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ONLINE JOB PORTAL

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Abstract

The Online Job Portal is a web-based application designed to simplify and improve the process of job searching and recruitment. Traditional job-search methods require candidates to manually search through newspapers, company websites, and multiple recruitment platforms, which can be time-consuming and inefficient. The proposed system provides a centralized platform where job seekers and recruiters can interact and manage the recruitment process online.

Job seekers can register, create profiles, upload resumes, search and filter job opportunities, view job details, and apply for suitable positions. They can search for jobs based on job title, skills, location, experience, salary, and employment type. Candidates can also track their application status and receive notifications about job updates.

Recruiters can register on the platform, create and manage job postings, specify required qualifications and skills, view candidate applications, and shortlist suitable applicants. The system maintains job postings, candidate profiles, applications, and recruitment information in a centralized database.

An administrator module allows authorized administrators to manage users, recruiters, job categories, job postings, applications, and system activities. The system can also provide notifications and basic recruitment reports to improve communication and management.

I. Introduction

The Online Job Portal is a web-based application developed to provide a centralized platform for job seekers and recruiters to connect with each other. In traditional job-search methods, candidates often depend on newspapers, company websites, recruitment agencies, and personal contacts to find suitable employment opportunities. Searching through multiple sources can be time-consuming and may make it difficult for candidates to identify relevant job openings.

The proposed system allows job seekers to register, create profiles, upload resumes, search for jobs, and apply for suitable positions online. Candidates can search and filter job opportunities based on factors such as job title, skills, location, experience, salary, and employment type. They can view complete job descriptions before applying and track the status of their submitted applications.

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Recruiters can use the platform to register, create job postings, specify required qualifications and skills, view applications, and shortlist suitable candidates. This provides organizations with a convenient way to publish vacancies and manage applications through a single platform.

The system maintains important information such as candidate profiles, recruiter details, job postings, applications, job categories, and application status in a centralized database. This makes information easier to manage and reduces the need for manual record keeping. The system can also provide notifications about new job postings, application updates, and recruitment activities.

II. Literature Survey

The Online Job Portal is developed based on research and advancements in web-based recruitment, employment information systems, applicant tracking, and digital job-search platforms. Traditional recruitment methods mainly depend on newspapers, recruitment agencies, personal references, and direct communication between candidates and organizations. These approaches can be time-consuming and provide limited access to employment opportunities. Online recruitment platforms were introduced to overcome these limitations by providing centralized access to job vacancies and candidate information.

Early online job portals primarily focused on publishing job vacancies and allowing candidates to search and apply for available positions. These systems provided basic features such as user registration, job posting, job searching, resume uploading, and application submission. Such platforms reduced the dependence on physical advertisements and made job opportunities accessible to a larger number of candidates.

Research on Applicant Tracking Systems (ATS) introduced additional facilities for recruiters to manage candidate applications electronically. ATS-based systems allow organizations to store resumes, track applications, manage candidate information, and monitor recruitment stages. These systems improve recruitment organization but may still require recruiters to manually review a large number of resumes.

Job-search and filtering mechanisms have also been widely studied. Candidates can filter vacancies using parameters such as job title, skills, location, experience, salary, and employment type. These search facilities make it easier to identify relevant jobs, although simple keyword-based searching may sometimes return irrelevant results or fail to identify opportunities described using different terminology.

Another important research area is job recommendation systems. Recommendation techniques can analyze candidate profiles, previous searches, applications, skills, and preferences to suggest relevant employment opportunities. Content-based recommendation can compare candidate characteristics with job requirements, while collaborative approaches can use user interaction and historical application behavior to generate recommendations.

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Natural Language Processing (NLP) has increasingly been applied to recruitment systems for processing resumes and job descriptions. NLP techniques can extract information such as skills, educational qualifications, job titles, certifications, and work experience from unstructured documents. This extracted information can be used to improve candidate searching and job matching.

Research has also explored machine-learning-based candidate matching. Machine-learning models can compare candidate profiles with job requirements and calculate suitability scores. Such approaches can help recruiters identify potentially relevant candidates more quickly and reduce the manual effort involved in initial screening.

Modern job portals also provide application tracking and notification systems. Candidates can view the status of submitted applications, while recruiters can manage applications through different stages such as received, shortlisted, interviewed, selected, or rejected. Automated notifications can improve communication between candidates and recruiters and reduce the need for repeated manual follow-ups.

