# <JobHub> System Requirements Specification

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## 1. Purpose

The purpose of the "Online Job Recruitment" application is to provide a user-friendly platform that streamlines the job search process for both job seekers and employers. The application aims to connect job seekers with employment opportunities by offering a comprehensive solution that includes personalized profiles, job listings, advanced search and filtering functionalities, seamless application submission, transparent feedback from recruiters, and direct communication between employers and applicants. The goal is to make the job search and recruitment process efficient, convenient, and accessible to users.

# 2. Scope

The scope of the "Online Job Recruitment" project is to design and develop a comprehensive web and mobile application that facilitates the job search and recruitment process. The primary focus is on creating a user-friendly platform that caters to the needs of both job seekers and employers.

The project aims to streamline the job search process, enhance transparency, and provide a seamless experience for both job seekers and employers. It involves the development of features that cater to various stages of the recruitment process, from job discovery to application submission, communication, and feedback. Additionally, the project emphasizes mobile accessibility to ensure users can engage with the platform from different devices.

### 3. Audience

- 4. Project Managers and Leaders.
- 5. Software Developers and Designers.
- 6. Business Analysts.
- 7. Human Resources Professionals.
- 8. Job Seekers.
- 9. Employers and Recruiters Technology Support Teams.
- 10. Mobile Application Developers.
- 11. Quality Assurance and Testing Teams.
- 12. End Users (Job Seekers and Employers).

### 4. Definition and abbreviation

- The definitions of some key terms and abbreviations related to the "Online Job Recruitment" application:
- Online Job Recruitment: The process of using an online platform or application to connect job seekers with employers and facilitate the hiring process.
- Job Seeker: An individual who is looking for employment opportunities and uses the "Online Job Recruitment" application to search for jobs, create a profile, and apply to job postings.
- Employer: An organization or company that is looking to hire new employees and uses the "Online Job Recruitment" application to create job postings, review applicant profiles, and communicate with potential candidates.
- User Authentication: The process of verifying the identity of a user accessing the application by requiring them to provide valid credentials, such as a username and password.
- Profile: A personalized account created by a job seeker that contains information about their skills, experiences, and aspirations. It is used to showcase their qualifications to potential employers.
- Application: The process through which a job seeker submits their interest in a specific job listing by providing their application materials, such as a resume and cover letter, to the employer.
- Feedback: Information or updates provided to the job seeker by the employer regarding the status of their application, such as whether it has been received, reviewed, or if they have been selected for an interview.
- Advanced Search and Filtering Functionalities: Enhanced features in the application that allow job seekers to refine their job searches based on specific criteria, such as job type, salary range, location, and required skills.

Abbreviations:

UI: User Interface

UX: User Experience

o API: Application Programming Interface

o CRM: Candidate Relationship Management

o ATS: Applicant Tracking System

HR: Human Resources

CV: Curriculum Vitae (Resume)

HRM: Human Resource Management

SaaS: Software as a Service

FAQ: Frequently Asked Questions

o GDPR: General Data Protection Regulation

# 5. System Overview

### a. Problem Statement

job seekers face challenges in navigating diverse job opportunities, and employers encounter difficulties in managing recruitment processes seamlessly.

### b. Proposed Solution

Allow job seekers to create personal profiles that show their skills and experiences.

# 6. Assumptions and/or constraints

### Assumptions:

- 1. Internet Connectivity: Users are assumed to have reliable internet access to use the online job recruitment platform.
- Device Compatibility: Users are expected to have access to devices such as computers, laptops, smartphones, or tablets that support the application's functionality.
- 3. Data Security: It is assumed that the system will implement robust security measures to protect users' personal information, including but not limited to resumes, contact details, and other sensitive data.
- 4. User Authenticity: The authentication process is assumed to be secure and effective in ensuring that registered users are genuine job seekers or employers.
- 5. Responsive Design: The application assumes a responsive design to provide a seamless user experience across various devices, including desktops, laptops, tablets, and smartphones.
- 6. Timely Updates: The assumption is made that the job listings and application statuses are updated regularly to provide accurate and current information to both job seekers and employers.
- 7. User Engagement: The success of the application relies on the active engagement of both job seekers and employers, including the regular updating of profiles and job postings.
- 8. Job Relevance Algorithms: The effectiveness of job recommendations and notifications is based on the accuracy and relevance of the algorithms employed by the system.
- 9. Recruiter Responsiveness: It is assumed that recruiters will actively use the platform for communication and updates throughout the recruitment process.
- 10. Feedback Loop: The assumption is that both job seekers and employers value and actively participate in the feedback loop, providing insights to enhance the platform's functionality.

