

Smart Recruiter HR – Project Report

1. Project Title

Smart Recruiter HR – Web-based Recruitment Prototype

2. Problem Statement

Recruitment is often a time-consuming and inefficient process for both job seekers and recruiters. Job seekers struggle to find opportunities that match their skills and often apply randomly, which lowers their chances of selection. Recruiters receive hundreds of applications for each role, making it difficult to identify the right candidates quickly. There is no simple system that effectively connects candidates and recruiters using standardised, skill-based metrics such as AMCAT scores.

This leads to a mismatch between candidate skills and job requirements, wasted time for both recruiters and applicants, and reduced chances of finding the right fit.

3. Solution

The Smart Recruiter HR system provides a web-based platform that connects job seekers and recruiters in an efficient way. Job seekers can register, explore career opportunities, and apply for jobs using their AMCAT scores and skill profiles. Recruiters can access a dashboard to review applications and shortlist suitable candidates quickly. The system also allows candidates to track the status of their applications in one place.

By using a structured scoring system and a centralized application dashboard, the solution reduces mismatches, saves time, and increases the chances of successful hiring for both candidates and recruiters.

4. Prototype

The prototype is a functional web application developed using HTML, CSS, JavaScript for frontend and Node.js for backend. It demonstrates the core features of the Smart Recruiter HR system.

Key Features:

1. **Home Page:** Introduction, company information, benefits of the platform, hero section with images and buttons.
2. **Careers Page:** Lists available job opportunities with basic details (role, location, skills).
3. **Apply Page:** Interactive application form to submit candidate details and resumes.
4. **Dashboard Page:** Displays submitted applications and their statuses, simulating a real-time dashboard.

Purpose of Prototype:

- Validate the concept of the platform.

- Collect user feedback.
- Demonstrate navigation, form submission, and dashboard updates.

Future Enhancements:

- Backend database integration for permanent storage.
- User authentication for security.
- OpenAI API integration for AI-driven resume analysis and job matching.
- Cloud deployment for scalability.

5. Feasibility Plan

The project will be executed in phases:

1. **Prototype Phase:** Build the basic web application with HTML, CSS, JavaScript, and Node.js. Store applications using local storage for demonstration.
2. **Database Integration:** Implement MongoDB/MySQL to handle larger user data.
3. **Security Measures:** Add user authentication and data encryption.
4. **AI Integration:** Use OpenAI APIs for resume parsing, recommendations, and communication automation.
5. **Deployment:** Host on cloud platforms like AWS, Azure, or Google Cloud for accessibility and scalability.

6. Use of OpenAI APIs

OpenAI APIs will be integrated to enhance the platform with artificial intelligence:

- Analyse resumes and extract key skills.
- Provide personalised job recommendations.
- Automate candidate communication (emails, interview tips).
- Suggest improvements to resumes or profiles.

This makes the system smarter and improves the hiring experience for both candidates and recruiters.