

Hiring Bangla: An Online Job Market Place

by

Esrat Jahan Moon
ID: CSE2202026061

Md. Sajib Mia
ID: CSE2202026010

Alpona Khan
ID: CSE2202026060

Md Sohel Rana
ID: CSE2202026027

Mustafijur Rahman Pavel
ID: CSE2202026127

Supervised by
Mohammad Naderuzzaman

Submitted in partial fulfillment of the requirements for the degree of
Bachelor of Science in Computer Science and Engineering



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SONARGAON UNIVERSITY (SU)

January 2026

APPROVAL

The project titled “**Hiring Bangla: A Online Job Market place**” submitted by Esrat Jahan Moon (CSE2202026061), Md. Sajib Mia (CSE2202026010), Alpona Khan (CSE2202026060) Md Sohel Rana (CSE2202026027) and Mustafijur Rahman Pavel (CSE2202026127) to the Department of Computer Science and Engineering, Sonargaon University (SU), has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents.

Board of Examiners

Mohammad Naderuzzaman

Associate Professor,
Department of Computer Science and Engineering
Sonargaon University (SU)

Supervisor

(Examiner Name and Signature)

Department of Computer Science and Engineering
Sonargaon University (SU)

Examiner 1

(Examiner Name and Signature)

Department of Computer Science and Engineering
Sonargaon University (SU)

Examiner 2

(Examiner Name and Signature)

Department of Computer Science and Engineering
Sonargaon University (SU)

Examiner 3

DECLARATION

We, hereby, declare that the work presented in this report is the outcome of the investigation performed by us under the supervision of **Mohammad Naderuzzaman, Associate Professor**, Department of Computer Science and Engineering, Sonargaon University, Dhaka, Bangladesh. We reaffirm that no part of this project has been or is being submitted elsewhere for the award of any degree or diploma.

Countersigned

Signature

(Mohammad Naderuzzaman)
Supervisor

Esrat Jahan Moon
ID: CSE2202026061

Md. Sajib Mia
ID: CSE2202026010

Alpona Khan
ID: CSE2202026060

Md Sohel Rana
ID: CSE2202026027

Mustafijur Rahman Pavel
ID: CSE2202026127

ABSTRACT

Finding a suitable job and hiring the right employee is a major challenge in today's competitive world. Many job seekers struggle to find job opportunities that match their skills, while employers face difficulty in finding qualified and reliable candidates. This project aims to solve these problems by developing an online job portal system for both job seekers and employers.

The proposed system provides a single platform where candidates can search and apply for jobs, and employers can post job vacancies and find new candidates easily. Job seekers can create their profiles, upload resumes, and apply for jobs based on their qualifications, skills, and interests. Employers can register, post job details, view candidate profiles, and select suitable applicants.

The system helps reduce the time and effort required in the traditional job searching and hiring process. It also improves communication between job seekers and employers by providing quick and easy access to job-related information. This platform is designed to be user-friendly, secure, and efficient so that users with basic technical knowledge can use it without difficulty.

Overall, this project helps job seekers find better job opportunities and assists employers in hiring new and suitable employees. The system contributes to making the recruitment process faster, simpler, and more effective for both sides.

ACKNOWLEDGMENT

At the very beginning, we would like to express our deepest gratitude to the Almighty Allah for giving us the ability and the strength to finish the task successfully within the schedule time.

We are auspicious that we had the kind association as well as supervision of **Mohammad Naderuzzaman**, Associate Professor, Department of Computer Science and Engineering, Sonargaon University whose hearted and valuable support with best concern and direction acted as necessary recourse to carry out our project.

We would like to convey our special gratitude to **Prof. Bulbul Ahmed** , Head of the department Computer Science and Engineering, Sonargaon University, for their kind concern and precious suggestions.

We are also thankful to all our teachers during our whole education, for exposing us to the beauty of learning.

Finally, our deepest gratitude and love to our parents for their support, encouragement, and endless love.

LIST OF ABBREVIATIONS

CV: Curriculum Vitae.

CMS: Content Management System.

