Green University of Bangladesh

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Skill Bridge (Job Portal)

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Project Report Status	
Marks:	**Signature:**
Comments:	**Date:**

Contents

Chapter 1

Introduction

1.1 Overview

A Job Portal Web Application built using HTML, CSS, PHP, and MySQL is a dynamic platform that connects employers with job seekers. The system consists of two main user roles: employers, who can register, log in, and post job openings, and job seekers, who can create accounts, browse job listings, and apply for positions directly through the portal. The platform includes a secure login and registration system, with role-based access so that each user sees features relevant to them. Employers can manage their job posts and view applications submitted by candidates, while job seekers can manage their profiles and track the jobs they've applied for.

1.2 Motivation

The primary motivation for developing a Job Portal Web Application is to create a centralized, efficient, and accessible platform that bridges the gap between employers seeking skilled professionals and job seekers looking for opportunities. In today's competitive job market, both sides often face challenges—employers struggle to find the right candidates quickly, and job seekers find it difficult to discover relevant job openings in a timely manner. A job portal simplifies and speeds up this process by allowing users to connect online, reducing the need for traditional, time-consuming methods like newspaper ads or physical job fairs.

1.3 Problem Definition

In the traditional job market, employers and job seekers face significant challenges in connecting efficiently. Employers often spend a lot of time and resources advertising vacancies, collecting resumes, and filtering suitable candidates. On the other hand, job seekers struggle to find updated job listings that match their qualifications and interests, often relying on outdated methods like newspaper ads, notice boards, or word-of-mouth.

There is also a lack of centralized and accessible platforms for job management in

many regions, especially for small businesses or fresh graduates. Existing solutions are often either too expensive, too complex, or lack localized and customizable features. Moreover, manual processes lead to miscommunication, missed opportunities, and inefficiency in hiring.

1.4 Design Goals/ Objectives

The main objective of the Job Portal Web Application is to design and develop a reliable, user-friendly, and efficient online platform that streamlines the job recruitment process for both employers and job seekers. The application aims to provide a clean and responsive user interface using HTML and CSS, ensuring easy navigation for different types of users. It includes a secure authentication system where users can register and log in as either employers or job seekers, with role-based access to specific features. Employers are able to post, update, and manage job listings, while job seekers can browse available jobs and apply directly with a cover letter.

The system is backed by a MySQL database that efficiently stores and manages user profiles, job posts, and applications, ensuring data integrity and smooth retrieval of information. One of the key goals is to enable a quick and simple job application process, along with providing search and filtering options to help job seekers find relevant opportunities based on job title, location, or category. Custom dashboards are created for each user role to provide tailored access to functionalities like viewing applications or managing posted jobs. Additionally, the project is built with scalability in mind, allowing for future features like resume uploads, email notifications, and admin analytics. In general, the design goals focus on accessibility, performance, and real-world usability to offer a practical solution to the challenges of the job market.

1.5 Application

The Job Portal Web Application serves as a practical and valuable tool in real-world employment ecosystems by simplifying the interaction between job seekers and employers. It can be applied in various domains, such as corporate hiring, freelancer recruitment, university placement cells, and small to medium business staffing. Job seekers can use the portal to search for jobs, submit applications, and manage their career profiles—all in one place. Employers benefit by being able to post job openings, view candidate applications, and manage recruitment processes efficiently without relying on third-party services.

Educational institutions can use this system for managing student placements and internship opportunities, while local businesses can easily find nearby talent without incurring high costs. Additionally, governments and NGOs could use this system to connect unemployed individuals with work opportunities, especially in underdeveloped regions.

Chapter 2

Design/Development/Implementation of the Project

2.1 Introduction

In today's digital age, the traditional methods of job hunting and recruitment—such as newspaper ads, bulletin boards, and word-of-mouth—have become outdated and inefficient. With the growing need for faster, more accessible, and more organized job matching systems, online job portals have become essential tools for both employers and job seekers. A Job Portal Web Application, developed using HTML, CSS, PHP, and MySQL, serves as a centralized platform where companies can post job vacancies and individuals can browse and apply for positions that match their skills and interests.

This web application offers a user-friendly interface for two main types of users: employers and job seekers. Employers can register, log in, and post job openings, while job seekers can create profiles, search for jobs, and submit applications. The backend, built with PHP and MySQL, handles all core functionalities such as user authentication, job management, and application tracking.

