**Career Hub Website**

**Software Requirements Specification**

Version 1.0



**Group Id: F24PROJECT57AAE (BC200404460)**

**Supervisor Name: Ehsan ul Haq**

**Revision History**

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| --- | --- | --- | --- |
| **Date (dd/mm/yyyy)** | **Version** | **Description** | **Author** |
| 04/12/2024 | 1.0 | The Career Hub Website is a platform designed to connect job seekers and employers efficiently. The platform offers a centralized space where job seekers can search for relevant opportunities and employers can post job vacancies. The website is structured to cater to three types of users: Admin, Employer, and Job Seeker. Each user has specific functionalities tailored to their role. The platform aims to simplify the hiring process by offering advanced filtering options, easy job posting mechanisms, and an admin-controlled environment for managing content | BC200404460 |
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**Table of Contents**

1. [Scope (of the project)](#scope)
2. [Functional Requirements Non Functional requirements](#FRNFR)
3. [Use Case Diagram](#UCD)
4. [Usage Scenarios](#UCS)
5. [Adopted Methodology](#Adopted)
6. [Work Plan (Use MS Project to create Schedule/Work Plan)](#Gantt)

**SRS Document**

1. ***Scope of Project:***

The Career Hub Website aims to create a user-friendly platform that connects job seekers and employers, making the hiring process smoother and more efficient. The website will offer three main types of users: Admin, Employer, and Job Seeker. Admins will manage the platform, overseeing user accounts and job listings. Employers will be able to post job vacancies, view applicants, and manage the hiring process. Job seekers can create profiles, upload resumes, search for jobs, and apply directly through the website. For job seekers, the website will allow them to create and manage their profiles, which will include personal information, educational background, work experience, and resume uploads. They will also have access to a job search feature, where they can filter job listings based on categories, locations, and job types. The search results will show key job details such as the company name, job title, and location. Job seekers can track their applications and view their history of applied jobs.

Employers will be able to post job listings with detailed information, including job title, company name, location, salary range, and job requirements. They will also have the option to edit or delete their job postings and review applications received from job seekers. Employers can shortlist candidates based on the resumes and application details submitted by job seekers, facilitating an organized hiring process. The admin will have complete control over the platform, ensuring that the system runs smoothly. Admins will be able to manage user accounts by adding, editing, or removing accounts and moderating job listings to ensure they meet platform guidelines. Admins will also monitor platform activity, including job applications and user engagement, through a dashboard that provides key metrics and statistics, allowing for efficient management and oversight of the website’s operations.

1. **Functional and Non-Functional Requirements:**
   1. ***Functional requirements:***

Functional requirements describe what a system should do, outlining the specific tasks or behaviors it must perform. They define the features, actions, and interactions of the system, such as user authentication, data processing, and reporting. These requirements focus on the functionality and operations that the system must support.

**Admin Role:**

* **Login**

The admin must log in with a secure username and password to access the Admin Panel. The system will verify the credentials, and upon successful login, the Admin will be redirected to the dashboard where they can manage users and job listings.

* **Manage User Accounts**

The admin can view, add, edit, or delete user accounts (both Job Seekers and Employers). This includes managing their personal information, roles, and account status (active, suspended, or deleted).

* **Moderate Job Listings**

The admin has the authority to approve, reject, or remove job postings submitted by employers. The admin will review job details and ensure they adhere to platform guidelines before making them visible on the site.

* **Monitor Platform Activity**

The admin can access platform statistics, including the number of active users, job postings, and job applications. Admins can generate reports on user engagement, such as active job seekers, posted jobs, and applications received.

* **Admin Dashboard**

The admin will have access to a dashboard that presents key metrics, such as user registrations, total job applications, and job listings statistics. This dashboard allows for easy management and oversight of the platform.

* **Logout**

The admin can log out from the Admin Panel, which will terminate the session and ensure the system remains secure.

**Admin Role:**

* **Login**

Employers can securely log in using their registered credentials (email and password) to access the employer dashboard, where they can manage job postings and view applications.

