

AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (AUST)
141 & 142, Love Road, Tejgaon Industrial Area, Dhaka-1208.



Department of Computer Science and Engineering
Program: Bachelor of Science in Computer Science and Engineering

Project Proposal

Course No: CSE 3100

Course Title: Software Development.

Project Title: Job Tracking Application

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Submitted to

Ashek Seum

Lecturer, Department of CSE, AUST.

Sifat Rabbi

Adjunct Lecturer, Department of CSE, AUST.

Submitted by,

Name: Israt Jahan Anika

Student ID: 20210104136

Name: Arnob Das

Student ID: 20210104148

Name: Fargin Binta Anowar

Student ID: 20210104152.

Motivation:

This proposal outlines the development of a comprehensive Job Applicant Tracking System with integrated database functionality, designed to streamline and enhance the efficiency of job management and task monitoring within an organizational context. The proposed system aims to provide a user-friendly and intuitive platform for businesses to manage and track their projects, tasks, and associated resources seamlessly.

Features:

The “Job Applicant Tracking System” project is strategically designed to provide a comprehensive solution for businesses to efficiently manage job assignments and monitor project progress. This system aims to address the following key features.

1. **Efficient Job Search:** The project seeks to streamline the job-seeking process, enabling candidates to perform effective and targeted job searches. Through intuitive features and comprehensive job listings, users can easily identify relevant opportunities.
2. **Effective Job Advertising:** For job advisors, the platform aims to simplify the process of advertising job openings. The system provides tools to manage and optimize job postings, ensuring that positions reach the right audience and are presented effectively.
3. **Comprehensive Job Status Tracking:** The project focuses on creating a centralized hub for tracking all job-related activities. Job seekers can monitor the status of their applications, while job advisors gain real-time insights into posted jobs, applicants, and overall job statuses.
4. **Enhanced User Profiles:** The application prioritizes the creation and modification of user profiles, offering a personalized experience for both job seekers and advisors. Users can efficiently update their profiles to reflect skills, preferences, and relevant information.

6. Job Search: Job seekers can seamlessly search for opportunities based on specific criteria such as job title, company, salary, position, listings for a tailored experience.

7. **Frequency Calculation Integration:** Our unique Frequency Calculation feature offers insights into job popularity, assisting users in prioritizing and focusing on the most relevant opportunities.

8. Detailed Job Information: Users can access comprehensive details about each job listing, ensuring informed decision-making before applying.

Efficient Navigation: The system adapts its navigation menu based on user roles, providing a seamless experience for both job seekers and advisors.

Objective:

1. Job Seekers: Individuals actively seeking employment are fundamental stakeholders. Their user experience and satisfaction are crucial to the project's success, emphasizing the importance of aligning the system with their needs.

2. Job Advisors and Recruitment Agencies: Professionals providing job advisory services or working in recruitment agencies are vital stakeholders. Their engagement with the platform directly influences the efficiency of job advertising, applicant tracking, and overall advisory services.

3. System Developers: The development team responsible for designing, coding, and maintaining the application and database constitute key stakeholders. Their expertise ensures the delivery of a robust, functional, and reliable solution.

4. Maintenance and Support Team: A dedicated team for ongoing maintenance and support is essential. These stakeholders are responsible for ensuring the system's sustained performance, resolving issues promptly, and adapting the application to evolving needs.

5. Management and Decision-Makers: Individuals in managerial and decision-

making roles, including business owners and executives, are critical stakeholders. Their strategic decisions and support are essential for guiding the project through successful development, implementation, and long-term operation.

6. Employers and Companies: Organizations posting jobs and managing applications are important stakeholders. Their engagement with the platform influences the effectiveness of the job advertising process and the overall success of the application.

Impact:

The main impact will be on clients or users. Targeting clients for this project include:

1. Job Seekers: Individuals actively seeking employment who can benefit from a streamlined job search process, efficient application tracking, and personalized user profiles.

2. Job Advisors and Recruitment Agencies: Professionals offering job advisory services or working in recruitment agencies seeking a platform to manage and optimize job advertising, applicant tracking, and overall advisory efficiency.

3. Employers and Companies: Organizations looking for a comprehensive solution to manage their job postings, track applicants, and optimize the hiring process. This includes both large enterprises and smaller businesses.

4. Human Resources Departments: HR professionals within companies aiming to enhance their recruitment and hiring processes, gaining insights into job statuses, applicant details, and overall recruitment efficiency.

5. Freelancers and Gig Workers: Individuals in the gig economy or freelancers seeking short-term or project-based opportunities. The platform can serve as a valuable tool for discovering relevant gigs and managing applications.