### Constraints:

- 1. Technology Limitations: The development and functionality of the application are constrained by the current state of technology, including programming languages, frameworks, and third-party integrations.
- 2. Budget Constraints: The development, maintenance, and potential scalability of the application are subject to budgetary limitations.
- Legal Compliance: The application must comply with relevant employment laws, privacy regulations, and other legal requirements, which may vary across regions.
- 4. Server Capacity: The system's performance is constrained by the capacity of the servers hosting the application, impacting factors like response time and concurrent user capacity.
- 5. User Skill Level: The usability of the application is constrained by the assumed skill level of users in navigating online platforms and completing the necessary tasks.
- 6. Data Accuracy: The accuracy of job-related information, including job descriptions and company profiles, is constrained by the data provided by employers and may be subject to occasional inaccuracies.
- 7. Third-Party Integration Reliability: The application's integration with external systems and services is constrained by the reliability and availability of those third-party services.
- 8. Regulatory Changes: Changes in employment laws, regulations, or industry standards may impose constraints on the application's features and functionalities, requiring updates and adaptations.
- 9. Scalability: The application's ability to scale and handle a growing user base is constrained by the chosen architecture and infrastructure.
- 10. User Adoption: The success of the platform is constrained by the willingness of job seekers and employers to adopt and actively use the system for their recruitment needs.

# 7. System Requirements

### a. Functional Requirements

- 1- Users should have the ability to create and manage a personalized profile, including information on skills, experiences, and career
- 2- Users should be able to explore job listings categorized by industries, positions, and locations and detailed information for each job listing should include company profiles, comprehensive job descriptions, and application instructions.
- 3- Once an application is submitted, the system should provide feedback on the status of the application from the recruiter.
- 4- Advanced search functionalities should allow users to refine job searches based on criteria such as job type, salary range, and required skills.
- 5- Notification features should inform users of relevant job openings matching their career goals.
- 6- A messaging system should be integrated to enable direct communication between employers and applicants. For Employers should be able to create, manage, and post job openings and have the capability to review applicant profiles and communicate seamlessly with potential candidates.
- 7 The application should support a mobile-responsive design to enhance accessiblity, allowing users to engage with the platform on various devices

### b. Non-Functional Requirements.

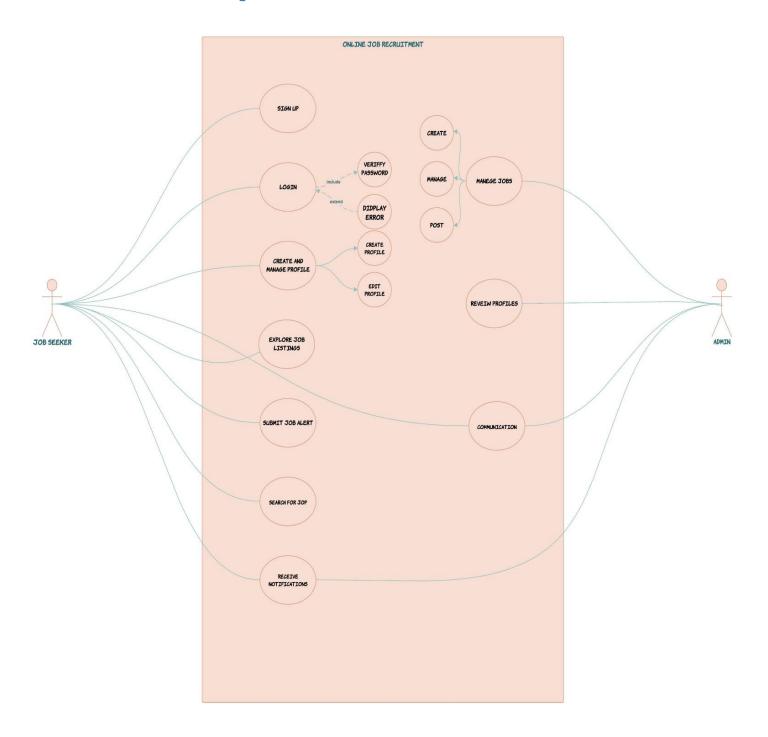
1- Usability: Usability: The application should boast a user-friendly interface, ensuring that both job seekers and employers can effortlessly navigate the system. The design should not only be visually appealing but also responsive across various devices. The system should be available 24 hours a day, and the response time should be swift, aiming for a performance rate of at least 95%.

