

linkedIn

IS 244 Information System Analysis and Design Project

Section

F10

2025

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Chapter 1: Introduction

1.1 Introduction

The user creates an account and completes a profile with personal details, skills, qualifications, experience, and job title. The app then displays job listings based on the profile. The user reviews job descriptions, selects preferred roles, and submits a CV. The company receives the application, evaluates the profile for a match, conducts interviews if suitable, and decides on hiring.

1.2 Problem Definition

Fake profile

One of the problems that users face on LinkedIn is the problem of fake profiles, where fake accounts are created that contain fake images or inaccurate information, which makes it difficult for users to verify the identity of people and ensure the credibility of accounts. They are promoted through advertisements, which leads to the creation of an unreliable environment.

Privacy

One of the concerns that users face is privacy issues due to the presence of a lot of personal information and professional certificates, which leads to concerns about data leakage.

Lack of Response from Employers

Many applicants face the problem of not receiving any response from employers, even when they meet all the required requirements

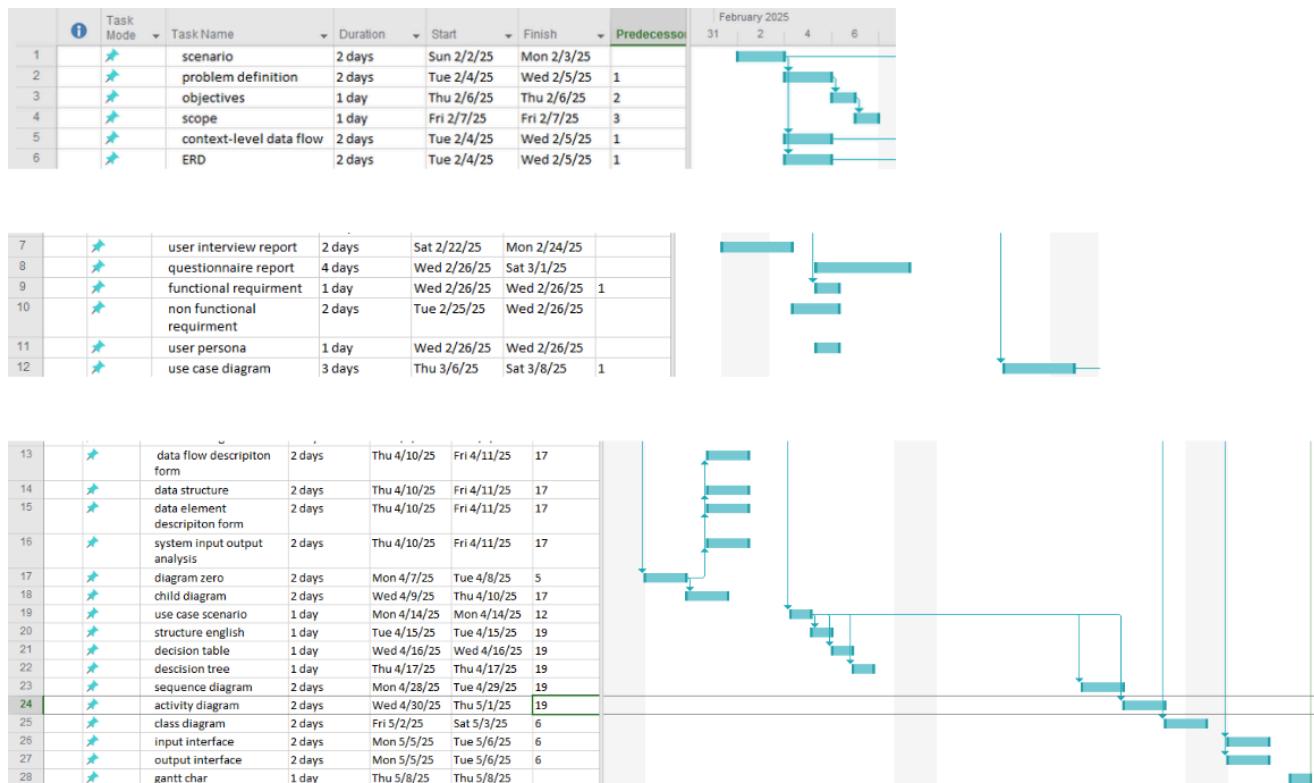
1.3 Project Objectives

- To create a secure and trustworthy environment for job seekers, free from fake profiles, ensuring a more credible and efficient hiring experience by implementing an identity verification system to confirm user identity and ensure authenticity.
- Enhancing the privacy policy by improving privacy settings, imposing restrictions on users' sensitive information, and providing more detailed options that allow users to control who can access their personal data.
- To enhance communication between employers and job applicants through mechanisms that ensure clear and structured responses, thereby increasing transparency and improving the job-seeking experience.
-

1.4 Project Scope

This app connects job seekers with employers, helping users find jobs and companies find employees. It is used during account creation, job browsing, application submission, and response waiting, all this through the online app and company

1.5 Project Timeline



Chapter 2: System Analysis

2.1 Analysis of Existing Systems

The user creates an account on the app and adds a profile that includes all personal information, skills, qualifications, experience, and the job title. The program starts to display all the jobs based on his profile. He starts to read the description of jobs that appear and chooses jobs that he wants to apply and sends his CV. The company receives the user's application they checks if the user matches the job description or not based on the information in his profile. They could interview the user and decide whether they want to hire him or not.

2.1.1 User Interviews Report

Q: What is the purpose of LinkedIn?

A: LinkedIn facilitates job seekers to find job opportunities, and helps employers to search for employees.

From the answer, we understand that the main purpose of the program is to provide a smooth process for users to find jobs that align with their qualifications which makes it a useful process for the user to find a job that suits him and for employers to find the employees who meet their requirements.

Q: What are the procedures that are taken when applying for a job?

