

Recruitment Automation Portal

By Md Zameer | Email: b200926@rgukt.ac.in

1. Problem Statement

Recruiters spend excessive time manually screening resumes, coordinating interviews across multiple channels (email, WhatsApp, Sheets), and consolidating interviewer feedback. This results in slow hiring cycles, candidate drop-offs, and lack of visibility into the pipeline.

2. Proposed Solution

A lightweight web application that automates resume parsing, candidate ranking, interview scheduling, and feedback collection - all in one platform with minimal external dependencies.

Key Features:

- * Resume parsing and auto-scoring based on job criteria
- * Candidate pipeline tracking (Applied -> Tech -> HR -> Offer)
- * In-app scheduling and notifications (ICS invites + reminders)
- * Interviewer feedback forms with automated scoring
- * Recruiter dashboard showing hiring metrics and CSV export

This solution replaces fragmented tools (Google Forms, Sheets, emails) with a unified workflow, improving hiring efficiency and reducing manual errors.

3. Differentiator

- * End-to-end automation within a single app (no third-party SaaS)
- * Rule-based matching engine for configurable scoring
- * Simple, scalable, and cloud-deployable with minimal cost

4. Tech Stack and Architecture

- * Backend: Node.js + Express (or Spring Boot)
- * Database: PostgreSQL
- * Frontend: React.js
- * Resume Parsing: pdf-to-text + regex + basic NLP
- * Deployment: Docker on AWS Lightsail or DigitalOcean VPS

5. 4-Week Implementation Timeline

- * Week 1: Requirements, database schema, file upload and recruiter auth setup
- * Week 2: Resume parsing, scoring engine, candidate list and filters
- * Week 3: Interview scheduling, notifications, feedback form integration
- * Week 4: Dashboard, export templates, QA, deployment and documentation

6. Outcome and Impact

This project will help recruitment companies operate faster, smarter, and with higher accuracy by automating repetitive tasks and improving communication between HR and candidates. It will serve as a scalable tech-based hiring accelerator for modern recruitment workflows.