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Job Portal with Resume Analyzer - Modular Breakdown

This report divides the Job Portal with Resume Analyzer project into 5 detailed modules. Each module has been explained with responsibilities, components, and graphical representation where applicable. The aim is to create a structured roadmap for implementation and evaluation.

Module 1: Admin Panel

The Admin Panel acts as the central management system of the portal. It provides control over users, job postings, and system analytics. - User Management: Create, suspend, and monitor user activities. - Job Oversight: Approve/Reject postings, ensure compliance. - Security & Audit: Track logs and prevent misuse. - Analytics: Generate statistical reports on usage.

Module 2: Job Seeker Portal

The Job Seeker Portal simplifies the career search process and gives personalized recommendations. - Profile & Resume Upload: Supports multiple formats. - Resume Parsing: Extracts skills, experience, and education. - Job Recommendations: AI-based tailored job suggestions. - Application Tracking: Track progress of submitted applications. - Dashboard: View saved jobs, recommendations, and updates.

Module 3: Recruiter Portal

The Recruiter Portal streamlines hiring workflows for recruiters and HR teams. - Job Posting: Post and manage job listings. - Candidate Matching: View AI-ranked candidate lists. - Filtering: Search based on skills, experience, or location. - Communication Tools: Message or invite candidates. - Hiring Dashboard: Track hiring pipeline and job statuses.

Module 4: Resume Matcher (AI Component)

This module is the core AI-driven component ensuring precise candidate-job alignment. - Resume Parsing: NLP-based data extraction. - Matching Algorithm: Ranks resumes against job descriptions. - Scoring System: Generates match scores. - Continuous Learning: Improves over time with recruiter feedback.

Module 5: Database & Backend Integration

This module integrates the technical backbone ensuring scalability, security, and modularity. - Backend: Spring Boot APIs for secure authentication and CRUD operations. - ORM: Hibernate for smooth DB interaction. - Database: MongoDB for semi-structured data like resumes. - Frontend Integration: React-based role-specific dashboards. - Scalability: Handles large datasets and AI queries efficiently.

Graphical Representation of Modules

Module	Focus Area
Admin Panel	User & system management
Job Seeker Portal	Profiles, parsing & recommendations
Recruiter Portal	Job posting & candidate filtering
Resume Matcher	AI-based parsing & scoring
Database & Backend	System backbone & integrations

This modular division ensures clarity in development and role-specific responsibilities. Each module can be developed, tested, and deployed independently while maintaining integration with the overall system. The modular structure also enhances scalability and maintainability, making the project future-proof.