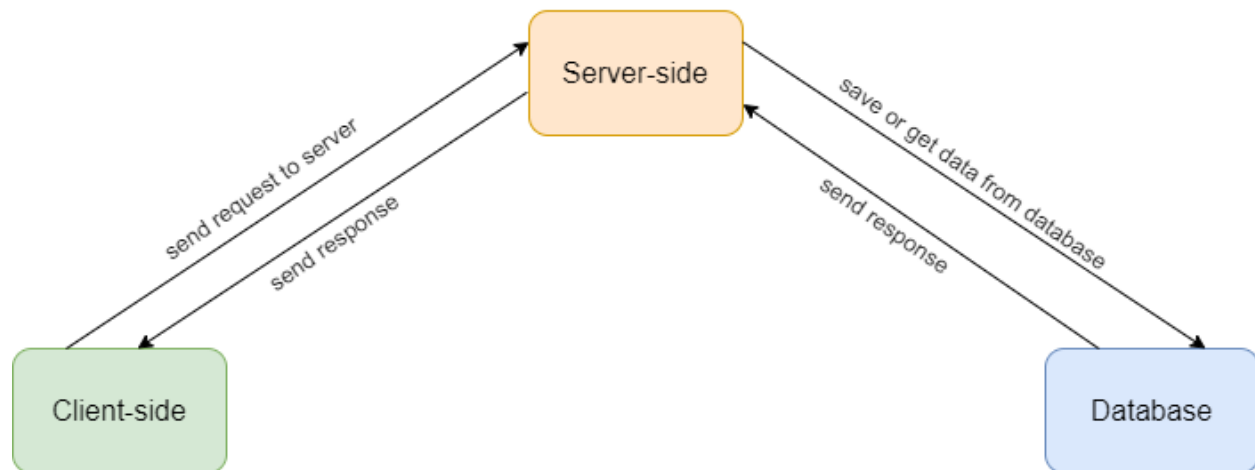
Manage Feedback



3.6 Architecture Diagrams

Software Architecture

Pseudocode, Flowchart or workflow



Chapter 4: Acceptance Criteria

Acceptance Criteria:-

In this chapter we will discuss the success criteria that will lead our system to achieve its goal and be accepted by users.

Chapter Headlines:

4.1 Acceptance Criteria

4.2 Verification and Validation Methods Matrix

4.1 Acceptance Criteria

Company wants to view seeker profile:-

Scenario	Company wants to view seeker profile
Given	Company is already logged in and navigated to his/her home page
When	Company sees applied job seekers
Then	The company selects the user and navigates to his/her profile page

User wants to add feedback:-

Scenario	User wants to add feedback
Given	User is already logged in and navigated to his/her home page
When	The user selects a company that he/she wants to add feedback
Then	He/she would add a feedback in a feedback section

Admin wants to view company feedback:-

Scenario	Admin wants to view company feedback
Given	Admin is already logged in and navigated to his/her home page
When	The Admin selects a company that he/she wants to add feedback
Then	The Admin presses a button to Company reviews

User wants to edit his/her profile:-

Scenario	User wants to edit his/her profile
Given	User is already logged in and navigated to his/her home page
When	User selects to go to his/her profile
Then	user presses on a button to edit his/her information
When	He/she is navigated to a page to edit his/her information
Then	User edits what's needed, then presses a button to save the changes

Company wants to edit his/her profile:-

Scenario	Company wants to edit his/her profile
Given	Company is already logged in and navigated to his/her home page
When	Company selects to go to his/her profile
Then	company presses on a button to edit his/her information
When	Company is navigated to a page to edit his/her information
Then	Company edits what's needed, then presses a button to save the changes

Company wants to Add Post:-

Scenario	Company wants to Add Post
Given	Company is already logged in and navigated to his/her home page
When	When The Company presses the button to add a post
Then	The company writes what he/she fill req. info.
When	The other users will see the post
Then	User can apply for job

Company /user wants to update password:-

Scenario	Company /user wants to update password
Given	Company /user is already logged in and navigated to his/her home page
When	The Company /user selects a setting and press update password
Then	Fill form and save changes

User wants to see his/her previous applied job:-

Scenario	user wants to see his/her previous applied jobs
Given	user is already logged in and navigated to his/her home page
When	The user selects a Applied job
Then	All applied job appears

