GLA UNIVERSITY, MATHURA

Department of Computer Engineering Application

SYNOPSIS

For

Mini Project - II

B.Tech CSE 3rd Year

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Abstract

The Remote Job Board is a web-based application designed to help job seekers find remote employment opportunities easily and efficiently. The system provides a centralized platform where employers can post remote job vacancies and candidates can search, filter, and apply for jobs. The application also supports user registration, job tracking, and notification features. This project is developed using the MERN stack to ensure scalability, responsiveness, and real-time data handling. The main goal is to simplify remote job searching and hiring by providing a user-friendly and reliable platform.

Keywords

MERN Stack, MongoDB, Express.js, React.js, Node.js, Web Application

1. Introduction

With the rapid growth of remote work, there is a strong need for platforms that specifically focus on remote job opportunities. Traditional job portals often mix on-site and remote roles, making it difficult for users to find relevant positions. The Remote Job Board aims to solve this problem by offering a dedicated system for remote employment. The project focuses on creating a simple and efficient web application where users can explore jobs, apply online, and receive updates.

2. Problem Statement

Job seekers face difficulties in finding genuine remote jobs due to scattered information across multiple platforms. Employers also struggle to reach the right candidates efficiently. Existing systems lack proper filtering, tracking, and notification mechanisms for remote roles. Hence, there is a need for a centralized Remote Job Board that simplifies job searching, application management, and hiring.

3. Objectives

To design a centralized platform for remote job listings.

To allow employers to post and manage job vacancies.

To enable job seekers to search, filter, and apply for jobs.

To provide application tracking and notifications.

To build a secure and scalable web application using MERN stack.

4. Literature Review

Various job portals exist today; however, most of them focus on general employment rather than remote-only roles. Studies show that specialized platforms improve user experience and job matching efficiency. Modern web technologies like MERN stack provide fast development, real-time updates, and flexible architecture, making them suitable for building job portals.

5. Proposed Methodology

The system will follow a client–server architecture. React.js will be used for the frontend interface, Node.js and Express.js for backend APIs, and MongoDB for database management. Users will register/login, browse jobs, and apply online. Employers will manage job posts through an admin dashboard. Notifications will be implemented to inform users about application updates.

6. System Architecture

Frontend: React.js (User Interface)

Backend: Node.js with Express.js (API Layer)

Database: MongoDB (Job listings, users, applications)

Deployment: Netlify

The frontend communicates with backend APIs, which interact with the database to store and retrieve information.

7. Implementation Plan

Requirement Analysis

UI Design

Database Design

Backend Development

Frontend Development

Integration and Testing

Deployment

Each phase will be completed step by step to ensure proper functionality.

8. Expected Results

A fully functional Remote Job Board web application.

Easy job search and application process.

Improved communication between employers and candidates.

Efficient job tracking and notification system.

User-friendly interface with secure data handling.

9. Conclusion

The Remote Job Board project aims to provide a practical solution for remote employment management. By using modern web technologies, the system will simplify job searching and hiring processes. This project demonstrates real-world application of full-stack development and contributes toward digital employment solutions.

References

[1] MERN Stack Documentation, MongoDB, Express.js, React.js, Node.js

[2] Job Portal System Design Concepts

[3] IEEE Web Application Development Standards