* **Register**

Employers must register an account by providing essential information such as company name, contact details, and a secure password. The registration process will enable employers to post jobs and manage their profiles.

* **Post Job Listings**

Employers can create job postings by providing detailed information, including:

* + Job Title
  + Company Name
  + Location
  + Job Requirements
  + Salary Range
  + Job Type (Full-time, Part-time, Contract)
  + Application Deadline

Employers can edit or delete job listings at any time.

* **View Applications**

Employers can view the list of job applications submitted by job seekers for each job posting. They can review candidate resumes and application details and decide whether to shortlist or reject applicants.

* **Shortlist Candidates**

Employers can select job seekers from the pool of applicants by shortlisting candidates who meet the job requirements. Shortlisted candidates will be notified of their selection status.

* **Job Management**

Employers can manage their job postings, including updating details, adjusting deadlines, or removing listings. They can also check the number of applicants for each posting.

* **Logout**

Employers can log out of their accounts, ensuring that the session ends securely and preventing unauthorized access.

**Job Seeker Role:**

* **Login**

Job Seekers can log in to the platform using their registered credentials (email and password) to access their profile, search for jobs, and apply for open positions.

* **Register**

Job Seekers must create an account by providing personal details such as name, email, contact information, location, education, work experience, and password. They will then be able to create a profile and upload their resume.

* **Create and Edit Profile**

Job Seekers can create and update their profile with essential details such as:

* + Personal Information (Name, Contact Info, Location)
  + Resume Upload (PDF, DOCX formats)
  + Education History
  + Work Experience
  + The profile can be edited at any time to reflect the most current information.
* **Search Jobs**

Job Seekers can search for jobs using various filters, including:

* + Category/Industry (e.g., IT, Marketing, Finance)
  + Location (e.g., city, region)
  + Job Type (Full-time, Part-time, Contract)
  + A search bar allows job seekers to enter specific keywords (e.g., job titles, company names) to find relevant opportunities quickly.
* **Apply for Jobs**

Job Seekers can apply for jobs directly through the platform by attaching their resume and providing any additional information required by the employer. Once applied, the job seeker can track the status of their application.

* **Application History**

Job Seekers can view a record of all the jobs they have applied for, including application status (e.g., Pending, Shortlisted, Rejected). This helps them stay updated on the progress of their job applications.

* **Job Alerts/Notifications**

Job Seekers can set up notifications to receive alerts for new job postings that match their skills and preferences. Alerts can be sent via email or through the platform.

* **Logout**

Job Seekers can log out of their account to ensure their session is securely ended.

* 1. ***Non-Functional requirements:***

Non-functional requirements describe how a system performs its tasks, rather than what tasks it performs. They define the overall qualities and constraints of the system, such as performance, scalability, security, usability, and reliability. These requirements ensure the system meets certain standards of quality and user experience.

1. **Security:**

This application will be secure. This site provides an easy way for you to find diagnostic center that meet your needs. Security has been built into the project and we guarantee it.

1. **Usability:**

User friendly interface will be provided so that user can interact easily. The Logistic system you find the right lab to suit your needs by walking you through a few easy steps.

1. **Responsive:**

This application will be responsive. It will look good on all devices like PC, Tablets and Mobile Phones.

1. **Reliability:**

This application will consistently perform the specified functions without failure. If failure occurs, the application will display an error message showing the root cause of the failure.

1. **Availability:**

This application will be able to function during normal operating times.

1. **Efficiency:**

Response time will be quick. It will use very less storage and computational resources.

1. **Maintainability:**

This application will be easy to maintain because it will be built in good architecture and using well coding techniques.

