JOB PORTAL USING CRUD OPERATION

Sitesh Baral, Bhargab Pradhan, 4th Year, Department of CSE, Gandhi Institute for Technology, BPUT, India. sitesh2020@gift.edu.in;

prof. Nitu Singh, Assistant Professor, Department of CSE, Gandhi Institute for Technology, BPUT, India

Abstract—Job Portal" System is a student project that aims to create a website to facilitate the process of finding and applying for job opportunities. The project will develop a platform that allows job seekers to search for and apply to job openings, upload and manage their resumes and cover letters, and receive alerts for new job opportunities that match their preferences. The website will also provide resources and support for job seekers, including information about different industries and career paths, tips for preparing for job interviews and negotiations, and guidance on professional development. The goal of the project is to make it easier and more efficient for individuals to find and pursue job opportunities and to help employers connect with qualified candidates. By providing a comprehensive and user-friendly tool for managing the job search process, the Job Portal System hopes to contribute to a more dynamic and successful job market. The website utilizes various technologies and frameworks such as React, Express, MongoDB. Keywords: HTML, CSS, JavaScript

I. INTRODUCTION

"Job Portal" System is an innovative and dynamic solution to the challenges facing job seekers and recruiters in the digital age. With the rise of online job portals, it has become increasingly important to create a platform that not only streamlines the job search process but also ensures the safety and security of personal data. This student project aims to develop a user-friendly website that enables job seekers to find, apply for, and manage job opportunities in a more efficient and effective manner. The Job Portal System will provide a range of resources and support services to help job seekers navigate the complexities of the job market, while also offering employers access to a pool of qualified and talented candidates. By bringing job seekers and recruiters together on a single platform, this project hopes to contribute to a more dynamic and successful job market. In addition to providing a comprehensive job search tool, the Job Portal System project also seeks to address the need for a more flexible and versatile platform. Many existing job portals only cater to one side of the employment equation, either for job seekers or employers. However, this project recognizes the need to create a platform that can accommodate both job seekers and employers, including freelancers and contractors who may transition from job seeker to employer. Additionally, the project aims to address the issue of accessibility by developing a mobile application that allows users to easily access and manage job opportunities on-the-go. By incorporating these features, the Job Portal System project aims to create a more inclusive and responsive platform that serves the needs of all users in the job market.

II. LITERATURE REVIEW

A literature survey on a job portal project would involve reviewing existing research, academic papers, articles, and case studies related to job portals, online recruitment, human resources management systems, and related technologies. Here's a structured approach you could take: Introduction to Job Portals and Online Recruitment: Understand the evolution and significance of job portals in the recruitment process. Explore how job portals have transformed traditional hiring methods. Look for statistics and trends regarding the usage of job portals by employers and job seekers. Key Features and Functionalities of Job Portals: Identify common features such as job

postings, resume databases, search filters, application tracking systems, etc. Analyze the importance of user experience design in job portals. Investigate any emerging features or trends in job portal development. Technological Infrastructure: Examine the technology stack commonly used in building job portals (e.g., databases, programming languages, frameworks). Explore the role of artificial intelligence (AI) and machine learning (ML) in enhancing job matching algorithms and candidate screening processes. Challenges and Solutions: Identify challenges faced by job portals such as fake job postings, spam applications, biased algorithms, etc. Review research on solutions to these challenges, such as fraud detection algorithms, automated candidate screening tools, etc.

METHODOLOGY

PROJECT PLANNING AND REQUIREMENTS GATHERING: DEFINE THE OBJECTIVES, FEATURES, AND TARGET AUDIENCE OF THE WEBSITE. GATHER ALL THE FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS. DATABASE DESIGN: DESIGN THE DATABASE SCHEMA USING MONGODB TO STORE DATA, SUCH AS CANDIDATE, EMPLOYER, RESUME, JOBS ETC. BACKEND DEVELOPMENT WITH NODE.JS AND EXPRESS.JS: IMPLEMENT THE SERVER-SIDE LOGIC TO HANDLE USER REQUESTS, AUTHENTICATION, AND INTERACTIONS WITH THE MONGODB DATABASE. API DEVELOPMENT: CREATE RESTFUL APIS TO HANDLE CRUD OPERATIONS (CREATE, READ, UPDATE, DELETE) FOR RECIPES AND USER-RELATED ACTIONS. USER AUTHENTICATION AND AUTHORIZATION: IMPLEMENT USER AUTHENTICATION AND AUTHORIZATION USING TOOLS LIKE JSON WEB TOKENS (JWT) TO SECURE THE API ENDPOINTS AND MANAGE USER SESSIONS. FRONTEND DEVELOPMENT WITH REACT.JS: BUILD THE USER INTERFACE FOR THE WEBSITE, ALLOWING CANDIDATE TO SEARCH JOB, APPLY JOB AND BUILD RESUME. USER INTERFACE DESIGN: DESIGN AN INTUITIVE AND VISUALLY APPEALING USER INTERFACE WITH RESPONSIVE LAYOUTS, MAKING IT ACCESSIBLE ACROSS DIFFERENT DEVICES. USER INTERACTION AND SOCIAL FEATURES: ALLOW CANDIDATE TO VIEW INTERVIEWS. IMPLEMENT FEATURES TO CREATE CANDIDATE PROFILES AND SAVE THE PROFILE. TESTING: PERFORM UNIT TESTING, INTEGRATION TESTING, AND USER TESTING TO ENSURE THE WEBSITE FUNCTIONS CORRECTLY AND MEETS THE REQUIREMENTS. SECURITY CONSIDERATIONS: ENSURE DATA SECURITY BY VALIDATING USER INPUTS, SANITIZING DATA, AND PROTECTING AGAINST COMMON WEB VULNERABILITIES. COMMUNITY AND FEEDBACK: ENCOURAGE USER ENGAGEMENT, FEEDBACK, AND COMMUNITY BUILDING TO ENHANCE THE WEBSITE'S GROWTH AND CONTENT QUALITY.

