# JOB CONNECT PLATFORM
## SOFTWARE REQUIREMENT SPECIFICATION

**By**

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**DATE:** NOV 03, 2024

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# SIGNATURE PAGE

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# CHANGE HISTORY

| Version | Date | Changed By | Description |
|---------|------|------------|-------------|

| 1.0 | Oct 07, 24 | G6 | Project Plan |
|-----|------------|-----|--------------|
| 1.0 | Oct 14, 24 | G6 | Project Analysis |
| 1.0 | Oct 29, 24 | G6 | Project Analysis |
| 1.0 | Nov 03, 24 | G6 | SRS (missing usecase added and Domain model improved) |

## **Remarks:**

_____

(Signature)

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# Preface:

The purpose of this document is to outline SRS of the JOB ONNECT project.

# Table of Contents:

# 1. INTRODUCTION

## 1.1    PURPOSE

The purpose of this Software Requirements
Specification (SRS) document is to outline the
functional and non_functional requirements for the
Job Portal Project.  This document serves as a guide
for the development, testing, and maintenance of the
system.

## 1.2    SCOPE

The JOB CONNECT project allows:

- Companies post job openings.
- Applicants to submit CVs.
- Automated shortlisting of candidates.
- Automated scheduling of appointments.
- Automatic deletion of job postings after deadlines or when positions are filled.

## 1.3    DEFINITIONS, ACRONYMS AND ABBREVIATIONS

- **Job Portal:** A web-based platform that allows companies to post job openings and applicants to submit their CVs.

- **Shortlisting:** The process of selecting suitable candidates from a pool of candidates.

- **Appointment Scheduling:** The process of setting up meetings or interviews between companies and candidates.

- **CV (Curriculum Vitae):** A document that outlines an applicant's work experience, education, and skills.
- **SRS (Software Requirement Specification):** A comprehensive description of the intended purpose and environment for software under development. The SRS fully describes what the software will do and how it will be expected to perform.

## 1.4 REFERENCES

- ISO/IEC/IEEE 16326:2019, Systems and software engineering -Life cycle processes- Project management.
- EEE Std 830-1998 (Revision of IEEE Std 830-1993) IEEE Std 830-1998 Recommended Practice for Software Requirements specifications.
- Case Study#2 – Problem description provided by the teacher.

## 1.5 OVERVIEW

**a) Description of the Rest of the SRS**

This Software Requirements Specification (SRS) docu ment provides a comprehensive description of the job portal project's requirements. The document is divided into several sections, each addressing various aspects of the system:

- **Introduction**: This section covers the purpose, scope, definitions, acronyms, abbreviations, refe rences, and an overview of the SRS.

- **Overall Description**: It offers a highlevel view of the product, its perspective, functions, user characteristics, constraints, assumptions, and dependencies.

- **Specific Requirements**: Detailed descriptions of the system's functional and nonfunctional requirements, including use cases and external interface requirements.

**Appendixes**: Supplementary information that supports the main content of the document.

- **Index**: An alphabetical listing of topics covered in the SRS to facilitate quick reference.

**b) Explanation of SRS Organization**

The SRS is organized to provide a clear and logical structure, making it easy for stakeholders to navigate and understand the requirements. The document starts with introductory sections to set the context, followed by a comprehensive overview of the system. The core of the SRS consists of specific requirements that detail the functional and nonfunctional aspects of the system. Finally, appendixes a nd an index are included to offer additional resources a nd easy navigation.

# 2. OVERALL DESCRIPPTION

## 2.1 PRODUCT PERSPECTIVE
The job portal is designed to be a standalone, selfcontained web-
based platform. It integrates several functionalities, such as job posting, job searching, CV submission, and application tracking, to provide a comprehensive solution for both job seekers and employers.

## 2.2 PRODUCT FUNCTIONS
- SIGN-UP
- LOG-IN
- MANAGE PROFILE
- VIEW PROFILE

- 

  - POST JOBS
  - UPDATE JOB POST
  - DELETE JOB POST
  - SEARCH JOB
  - SELECT JOB
  - SUMBIT CV
  - EDIT CV
  - FILL CRITERIA FORM
  - VIEW APPLICATION
  - TRACK APPLICATION STATUS
  - MAKE SHORTLIST
  - VIEW SHORTLIST
  - SCHEDULE APPOINTMENT
  - VIEW APPOINTMENT
  - MANAGE APPLICANTS
  - MANAGE COMPANIES

## 2.3 USER CHARACTERISTICS

The job portal is designed for a diverse range of users, each with unique characteristics. Understanding these characteristics ensures that the system meets their needs effectively.

**Applicants**:

- **Educational Level**: Varies widely; includes individuals with high school diplomas, vocational training, and higher education degrees (bachelor's, master's, PhD).
- **Experience**: From entrylevel job seekers to experienced professionals.
- **Technical Expertise**: Basic to moderate computer skills; familiar with internet browsing and basic applications like email and word processors.