2.2 Project Details

The Job Portal Web Application is a comprehensive web-based system designed to facilitate seamless interaction between job seekers and employers. Built using HTML, CSS, PHP, and MySQL, the application provides a secure platform where users can register and log in according to their roles—either as job seekers or employers. Job seekers can create profiles, search and filter through available job listings, and apply to positions by submitting cover letters. Employers, on the other hand, can post new job vacancies, manage existing listings, and review applications submitted by candidates. The backend, powered by PHP, handles user authentication, session management, and database operations using MySQL, ensuring data integrity and security with prepared statements to prevent SQL injection. The system is organized with a clear folder structure for maintainability and future scalability, offering role-based dashboards tailored to the specific needs of each user type. Optional enhancements such as resume uploads,

email notifications, and an admin panel can be incorporated to monitor platform activity to extend functionality.

2.3 Implementation

The implementation of the Job Portal Web Application involves setting up both the frontend and backend components to work together seamlessly. The frontend is built using HTML and CSS, providing clean and responsive interfaces for users to register, log in, browse jobs, and manage their profiles. PHP handles the backend logic, processing form submissions, managing sessions, and interacting securely with the MySQL database. The database stores all relevant information, including user details, job postings, and job applications, organized into relational tables to maintain data integrity. Core features such as user authentication, role-based access control, job posting, and application submission are implemented using PHP scripts with prepared statements to safeguard against SQL injection attacks. The system follows a modular folder structure, separating concerns like database connections and reusable components to facilitate easier maintenance and scalability. During implementation, particular attention is given to validating user inputs and ensuring a smooth user experience across different devices and browsers. Optional features like file uploads for resumes and email notifications can be integrated to enhance functionality

Chapter 3

Performance Evaluation

3.1 Simulation Environment/ Simulation Procedure

development platform using tools like XAMPP, which provide an Apache web server with PHP and MySQL support. This setup mimics a real web server and database system on the developer's machine. The MySQL database is created and configured locally to store user information, job listings, and applications. The application files are placed within the web server's root directory, and database connection settings are configured accordingly. During simulation, the developer uses a modern web browser to interact with the application through URLs like http://localhost/Skill Bridge (job-portal). The simulation procedure includes testing all core functionalities: registering users with different roles, logging in securely, posting jobs as employers, and applying for jobs as seekers. It also involves verifying data storage, session management, and security features such as password hashing. Additionally, the interface is tested across various browsers and screen sizes to ensure a consistent user experience. Error handling is simulated by entering invalid data or attempting unauthorized actions to confirm the system responds gracefully. This controlled local testing environment ensures that the application works correctly and securely before it is deployed to a live server.

