**Software Requirement Specification**

For

**Career Up**

Under the guidance of

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**1. Introduction**

**1.1 Purpose**

The purpose of this document is to outline the requirements for the development of a career development tool that assists individuals in various aspects of their professional growth.

**1.2 Scope**

This project is useful for Students and Employees in providing a platform to build their resumes ,take guidance to learn new skills and take tests on their skills .

**1.3 Overview**

There are many applications which provide the features like resume building , learning roadmaps and skill performance test . Among these applications there is no application that provides all these features together and create resumes based on the tests taken automatically.

**2. General Description**

**2.1 Product Perspective**

The “career up” is a self-contained application that operates independently, providing users with a comprehensive platform to support their professional growth. It does not rely on any other software or systems and can be installed on various devices. The tool offers features such as resume building, college searching, coding contest information, learning roadmaps, and skill performance analysis. By operating independently, it ensures data privacy and security while offering users the convenience and flexibility to access its functionalities anytime, anywhere. The “ career up “ is designed to be a standalone solution for individuals seeking assistance in their career advancement.

**2.2 Product Functions**

**Resume Building:**

* Provides users with pre-designed templates and tools to create professional resumes.
* Allows users to enter and format their education, work experience, skills, and achievements.
* Enables previewing, editing, and saving of resumes

**Automated Resume Creation:**

* Generates resumes automatically based on completed courses and skill performance test results.
* Extracts relevant information and presents it in a professional resume format.
* Offers customization options for users to review and adjust the generated resume.

**College Searching:**

* Allows users to search for colleges based on preferences such as rank and location.
* Retrieves college data and provides information about institutions that match the user's criteria.
* Offers filtering and sorting options to refine search results.

**Coding Contest Information:**

* Fetches details about upcoming and ongoing coding contests worldwide from an API.
* Presents contest information, including dates, locations, registration links, and descriptions.
* Allows users to subscribe to contest notifications and receive updates.

**Learning Roadmaps:**

* Provides curated learning resources for various programming languages and tools.
* Offers learning roadmaps with recommended tutorials, online courses, and documentation.
* Enables users to track their progress, mark completed resources, and receive recommendations for further learning.

**Skill Performance Analysis:**

* Assesses users' skills based on completed courses, coding contest participation, or other metrics.
* Analyzes skill levels, strengths, and areas for improvement.
* Provides personalized feedback, recommendations, and learning resources to enhance skills.
  1. **Product Functions**

a) **User A** - Job Seekers

* + Individuals who are actively seeking employment or career advancement opportunities.
  + They use the career up to create professional resumes , access learning resources, and improve their skills.

b) **User B** - College Applicants

* + Students or professionals interested in pursuing higher education.
  + They utilize the tool to search for colleges based on preferences such as rank and location, gather information about institutions, and make informed decisions about their educational pursuits.

c) **User C** - Coding Enthusiasts

* + Individuals passionate about programming and participating in coding contests.
  + They rely on the career development tool to stay updated on upcoming coding contests, access contest details, and register for events.

d) **User D** - Learners

* + People interested in expanding their knowledge and skills in programming languages and tools.
  + They utilize the learning roadmaps and curated learning resources provided by the tool to enhance their abilities and track their learning progress.

**3. System Features and Requirements**

**3.1 Functional Requirements**

**3.1.1 Resume Builder**

* Users should be able to select from pre-designed resume templates.
* The application should provide an automated resume generation feature that creates the resume for the user based on the courses completed, utilizing the learning roadmap feature and skill performance test.
* Users should be able to customize and edit their resumes as needed.
* The application should provide a preview of the resume before finalizing it.
* Users should be able to save and export their resumes in various format

### 3.1.2 College Search

* Users should be able to search for colleges based on preferences such as rank and location.
* The application should provide a list of matching colleges with relevant information (e.g., rankings, location, programs offered).
* Users should be able to view detailed profiles of individual colleges

### 3.1.3 Coding Contest Information

* The application should utilize an API to fetch details on upcoming and ongoing coding contests.
* Users should be able to view information on coding contests (e.g., date, location, rules, prizes).
* Users should have the option to save contests of interest for future reference.

### 3.1.4 Learning Roadmaps

* The application should provide a curated list of learning resources for different programming languages and tools.
* Users should be able to select a specific programming language or tool to view the corresponding learning roadmap.
* The learning roadmap should include a structured learning path with recommended resources and milestones.
* Users should be able to track their progress along the learning roadmap and mark completed resources.

### 3.1.5 Skill Performance Analysis

* The application should assess user’s skills based on their completed courses and coding contest participation.
* Users should receive personalized feedback on their skills, highlighting areas for improvement.
* The feedback should include recommendations for relevant learning resources and practice opportunities.

**3.2 Non-Functional Requirements**

* User Interface: The application should have an intuitive and user-friendly interface for easy navigation and interaction.
* Performance: The application should respond quickly to user actions and provide a seamless user experience.
* Security: User data should be stored securely and protected from unauthorized access.
* Compatibility: The application should be compatible with major web browsers and mobile devices.
* Scalability: The application should be able to handle a growing number of users and data without significant performance degradation

**4. Interface Requirements**

**4.1 User Interface Requirements**

1. The user interface should be intuitive, making it easy for users to navigate and interact with the application
2. Colors, typography, icons, and other visual elements should be used consistently throughout the interface
3. Clear validation messages and notifications should be displayed to guide users and help them correct any mistakes

**4.2 Software Requirements**

* Frontend Languages : HTML , CSS (Tailwind), JavaScript
* Backend Languages : Node JS
* Frameworks and Libraries : React JS , Chakra UI
* Database : MongoDB
* IDE : VS Code

**4.3 Hardware Requirements**

* Processor : Intel i3 and above
* RAM : 4GB and Higher
* Web Browser : Chrome , Firefox and Safari

**5. Performance Requirements**

**Response Time**

* The application should have fast response times to user interactions, such as loading pages, submitting forms, and retrieving search results.
* The response time should be within acceptable limits to provide a smooth and seamless user experience

**Latency**

* Network requests made by the application should have minimal latency to ensure timely retrieval of data from external sources.
* The application should be designed to handle and minimize delays caused by network latency

**Concurrent User Handling**

* The system should be able to handle multiple concurrent user sessions without significant degradation in performance.
* The application should be optimized to efficiently process and respond to concurrent user requests, ensuring smooth operation during peak usage periods.

**Efficiency**

* The application should be designed to optimize resource utilization, such as CPU, memory, and disk space.
* Algorithms, data structures, and database queries should be efficient to minimize resource consumption and maximize overall system performance.

**Error Handling**

* The application should handle errors gracefully, providing informative error messages and appropriate feedback to users.
* Error handling mechanisms should be in place to capture and log errors for analysis and troubleshooting purposes.

**6. Appendices**

**6.1 Abbreviations**

1. API - Application Programming Interface.
2. UI - User Interface
3. UX - User Experience
4. CRUD - Create, Read, Update, Delete
5. DBMS - Database Management System
6. UX/UI Design - User Experience/User Interface Design

**6.2 References**

[ 1 ] www.google.com