III. System Analysis

System analysis is an important stage in developing the Online Job Portal. The system is designed to connect job seekers and recruiters through a centralized online platform. Job seekers can register and create profiles containing their education, skills, experience, certifications, and career preferences. Recruiters can register and create job postings with details such as job title, required skills, qualifications, experience, salary, and location. The system allows candidates to search for jobs using different filters and view complete job descriptions. Candidates can upload resumes and apply for suitable job opportunities through the platform. The system stores candidate, recruiter, job, and application information in a centralized database. Candidates can track their application status through their personal dashboard. Recruiters can view applications, manage candidate information, and shortlist suitable applicants. Notifications can inform users about new jobs, application updates, and recruitment activities. Administrators can manage users, recruiters, job categories, job postings, and applications. Overall, system analysis defines the functional and technical requirements needed to develop an efficient online recruitment platform.

Existing System

In the existing system, job seekers commonly search for employment opportunities through newspapers, company websites, recruitment agencies, social media, and different online job portals. Candidates often need to visit multiple platforms to find suitable job openings, which can consume considerable time. Traditional job portals mainly provide basic job searching, filtering, and application facilities. Candidates may receive a large number of job postings that are not relevant to their skills or qualifications. Recruiters often need to manually review a large number of resumes and applications to identify suitable candidates. Basic keyword-based searching may fail when similar skills are represented using different terms. Application tracking may also depend on emails, telephone calls, or separate recruitment software. Some systems provide limited communication between candidates and recruiters. Candidates may

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have difficulty knowing whether their applications have been viewed or shortlisted. Recruiters may also face difficulties managing large numbers of job postings and applications efficiently. Existing systems may provide limited personalized recommendations and recruitment analytics. Therefore, an improved online job portal is required to provide better job management and recruitment services.

Disadvantages of Existing System

- Requires considerable manual job searching.
- Candidates may need to use multiple platforms.
- Large numbers of irrelevant job postings may appear.
- Limited personalized job recommendations.
- Heavy dependence on keyword-based searching.
- May overlook relevant candidates or job opportunities.
- Manual resume screening is time-consuming.
- Difficult to manage a large number of applications.
- Limited communication between candidates and recruiters.
- Application tracking may be inefficient.
- Limited recruitment analytics and reporting.
- Higher workload for recruiters.

Proposed System

The proposed Online Job Portal provides a centralized platform for job seekers and recruiters to manage the complete recruitment process. Job seekers can register and create detailed profiles containing education, skills, experience, certifications, projects, and career preferences. They can upload resumes and search for job opportunities using filters such as job title, skills, location, experience, salary, and employment type. Recruiters can create job postings and provide complete information about job requirements and responsibilities. The system allows candidates to view job descriptions and apply for suitable positions online. Candidate applications and recruitment information are stored securely in a centralized database. Candidates can track their application status and receive notifications about important updates. Recruiters can view applications, examine candidate profiles, shortlist applicants, and manage recruitment activities. The system can also provide basic matching or recommendation features based on candidate skills and job requirements. Administrators can manage users, recruiters, job categories, job postings, and applications through an administrative dashboard. The platform provides a simple and responsive interface that can be accessed from different devices. Overall, the proposed system makes job searching and recruitment more organized, convenient, and efficient.

Advantages of Proposed System

- Provides centralized job searching.
- Allows candidates to apply online.
- Supports resume uploading and management.
- Provides advanced job search and filtering.
- Reduces manual recruitment effort.

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- Provides application status tracking.
- Helps recruiters manage job postings efficiently.
- Centralizes candidate and application information.
- Improves communication through notifications.
- Supports candidate-job matching.
- Provides administrative management.
- Can be enhanced with AI-based recommendations.

