

Project Report: Elevate Job Portal

Introduction

The **Elevate Job Portal** is a web-based platform designed to bridge the gap between job seekers and employers. In today's competitive job market, both employers and applicants face challenges in the recruitment process. Employers need an organized way to post jobs, track applicants, and manage the hiring process, while applicants need a simple platform to search for jobs and submit applications.

This project provides a **role-based system** where employers can post jobs, view applicants, approve or reject applications, and manage their job postings. Applicants can register, view available jobs, and apply for suitable positions. The application is built using **Spring Boot** for backend, **Thymeleaf** for frontend, and **MySQL** for data management. The project demonstrates full-stack web development principles, integrating front-end UI, backend logic, and database operations.

Abstract

The Elevate Job Portal automates and streamlines the recruitment workflow. It eliminates manual processes, reduces paperwork, and provides a user-friendly interface for both employers and applicants. The key objectives of the project include:

- **Efficient Job Management:** Employers can add, edit, or delete jobs.
- **Applicant Tracking:** Employers can view applicants for each job and update their application status (approved/rejected).
- **Role-based Authentication:** Ensures secure access for both employers and applicants.
- **Responsive UI:** Frontend is designed with Thymeleaf and CSS to provide a clean, intuitive interface.
- **Data Persistence:** MySQL database stores all job postings, user credentials, and application details.

The portal enhances transparency in the hiring process and ensures that both employers and applicants have a seamless experience.

Tools Used

- **Programming Languages:** Java, HTML, CSS, JavaScript
- **Frameworks & Libraries:** Spring Boot, Thymeleaf
- **Database:** MySQL
- **Version Control:** Git, GitHub
- **IDE & Tools:** IntelliJ IDEA, Postman, Web Browser

Steps Involved in Building the Project

Requirement Analysis

- Identified core functionalities for both employers and applicants.
- Defined user roles, access permissions, and key operations such as posting jobs and applying for jobs.

Database Design

- Designed tables for User, Job, and Application.
- Established relationships: One employer → Many jobs; One job → Many applications.
- Ensured data integrity using primary keys, foreign keys, and constraints.

Backend Development

- Configured **Spring Boot** project with dependencies for web, JPA, and MySQL.
- Developed entities, repositories, and services for User, Job, and Application.
- Implemented **role-based authentication** and secured routes for employers and applicants.

Frontend Development

- Designed responsive UI using **Thymeleaf templates** and **CSS styling**.
- Created pages for login, registration, job listing, posting new jobs, and viewing applicants.
- Added buttons, forms, and tables to make user interaction intuitive.

Integration

- Connected frontend forms to backend controllers.
- Ensured that job creation, application submission, and status updates reflect immediately in the database.

Testing & Debugging

- Tested all functionalities: user registration, login, job posting, application, approval, and rejection.
- Verified data consistency in MySQL database.
- Debugged UI issues such as form alignment, button functionality, and error messages.

Deployment & Version Control

- Managed project versions using **Git**.
- Hosted repository on **GitHub** for collaboration and backup.

Conclusion

The **Elevate Job Portal** demonstrates a comprehensive full-stack development approach integrating backend, frontend, and database management. It provides a **robust solution for employers to manage job postings and track applicants**, and a **user-friendly interface for applicants to apply for jobs**.

The project can be extended with additional features such as:

- Resume uploads and document management for applicants.
- Email notifications for application status updates.
- Advanced search and filtering options for jobs.
- Analytics dashboard for employers to track application statistics.

Overall, this project strengthens skills in **Java, Spring Boot, Thymeleaf, MySQL, and full-stack development**, while providing a practical solution for the recruitment process.