3.2 Results Analysis/Testing

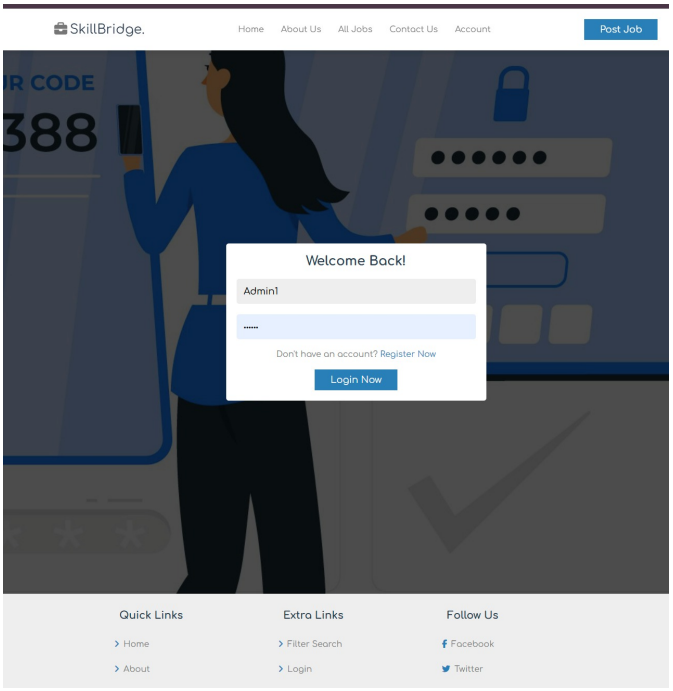

Figure 3.1: Login Interface

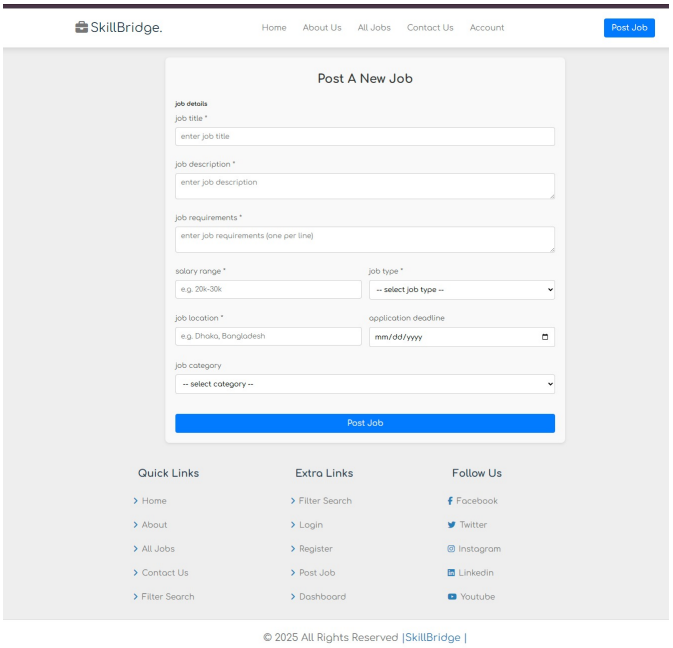

Figure 3.2: Post a new job

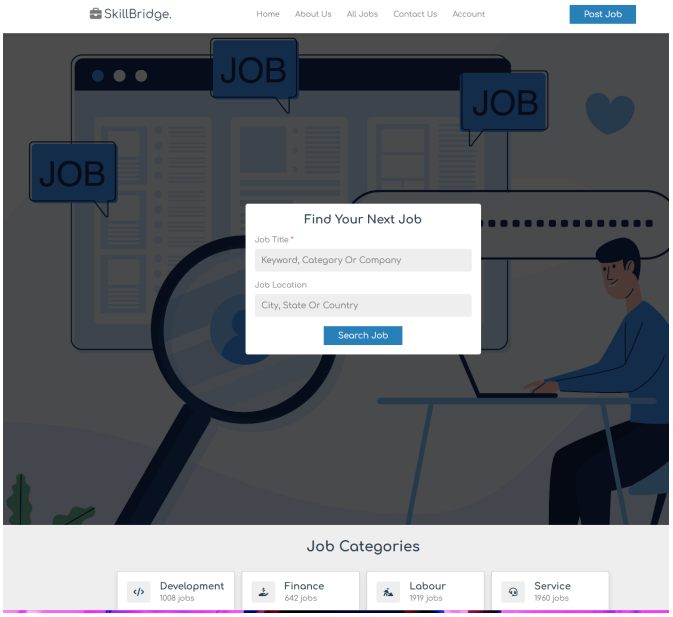

Figure 3.3: Find job

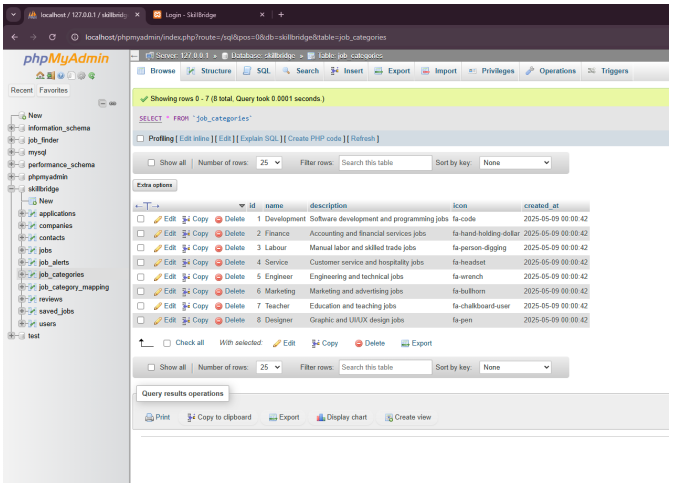

Figure 3.4: Database

Chapter 4

Conclusion

4.1 Discussion

The Job Portal Web Application, developed using HTML, CSS, PHP, and MySQL, successfully demonstrates how web technologies can be integrated to solve real-world problems such as job searching and recruitment. The application provides a centralized platform where employers can easily post job vacancies and manage applications, while job seekers can efficiently search and apply for relevant positions. Throughout the development process, careful consideration was given to user experience, security, and data management.

One of the key strengths of the system is its role-based design, which offers customized dashboards and functionalities tailored for different users. This separation enhances usability and ensures that users only access features relevant to their needs. The implementation of secure authentication and data validation measures helps protect sensitive information and maintain the integrity of the system. [1]

References

[1] Mustafa Pinjari, Nishit De, Rutvij Kokne, Aamir Siddiqui, and Dnyanoba Chitre. Online job portal. *International Research Journal of Engineering and Technology*, 6(4), 2019.