**Companies**:

- **Educational Level**: Typically higher education degrees (bachelor's or higher) in HR, business management, or related fields.
- **Experience**: Experienced professionals in HR or hiring roles.
   **Technical Expertise**: Moderate to advanced computer skills; familiar with HR management systems and online job posting tools.

**Admin**:
- **Educational Level**: Higher education degrees (bachelor's or higher), often in IT, computer science, or related fields.
- **Experience**: Experienced IT professionals with a background in system administration and management.
- **Technical Expertise**: Advanced technical skills; proficient in database management, network security, and user management.


## 2.4 CONSTRAINTS
NOT APPLICABLE

## 2.5 ASSUMPTIONS AND DEPENDENCIES
**Internet Access**:
- Assumption: Users will have reliable internet access to use the job portal.
- Impact: If users lack stable internet connectivity, the system's usability and accessibility will be compromised.

**Web Browser Compatibility:**
- Assumption: The system will be accessed via modern web browsers (Chrome, Firefox, Safari, Edge).

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        ◻ Impact: If users utilize outdated or unsupported browsers, it may affect the functionality and user experience.

**User Device Compatibility:**

- Assumption: Users will access the system using compatible devices such as computers, tablets, and smartphones. ○ Impact: Incompatible

        or outdated devices may hinder the system's performance and usability.

# 3. SPECIFIC REQUIREMENTS
## 3.1 EXTERNAL INTERFACES
### 3.1.1 User Interfaces
- The interface must be userfriendly and intuitive.
- Users must be able to access job postings, search functions, and profile management features easily.

**Inputs**:
- User actions (e.g., button clicks, form submissions).
- Profile details.
- Job search criteria. **Outputs**:
- Display of job postings.
- Confirmation messages.
- Validation error messages.

### 3.1.2 Hardware Interfaces
- Standard web browsers and internet connectivity will be sufficient.

- No special hardware is required.

### 3.1.3 Software Interfaces

- Integration with external databases to store and r
  etrieve user and job data.
- APIs for external systems to connect with the jo
  b portal.

### 3.1.4 Communications Interfaces

All communications between the client and serv
er should use secure HTTPS protocols.

## 3.2 FUNCTIONS

**USE CASE UC-01: SIGN-UP**

**BY: M. FURQAN**

| ID | UC-01 |
|---|---|
| **Name** | Sign-up |
| **Primary Actor** | Company, Applicant, Admin. |
| **Secondary Actor** | none |
| **Stakeholders and Interests** | **Company**: Wants to create an account to post new jobs and manage applications. <br><br> **Applicant**: Wants to create an account to search for and apply for jobs. <br><br> **Admin:** Wants to manage the system and oversees companies and applicants. |
| **Pre-conditions** | • The user has access to the sign-up page of platform. <br> • The user has not previously registered on the site. |
| **Post-conditions** | ▢The account for the user is successfully created |

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| Main Success Scenario | 1. **System**: Displays the sign-up page with required fields (e.g., username, email, password). <br><br> 2. **User**: Enters all necessary details, such as username, email, and password. <br><br> 3. **System**: Validates the entered information. <br><br> 4. **System**: If the information is valid, creates a new account for the user. <br><br> 5. **System**: Shows confirmation prompt to the user for account creation and directs the user to the login page. |
|---|---|
| **Extension** <br><br> **(Alternative flow)** | **3a.** If the entered email, username or password is already registered with an existing account, the system displays an error message. |
| | **3b**. If any field is incomplete or invalid, the system prompts the user to correct it. |
| **Inputs** | - Username, email, password. |
| **Outputs** | - Confirmation message for successful account creation of account <br> - An error message if the input is invalid. |
| **Technology and data variations list** | - Smart devices, internet access |
| **Frequency of occurrence** | High, as multiple companies and applicants will be creating accounts frequently. |

| Open issues | Ensuring unique usernames to avoid duplication of accounts. |
|---|---|
| | Handling cases where users attempt to sign up with an already registered email address. |

**USE CASE UC-02: LOG-IN  BY:**
**KALSOOM KHAN**

| ID | UC-02 |
|---|---|
| Name | Log-In |
| Primary Actor | Applicant, Company |

| | |
|---|---|
| **Secondary Actor** | System Administrator |
| **Stakeholders and Interests** | **Applicant:** Seeks secure and easy access to search for and apply for jobs. <br><br> **Company:** Requires secure access to manage job postings and review applications. |
| | **System:** Ensures system security and reliable handling of credentials. |
| **Pre-Conditions** | ☐The Applicant or Company must be registered on the job portal with valid credentials (username and password). |
| **Post-Conditions** | • The Applicant or Company gains access to their respective profiles and authorized functionalities. <br> • The system logs successful sign-ins for record-keeping. |
| **Main Success Scenario** | 1. The Applicant or Company enters their username and password on the Sign In page. <br> 2. The system verifies the credentials. <br> 3. Upon successful verification, the system grants access to the Applicant or Company profile and redirects them to their respective dashboards. |
| **Extensions (or Alternative Flows)** | **2a:** If the username or password is incorrect: <br> • The system displays an error message, allowing the user to re-enter credentials. <br> • After three unsuccessful attempts, the system temporarily locks the account. <br> **2b:** If the user forgets their password: <br> • The system sends a reminder to Applicants about the appointment until a response is received. |
| **Inputs** | - Username and password entered by the Applicant or Company. |