A: The user must match all the job description that specified by the company

From the answer, we get that there are procedures that LinkedIn take to ensure that the user matches the company job description which facilitates the process of sorting applicants and make it easier for the company.

Q: What are the most effective features for the user when searching for jobs on LinkedIn?

A: LinkedIn enhances the job search process by providing personalized job recommendations based on the user's skills, qualifications, and experience.

For the answer, we understand that this feature is very important for the user because it saves time and effort by showing him all the available jobs that align with his experience and skills and helps enhance the search experience for many users.

Q: Can LinkedIn recruiters filter candidates based on specific skills and experience?

A: Yes, LinkedIn Recruiter provides advanced search filters to help recruiters find candidates based on skills, experience, and location.

from the answer, we understood that there is a precise process linkedin use to sort job applicants based on certain criteria which further refine searches. These advanced filtering options help recruiters identify the best-fit candidates efficiently.

Q: Does LinkedIn allow job seekers to apply for jobs anonymously?

A: No, job applications are sent with the user's profile and details, but privacy settings allow for some control over profile visibility.

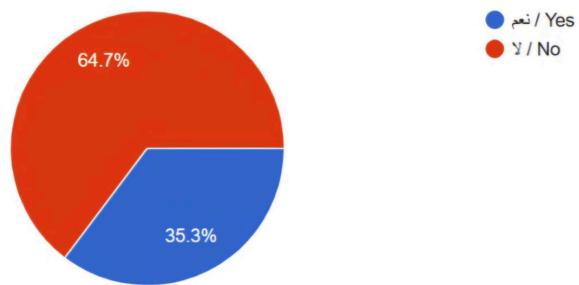
From the answer, it became clear that the application provides high privacy and security, as personal information will only appear to specific people, and the user can control this feature through his personal file.

2.1.2 Questionnaires Report

Have you used LinkedIn to search for a job?

هل استخدمت تطبيق لينكد إن للبحث عن وظيفة؟

17 responses



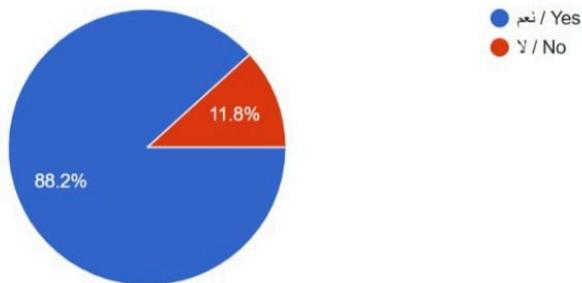
The survey results showed that 64.7% of the participants have never used LinkedIn to search for a job, while 35.3% have used it for this purpose. This result is expected, as the survey was conducted among students who are not yet actively looking for job opportunities.

Do you think LinkedIn features meet your professional needs?

(e.g., job opportunities, professional networking, training courses)

هل تعتقد أن ميزات لينكد إن تلبي احتياجاتك المهنية؟
(مثلاً: فرص عمل، تواصل مهني، دورات تدريبية)

17 responses

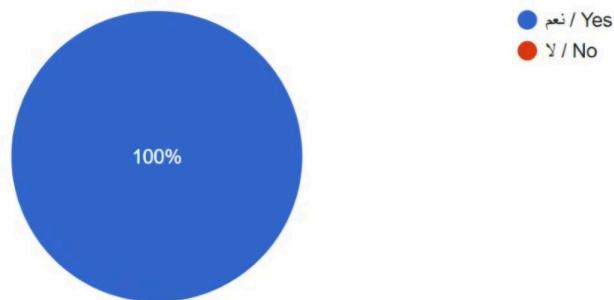


The survey results indicate that 88.2% of participants believe that LinkedIn features meet their professional needs, while 11.8% think otherwise. This suggests that the majority of respondents find LinkedIn useful for their career-related activities.

Would you prefer to receive notifications when suitable jobs are available?

هل تفضل أن يصلك إشعار عند توفر وظائف تناسبك؟

17 responses



The survey results show that 100% of participants prefer to receive notifications when suitable jobs are available. This indicates a strong interest in job alerts, suggesting that students and job seekers value real-time updates on job opportunities.

If you answered 'Yes' to the previous question, how would you prefer to receive job notifications?

Copy chart

إذا أجبت بـنعم على السؤال السابق، كيف تفضل أن يصلك إشعار بالوظائف؟

17 responses

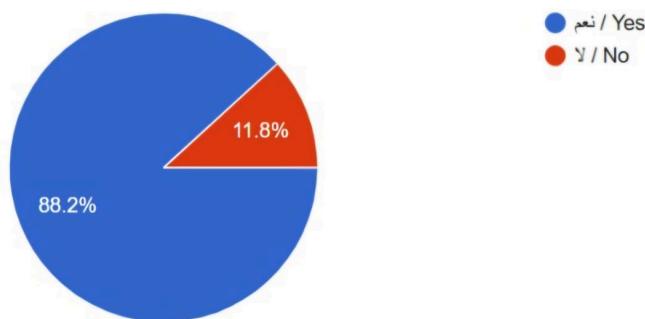


Among those who preferred to receive job notifications, the survey results indicate that 58.8% prefer to receive them via SMS, 23.5% through app notifications, and 17.6% via email. This suggests that SMS is the most favored method, likely due to its immediacy and accessibility.

Do you think LinkedIn is a safe and effective platform for finding a job?

هل تعتقد أن لينكد إن منصة آمنة وفعالة للحصول على وظيفة؟

17 responses



The survey results indicate that 88.2% of participants believe LinkedIn is a safe and effective platform for finding a job. This high level of trust suggests that LinkedIn is widely regarded as a reliable tool for job seekers. However, the remaining 11.8% who may have concerns could indicate a need for further improvements in security, job authenticity, or user experience to enhance confidence in the platform.

What job are you looking for?