PHP: Hypertext Preprocessor

HTML: Hyper Text Markup Language

CSS: Cascading Style Sheets

HTTP: Hyper Text Transfer Protocol

JS: JavaScript

TABLE OF CONTENTS

Title	Page No.
DECLARATION	III
ABSTRACT	IV
ACKNOWLEDGEMENT	V
LIST OF ABBREVIATION	VI
CHAPTER 1	1-3
INTRODUCTION TO AUTOMATIC SPEECH RECOGNITION	
1.1 Introduction	1
1.2 Objectives.....	1-2
1.3 Why Hiring Bangla.....	2-3
1.4 Limitations.....	3
CHAPTER 2	4-6
Features and Function of the project	
2.1 Features of the project	4
2.2 User Registration, Login and Admin Panel.....	5
2.3 Job Posting and Management.....	5
2.4 Job Search and Application.....	5
2.5 Job Alert System.....	5-6
2.6 Task Bidding and Partial Payment System.....	6
2.7 Review and Rating System.....	6
2.8 Company and Freelancer Profiles.....	6
2.9 WalletandWithdrawal System.....	6

CHAPTER 3	7-15
Tools and Technology	
3.1 Content Management System (CMS).....	7-8
3.2 Plugins Used.....	9
3.3 Programming Languages	10-11
3.4 Database Management System	12-13
3.5 Web Server and Hosting Environment.....	14-15
 CHAPTER 4	 16-18
Analysis of Requirement, Design and Implementation	
4.1 Requirement Analysis	16
4.2 System Design.....	17
4.3 Use Case Description.....	17
4.4 Database Design.....	18
4.5 Implementation.....	18
 CHAPTER 5	 19-28
PROJECT DESCRIPTION	
5.1 Home Page	19
5.2 Login / Registration page.....	20
5.3 Employer Dashboard.....	20-22
5.4 Candidate Dashboard	22-24
5.5 Task Bidding and Partial Payment	25
5.6 Review and Rating System	26
5.7 Job Listing Page	27
5.8 Task Listing Page	27
5.9 Freelancer & Companies Page	28

CHAPTER 6	29
CONCLUSION AND FUTURE WORKS	
6.1 Conclusion	29
6.2 Future Scope.....	29
REFERENCES	30

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page No.</u>
Fig.5.1	Home Page	19
Fig.5.2	Registration Page	20
Fig.5.3	Login Page	20
Fig.5.4	Employer Dashboard	20
Fig.5.5	Job Post Overview	21
Fig.5.6	Task Post Overview	21
Fig.5.7	Add Company Overview	22
Fig.5.8	Candidate Dashboard	22
Fig.5.9	Add Resume Overview	23
Fig.5.10	Project Listing Overview	23
Fig.5.11	Wallet Overview	24
Fig.5.12	Job Alert Overview	24
Fig.5.13	Bid Listing Overview	25
Fig.5.14	Partial Payment Overview	25
Fig.5.15	Candidate review Overview	26
Fig.5.16	Employer Review Overview	26
Fig.5.17	Job Listing Page	27
Fig.5.18	Task Listing Page	27
Fig.5.19	Freelancer Listing Page	28
Fig.5.20	Companies Listing Page	28

CHAPTER 1

INTRODUCTION TO ONLINE JOB MARKET

1.1 Introduction

In the modern world, recruitment and employment processes have become increasingly dependent on online platforms. Traditional methods of hiring are often time-consuming, inefficient, and lack transparency. To address these challenges, the Hiring Bangla project has been developed as an online job and task marketplace.

Hiring Bangla is a web-based platform designed to connect employers, candidates, and freelancers in Bangladesh. The platform allows employers to post jobs and tasks, and candidates or freelancers can apply, bid, and complete tasks through the system. The platform also includes a secure wallet system that stores earnings, enables withdrawals, and applies a 10% service fee for administrative management.

Additionally, the system features a two-way review and rating system, which builds trust between employers and candidates and ensures transparency. Users receive job alerts and notifications based on their preferences, improving efficiency and engagement.

The project is developed using WordPress with the WorkScout theme, leveraging PHP, HTML, CSS, JavaScript, and MySQL to provide a secure, responsive, and user-friendly web application. By combining task management, job postings, payment handling, and review mechanisms, Hiring Bangla offers a comprehensive solution for online recruitment and freelance work in Bangladesh.