III. SYSTEM DESIGN

SYSTEM DESIGN IN A JOB PORTAL PROJECT IS A MULTIFACETED PROCESS THAT INVOLVES UNDERSTANDING THE REQUIREMENTS, PLANNING THE ARCHITECTURE, DESIGNING THE DATABASE, IMPLEMENTING THE USER INTERFACE AND BACKEND LOGIC, AND INTEGRATING THIRD-PARTY SERVICES. BY FOLLOWING BEST PRACTICES IN SYSTEM DESIGN AND LEVERAGING MODERN TECHNOLOGIES AND FRAMEWORKS, A WELL-DESIGNED JOB PORTAL PLATFORM CAN PROVIDE A SEAMLESS AND EFFICIENT EXPERIENCE FOR JOB SEEKERS AND EMPLOYERS ALIKE, FACILITATING THE CONNECTION BETWEEN TALENT AND OPPORTUNITIES IN THE JOB MARKET.

IV. IMPLEMENTATION

it's essential to collaborate closely with stakeholders, iterate based on feedback, and prioritize features based on user needs and project goals. Additionally, following best practices for software development, such as modular design, code reusability, and documentation, will contribute to the success of the job portal project.

V. RESULTS

a job portal project can be evaluated based on various factors, including user engagement, adoption rate, efficiency in matching candidates with job opportunities, satisfaction of employers and job seekers, and impact on the recruitment process. Here are some potential results or outcomes:

User Engagement: Increased traffic and active user participation on the job portal platform. Higher frequency of user interactions, such as job searches, profile updates, and job applications .Adoption Rate: Growth in the number of registered users (both job seekers and employers) over time .Expansion of the user base to include a diverse range of industries, job types, and geographical locations .Efficiency in Matching Candidates: Improved accuracy and relevance of job recommendations based on candidate profiles and preferences .Reduction in the time taken for candidates to find suitable job opportunities and for employers to identify qualified candidates. Satisfaction of Employers and Job Seekers: Positive feedback from employers regarding the quality of candidates sourced through the portal. High satisfaction ratings from job seekers on the user experience, ease of navigation, and usefulness of feature. Impact on Recruitment Process: Streamlined recruitment process leading to reduced time-to-hire for employers. Increased efficiency in managing job postings, applications, and candidate communications. Cost savings for employers compared to traditional recruitment methods, such as print advertising or recruitment agencies. Business Impact: Growth in revenue or profitability for the organization operating the job portal. Expansion of partnerships with employers and other stakeholders in the recruitment ecosystem. Enhancement of the organization's brand and reputation as a reliable source for talent acquisition solutions.
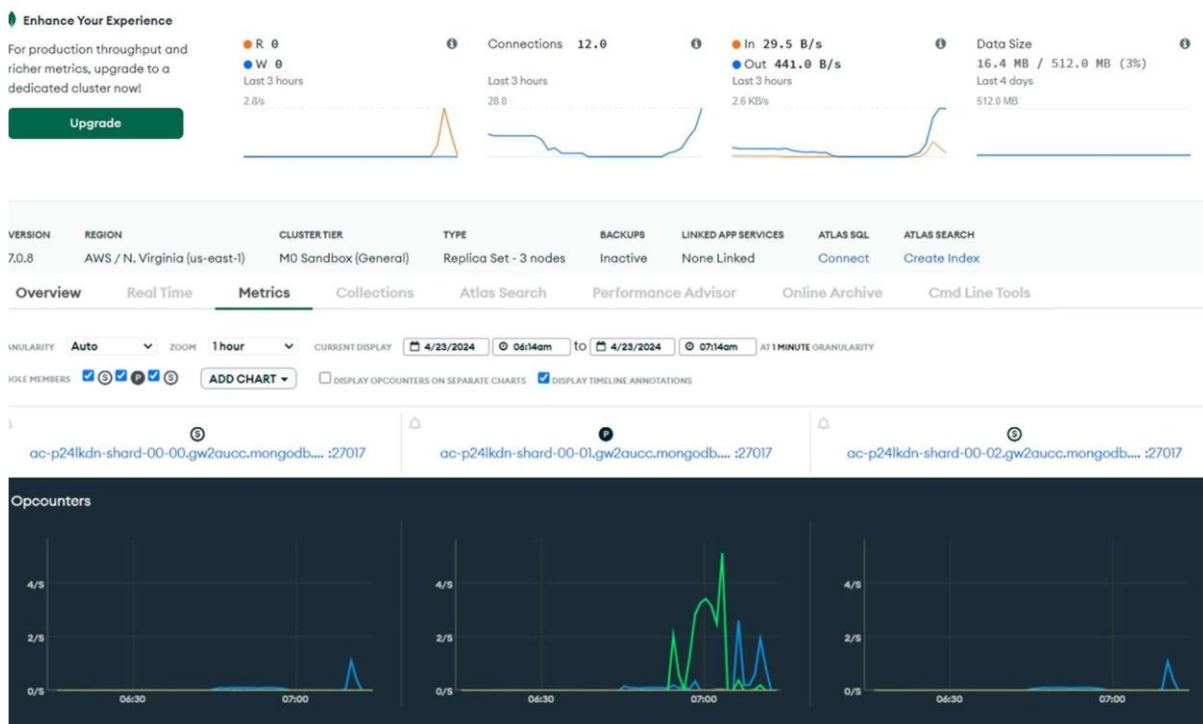
A. Figures