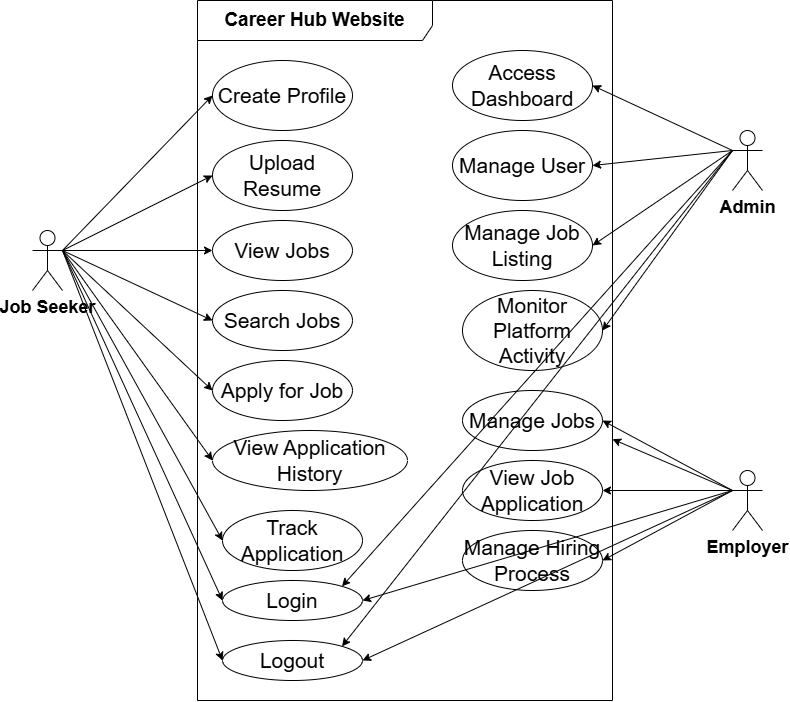
1. **Portability:**

This application will be portable on any platform due to the nature of the web.

1. **Confidentiality:**

This application will protect sensitive data and allows only authorized access to data. General Information just only for unregistered users.