1.2 Objectives

The main objective of the Hiring Bangla project is to create a comprehensive online job and task marketplace that connects employers, candidates, and freelancers. The detailed objectives include:

1. Job Management

- Enable employers to post job listings with details such as title, category, location, and salary.
- Allow candidates to search and apply for jobs easily.
- Categorize jobs for better filtering and faster matching.

2. Task & Freelance Management

- Enable employers to post short-term or freelance tasks.
- Allow freelancers to bid on tasks with proposed timelines and payment.
- Facilitate partial payment before task start to ensure commitment.

3. Wallet & Payment System

- Implement wallet feature for candidates/freelancers to receive payments.
- Allow candidates to withdraw earnings anytime.
- Deduct 10% admin service fee during withdrawals to sustain platform operations.

4. Review & Rating System

- Provide a two-way review system for transparency:
- Employers review candidates after task completion.
- Candidates review employers after payment.
- Build trust and improve credibility for both parties.

5. Notifications & Alerts

- Notify candidates about new job postings based on their preferences.
- Notify employers about candidate applications and bids.
- Ensure users are updated in real-time.

6. User Management & Dashboard

- Implement role-based access: Admin, Employer, and Candidate/Freelancer.
- Provide separate dashboards for managing jobs, tasks, applications, payments, and reviews.
- Allow Admin to monitor platform activities, users, and transactions.

7. Platform Usability & Technology

- Provide a responsive, user-friendly interface for desktop and mobile users.
- Use WordPress + WorkScout theme for easy management and scalability.

1.3 Why Hiring Bangla

In Bangladesh, the recruitment and freelance task process is still largely manual and inefficient, which causes delays for employers and difficulties for candidates or freelancers in finding relevant opportunities. Traditional recruitment often lacks transparency, and candidates may face uncertainty regarding payments, task assignments, and trustworthiness of employers. Similarly, employers struggle to find qualified candidates efficiently and have no system to ensure accountability for task completion.

Hiring Bangla addresses these challenges by providing a centralized, user-friendly online job and task marketplace specifically tailored for the Bangladeshi market. The platform allows employers to post jobs and tasks while candidates and freelancers can apply or bid in a structured system.

This task-based system introduces flexibility, enabling freelancers to work on projects that match their skills and availability.

A key feature of Hiring Bangla is the wallet-based payment system, which ensures that earnings are credited securely after task completion. Candidates can withdraw funds conveniently while a

10% service fee is applied for platform administration, ensuring sustainability. Additionally, a two-way review and rating system helps maintain trust, transparency, and accountability between employers and candidates.

Other features, such as real-time job alerts and notifications, separate dashboards for admin, employers, and candidates, and responsive web design, make the platform efficient, reliable, and scalable. By integrating job posting, task bidding, secure payments, and trust mechanisms in a single platform, Hiring Bangla transforms the recruitment process, providing a modern, convenient, and localized solution for the Bangladeshi job market.

1.4 Limitations

Despite the successful implementation of the Online Job Market Place, the project has some limitations:

- Some advanced features such as full payment gateway integration, escrow system, and advanced analytics require premium plugins or third-party services.
- The performance of the system depends on hosting quality and internet connectivity.
- Real-time video interview features are not implemented in the current version.

CHAPTER 2

FEATUTRS AND FUNCTIONS OF THE PROJECT

2.1 Features of the Project

Hiring Bangla is a comprehensive online job and task marketplace designed to facilitate employment, recruitment, and freelance opportunities in Bangladesh through a single digital platform. The system is developed to reduce the gap between employers, job seekers, and freelancers by offering structured, transparent, and efficient features.

Job Seekers:

Job seekers can create professional profiles by adding personal information, educational background, skills, and work experience. They can upload their CVs and search for jobs based on category, skills, job type, and location. Advanced filtering options help users find jobs that best match their qualifications, experience, and career preferences, making the job search process faster and more effective.

Employers:

Employers can post job vacancies with complete details such as job description, requirements, salary range, and employment type. They can manage job postings, monitor applications, shortlist candidates, and review applicant profiles directly from their dashboard. This structured recruitment process saves time and improves hiring efficiency.