IV. Methodology

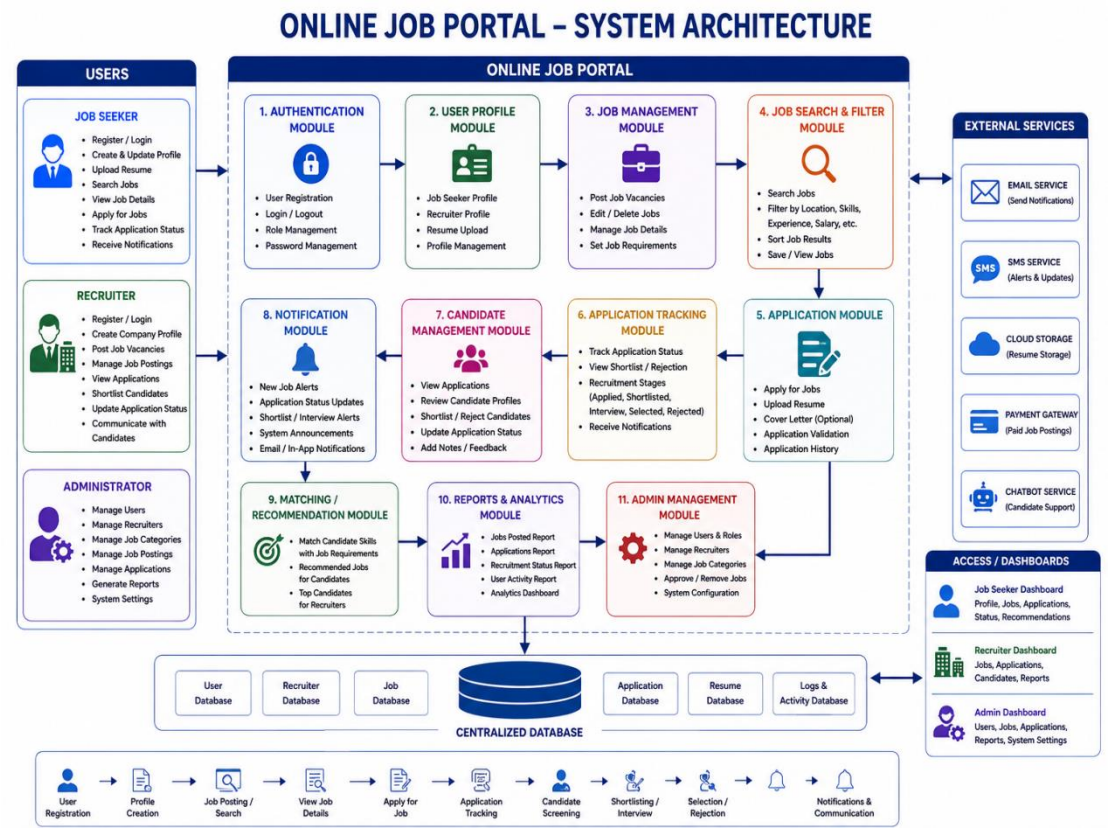
The methodology begins with identifying the requirements of job seekers, recruiters, and administrators. Job seekers register on the platform and create profiles containing their personal, educational, professional, and skill-related information. Recruiters register and create job postings by specifying job titles, descriptions, required qualifications, skills, experience, salary, and location. The system stores candidate profiles and job information in a centralized database. Candidates can search and filter job postings according to their requirements. After selecting a suitable job, the candidate can view its details and submit an online application with a resume. The system validates and stores the application information and updates the candidate's application history. Recruiters can access received applications, view candidate profiles, and shortlist suitable applicants. The application status can be updated through different recruitment stages and displayed to candidates. Notifications can be generated when important application or job-related changes occur. Administrators manage users, recruiters, job categories, job postings, and applications through the admin dashboard. Finally, the system is tested for authentication, job searching, application processing, database operations, security, responsiveness, and overall usability.

System Architecture

The system architecture represents the complete flow of information between job seekers, recruiters, administrators, application modules, and the centralized database. The process begins when a Job Seeker, Recruiter, or Administrator accesses the Online Job Portal through a web-based interface. The Authentication Module verifies user credentials and provides access according to the user's role. Job seekers create profiles, upload resumes, and provide their skills, qualifications, experience, and career preferences. Recruiters create and manage job postings containing job descriptions, required skills, qualifications, salary, and location. The Job Search and Filter Module retrieves suitable job postings based on candidate search criteria. Candidates can view job details and submit applications through the Application Management Module. The system stores candidate, job, and application information in the Centralized Database. Recruiters can access applications, view candidate profiles, shortlist candidates, and update application statuses through the recruiter dashboard. The Notification Module sends alerts about new job postings, application updates, and recruitment activities. The administrator dashboard allows authorized administrators to manage users, recruiters, job categories, job postings, and applications. A Matching/Recommendation Module can compare candidate skills with job requirements and suggest relevant opportunities. The system can generate application and recruitment reports for monitoring activities. Overall, the architecture follows the workflow **User → Authentication →**