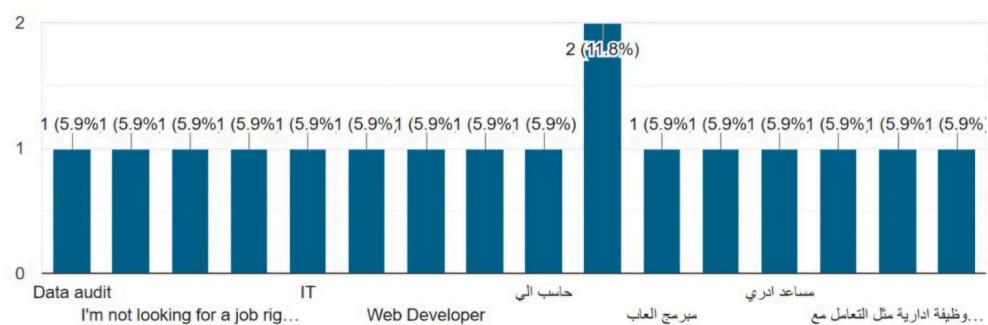
(Please write your preferred job in the space below)

[Copy chart](#)

ما هي الوظيفة التي تبحث عنها؟

(يرجى كتابة الوظيفة التي تفضلها في المساحة أدناه)

17 responses



The survey results showed that 53.3% of participants are looking for jobs in the technical field, such as programming and web development. Meanwhile, 13.3% prefer administrative jobs, and 13.3% prefer office jobs. Additionally, 20% of participants have not yet decided on their future job or are not currently looking for a job.

2.2 Requirements Elicitation

2.2.1 Functional Requirements

User

- User submit job applications to multiple companies.
- User receive notifications about job application statuses and interviews.
- User attend scheduled interviews set by companies..

Company

- The company reviews job applications and decides on acceptance or rejection.
- The company schedules interviews for job applications.
- The company can manage job vacancies and accept new applications.
- The company can assign interviewers for specific interviews.

2.2.2 Non Functional Requirements

Speed: Accelerating job opportunity discovery by analyzing skills and experience and instantly suggesting suitable positions to users.

Ease of use : The program displays jobs that match the user, making the process more efficient and saving time and effort.

Reliability: This feature has been achieved by implementing specific strategies that ensure security and reliability.

2.2.3 User Persona

MARK SMITH

Graphic Designer
Available For Work

BIO

Creative and detail-oriented graphic designer with 4 years of experience in developing visually compelling designs for print and digital media. Adept at collaborating with cross-functional teams and managing multiple projects to deliver high-quality results on time and within budget.

Skills:

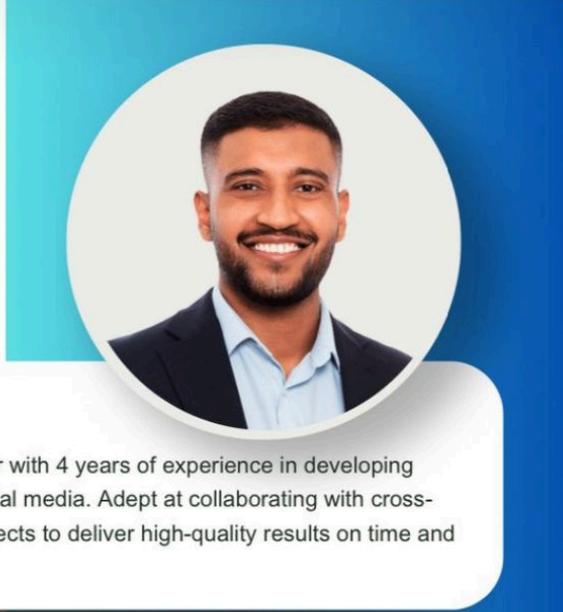
Graphic Design
Typography
Branding & Identity
Print & Digital Media
Project Management

Education:

Bachelor of Fine Arts in Graphic Design
Paucek and Lage University
2016 - 2020

Language:

English: 94%
Chinese: 86%



Professional Experience:

Senior Graphic Designer
June 2022 - May 2024 | Fradel and Spies Company

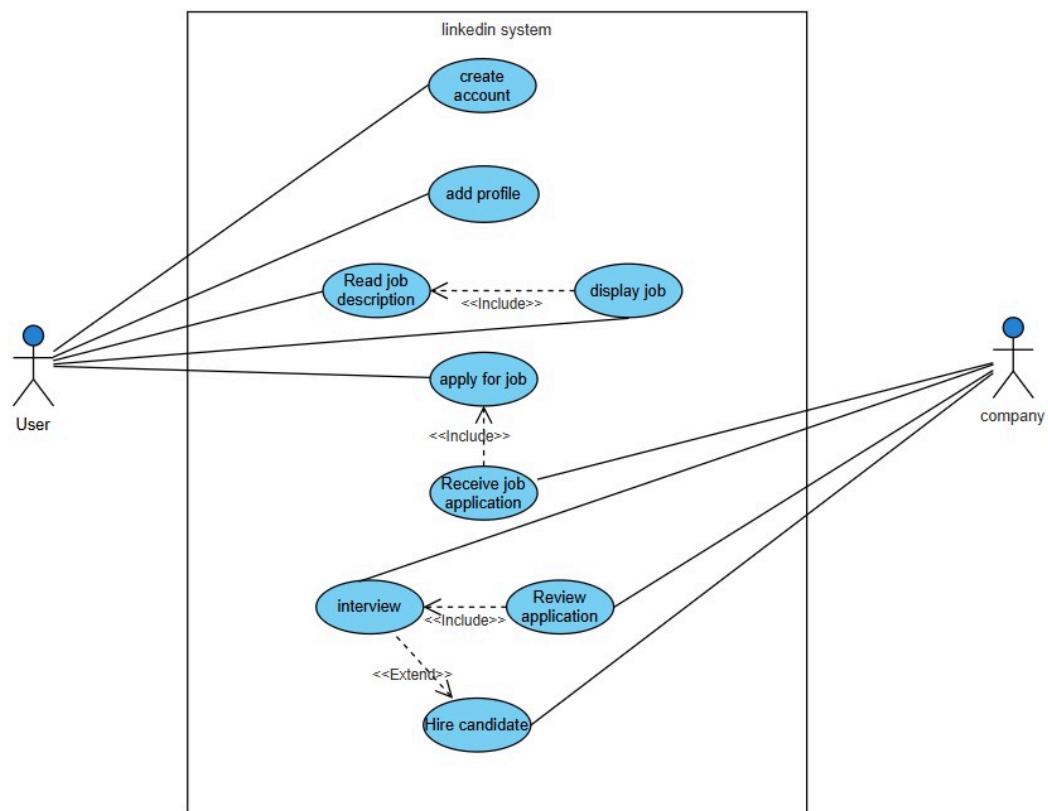
- Designed branding materials, marketing collateral, and digital assets, resulting in a 25% increase in client engagement.
- Collaborated with marketing and product teams to develop visually appealing and effective campaigns.
- Managed multiple design projects simultaneously, ensuring timely delivery and adherence to brand guidelines.

