

Software Requirement Specification(SRS):
Placement Assistance Software

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1. Introduction:

1.1 Purpose

The purpose of this document is to outline the requirements and specifications for the development of the Placement Assistant software. This software aims to assist engineering students in managing their job placement process effectively.

1.2 Scope

The Placement Assistant software will provide features to help engineering students organize their job search, track application statuses, and prepare for interviews. It will serve as a centralized tool to simplify the placement process.

2. OVERALL DESCRIPTION:

2.1 Product Perspective

The Placement Assistant software will be a standalone application that runs on Windows, macOS, and Linux platforms. It will not require any external connections to function but may allow importing/exporting data from/to external files.

2.2 User Classes and Characteristics

The software will primarily target engineering students seeking job placements. Users should have basic computer literacy.

2.3 Operating Environment

The software will run on common operating systems, including Windows 10, macOS 10.13+, and popular Linux distributions.

2.4 Design and Implementation Constraints

The software will be developed using Python with a suitable GUI library for the user interface. It should follow good coding practices and adhere to user-friendly UI design principles.

3.Functional Requirements:

R.3.1 Enroll Student

Description: The system shall allow administrators to enroll students. Students should provide their personal information, academic records, and career preferences during enrollment. Each student shall have a unique identifier.

Input:

Student's personal information (name, email, contact details).

Academic records (transcripts, GPA, courses completed).

Career preferences (desired job roles, industries, locations).

Any other relevant details (skills, certifications, etc.).

Output:

Student's unique identifier (ID) generated by the system.

A confirmation message indicating successful enrollment.

User account credentials (username and password) for future login.

R.3.2 Enroll Company

Description: The system shall allow administrators to enroll companies. Companies shall provide their company details, job openings, and recruitment preferences during enrollment. Each company shall have a unique identifier.

Input:

Company details (name, industry, location).

Job openings (positions, job descriptions, qualifications, application deadlines).

Recruitment preferences (desired qualifications, experience levels, etc.).

Output:

Company's unique identifier (ID) generated by the system.

Confirmation message indicating successful enrollment.

User account credentials (username and password) for future login.

R.3.3 Submit CV

Description: Students shall be able to submit their CVs through the system. The CV submission shall include personal information, education history, work experience, and other relevant details. CVs shall be stored securely and associated with the respective student's profile.

Input:

Student's Curriculum Vitae (CV) containing personal and professional details.

Output:

CV stored securely in the system database, associated with the student's profile.

Confirmation message indicating successful CV submission.

R.3.4 Notify Job Requirements

Description: Companies shall be able to post job requirements, including job descriptions, qualifications, and application deadlines. The system shall notify students of new job requirements that match their profiles.

Input:

Job requirements posted by companies.

Output:

Notifications sent to students who match the job requirements.

Job requirements displayed in the student's dashboard.

R.3.5 Send Matching CV

Description: When a student applies for a job, the system shall send the matching CVs to the corresponding company. Companies shall have access to view and assess the submitted CVs.

Input:

Student applications for specific job openings.

Access to student CVs.

Output:

Matching CVs sent to the corresponding company for evaluation.

Confirmation message indicating successful transmission.

R.3.6 Notify Job Offer

Description: Companies shall be able to make job offers to selected students through the system. The system shall notify students of job offers via email or in-app notifications.

Input:

Job offers made by companies to selected students.

Output:

Notifications sent to students who receive job offers.

Job offers displayed in the student's dashboard.

R.3.7 Company Feedback

Description: After the recruitment process is complete, companies shall be able to provide feedback on the selected students. Feedback may include comments on the student's performance during interviews or other relevant information.

Input:

Feedback from companies regarding the recruitment process and selected students.

Company identifier (ID) for tracking feedback.

Output:

Feedback data stored in the system's database.

Confirmation message indicating successful submission of feedback.

R.3.8 Student Feedback

Description: Students shall have the option to provide feedback on their placement experience and the company they were placed in. Feedback may include comments on the company's recruitment process, work environment, and overall satisfaction.

Input:

Feedback from students regarding their placement experience and the company they were placed in.

Student identifier (ID) for tracking feedback.

Output:

Feedback data stored in the system's database.

Confirmation message indicating successful submission of feedback.

4. Non-Functional Requirements

The non-functional requirements capture those requirements of the customer that cannot be expressed as functions (i.e., accepting input data and producing output data).

The Non-functional Requirements are:

4.1 User Interface

The UI should be intuitive and easy to navigate.

The UI should follow a modern design language.

The UI should be responsive on different screen sizes.

4.2 Performance

The software should respond promptly to user interactions.

Searches and data retrieval should be efficient, even with a large dataset.

4.3 Security

User passwords should be securely stored using encryption.

User data should be protected from unauthorized access.

4.4 Compatibility

The software should function smoothly on different operating systems and browsers.

4.5 User Documentation The software will come with comprehensive user documentation that includes installation, instructions, user guides, and troubleshooting information.

4.6 Reliability

The software shall have a high level of availability and reliability, ensuring minimal downtime during the critical phase of the placement process.

5. Design and Implementation Constraint:

5.1 Budget Constraints

The project may have a predefined budget, which limits the resources available for development, including personnel, technology, and infrastructure. The SRS should outline the budgetary constraints and guide decision-making accordingly.

5.2 Technology Stack

Constraints related to the technology stack can include restrictions on the programming languages, frameworks, or platforms that must be used or avoided due to organizational preferences or existing infrastructure.

5.3 Data Privacy and Security

Constraints regarding the protection of sensitive data are crucial. The SRS should specify how data will be encrypted, stored securely, and accessed only by authorized personnel.

6. Conclusion

This Software Requirement Specification (SRS) outlines the functional and non-functional requirements for the Placement Assistant Software. It is intended to guide the development team in building a robust and user-friendly platform to streamline the placement process for students and companies.