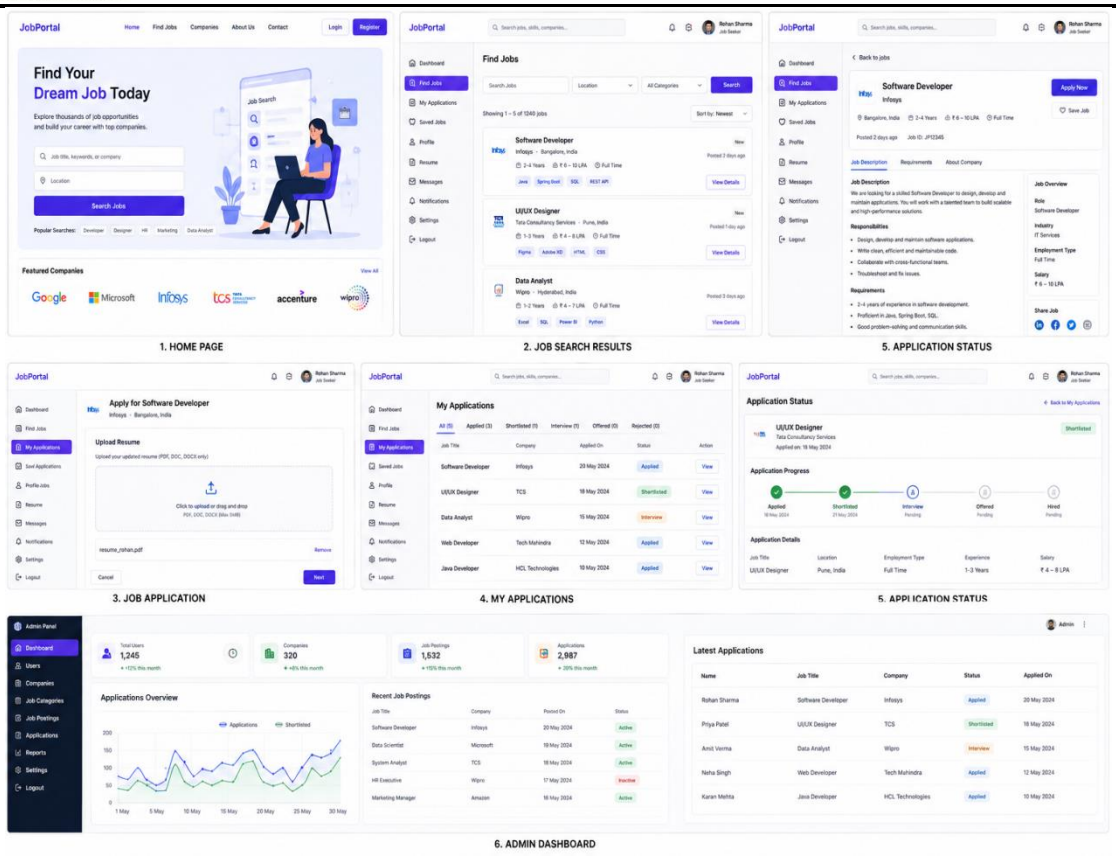
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Candidate/Recruiter Profile → Job Posting & Search → Job Details → Application → Database → Candidate Screening → Shortlisting → Notifications → Admin Management & Reports.



V. Result and Output

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VI. Conclusion

The Online Job Portal provides an efficient and user-friendly platform that connects job seekers with recruiters through a centralized digital system. The system simplifies the traditional recruitment process by allowing candidates to register, create profiles, upload resumes, search for jobs, apply online, and track application status.

Recruiters can easily create and manage job postings, view candidate applications, review profiles, shortlist suitable candidates, and update application statuses. This reduces the manual effort involved in recruitment and makes candidate management more organized.

The system also provides job search and filtering facilities, notifications, application history, and centralized data management, helping users access important recruitment information quickly. Candidates can search for opportunities based on skills, location, experience, salary, and employment type.

Overall, the proposed Online Job Portal makes the recruitment process faster, easier, accessible, and more efficient for both candidates and recruiters. It reduces paperwork, improves communication, and provides a convenient platform for managing employment opportunities.

Future enhancements can include AI-based resume screening, intelligent job recommendations, automated candidate matching, skill-gap analysis, AI chatbot

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assistance, predictive recruitment analytics, personalized career recommendations, and automated interview scheduling.

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