- **2- Performance**: The application must efficiently handle a substantial number of users concurrently, striving to maintain fast and responsive page loading times. Whether users are searching for jobs or submitting applications, the system should provide an efficient and quick experience. Aim for a response time of 90% within 2 seconds.
- **3- Security**: Ensuring the security and privacy of user data is paramount. The system should implement robust user authentication and authorization mechanisms to safeguard sensitive information. Measures should be in place to prevent unauthorized access, data breaches, and other security threats.
- **4- Scalability**: The application should be scalable to accommodate potential growth in users and job postings. It should handle increased traffic and data volume without compromising performance. Plan for scalability that allows for at least a 20% increase in users and data volume.
- **5- Reliability**: The system should be highly reliable and available, minimizing downtime. Users should be able to access the application and its features at all times. Regular backups and data recovery mechanisms should be in place to prevent data loss. Aim for an uptime of 99.9%.
- **6- Integration**: The application should seamlessly integrate with other systems or services, such as email notifications, messaging systems, and social media platforms. This integration enhances communication and connectivity between job seekers and employers.
- 7- Accessibility: The platform should prioritize accessibility for users with disabilities, complying with accessibility standards and guidelines. It should support assistive technologies to ensure equal access and usability for all users.
- **8- Maintainability**: The application should be developed using modular and well-documented code, facilitating easier maintenance, updates, and long-term support. Adherence to code quality standards and version control practices is essential for a sustainable system.

**9- Compliance**: The system should rigorously comply with relevant laws, regulations, and industry standards related to job recruitment, data protection, and privacy. Regular audits and updates should be conducted to ensure ongoing compliance.

# 8. Use Case Model

# 8.1 Use Case Diagram



# 8.2 Use Case narratives

Name	Online job recruitment	
Actor	1-Job Seeker 2-Employer	
Entry ConditionEntry Condition	<ol> <li>Job Seeker:         <ul> <li>The job seeker may need to create a user account or log in to an existing account to access the features of the system.</li> </ul> </li> <li>Employer:         <ul> <li>The employer may need to create a user account or log in to an existing account to access the features of the system.</li> </ul> </li> </ol>	
Exit Condition	<ul> <li>1.Job Seeker: <ul> <li>The job seeker can exit the system when they have completed their job search or have found a suitable job and no longer need to use the system.</li> </ul> </li> <li>The job seeker may choose to log out of their user account or simply close the application or website.</li> <li>2.Employer: <ul> <li>The employer can exit the system when they have completed their recruitment process, including creating and managing job postings, reviewing applicant profiles, and communicating with potential candidates.</li> </ul> </li> <li>The employer may choose to log out of their user account or simply close the application or website.</li> </ul>	
Flow Of Events	<ul> <li>1-Job Seeker Flow of Events: <ul> <li>a. Browsing and Searching for Jobs:</li> <li>1- The job seeker opens the application or website.</li> <li>2-The job seeker logs in to their user account (if required) or proceeds as a guest user.</li> <li>3- The job seeker explores job categories, industries, or uses the search functionality to find relevant job listings.</li> <li>4-The job seeker selects a job category, industry, or enters search criteria.</li> <li>5-The system displays a list of job listings matching the selected criteria.</li> </ul> </li> </ul>	

6-The system updates the displayed job listings based on the applied filters.