| | |
|---|---|
| **Outputs** | - Access to the appropriate user dashboard. - Error messages for invalid credentials. |
| **Technology and Data Variations List** | - Passwords are encrypted for storage.<br>- Usernames and passwords are stored securely in the database. |
| **Frequency of Occurrence** | Occurs whenever an Applicant or Company logs into the system, expected multiple times daily. |
| **Open Issues** | Consideration for multi-factor authentication for added security. |

## USE CASE UC-03: MANAGE PROFILE

**BY: SUMBAL ZAHRA**

| | |
|---|---|
| **ID** | UC-03 |
| **Name** | Manage profile |
| **Primary Actor** | System Administrator, Company and Applicant. |
| **Secondary Actor** | None |
| **Stakeholders and Interests** | **Admin:** This usecase allows the system admin to manage their own profile and overseeing user profiles, job postings, and system configurations, ensuring the integrity and efficiency of the system.<br>**Company:** Enables companies to update their organizational profiles.<br>**Applicant:** Allows applicants to manage their profiles, ensuring their information is up-to-date and accurate. |
| **Pre-conditions** | The system admin must be logged into the system. |
| **Post-conditions** | The system saves updated profile information. |

| Main success scenario | 1. The user accesses the manage profile option. |
|---|---|
| | 2. The system presents the current profile information to the user. |
| | 3. The user modifies the required information. |
| | 4. The system stores the changes and confirms the update. |
| | 5. The user verifies the updated profile information for accuracy. |
| Extension (Alternative flow) | 4a. If the user decides not to proceed with the changes, the system will retain the existing profile information. |
| | 4b. If any validation errors are encountered, the system will prompt the user to correct the errors before proceeding. |
| Inputs | ⬜The profile information the user wants to update. |
| Outputs | • Updated profile information. OR |
| | • Validation error messages if the input is incorrect. |
| Technology and data variation list | ⬜Internet and smart devices must be available. ⬜ Database Management System. |
| Frequency of occurrence | The frequency will be occasional, occurring when users need to update their profiles. |
| Open issues | • Ensuring the profile management function is quick and responsive under heavy load. |
| | • Ensuring the system can handle increasing numbers of profiles and profile updates. |

## USE CASE UC-04: POST JOBS

**BY: M. FURQAN**

| ID | UC-04 |
|---|---|
| Name | Post jobs |

| Primary Actor | Company, Admin |
|---|---|

| | |
|---|---|
| **Secondary Actor** | User |
| **Stakeholders and Interests** | Company: Wants to post advertisements for vacant jobs in company<br><br>Admin: Manages jobs of various categories for each company<br>User: Wants updates about the job vacancies of his/her interest |
| **Pre-conditions** | ☐Company must be logged into its account |
| **Post-conditions** | • Jobs should be advertised and visible to users<br><br>• Notification should be sent to relevant users |

| | |
|---|---|
| **Main Success Scenario** | 1-System: Displays the option to post jobs<br><br>2-Company: Clicks on "post jobs" option<br><br>3-System: Displays list of Job categories and cities<br><br>4-Company: Selects the category and cities where they want to advertise jobs<br><br>5-System: Ask the requirements for job from the company which includes<br><br>6-Eligibility criteria for shortlisting applicants, no of jobs, deadline and appointments dates<br><br>7-Company: Provides all required information<br><br>8-System: Asks to Save information or modify<br><br>9-Company: Saves the information to finish the job posting process<br><br>10-System: Saves the company's information, Post jobs and notifies the relevant users |

| Extension (Alternative flow) | **4a-** If the company does not select a category or city, the system displays message to select before proceeding |
| --- | --- |
| | **6a-** If the company provides an incomplete information system should ask company to give missing information |
| **Inputs** | - Job eligibility criteria, no of jobs, deadline, appointment date |
| **Outputs** | - Confirmation message of job posting to the company |
| | - Relevant user gets notified about the job via email |
| **Technology and data variations list** | - Smart devices, internet access |
| **Frequency of occurrence** | Whenever company wants to advertise a job |
| **Open issues** | none |

