

ResumeFiller

Team 8

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Software Requirements Specification Document

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1 Purpose

The current job application process, particularly on platforms like Workday, can be both tedious and frustrating. Job seekers are often required to manually enter their resume information for each application, despite already having an updated resume prepared. This repetitive process is inefficient and time-consuming, adding unnecessary complexity to an already stressful task. Moreover, tracking job applications across various platforms is typically disorganized, making it easy for candidates to lose track of opportunities.

The proposed Chrome extension aims to streamline this experience by automatically filling in resume details for users, eliminating the need for manual input. Additionally, it will provide a centralized system for tracking applications across multiple platforms, offering an organized and efficient solution. This not only saves time but also reduces frustration, allowing job seekers to focus more on finding the right opportunity rather than dealing with cumbersome application procedures.

2 Scope

The software, called ResumeFiller, will automate the process of filling out resumes on job portals and track job applications. It will support various formats to ensure compatibility with multiple platforms, including Workday and others.

Goals:

- Automatically fill in personal information, education, work history, and other resume details on job portals.
- Track all job applications in a single dashboard, allowing users to manage and follow up on applications.
- Ensure compatibility with a wide range of job portals by supporting various input formats and page structures.

Application and benefits:

The proposed system saves users valuable time and effort by eliminating the need to manually input their resume information for each job application. By automating this process, job seekers can avoid the repetitive task of re-entering the same details across multiple platforms. Additionally, the system provides an organized method for tracking applications, reducing the likelihood of missed follow-ups or lost opportunities. Ultimately, this seamless and automated job application experience leads to increased user satisfaction, allowing job seekers to focus on the opportunities rather than the logistics of applying.

3 User characteristics

3.1 Key Users

- User role responsibilities: These users will be responsible for using the extension to fill in job applications across different platforms.
- Subject matter experience: Job seekers (novice to journeyman level in applying for jobs, not necessarily expert in all job platforms).
- Technological experience: Mostly novice to journeyman, with basic knowledge of using web browsers and job application platforms.
- Other user characteristics:
 - Physical abilities: No specific physical requirements.
 - Intellectual abilities: Should be able to navigate job portals and understand the application process.
 - Attitude toward technology: Mostly positive, looking for tools to make the job application process easier.
 - Education: Varies from high school graduates to college graduates.
 - Linguistic skills: Primarily English, with potential to expand to other languages.
 - Age group: 18-65 years old, typical of job seekers across industries.

3.2 Secondary Users

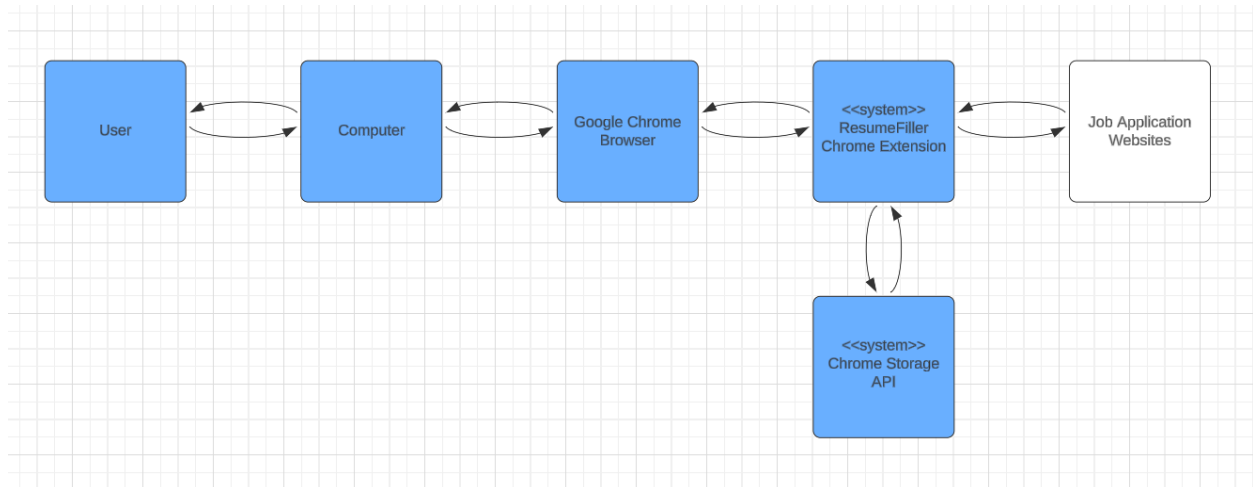
- User role responsibilities: These users may use the tracking feature but do not rely heavily on the resume autofill.
- Subject matter experience: Varies but typically novice in job application processes.
- Technological experience: Mostly novice, with basic understanding of using a Chrome extension.
- Other user characteristics:
 - Physical abilities: No specific physical requirements.
 - Intellectual abilities: Capable of managing job applications using a simple dashboard.
 - Attitude toward technology: Mostly indifferent but will appreciate improved ease of use.
 - Education: Varies, but generally less relevant as they might not be actively seeking jobs.
 - Age group: 18-65 years old.