1. ***Use Case Diagram(s)***

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***4. Usage Scenarios:***

|  |  |
| --- | --- |
| Use Case Title | Login |
| Use Case ID | UC-01 |
| Actors | Admin, Employer, Job Seeker |
| Description | Allows users to log in to the system using their registered credentials (email and password). |
| Pre-Condition | The user must have a registered account with valid login credentials. |
| Task Sequences | * User opens the login page. * User enters email and password. * System validates credentials. * User is redirected to their dashboard upon successful login. |
| Alternative | * If credentials are invalid, the system displays an error message. * Users can use the "Forgot Password" feature to reset credentials. |
| Exception | * System downtime prevents login. * Incorrect email format causes an error. |
| Post Condition | The user is successfully logged in and can access their respective dashboard. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Access Dashboard |
| Use Case ID | UC-02 |
| Actors | Admin, Employer, Job Seeker |
| Description | Allows users to access their respective dashboards after successfully logging in. |
| Pre-Condition | The user must be logged into the system. |
| Task Sequences | * User selects the dashboard option after login. 2 * System identifies user role (Admin, Employer, or Job Seeker). * User is redirected to the appropriate dashboard. |
| Alternative | If session times out, the user is redirected to the login page. |
| Exception | System error prevents the dashboard from loading. |
| Post Condition | The user successfully accesses their personalized dashboard based on their role. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Manage User |
| Use Case ID | UC-03 |
| Actors | Admin |
| Description | Allows the admin to add, edit, suspend, or delete user accounts. |
| Pre-Condition | Admin must be logged into the system. |
| Task Sequences | * Admin navigates to the "Manage Users" section. 2 * Admin selects the action (add, edit, suspend, or delete). * System processes the action and updates the user account. |
| Alternative | If user details are incomplete, the system displays an error message. |
| Exception | System error prevents account changes. |
| Post Condition | The user account is updated, and the change is reflected in the system. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Manage Job Listings |
| Use Case ID | UC-04 |
| Actors | Admin |
| Description | Allows the admin to approve, reject, or delete job postings. |
| Pre-Condition | Admin must be logged into the system. |
| Task Sequences | * Admin navigates to the "Job Listings" section. * Admin reviews job postings. * Admin selects an action (approve, reject, or delete). * System updates the status of the job posting. |
| Alternative | If the job listing violates guidelines, admin rejects it with a reason. - Admin can temporarily hide a listing instead of deleting. |
| Exception | System error prevents job status updates. |
| Post Condition | The job listing status is updated based on the admin's action and is reflected on the platform. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Monitor Platform Activity |
| Use Case ID | UC-05 |
| Actors | Admin |
| Description | Allows the admin to view statistics and monitor platform activities such as user engagement and application metrics. |
| Pre-Condition | Admin must be logged into the system. |
| Task Sequences | * Admin navigates to the "Platform Activity" section. * Admin selects the type of activity to monitor (e.g., user stats, job postings, applications). * System displays real-time statistics and reports. |
| Alternative | Admin can filter the activity view by time period or user type. - Admin downloads reports for further analysis. |
| Exception | System error prevents the display of statistics. |
| Post Condition | Admin successfully views or downloads platform activity data. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Logout |
| Use Case ID | UC-06 |
| Actors | Admin, Employer, Job Seeker |
| Description | Allows the user to log out of the system, ending their session. |
| Pre-Condition | The user must be logged into the system. |
| Task Sequences | * User clicks on the "Logout" button. * System logs out the user and redirects to the login page. |
| Alternative | If the session is already expired, the user is automatically logged out and redirected to the login page. |
| Exception | System error prevents logout, and the user is prompted with an error message. |
| Post Condition | User is logged out, and the session is terminated. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Manage Jobs |
| Use Case ID | UC-07 |
| Actors | Employer |
| Description | Allows the employer to post, edit, or delete job listings. |
| Pre-Condition | Employer must be logged into the system. |
| Task Sequences | * Employer navigates to the "Manage Jobs" section. * Employer selects the action (post, edit, or delete). * Employer enters job details or modifies existing ones. * System updates the job listing based on the employer's action. |
| Alternative | * If the job posting does not meet the requirements, the system displays an error message. * Employer can cancel the action and return to the job listings page. |
| Exception | System error prevents posting or editing job listings. |
| Post Condition | The job listing is successfully posted, edited, or deleted, and the change is reflected on the platform. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | View Job Applications |
| Use Case ID | UC-08 |
| Actors | Employer |
| Description | Allows the employer to view and manage the applications received for posted job listings. |
| Pre-Condition | Employer must be logged into the system and have active job listings with applicants. |
| Task Sequences | * Employer navigates to the "View Job Applications" section. * Employer selects a job listing to view applications. * System displays a list of applicants along with their resumes and application status. * Employer can review each application and take action (e.g., accept, reject, or shortlist). |
| Alternative | * Employer can filter applicants based on application status or qualifications. * Employer can download resumes for offline review. |
| Exception | * System error prevents the display of applications. * No applicants available for the job posting. |
| Post Condition | Employer successfully views job applications and takes action on the applications. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Manage Hiring Process |