## USE CASE UC-05: UPDATE JOB POSTS

**BY: M. FURQAN**

| ID | UC-05 |
| --- | --- |
| **Name** | Update job posts |
| **Primary Actor** | Company |
| **Secondary Actor** | Admin, applicant |

| Stakeholders and Interests | **Company**: Wants to modify job details to keep the job post correct and up to date. |
| --- | --- |
| | **Admin**: Manages and oversees job postings for accuracy and relevance. |
| | **Applicant:** Wants to stay up to date about the jobs they are interested in. |
| **Pre-conditions** | • The company must be logged in. |
| | • The job post which company wants to update should already exist in the system. |
| **Post-conditions** | ☐The job post is updated with the latest details |

| Main Success Scenario | 1. **Company:** Logs in its account and goes to the job post that needs to be updated. |
| --- | --- |
| | 2. **System:** Displays a list of existing job posts created by the company**.** |
| | 3. **Company:** Selects the job post they wish to update. |
| | 4. **System:** Displays the current details of the selected job post with and visible option to update the post. |
| | 5. **Company:** selects the option and edits the necessary fields (e.g., job description, requirements, or deadline). |
| | 6. **System**: Prompts the company to confirm the changes. |
| | 7. **Company:** Confirms the updated details. |
| | 8. **System:** Saves the changes and updates the job post. |
| | 9. **System:** confirmation message to the company of the successful update**.** |

|  |  |
|---|---|
|  | **10. Applicants:** Relevant applicants receive notification about the updated job post. |
| **Extension**<br><br>**(Alternative flow)** | **5a.  System:** Detects invalid information while updating job posts<br><br>**5b.     System**: Displays an error message to the company to correct the information. |
| **Inputs** | - Details that the company wants to be updated including job description, eligibility criteria, or deadline. |
| **Outputs** | - Confirmation message indicating the job post has been updated successfully.<br>- Notification sent to relevant applicants. |
| **Technology and data variations list** | - Smart devices, internet access |

| Frequency of occurrence | Whenever the company needs changes in details of the job posts |
|---|---|
| Open issues | Handling notifications for relevant applicants about significant changes in the job post.<br><br>Validating updated details to avoid incomplete or incorrect information. |

### USE CASE UC-06: SEARCH JOBS  BY: SUMBAL ZAHRA

| ID | UC-06 |
|---|---|
| Name | Search Jobs |
| Primary Actor | Applicant |
| Secondary Actor | None |
| Stakeholders and Interests | Applicant: This usecase allows applicants to search for jobs based on various criteria. |
| Pre-conditions | Applicant must be registered and logged into the system. |
| Post-conditions | Applicant can view and apply jobs that match their criteria. |
| Main success scenario | 1. The applicant clicks the 'Search Jobs' option.<br>2. The system displays various search filters (e.g Job title, job type, industry, salary range).<br>3. The applicant selects the desired search criteria.<br>4. The applicant clicks on the "Search" button.<br>5. The system displays a list of available jobs matching the search criteria.<br>6. The applicant reviews the search and selects a job for more details.<br>7. The system displays the details of the Job with an "Apply" button. |

| Extension (Alternative flow) | 4a. If the applicant does not select any criteria and clicks on "Search", the system displays all active jobs. |
| --- | --- |
| | 5a. If no jobs match the search criteria, the system displays a message stating "No job found" and suggests broadening the search criteria. |
| **Inputs** | Search criteria: Job title, location etc. |
| **Outputs** | List of jobs matching the criteria or recommendations for broadening the search criteria if no results are found. |
| **Technology and data variation list** | Internet and smart device must be available. |
| **Frequency of occurrence** | The frequency will be high as this usecase is expected to occur frequently as applicants regularly search for jobs. |
| **Open issues** | • Ensuring the search function is quick and responsive under heavy load. |
| | • Ensuring the system can handle increasing numbers of jobs and search queries. |


### USE CASE UC-07: SUBMIT CV

### BY: KALSOOM KHAN

| ID | UC-07 |
| --- | --- |
| **Name** | Submit CV |
| **Primary Actor** | Applicant |
| **Secondary Actor** | Company User |

| | |
|---|---|
| **Stakeholders and Interests** | **Applicant:** Aims to successfully submit their CV for job applications.<br><br>**Company User:** Receive CVs from applicants who meet the job criteria.<br><br>**System Administrator:** Ensures the overall submission process runs smoothly and securely. |
| **Pre-Conditions** | The Applicant is registered and logged in to the system. There's at least one active job posting available for CV submission. |
| **Post-Conditions** | The CV is successfully uploaded by the applicant, then it is stored and associated by the system with the job application. The Applicant gets a submission confirmation. |
| **Main Success Scenario** | 1. The Applicant navigates to the desired job listing.<br>2. The Applicant selects a job and apply for it.<br>3. The system prompts the Applicant to upload their CV file.<br>4. The system verifies the file format and checks for completeness.<br>5. Upon successful upload, the Applicant submits the CV.<br>6. The system stores the CV, linking it to the job listing and the Applicant. |
| | 7. A confirmation message is sent to the Applicant. |

| Extensions (or Alternative Flows) | **5a:** If a CV has already been submitted for the job: •        The system alerts them and prevents duplicates.<br>**5b:** If the file format is incorrect:<br>• An error message lists acceptable formats (e.g., PDF, DOCX). •        The Applicant re-uploads a valid file. |
|---|---|
| **Inputs** | CV file from the Applicant (PDF, DOCX, DOC). |
| **Outputs** | - Confirmation of successful submission.<br>- Error messages for invalid formats or duplicate entries. |
| **Technology and Data Variations List** | - Accepts PDF, DOCX, or DOC files for CV.<br>- Availability of Internet and Smart device |
| **Frequency of Occurrence** | This usecase is expected to happen frequently based on the number of applicants and active job postings. |
| **Open Issues** | - An option for Applicants to update or replace a previously submitted CV may be needed.<br>- Ensuring secure storage and privacy for CVs. |