### b. Applying to Jobs:

- a. The job seeker clicks on the "Apply" button.
- b. The job seeker uploads the required documents and submits the application.
- c. The system may notify the job seeker about the status of their application at a later stage.
- d. Communicating with Employers:

### 2.Employer Flow of Events:

- a. Creating and Managing Job Postings:
  - The employer opens the application or website.
  - 2. The employer logs in to their user account (if required) or proceeds as a quest user.
  - 3. The employer selects the option to create a new job posting.
  - 4. The employer can manage and update their existing job postings as needed.

### b. Communicating with Job Seekers:

5. The system facilitates the communication between the employer and the job seeker.

### **Alternative Events**

### 1.Job Seeker:

- a. No matching job listings:
- When the job seeker performs a search or applies filters, if there are no job listings that match the specified criteria, the system may display a message indicating no matching results. The job seeker can modify their search criteria or choose to browse other job categories or industries.

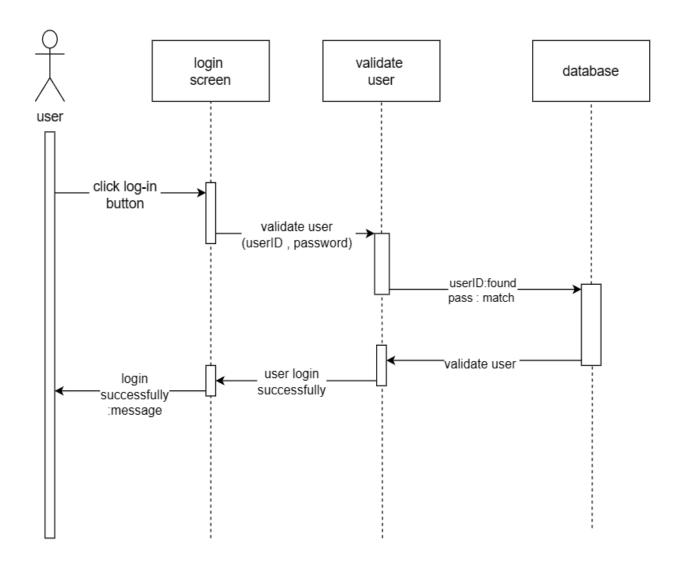
### 2.Employer:

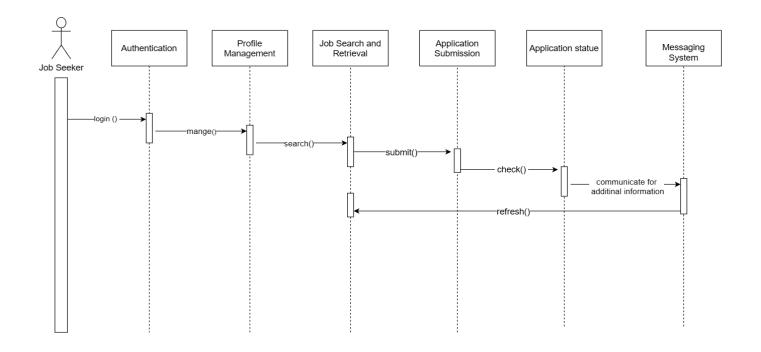
- a. Technical issues:
- The employer may encounter technical issues, such as difficulties in creating or updating job postings, uploading documents, or accessing applicant profiles. The system should handle these issues gracefully, display appropriate error messages, and provide guidance on resolving the problem or contacting technical support.

# 9. Sequence Diagram

- Provide 2 sequence diagrams [complex use case scenarios]
- Use ArgoUML or visual-paradigm to Draw the sequence diagram

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