| Use Case ID | UC-09 |
| Actors | Employer |
| Description | Allows the employer to manage the hiring process by reviewing, accepting, or rejecting candidates. |
| Pre-Condition | Employer must be logged into the system and have received applications for a job posting. |
| Task Sequences | * Employer navigates to the "Manage Hiring Process" section. * Employer selects a job listing to manage applicants. * Employer reviews the applications and resumes. * Employer selects actions (e.g., accept, reject, shortlist) for each applicant. |
| Alternative | * Employer can schedule interviews for shortlisted candidates. * Employer can update the hiring status (e.g., hired, pending). |
| Exception | * System error prevents updating the hiring status. * Applicant data is incomplete or unavailable. |
| Post Condition | Employer successfully manages the hiring process by updating the status of applicants. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Create Profile |
| Use Case ID | UC-10 |
| Actors | Job Seeker |
| Description | Allows the job seeker to create and update their profile with personal information, education, and resume. |
| Pre-Condition | Job Seeker must be logged into the system. |
| Task Sequences | * Job Seeker navigates to the "Create Profile" section. * Job Seeker enters personal details (name, contact, location). * Job Seeker uploads a resume (PDF, Word format). * Job Seeker fills in education and work experience details. * Job Seeker saves the profile. |
| Alternative | * Job Seeker can edit or update their profile later. * If details are missing, the system prompts the user to complete them. |
| Exception | * System error prevents profile creation. * Invalid resume format results in an error message. |
| Post Condition | Job Seeker successfully creates or updates their profile. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Upload Resume |
| Use Case ID | UC-11 |
| Actors | Job Seeker |
| Description | Allows the job seeker to upload their resume in supported file formats (e.g., PDF, Word). |
| Pre-Condition | Job Seeker must be logged into the system and have created a profile. |
| Task Sequences | * Job Seeker navigates to the "Upload Resume" section. * Job Seeker selects the resume file to upload. * Job Seeker clicks on the "Upload" button. * System validates the file format and uploads the resume. |
| Alternative | * Job Seeker can upload a new version of the resume. * If the file format is incorrect, the system displays an error message. |
| Exception | * System error prevents the resume upload. * File size exceeds the allowed limit. |
| Post Condition | Job Seeker's resume is successfully uploaded and stored in their profile. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | View Jobs |
| Use Case ID | UC-012 |
| Actors | Job Seeker |
| Description | Allows the job seeker to view available job listings and filter them based on their preferences. |
| Pre-Condition | Job Seeker must be logged into the system. |
| Task Sequences | * Job Seeker navigates to the "View Jobs" section. * Job Seeker can apply filters (e.g., category, location, job type). * System displays a list of jobs based on the selected filters. * Job Seeker browses through the job listings. |
| Alternative | * Job Seeker can search for jobs using keywords. * Job Seeker can sort job listings by date or relevance. |
| Exception | * System error prevents displaying job listings. * No job listings match the search or filter criteria. |
| Post Condition | Job Seeker successfully views the available job listings. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Search Jobs |
| Use Case ID | UC-13 |
| Actors | Job Seeker |
| Description | Allows the job seeker to search for jobs using specific keywords or criteria. |
| Pre-Condition | Job Seeker must be logged into the system. |
| Task Sequences | * Job Seeker enters keywords or search criteria in the search bar. * Job Seeker clicks on the "Search" button. * System displays job listings that match the search criteria. * Job Seeker browses through the search results. |
| Alternative | * Job Seeker can refine the search by adding more filters (e.g., location, job type). * Job Seeker can clear the search and start a new one. |
| Exception | * No results match the search criteria. * System error prevents the search from completing. |
| Post Condition | Job Seeker successfully views job listings based on the search criteria. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Apply for Job |
| Use Case ID | UC-14 |
| Actors | Job Seeker |
| Description | Allows the job seeker to apply for a job by submitting their resume and profile details. |
| Pre-Condition | Job Seeker must be logged into the system and have a complete profile with an uploaded resume. |
| Task Sequences | * Job Seeker browses the job listings or uses the search function. * Job Seeker selects a job they want to apply for. * Job Seeker clicks on the "Apply" button. * Job Seeker attaches their resume (if not already uploaded) and clicks "Submit Application". * System confirms the application submission and stores it in the job seeker's application history. |
| Alternative | * Job Seeker can edit their profile or upload a new resume before applying. * Job Seeker can cancel the application before submission. |
| Exception | * System error prevents application submission. * Resume format is incorrect or missing. |
| Post Condition | Job Seeker's application is successfully submitted for the job, and the application is stored in their history. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | View Application History |
| Use Case ID | UC-15 |
| Actors | Job Seeker |
| Description | Allows the job seeker to view a list of jobs they have previously applied for, along with their application status. |
| Pre-Condition | Job Seeker must be logged into the system and have at least one job application submitted. |
| Task Sequences | * Job Seeker navigates to the "Application History" section. * System displays a list of all jobs the Job Seeker has applied for. * Job Seeker reviews the status of each application (e.g., pending, accepted, rejected). |
| Alternative | * Job Seeker can filter the application history by job status (e.g., only show pending applications). * Job Seeker can view detailed job descriptions for each application. |
| Exception | * No applications have been submitted yet. * System error prevents loading the application history. |
| Post Condition | Job Seeker successfully views their application history with details on job status. |
| Author | BC200404460 |