## USE CASE UC-08.1: VIEW SHORTLIST (Company)
## BY: SUMBAL ZAHRA

| ID | UC-08.1 |
|---|---|
| **Name** | View Shortlist |
| **Primary Actor** | Company |
| **Secondary Actor** | None |
| **Stakeholders and Interests** | **Company:** This usecase allows companies to view the list of applicants who have been shortlisted for their job posts. |
| **Pre-conditions** | • The company must be logged into the system.<br>• The shortlisting process must have been completed. |

| Post-conditions | The company can view the list of shortlisted applicants. |
|---|---|
| Main success scenario | 1. Company navigates to the Post job management page.<br>2. Company selects a job post to view the shortlist.<br>3. System retrieves and displays the list of shortlisted applicants for the selected job post. |
| Extension (Alternative flow) | 3a. If there are no shortlisted applicants for the job post, the system displays a message indicating that no applicants have been shortlisted.<br>3b. If there is a system error during the retrieval process, the system displays an error message and prompts the company to try again later. The error is logged for further investigation by the system administrator. |
| Inputs | ☐Job post ID |
| Outputs | • List of shortlisted applicants for job.<br>• Error messages if the retrieval process fails. |
| Technology and data variation list | ☐Internet and smart devices must be available. |
| Frequency of occurrence | The frequency will be high as this usecase is expected to occur frequently as company regularly views shortlists for jobs. |
| Open issues | ☐Ensuring the view shortlist function is quick and responsive under heavy load. |

## USE CASE UC-08.2: VIEW SHORTLIST (Applicant)

**BY: SUMBAL ZAHRA**

| ID | UC-08.2 |
|---|---|
| Name | View Shortlist (Applicant) |
| Primary Actor | Applicant |
| Secondary Actor | None |
| Stakeholders and Interests | **Applicant:** This usecase allows applicants to view if they have been shortlisted for any job posts. |
| Pre-conditions | • The applicant must be logged into the system.<br>• The shortlisting process must have been completed. |

| Post-conditions | The applicant can view if they have been shortlisted for any job posts. |
|---|---|
| Main success scenario | 1. Applicant navigates to the Application status page.<br>2. Applicants view their application status if they have been shortlisted.<br>3. System retrieves and displays the list of job posts for which the applicants has been shortlisted. |
| Extension<br>(Alternative flow) | 3a. If applicant has not been shortlisted for any jobs, the system displays a message indicating that they have not been shortlisted.<br>3b. If there is a system error during the retrieval process, the system displays an error message and prompts the applicant to try again later. The error is logged for further investigation by the system administrator. |
| Inputs | ☐Job post ID |
| Outputs | • Application status indicating if the applicant has been shortlisted.<br>• Error messages if the retrieval process fails. |
| Technology and data variation list | ☐Internet and smart devices must be available. |
| Frequency of occurrence | The frequency will be occasional, typically occurring when applicants check their application status. |
| Open issues | • Ensuring the view shortlist function is quick and responsive under heavy load.<br>• Ensuring that the shortlisted candidates are notified promptly and accurately about their application status. |

## USE CASE UC-09: SCHEDULE APPOINTMENT

**BY: KALSOOM KHAN**

| ID | UC-09 |
|---|---|
| | |

| Name | Schedule Appointment |
|---|---|
| **Primary Actor** | Company User |
| **Secondary Actor** | Applicant |
| **Stakeholders and Interests** | **Applicant:** Interested in receiving prompt information about interviews and confirming attendance. **Company:** Wants to schedule appointments efficiently for shortlisted applicants and ensure timely notifications. **System:** Ensures proper functionality of scheduling and notifications. |
| **Pre-Conditions** | • The system has already generated a list of shortlisted applicants for a job posting. <br> • Company User is logged into the system and has access to the shortlist. |
| **Post-Conditions** | • Appointment details are saved in the system and notifications are sent to both the Company and the Applicant. <br> • The Applicant's response is recorded and shared with the Company. |

