Job Portal System - Project Report

Introduction

The Job Portal System is a web-based application developed as part of an internship project. The main objective of the project is to create a platform where employers can post job opportunities and applicants can search and apply for jobs. The system provides role-based functionalities for employers and applicants, with secure login and data management.

Abstract

This project implements a Job Portal System using Java, Spring Boot, MySQL, and Thymeleaf. Employers can post and manage job listings, while applicants can browse available jobs, apply, and track their application status. The system uses Spring Security for authentication and authorization, and MySQL for data storage. Additional features include job search and filtering.

Tools Used

1. Java – Programming language for backend development.
2. Spring Boot – Framework for building the web application.
3. MySQL – Database to store users, jobs, and applications.
4. Thymeleaf – Template engine for building the frontend.
5. Spring Security – For authentication and role-based access control.
6. Maven – For dependency management and project build.

Steps Involved in Building the Project

1. **Requirement Analysis** – Identified roles (employer, applicant) and their functionalities.
2. **Database Design** – Created schema with tables for users, jobs, and applications.
3. **Backend Development** – Implemented business logic using Java and Spring Boot.
4. **Authentication & Security** – Configured Spring Security for login and registration.
5. **Frontend Development** – Developed UI using Thymeleaf templates.
6. **Job Posting & Application Module** – Employers can post jobs, and applicants can apply.
7. **Search & Filtering** – Added job search features based on title, location, and skills.
8. **Testing & Deployment** – Performed testing using JUnit and Postman, and prepared deployment files.

Conclusion

The Job Portal System successfully demonstrates the implementation of a real-world web application using Java and Spring Boot. It provides secure authentication, role-based functionalities, and a structured database design. This project enhanced my understanding of full-stack development, security integration, and database management. In the future, additional features such as resume parsing, AI-based job recommendations, and third-party login integration can be added to make the system more robust and user-friendly.