Graphic Designer
January 2020 - March 2022 | Borcelle Company

- Created website and mobile app designs that enhanced user experience and increased engagement by 20%.
- Led the redesign of the company website, resulting in a 30% increase in web traffic and improved user feedback.
- Conducted client presentations, gathered feedback, and refined design concepts to meet client expectations.

2.3 Requirements Specification

2.3.1 Use case Diagram



2.3.2 Use case Scenario

Use Case: Apply for Job

UniqueID: JobApp UC 002

Area: Company System

Actors: user

Description: Allow user to submit a job application with their CV. The company evaluates the application and notifies the user based on how well they meet the job requirements.

Triggering Event: user submits a job application through the system.

Trigger Type: External Temporal

Steps Performed (Main Path)

----	Steps Performed	Information for Steps
1	User submits a job application with CV.	User CV
2	Company reviews the user profile.	User CV, Job Requirements
3	company checks if user matches job requirements.	Matching Rules
4	Matching result is evaluated:	—
5	If fully matched → Send interview invitation.	Interview Invitation
6	If partially matched → Check missing criteria.	Missing Skills or Experience
7	If only minor skills/experience are missing → Send 'Application Under Review' notification.	Under Review Message
8	If critical requirements are missing → Send rejection message with explanation.	Rejection with Reason
9	If no match at all → Send rejection notification.	Standard Rejection Message

Preconditions: Applicant has submitted a valid CV and application.

Postconditions: user receives a status update (interview, under review, or rejection).

Assumptions: System has predefined job requirements and evaluation rules.

Requirements Met: Enable fair and clear feedback to applicants based on their qualifications.

Outstanding Issues: Should the system provide suggestions for skill improvement?