| Main Success Scenario | 1. The Company User views the list of shortlisted applicants for a specific job. |
|---|---|
| | 2. The Company User selects the type of appointment (online or on-site). |
| | 3. If online, the Company User chooses a date and time for the appointment. |
| | 4. If on-site, the Company User selects the date, time, and location. |
| | 5. The Company User confirms the appointment details. |
| | 6. The system sends a notification to each shortlisted Applicant with the appointment details. |
| | 7. Shortlisted Applicants receive the notification and respond to confirm or decline. |
| | 8. Upon confirmation from an Applicant, the system sends a notification to both the Applicant and the Company User. |
| **Extensions (or Alternative Flows)** | **7a:** If an Applicant declines the invitation: <br> • The system records the decline response and notifies the Company User. The Company User may reschedule or proceed with the remaining applicants. <br> **7b:** If no Applicant confirms: <br> • The system sends a reminder to Applicants about the appointment until a response is received. |

| Inputs | - Appointment type (online or on-site), date, time, location (if on-site). |
|---|---|
| Outputs | - Notification to Applicant with appointment details.<br>- Confirmation notification to both Company User and Applicant. |
| Technology and Data Variations List | - The system differentiates between online and on-site appointments.<br>- Availability of Internet and Smart device |
| Frequency of Occurrence | Occurs each time a Company User schedules an appointment for a new batch of shortlisted Applicants. |
| Open Issues | Need to handle scenarios if an Applicant fails to respond by the specified deadline. |

## USE CASE UC-10: MAKE SHORTLIST
## BY: SUMBAL ZAHRA

| ID | UC-10 |
|---|---|
| Name | Make shortlist |
| Primary Actor | Admin |
| Secondary Actor | None |
| Stakeholders and Interests | **Admin:** This use case allows the system admin to trigger the automatic shortlisting of applicants based on the predefined criteria for job postings.<br>**Company:** Interested in receiving a high-quality list of shortlisted applicants who meet their criteria.<br>**Applicant:** Interested in being accurately evaluated and shortlisted applicants who meet the criteria. |
| Pre-conditions | • The system admin must be logged into the system. ☐ Job postings and applicant CVs must be present in the system. |

| | |
|---|---|
| | • Shortlisting criteria must be defined by the company for each job postings. |
| **Post-conditions** | • A list of shortlisted applicants is generated, and the respective companies are notified.<br><br>• The application status of all applicants is changed.<br><br>• The shortlisted applicants are notified. |
| **Main success scenario** | 1. System admin navigates to the shortlisting management age.<br><br>2. System admin initiates the shortlisting process.<br><br>3. System retrieves all submitted CVs for each job post.<br>4. The system matches CVs against the predefined shortlisting criteria.<br><br>5. The system compiles a list of applicants who meet the criteria.<br><br>6. The system notifies the shortlisted applicants and their respective companies.<br><br>7. The system changes the application status of all applicants. |
| **Extension (Alternative flow)** | 5a. If no applicants meet the criteria, the system notifies the companies and suggests broadening the criteria.<br><br>5b. If the shortlisting process fails, the system displays an error message. |
| **Inputs** | ⬜The Job post with its criteria. ⬜ Applicants' CVs. |
| **Outputs** | • List of shortlisted applicants for each job.<br>• Notification to the companies and shortlisted applicants.<br>⬜Change in application status of all the applicants for the job.<br>• Error message if the shortlisting process fails. |
| **Technology and data variation list** | • Internet and smart devices must be available.<br>• Technologies: Machine learning algorithms and Natural language processing. |
| **Frequency of occurrence** | The frequency will be high as this usecase is expected to occur frequently as system admin regularly shortlists applicants for jobs. |

| Open issues | • Ensuring the shortlisting function is quick and responsive under heavy load. |
| | • Ensuring the system can handle increasing numbers of applications and shortlisting queries. |

## 3.3 PERFORMANCE REQUIREMENTS

- The system should handle up to 1,000 concurren t users without performance degradation.
- Search results should be displayed within 2 seco nds.

## 3.4 DESIGN CONSTRAINTS

- The system must be designed to ensure high ava ilability and scalability.
- It should be modular to allow future enhanceme nts.

## 3.5 SOTWARE SYSTEM ATTRIBUTES

### 3.5.1 Reliability

- The system should have an uptime of 99.9%.

### 3.5.2 Availability

- The system should be available 24/7.

