Software Requirements Specification (SRS) Document

Project Title: Training and Placement Management / ERP System

1. Introduction

1.1 Purpose This document specifies the software requirements for the development of a comprehensive Training and Placement ERP system aimed at automating and streamlining campus placement processes for educational institutions.

1.2 Intended Audience

- Developers

- Project Managers

- Stakeholders (Admin, Co-ordinators, Students, Recruiters)

- QA/Testers

1.3 Scope The system will serve as a central platform with multiple user roles to manage student profiles, training schedules, placement activities, and communication between students and college placement staff.

1.4 Definitions and Acronyms

- ERP: Enterprise Resource Planning

- LOR: Letter of Recommendation

- PLI: Pre-Placement Interview

2. Overall Description

2.1 Product Perspective The ERP system will be a web-based application with role-based access to features for Admins, Students, Co-Ordinators, and optionally Recruiters.

2.2 User Classes and Characteristics

- **Admin:** Full control of the application, user management, system settings.

- **Co-Ordinator:** Manages training content, student data, placement activities.

- **Student:** Manages own profile, job applications, resumes, requests LORs.

- **Recruiter (Optional):** Access to student resumes, interview scheduling.

2.3 Operating Environment

- Web browser-based interface

- Hosted on institutional server or cloud

- Responsive across devices (PCs, tablets, smartphones)

2.4 Design and Implementation Constraints

- Secure login and data encryption

- Scalable to handle large student data

- Integration with institutional email system for notifications

3. System Features

3.1 Authentication & User Management

- Self-registration and admin-based account creation for students and co-ordinators

- Default email as username, password change on first login

- Role-based access control

3.2 Student Module

Profile Management:

- Personal, academic, and resume-like data fields

- Upload resume (PDF, multiple versions)

- Projects (with GitHub and Live Demo links)

- Skills and Certifications (with links)

- Interest Tags/Domains

Letter of Recommendation (LOR):

- Form with: purpose, target, date required, remarks

- Track request status: Pending/Approved/Rejected

Dashboard:

- Overview of upcoming interviews, events, test results, LOR status

- Calendar view

Job Application:

- View eligible jobs by category (CAT 1, 2, 3)

- Apply to job roles within eligibility

Notifications & Alerts:

- For interviews, training, deadlines, test results

- Auto-sync with calendar

3.3 Co-Ordinator Module

Training Material Management:

- Upload/manage videos, PDFs, slides

- Monitor student engagement

Mock Tests & Attendance:

- Upload results and attendance records

Activity Scheduling:

- Schedule events added to calendar with alerts

Placement Management:

- Post company info: role, description, eligibility

- Track student registration per company

- Schedule interviews

- Post results (Aptitude, DSA, Interview)

Announcements & Notices:

- Global or category-based visibility

Student Feedback Handling:

- Query system for students to post and receive responses

3.4 Admin Module

User and System Management:

- Create/edit/delete users

- Password resets

- Enable recruiter access

- Upload bulk student lists (auto-create accounts)

Feature Customization:

- Add new fields/features

- Mandatory categorization (Placement, Placement + PLI, Higher Studies)

Monitoring & Audit:

- Logs for all roles

- Analytics on placements, test scores, applications

3.5 Recruiter Module (Optional)

- Limited access to view student profiles

- Resume and project link access

- Interview scheduling

- Post job roles directly

- Download applicant lists

3.6 Calendar & Notification System

- Auto-alerts for all user roles

- Calendar integration for schedules and deadlines

4. Non-Functional Requirements

4.1 Performance Requirements

- System must support concurrent logins

- Load time < 3 seconds for most pages

4.2 Security Requirements

- Role-based access

- Encrypted passwords

- Secure data transmission

4.3 Usability Requirements

- User-friendly dashboards

- Mobile responsiveness

4.4 Maintainability and Scalability

- Modular architecture for easy updates

- Scalable DB design for increasing users/data