Fig. 1 User Interface to select visualization period

id	skills				imgurl	contact	bio
	HTML	CSS	JAVASCRIPT	PYTHON			
33cc68	yes	yes	yes	no	""	986150222	""
998cb76	yes	yes	yes	no	""	986756565	""

rating	role	name	email	password	education	
					INST 1	INST 2
3	Applicant	Kirtiranjan	P@gmail.com	P@123	Giet	NA
3	Applicant	Jagadish	j@gmail.com	J@123	Giet	NA

VI. CONCLUSION

CONCLUDING THE JOB PORTAL WEBSITE PROJECT REPRESENTS A SIGNIFICANT MILESTONE IN ADVANCING ONLINE RECRUITMENT SOLUTIONS. THROUGH METICULOUS PLANNING AND EXECUTION, THE PROJECT AIMS TO DELIVER A SOPHISTICATED PLATFORM POISED TO REVOLUTIONIZE THE JOB SEARCH EXPERIENCE. BY HARNESSING CUTTING-EDGE WEB TECHNOLOGIES AND INCORPORATING USER-CENTRIC DESIGN PRINCIPLES, THE WEBSITE ASPIRES TO OFFER A SEAMLESS INTERFACE FOR BOTH EMPLOYERS AND JOB SEEKERS. THE COMPREHENSIVE FEATURE SET, INCLUDING ROBUST JOB POSTINGS, STREAMLINED RESUME SUBMISSION PROCESSES, AND TAILORED SEARCH FUNCTIONALITIES, UNDERSCORES THE COMMITMENT TO ENHANCING EFFICIENCY AND EFFICACY WITHIN THE JOB MARKET ECOSYSTEM. MOREOVER, BY PRIORITIZING SCALABILITY, SECURITY, AND PERFORMANCE OPTIMIZATION, THE WEBSITE IS POISED TO MEET THE EVOLVING NEEDS OF ITS USERS WHILE ENSURING A SEAMLESS BROWSING EXPERIENCE. IN SUMMARY, THE JOB PORTAL WEBSITE PROJECT EMBODIES A DEDICATION TO INNOVATION AND EXCELLENCE IN FACILITATING MEANINGFUL CONNECTIONS BETWEEN EMPLOYERS AND CANDIDATES. MOVING FORWARD, ONGOING REFINEMENT BASED ON USER FEEDBACK AND MARKET DYNAMICS WILL BE INSTRUMENTAL IN SOLIDIFYING ITS POSITION AS A PREMIER DESTINATION FOR ONLINE RECRUITMENT. THE DEVELOPMENT AND IMPLEMENTATION OF A JOB PORTAL PROJECT REPRESENT A SIGNIFICANT ENDEAVOR AIMED AT ADDRESSING THE EVOLVING NEEDS OF JOB SEEKERS AND EMPLOYERS IN TODAY'S DYNAMIC JOB MARKET. THROUGH THE CREATION OF A USER-CENTRIC PLATFORM, THE PROJECT ENDEAVORS TO STREAMLINE THE RECRUITMENT PROCESS, ENHANCE ACCESSIBILITY TO JOB OPPORTUNITIES, AND FOSTER CONNECTIONS BETWEEN TALENT AND ORGANIZATIONS.

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