### 3.5.3 Security

- All user data must be encrypted.
- Multi-factor authentication for admin access.
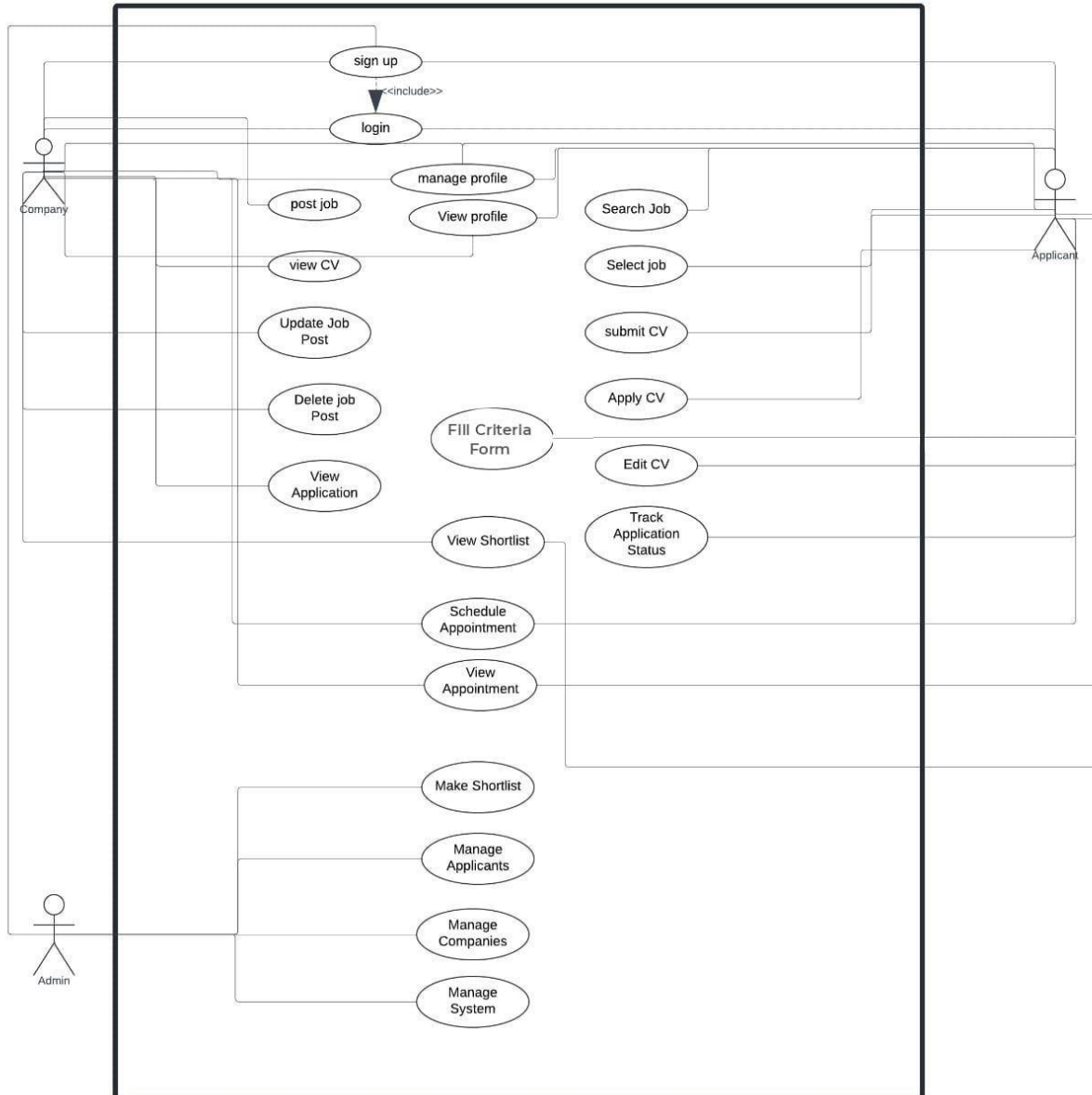
### 3.5.4 Maintainability

- The codebase should be documented to facilitat e maintenance.

### 3.5.5 Portability

- The system should be operable on various opera ting systems (Windows, macOS, Linux).