Priority: Medium

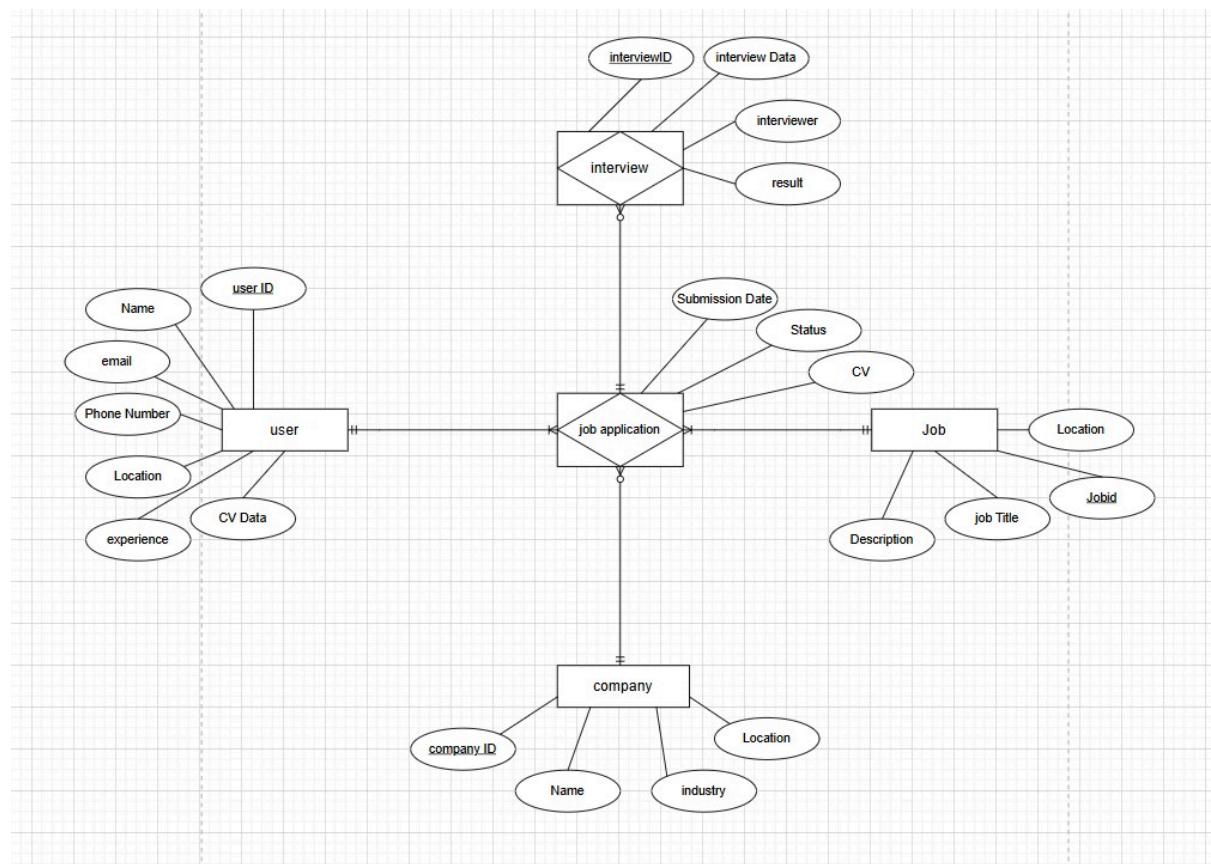
Risk: Medium

Chapter 3: System Design

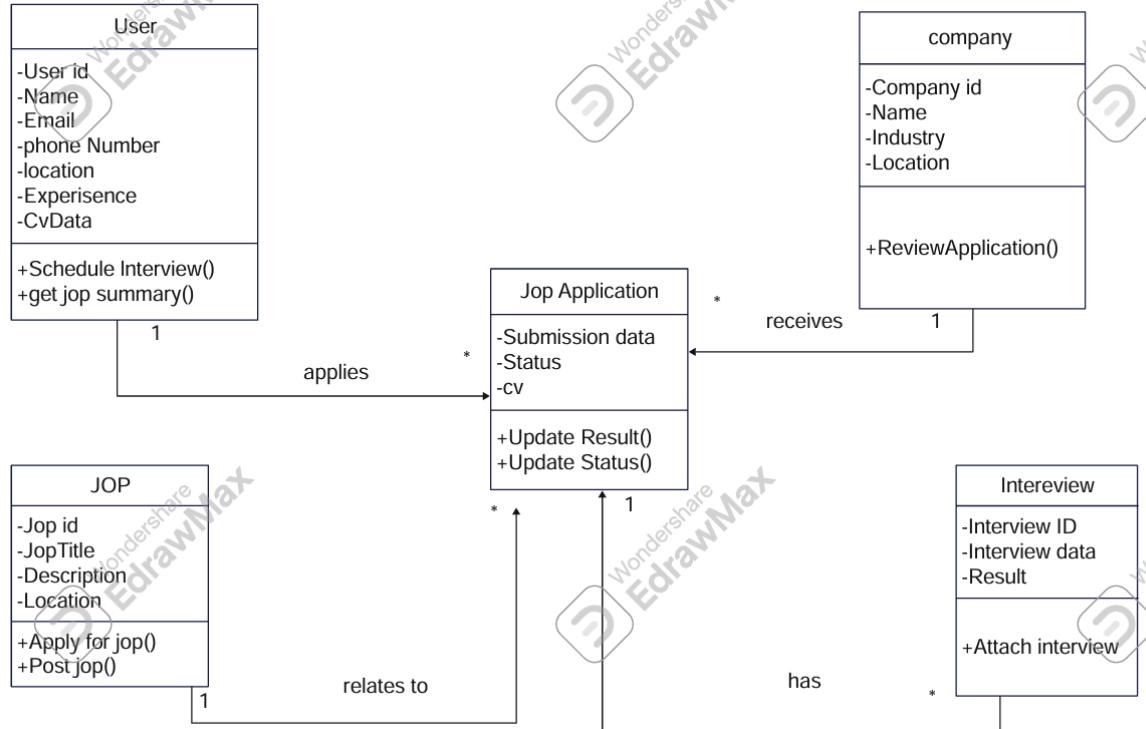
3.1 Object Oriented Design

3.1.1 Structural Static Models

3.1.1.1 Entity Relationship diagram

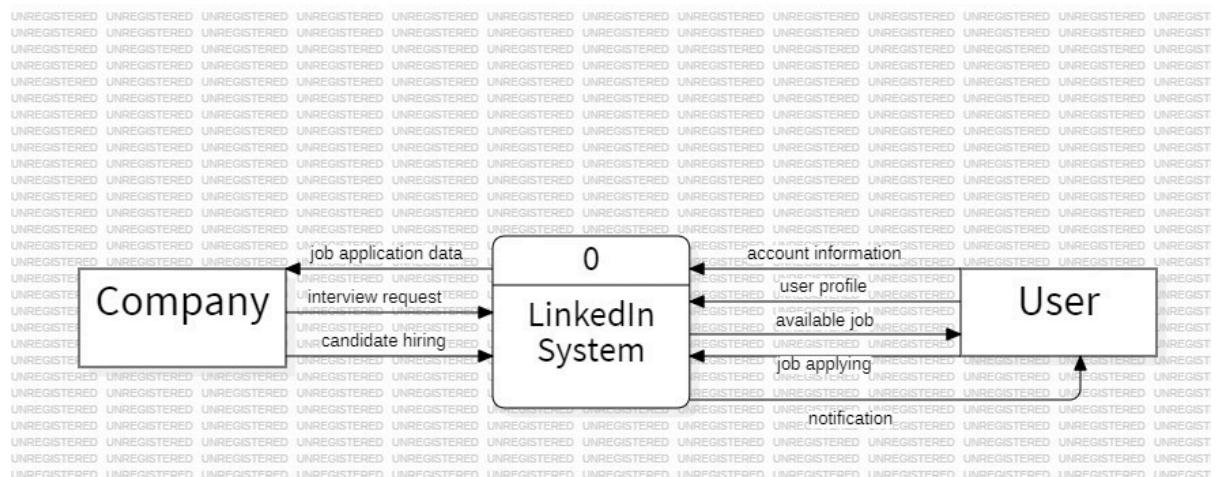


3.1.1.2 Class Diagram

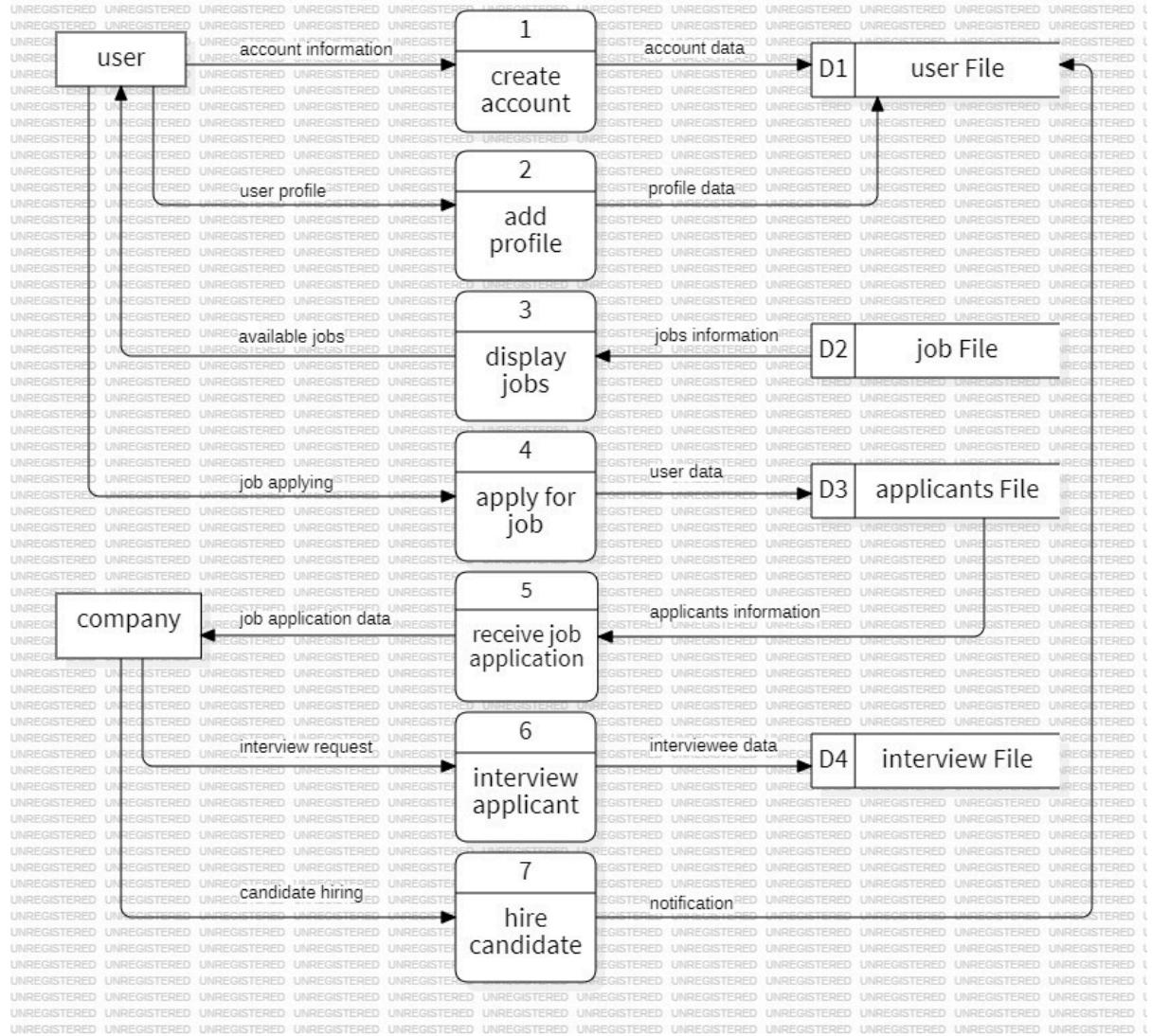


3.1.1.3 Data Flow Diagram

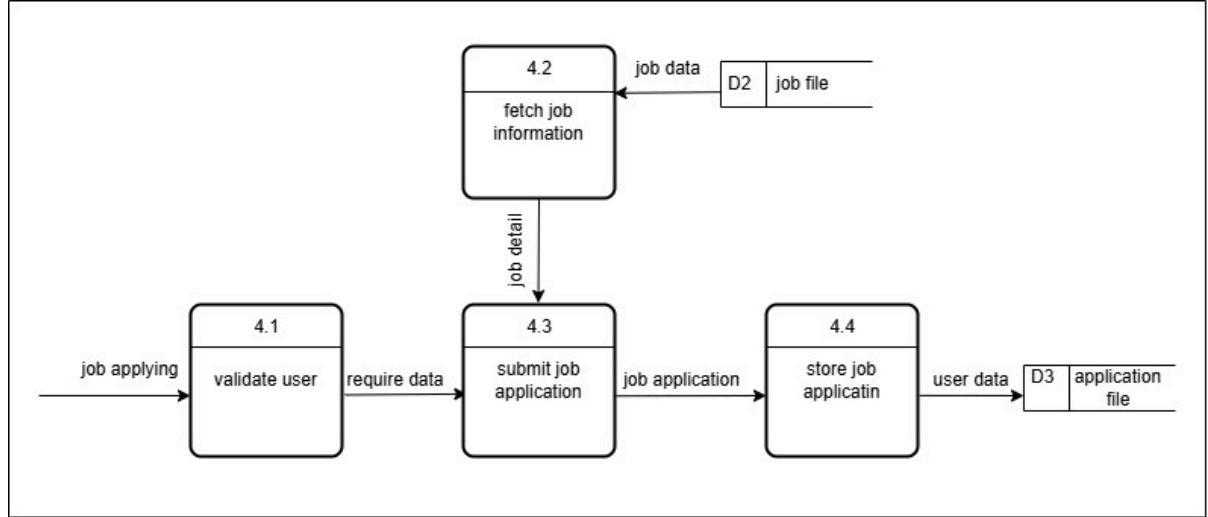
3.1.1.3.1 Context Level Diagram



3.1.1.3.2 Diagram 0

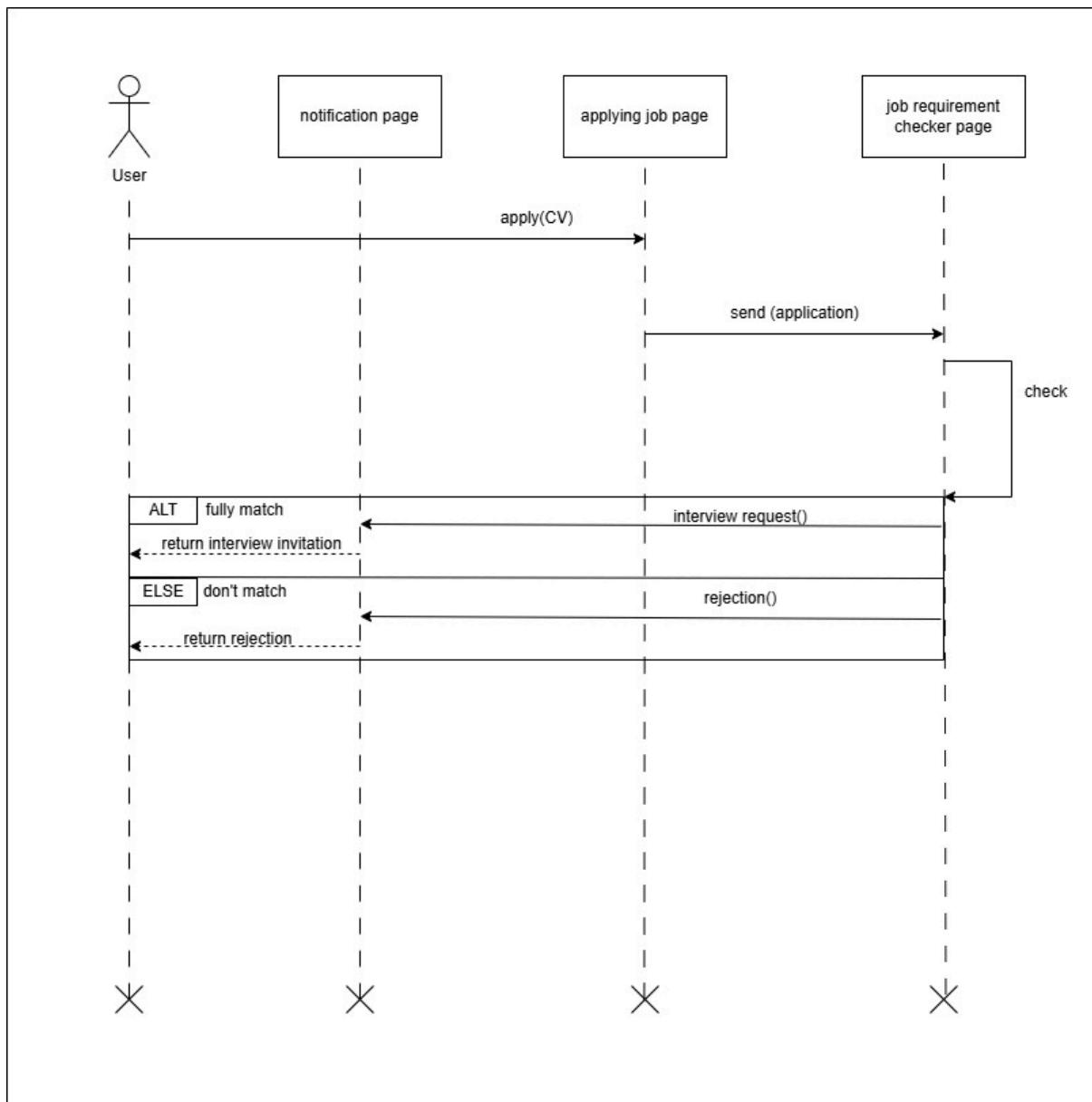


3.1.1.3.3 Child Diagram

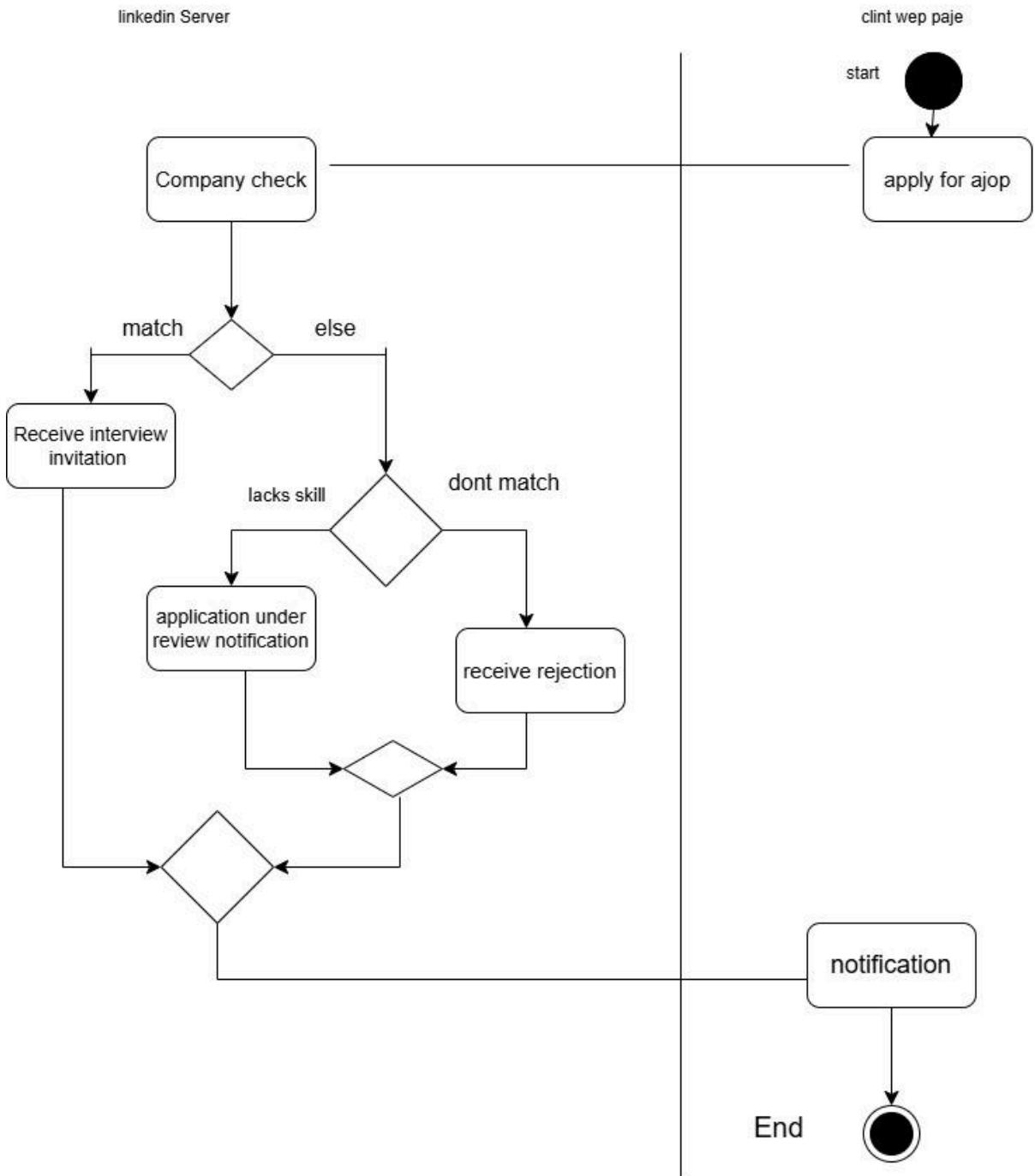


3.1.2 Dynamic Models

3.1.2.1 Sequence Diagram



3.1.2.2 Activity diagram



3.2 Data Modeling

3.2.1 Data Flow Description

Data flow description form

ID:

Name: user profile

Description: contains personal user information that helps the program to display jobs that match his profile.

Source : user	destination: Add profile (Process 2)
----------------------	---

File Screen Report Form Internal

Data Structure Travelling with the Flow User information	Volume/Time 1000/hour
--	---------------------------------