Job seeker wants to see his/her Sign up on application:-

Scenario	Job seeker wants to see his/her Sign up on application
Given	Job seeker will fill form
When	create an account by providing their name, email address, and password
Then	Registration successfully

4.2 Verification and Validation Methods Matrix

	Admin	Company	Job Seeker
Sign up	0	1	1
Log in	1	1	1
Log out	1	1	1
Delete post	1	1	0
Search	1	0	1
Edit Profile	1	1	1
Block Company	1	0	0
Job Details	0	1	0
Job Requirements	0	1	0
Apply	0	0	1
View Applied Seekers	1	1	0
View All Jobs (History)	0	1	0
Update Password	1	1	0
Create Post	0	1	0
View All Posts from All Companies	1	0	0
View Company Post	1	1	1
Add Admin	1	0	0
Manage Feedback	1	0	0
Matched Jobs	0	0	1
Upload CV	0	0	1

Chapter 5: Development Organization Requirements

Development Organization Requirements:-

In this chapter we will discuss the business prospective of the application implementation also the characteristics of the new system

Chapter Headlines:

- 5.1 Business Requirements
- 5.2 Cost Requirements
- 5.3 Relationship to future products
- 5.4 Special Considerations
- 5.5 Characteristics of the proposed software
- 5.6 Success criteria

5.1 Business Requirements:

User gets matched jobs	The system should be fast when get jobs.
User searches for job posts	The result of the search should be of high accuracy and speed
User refreshes the job posts feed	The server update should be of high speed and 24/7 availability.
Company posts a job	The system should be fast when company post a job.
Understanding of the system	The system has a user interface that features simplicity and be self-descriptiveness.

5.2 Cost Requirements:

- This application will follow free software and will be available for several users for free, No cost will be taken by user, should be taken by companies that will use it for more than a month.
- The application is good and available from the economic and business point of view.

5.3 Relationship to future products:

- The application provides a seamless and easy opportunity to find a suitable job for each person and is also suitable for companies that are looking for suitable employees to work with different systems.
- This application gives us quick opportunities to apply for different jobs and also know what the requirements for each job are.
- This application is very good, especially for graduates who are still searching for the requirements of the labor market and knowing what jobs are for everyone according to his qualifications.

5.4 Special Considerations:

- Admin can block any user that does bad behavior.
- Admin can block any company that posts inappropriate jobs.
- Admin can delete any job inappropriate.

5.5 Characteristics of the proposed software:

- The application provides a good job browsing, selecting the desired job and applying for it.
- Based on the user's skills the app recommends a suitable list of jobs that he/she can see and apply for it.

5.6 Success criteria:

- User gets the best job matched with his skills.
- Company gets best employees for its job.
- Increase job opportunities.
- meets our expected quality.
- our application gains popularity.

Chapter 6: Result and Discussion

Result and Discussion :-

In this chapter we're going to find out the results of the project whether they're achieved or not and the differences between the desired results and the actual ones.

Chapter Headlines:

6.1 Results

6.1.1 Expected Results

6.1.2 Actual Results

6.2 Discussion

6.1.1 Expected Results

- * Job seeker can enter his skills and the application analyzes them and sends a notification when the company publishes a post that matches his skills.
- * Job seeker can see the company page and all the jobs currently advertised, and he can also use the **chat bot** to communicate with the company easily.
- * The job seeker can view all applied jobs.
- * The company can see the job applicant page.
- * All these processes are monitored and managed by administrators.

6.1.2 Actual Results

- * The job seeker can enter his skills and the application analyzes them and sends a notification when the company publishes a post that matches his skills.
- * The job seeker can see the company page and all the jobs currently advertised.
- * The job seeker can view all applied jobs.
- * The company can see the job applicant page.
- * All these processes are monitored and managed by administrators.

6.2 Discussion

- We managed to get the same expected result except chat bot

Chapter 7: Future Work

Future Work:-

1- Video resumes: Video resumes can be used to provide a more personalized and engaging way for job seekers to showcase their skills and experience.

2- We will add a chat bot to answer the most common questions

3- We plan to launch the beta version for close people and friends to test the project at the advanced operating level to fix any errors, and then launch the project on all platforms after completing any repairs



JOBSPOT APPLICATION

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Thank You...❤️