Additional Considerations

To further enhance usability, adding features such as saving cover letters or supporting multiple languages could increase the appeal. Given the timeline of two months, it's important to focus on core functionality such as resume autofill, application tracking, and compatibility with various formats.

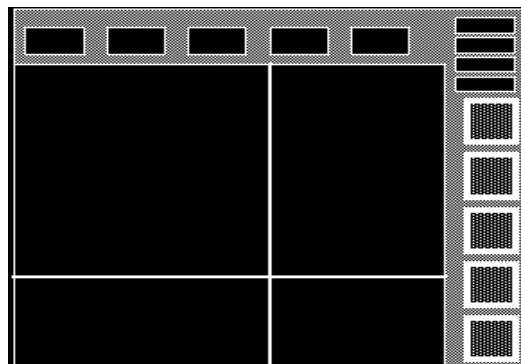
4 Product perspective

4.1 System Context



4.2 User interfaces

- 1) The extension can be clicked on by the user.
- 2) The extension can be closed by the user.
- 3) The extension offers settings that the user can choose to accommodate their preferences.
- 4) The extension allows users to fill out the file type of their choice.
- 5) The user can safely uninstall the extension.
- 6) It is required that the system allows users to save work-in-progress.
- 7) It is required that the system allows users to edit previous forms.
- 8) It is required that the system is capable of displaying error messages.
- 9) It is required that the user can view forms previously entered by the user into the extension.
- 10) It is required that the user can input information to be used by the system.



4.3 Software interfaces

- 1) Google Chrome Browser is required.
- 2) Chrome Storage API - Used to store and retrieve, will store data locally within Chrome.
- 3) JavaScript - For HTML manipulation and JSON files.
- 4) Manifest v3 Compliance - The Chrome Extension security model. All data handling, external APIs, and storage must comply with Google Chrome's guidelines.

4.4 Deployment requirements

- 1) The system will be operating on the most recent version of the Google Chrome browser on Windows.
- 2) The Chrome Storage API will be used to store and retrieve user data.

5 Assumptions and Dependencies

- 1) We expect the user to have the Google Chrome browser on their device.
- 2) We expect the user to accurately fill out data fields.
- 3) We expect the user to be able to download a Google Chrome extension.
- 4) We expect the user to know how to navigate an extension by clicking on it to open and to follow the tutorial.

6 Specific requirements

6.1 System Functional Requirements

- R1. As a job seeker, I want the Chrome extension to automatically fill in my personal information (such as name, contact information) on job portals, so that I can save time and avoid repeatedly typing the same details.
- R2. As a job seeker, I want a dashboard that tracks all my job applications, so that I can easily manage and follow up on each one without losing track of its status.
- R3. As a job seeker, I want the extension to automatically fill in my work history on job portals based on my resume, so that I don't have to manually enter the same information repeatedly.

6.2 Logical Database Requirements

- User Data: The user's basic information, such as their login credentials and settings, will be stored securely through a Google account login. This authentication method eliminates the need for complex password management or encryption protocols. By leveraging Google's existing authentication system, we ensure that users can access their data safely and efficiently without storing sensitive information like passwords or social security numbers.

- Resume Information: Once the user uploads their resume, the extension will parse it and extract relevant fields such as name, email, phone number, work experience, and education. This parsed data will be stored locally for use in future job applications, eliminating the need for repeated uploads. The extracted data will also be used to autofill the required fields on job portals. The information will be stored in a simple table format within the local storage, and users can edit or update this data as needed.

- Job Application Tracking: The extension will maintain a record of job applications submitted through the system. This tracking feature will store details such as the platform (e.g., Workday), job title, submission date, application status (e.g., Applied, Interview Scheduled), and any user-added notes. Each job application will be linked to the user's data so that users can track their job hunt across multiple portals.

Entity Relationships:

- A single user can upload and parse multiple resumes, but only one resume is active at a time.
- Each job application is associated with one user and linked to one resume.
- Job application data is independent of the resume file itself but relies on the data extracted from the resume for autofill purposes.

6.3 Software System Attributes

6.3.1 Usability

- The design will focus on reducing the number of steps needed to complete a task, ensuring that users can get from resume upload to job application submission within 5 minutes.
- To assess usability, the extension's effectiveness will be evaluated by determining if users can submit an application with no more than 2 errors occurring.

6.3.2 Performance

- The program should be able to support a reasonable load of approximately 500 users at any given time.
- Each user's application process should be quick and responsive, with auto filling of job application forms occurring in less than 2 seconds.
- The program will also be expected to handle up to 50 job applications per user, storing relevant information locally.

6.3.3 Reliability/Dependability

- The program must operate with a 95% uptime.

6.3.4 Security

- User authentication will be done by having users log into their Google accounts before they can use the extension.
- The extension will store minimal personal information, such as resume data and job application statuses, locally within the user's browser. No sensitive information, such as social security numbers, financial data, or passwords, will be stored

6.3.5 Maintainability

- The codebase will be organized into distinct sections, with separate functions for autofill, job application tracking, and user authentication. This modularity will allow the development team to easily add new features, such as support for additional job portals or more advanced tracking capabilities, without needing to overhaul the entire system.
- All major components of the extension will be clearly documented to facilitate future maintenance