

Campus Placement Management System For Recruiters And Students

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Abstract – This paper presents a role-based job portal system designed to streamline the campus recruitment process by providing tailored dashboards, features, and functionalities for both students and recruiters. The platform ensures seamless authentication, profile management, job application, job posting, and real-time tracking through RESTful API integrations. By leveraging responsive design, dynamic rolebased navigation, and visual application progress tracking, the enhances user experience, reduces system manual coordination, and increases transparency between applicants and recruiters. The project serves educational institutions and recruitment platforms seeking scalable, user-centric solutions for student placement. Keywords include job portal, student dashboard, recruiter module, REST API integration, role-based routing, and recruitment system.

Key Words: job portal, student recruitment, recruiter dashboard, web application, application tracking, responsive system

1.INTRODUCTION

The digitization of campus placement systems is vital in modern academic and recruitment environments. Traditional processes for handling job applications, recruiter-student interactions, and resume management are often manual, fragmented, and inefficient. This paper introduces a web-based Role-Based Job Portal that categorically differentiates functionalities between student users and recruiter users.

The proposed portal offers personalized dashboards based on the user's role, enabling them to access only relevant data and features. With the rise of placement cells in educational institutions and the increase in volume of applicants for a given job, a dynamic system that manages application lifecycles, recruiter-job postings, and student profile updates has become indispensable. The system also enhances collaboration between students and recruiters, making it easier to manage bulk applications, track job performance, and maintain studentrecruiter interaction records.

2. SYSTEM OVERVIEW

The system architecture is designed as a modular full-stack web application using React.js for the frontend, Node.js and Express for backend services, and MongoDB for data persistence. The core functionality is segregated into role-based modules, offering a clear separation of concerns between students and recruiters.

The portal features secure user registration and login functionality. During registration, users specify their role as either student or recruiter. Post-login, the system authenticates the user and redirects them to their respective dashboards. Role-based routing logic ensures that users cannot access unauthorized pages or features. The navbar also dynamically adapts to show relevant links, such as "My Applications" for students or "Posted Jobs" for recruiters. Role-based navigation guarantees data integrity, minimizes data exposure, and enhances overall user experience through efficient design principles.

3. STUDENT MODULE

3.1 Student Dashboard

The dashboard provides a real-time summary of key metrics, including:

- Total jobs applied for
- Applications shortlisted
- Pending applications

The dashboard is visually enriched with counters, graphs, and a filterable job list to ensure usability and quick navigation. The design considers accessibility and performance, ensuring that students can interact seamlessly even on low-resource devices.

Track Applications	Edit Profile	Notifications
Applications Total submitted 2	Pending Under rosiew 1	Shortlisted Selected for next round O
My Applications		View
hhbhijihihibih Test Company (60 teo) (ink) Selay rédeletik nikeletik		Suttus Pending Applied on 12/02/02 Pending

Figure – 1

3.2 Application Lifecycle Tracking

Each student can view the detailed status of every job they have applied for, segmented into:

- Applied
- Reviewed
- Shortlisted
- Selected
- Rejected

A visual tracker provides an intuitive understanding of the progress of each application. This tracking system is crucial for increasing transparency and reducing student anxiety during placement seasons. Each stage change is timestamped, creating



a traceable record of recruiter decisions, beneficial for future audits and institutional reports.



Figure – 2

3.3 Profile Management

Students can update their:

- Personal details (Name, Contact Info, Photo)
- Academic history (Class, Batch, GPA, Courses)
- Technical and soft skills
- Resume link (stored via secure cloud links)

All form inputs are validated to ensure data integrity. The profile module also supports document uploads such as transcripts or certificates, which may be required by some recruiters during the selection process.

4.RECRUITER MODULE

4.1 Recruiter Dashboard

The recruiter dashboard shows:

- Total jobs posted
- Active job listings
- Number of applicants per job

Each recruiter also has access to a list of recent applications, including candidate name, email, college, and a downloadable resume link. The dashboard enables filtering and sorting applications based on multiple criteria, including CGPA, skill match, and institution.



Figure – 3

4.2 Job Management

Recruiters can:

- Post new job openings with structured forms
- Set eligibility criteria (branch, CGPA, skills, etc.)
- Edit or delete existing jobs

Job postings are indexed and searchable by students. The recruiter interface also supports draft jobs and job cloning for recurring openings.

4.3 Application Review and Status Management

Recruiters can manage the lifecycle of an application. For each applicant, recruiters can:

- View resume and profile
- Set and update application status
- Add notes or flags for internal review

Application statuses are reflected in the student dashboard in real-time. This feedback loop reduces the burden of communication and makes status tracking seamless.

5. SHARED FEATURES

5.1 Notifications

Although currently a placeholder, the system has a notification module integrated into the navbar. Future enhancements will allow push notifications for:

- Job postings
- Application updates
- Profile suggestions

Notifications will be role-sensitive and timestamped for accountability.

NOTIFICATIONS Stay updated with job postings, application statuses, and system alerts.	Mark All as Read
All 4 Unread 2 Jobs Applications System	
Net cold Pandel Control Contro	View Mark as Read
Application Status Updated Two application to Disa Analysi has been reviewed 2000000	View
Complete Your Profile Phase complete your profile to improve violating to recruitures Constant	View Mark as Read
Job Deadline Approaching The application deadline for Software Engineer Intern is tomorrow 2010/012	View

Figure – 4

5.2 Responsive UI/UX

All pages adapt to screen size using responsive layouts. The UI is tested across devices including laptops, tablets, and mobile phones to ensure optimal experience. Accessibility standards like keyboard navigation and screen reader support are considered in the design.

5.3 REST API Integration

All communication between frontend and backend is handled via a set of RESTful APIs, ensuring scalability and reusability. Each API follows standard CRUD patterns and is authenticated via session or JWT tokens. APIs are versioned to ensure backward compatibility.

5.4 Form Validation and Loading States

Each form includes inline validation for required fields. Additionally, loading indicators and disabled buttons are used during data fetches or submission processes to improve user feedback and reduce errors. The system prevents doublesubmission and shows toast notifications on success or failure.

6. FUTURE WORK

The system has been designed with modular extensibility in mind. Future enhancements may include:

• Admin Role Support: For controlling users, jobs, and analytics



- Machine Learning Recommendations: To match jobs with candidate profiles
- Interview Scheduling Integration: Calendar slots, Zoom/Meet links
- Feedback Mechanism: Recruiter ratings, interview feedback
- Analytics Dashboard: Insights into job trends, applicant behavior, and system usage metrics

7. CONCLUSIONS

The role-based job portal system is a scalable, usercentric platform that modernizes campus recruitment processes. With clear role differentiation, visual application tracking, and real-time status updates, it brings transparency and efficiency to the student–recruiter interaction. The use of a REST API architecture and responsive UI ensures a robust foundation for further feature expansion. The portal addresses real-world inefficiencies and provides a standardized digital infrastructure for future-ready institutions.

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