6. **Career Counselors and Educators:** Professionals in career counseling or education who can utilize the platform to guide and support students or individuals in their career exploration and job application processes.

7. **Government Employment Agencies:** Public sector employment agencies interested in leveraging a digital platform for job listings, applicant tracking, and providing additional support to job seekers.

Project Potential Clients:

The "Job Applicant Tracking System" project is designed to cater to a diverse range of clients within the professional employment sector. Potential clients for this project include:

Job Seekers: Individuals actively seeking employment who can benefit from a streamlined job search process, efficient application tracking, and personalized user profiles.

Job Advisors and Recruitment Agencies: Professionals offering job advisory services or working in recruitment agencies seeking a platform to manage and optimize job advertising, applicant tracking, and overall advisory efficiency.

Employers and Companies: Organizations looking for a comprehensive solution to manage their job postings, track applicants, and optimize the hiring process. This includes both large enterprises and smaller businesses.

Human Resources Departments: HR professionals within companies aiming to enhance their recruitment and hiring processes, gaining insights into job statuses, applicant details, and overall recruitment efficiency.

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Government Employment Agencies: Public sector employment agencies interested in leveraging a digital platform for job listings, applicant tracking, and providing additional support to job seekers.

By targeting these potential clients, the "Job Applicant Tracking System" aims to meet the diverse needs of individuals, organizations, and professionals involved in the job-seeking and advisory ecosystem.

Effectiveness:

In conclusion, the "Job Applicant Tracking System" is not just a platform; it is a dynamic solution that transcends traditional job-seeking paradigms. With its intuitive design, personalized features, and innovative Frequency Calculation, our application redefines how individuals navigate the job market. As we embark on this journey, the future holds exciting possibilities for expansion and enhancement, paving the way for a holistic ecosystem that empowers both job seekers and advisors. This project is not merely a tool. It is a commitment to fostering career growth, facilitating meaningful connections, and revolutionizing the way we approach employment. Together, we are shaping the future of job tracking, one innovative feature at a time.

Project Estimated Cost:

Authentication Module: 10 hours

Homepage: 2 hours

Job Post Module: 10 hours

Job Search Module: 3 hours

Job Apply Module: 10 hours

Candidate Dashboard: 15 hours

Job Advisor Dashboard: 15 hours

Database Connections and Implementation: 10 hours

Bug Fixing: 8 hours

Deployment: 5 hours

Total Development Hours: 88 hours

Additional Timing Issues: 20 hours

Total Estimated Development Time: 108 hours

Hourly Rate: 25 USD

Development Cost: 108 hours * 25 USD = 2700 USD

Domain + Server Cost: 600 USD

Promotion Cost: 300 USD

Software Tutorial Video: 100 USD

Documentation: 100 USD

Total Development and Server Cost: 3800 USD

Depreciation Rate: 2%

Depreciation Cost: 76 USD

Other Costs: 150 USD

Final Total Cost: 3800 USD + 76 USD + 150 USD = 4026 USD

Rounded Total: 4100 USD

It's important to note that the estimated costs provided here are approximate figures and may vary based on specific project requirements and decisions made during development.

Future Works:

In the future, the “Job Applicant Tracking System” can be expanded to include additional features and capabilities to further benefit the job-seeking and advisory landscape. Some potential future works include:

1. AI-Based Job Recommendation: Explore the integration of artificial intelligence to enhance job recommendations. Utilize machine learning algorithms to analyze user preferences, skills, and historical data to provide personalized job suggestions, making the job search experience more efficient and tailored.

2. Candidate Profile-Based HR to Candidate Recommendation: Implement a feature where human resources professionals can receive tailored recommendations of potential candidates based on their job requirements and candidate profiles. This functionality aims to streamline the recruitment

process and improve the matching of candidates with job opportunities.

3. **Priority Showing with Payment** Introduce a priority showing feature allowing employers to boost the visibility of their job postings through a payment system. Employers can opt to pay for increased exposure, ensuring their job listings receive enhanced visibility and attract a wider pool of applicants. This feature provides a valuable option for organizations seeking to maximize the impact of their job advertisements.

Conclusion:

In conclusion, the "Job Applicant Tracking System" is not just a platform; it is a dynamic solution that transcends traditional job-seeking paradigms. With its intuitive design, personalized features, and innovative Frequency Calculation, our application redefines how individuals navigate the job market. As we embark on this journey, the future holds exciting possibilities for expansion and enhancement, paving the way for a holistic ecosystem that empowers both job seekers and advisors. This project is not merely a tool; it is a commitment to fostering career growth, facilitating meaningful connections, and revolutionizing the way we approach employment. Together, we are shaping the future of job tracking, one innovative feature at a time.