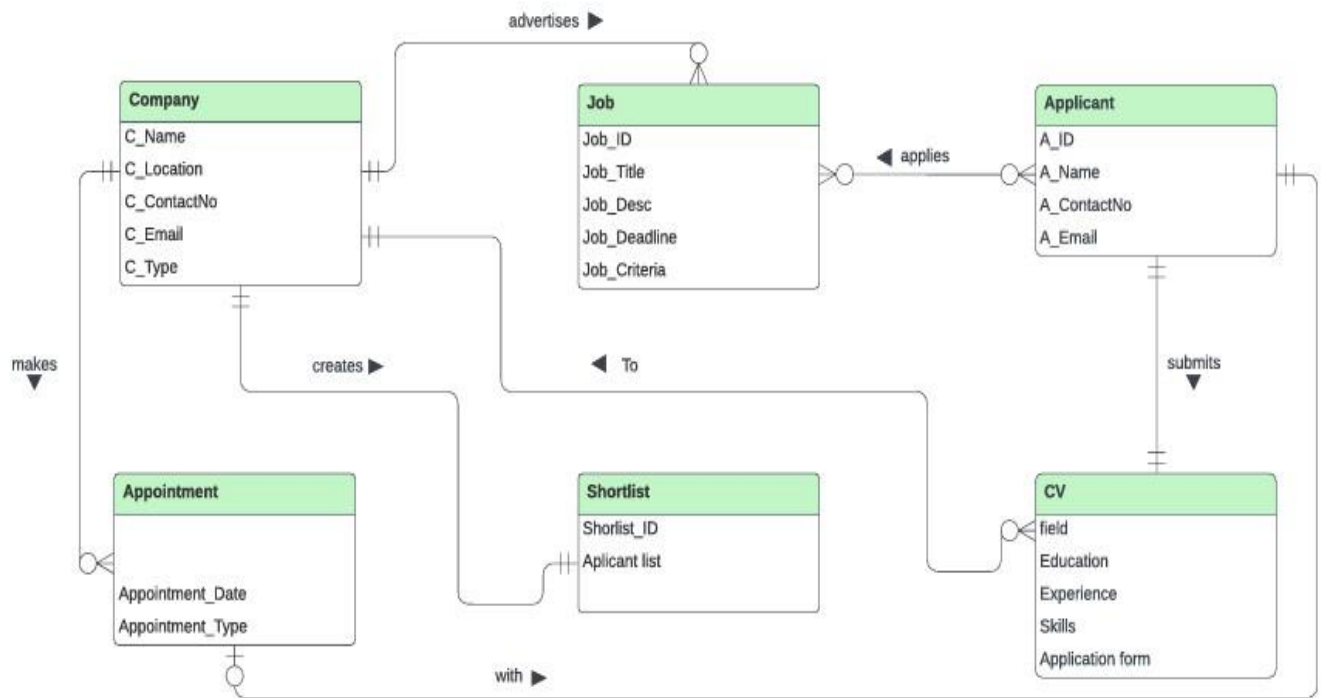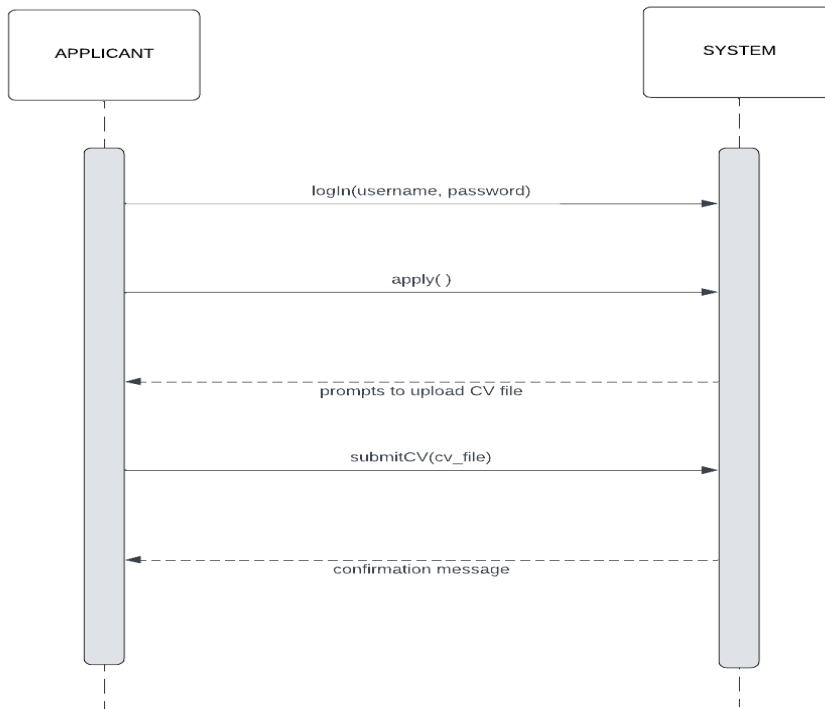# APPENDIXES

## USECASE DIAGRAM



## DOMAIN MODEL

**Figure: Domain Model**

## SYSTEM SEQUENCE DIAGRAM

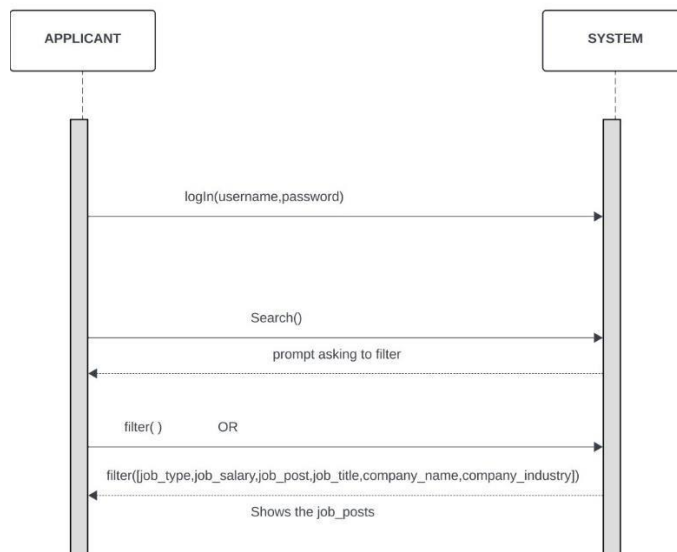### SSD1 for UC-07: SUBMIT CV
BY: Kalsoom Khan

 **SSD2 for UC-06: SEARCH JOBS**
BY: Sumbal Zahra

**USE CASE UC-04: POST JOBS**
BY: M. Furqan