User submit to the system a detailed profile about him that contains his skills, qualifications and experience.

3.2.2 Data Structure Description

user profile

Name =

First Name + (Middle Name) + Last Name

Location =

Country + (State/Region) + City

Phone number =

Country Code + Phone Number

Experience =

Job Title + Company Name + Location + Time Period + Description of Duties/Responsibilities +
(Media/Attachments)

CV =

CV = File Name + File Type + File URL

Email =

Local Part + "@" + Domain

3.2.3 Data element Description

Element Description Form

ID:-

Name: Email

Alias: Email Address:

Alias : User Email

Description: Represents the user's email address, used for login, communication, and account recovery purposes.

Element Characteristics

Length: 150 Dec. Pt.: -

Input Format: example@domain.com

Output Format: example@domain.com

Default Value

Continuous: [] or Discrete: [✓]

Alphabetic: [] Alphanumeric: [✓] Date: []

Numeric: [] Base: [✓] Derived: []

Validation Criteria

Discrete|Meaning

-Must contain "@" symbol

-Must contain a domain and extension such as com..

Comments: The email must follow a valid format (e.g., user@example.com). It is used as a unique identifier and for communication. System should validate format before saving.

3.2.4 Input and Outpunt analysis form

Input and Output Analysis Form

Input/Output Name: User Profile

User Contact: LinkedIn

File Type: Output Input

File Format: Screen

Sequencing Element (s) User Id

Element Name	Length	B/D	Edit Criteria
UserId	6	D	System Generated Unique
Name	30	B	Not Spaces,
Email	30	B	Format:name@example.com,notspaces
Phone Number	12	B	Format:05xxxxxxxx
Location	20	B	City name
Experience	3	D	Range0-99
Cv data	60	B	PDF or text file

Comments: Print one page per user profile. If additional fields exist, continue on a second page

3.3 Logic of Decision

3.3.1 Structured English

IF User submits CV

THEN

Review user profile against job requirements

IF user fully matches job requirements

THEN

Send interview invitation

ELSE IF user partially matches job requirements AND missing skills or experience

THEN

Notify user that application is under review

ELSE IF user partially matches job requirements AND missing critical requirements

THEN

Send rejection message with explanation

ELSE

THEN

Send rejection notification

END IF

3.3.2 Decision Table

	1	2	3	4	5	6
User	Matches the job	Partially match	Doesn't match	Matches the job	Partially match	Doesn't match
Missing criteria	Skills or experience	Skills or experience	Skills or experience	Critical requirements	Critical requirements	Critical requirements
Receive interview invitation	✗			✗		
Rejection notification			✗			✗
Application under review		✗	.			
Receive a rejection message explains why					✗	

3.3.3 Decision Tree



3.4 User Interface Design

3.4.1 Output Interfaces

LinkedIn Job Application Report	
Job Title	Front-End Developer
Company Name	Tech Solutions Ltd.
Job Location	Riyadh, Saudi Arabia
Date Applied	2025-05-03
Application Status	Submitted
Uploaded CV	john_cv.pdf

3.4.2 Input Interfaces

LinkedIn Job Application Form	
User ID:	Auto-filled
Name:	Auto-filled
Email:	Auto-filled
Phone Number:	
Select Job:	Choose a Job
Upload CV:	لم يتم اختيار ملف. اختر ملف
Submission Date:	٢٠٢٥/٠٥/٠٣
Application Status:	Submitted
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	