|  |  |
| --- | --- |
| Use Case Title | Track Application |
| Use Case ID | UC-16 |
| Actors | Job Seeker |
| Description | Allows the job seeker to track the progress of their job application, including any updates from the employer. |
| Pre-Condition | Job Seeker must be logged into the system and have an application in progress. |
| Task Sequences | * Job Seeker navigates to the "Application History" section. * Job Seeker selects a specific application they want to track. * System displays the current status and any updates from the employer (e.g., interview scheduled, rejected). |
| Alternative | * Job Seeker can receive notifications about changes in the application status. * Job Seeker can contact the employer for more information. |
| Exception | * No status updates are available for the selected application. * System error prevents fetching application updates. |
| Post Condition | Job Seeker successfully tracks the status of their application and receives updates from the employer. |
| Author | BC200404460 |

***5. Adopted Methodology***

**Development Methodology**

Methodology is a framework that is used to structure, plan and control the process of developing an information system.

VU process model is a combination of waterfall and spiral model.

**5.1 Waterfall model:**

Waterfall model is fast process model to be introduced. This model is also known as linear sequential model or classic life cycle model.

This model is depicted in the following diagram.

System

Requirements

System Design

Implementation

Testing

Deployment

Maintenance

* **Requirements Analysis:**

This is the first phase of waterfall model which includes all the specific requirements of the students.it is very important to understand the student’s requirements and expectations so that the students can easily attempted their test. All the requirements related to the system to be developed are analysis in this phase.

* **System design:**

System design helps in specifying hardware and system requirements and also helps in defining overall system architecture.

* **Implementation:**

First of all designed the system in small units and implemented for testing its functionality.

* **Testing**

In this stage both individual components and the integrated whole are methodically verified to ensure that they are error free and fully meet the requirements. All the units developed in the implementation phase integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

* **Deployment:**

Once the functional and non-functional testing is done the product is deployed.

* **Maintenance:**

This is the final phase of waterfall model in which the completed software product is handed over to the client after alpha beta testing.

**5.2 Spiral model:**



Spiral model is one of the most important Software Development Life Cycle models, which provides support for Risk Handling. Spiral model is a combination of iterative development process model and sequential linear development model. The spiral model has four phases like as

* **Identification:**

The business requirements in the baseline spiral. This also includes understanding the system requirements by continuous communication between the customer and the system analyst. At the end of the spiral, the product is deployed in the identified market.

* **Design:**

It involves architectural design, logical design of modules, physical product design and the final design in the subsequent spirals.

* **Construct or Build:**

The Construct phase refers to production of the actual software product at every spiral.  These builds are sent to the customer for feedback.

* **Evaluation and Risk analysis:**

Risk Analysis includes identifying, estimating and monitoring the technical feasibility and management risks, such as schedule slippage and cost overrun. After testing the build, at the end of first iteration, the customer evaluates the software and provides feedback.

**5.3 VU process model:**

VU process model is the combination of waterfall and spiral model. It is also called hybrid approach of system development. In this project we are choosing VU process model. It has five phases.

Analysis

Requirement

**Planning** **Risk analysis**

Software requirement, Cost effectiveness

Specification and work plan with minimum risk

**Client Evaluation** **Development**

Design

Project delivery with quality Designing, coding

Otherwise recycle again for Testing.

Further evaluation

Coding

Testing

Acceptance

**Reason for choosing VU process model:**

* The main idea to choose is to get the benefits of both these models.
* It is sequential model with backwards repetitions.
* In VU process model we will work in phase to complete the given project.
* It provides better project vision and control over milestones.
* This model is used when cost and risk evaluation is important.
* This methodology is also used when users are unsure of their requirement.
* It is also used when significant changes are expected.
* All the activities are performing in a sequence in VU process model.

***6. Working Plan***