Freelancers:

Freelancers can explore task-based projects and short-term jobs according to their skills and expertise. They can submit bids, communicate through task details, and work on assignments flexibly. This feature helps freelancers find income opportunities while allowing employers to choose suitable candidates based on skill, budget, and ratings.

User-Friendly Design:

The platform is designed with a simple, responsive, and intuitive interface, ensuring easy navigation for users of all technical levels. Registration, login, profile management, job application, and task bidding processes are smooth and user-friendly across different devices.

2.2 User Registration, Login, and Admin Panel

Hiring Bangla supports multiple user roles with secure authentication and role-based access control, ensuring system security and proper feature access.

Registration and Login:

Candidates, employers, and freelancers can register by providing valid personal or professional information. The system verifies user data and prevents duplicate or invalid entries. After registration, users can securely log in using their username and password.

Role-Based Dashboard:

Each user role is provided with a separate dashboard. Employers can manage job postings and applications, freelancers can bid on tasks and track earnings, and candidates can apply for jobs and manage profiles. This role-based structure improves usability and security.

Administrator Panel:

The admin panel gives administrators full control over the platform. Admins can manage users, approve or remove job and task postings, monitor wallet transactions, handle reviews, and ensure platform security. This ensures smooth operation and prevents misuse of the system.

2.3 Job Posting and Management

- The job posting and management system enables employers to conduct recruitment efficiently through a digital process.
- Employers can post new job vacancies by providing essential information such as job title, description, requirements, location, job type, and salary details.
- Job postings can be edited, updated, or deleted at any time from the employer dashboard.
- Employers can view and manage candidate applications, review CVs, and shortlist suitable candidates.
- The system allows employers to manage multiple job postings simultaneously, improving recruitment organization and efficiency.

2.4 Job Search and Application

Job seekers can search for jobs using keywords, job categories, and location filters. Once a suitable job is found, candidates can apply online directly through the platform. This eliminates the need for physical document submission, reduces processing time, and simplifies the overall job application process.

2.5 Job Alert System

The Job Alert system keeps job seekers informed about new opportunities. Users can set preferences such as job category, skills, or keywords. Whenever a new job matching these preferences is posted, the system automatically sends notifications or email alerts. This feature ensures timely updates and increases the chances of finding relevant job opportunities.

2.6 Task Bidding and Partial Payment System

Hiring Bangla includes a task-based work module that supports freelance activities.

- Employers can post tasks with defined scope, budget, and deadline.
- Freelancers or candidates can place bids on tasks based on their skills and expected payment.
- After selecting a freelancer, the employer can release a partial payment before task execution.
- This system builds trust, ensures commitment, and reduces the risk of payment disputes during task completion.

2.7 Review and Rating System

- After completing a job or task, both employers and candidates can provide reviews and ratings.
- This two-way review system promotes transparency and accountability.
- Positive ratings improve user credibility and visibility on the platform.
- Reviews help future users make informed decisions during hiring or job applications.

2.8 Company and Freelancer Profiles

- Companies and freelancers can create detailed profiles containing background information, skills, experience, and contact details.
- Company profiles showcase organizational details and job postings.
- Freelancer profiles highlight expertise, completed tasks, and ratings.
- These profiles help build trust and allow users to evaluate each other before engaging in recruitment or task-based work.

2.9 Wallet and Withdrawal System

- Hiring Bangla includes a secure wallet-based payment system for candidates and freelancers.
- After successful task completion, earnings are credited to the user's wallet.
- Users can check wallet balance and transaction history from their dashboard.
- During withdrawal requests, a 10% administrative service fee is deducted by the platform.
- The remaining 90% amount is transferred to the candidate or freelancer, ensuring transparent revenue sharing.

This wallet system ensures secure payment handling, financial transparency, and sustainability of the platform.

CHAPTER 3

TOOLS AND TECHNOLOGY

This chapter provides a detailed explanation of all the tools and technologies that were used to develop the Hiring Bangla – Online Job Market Place project. The tools and technologies were carefully selected based on their suitability, reliability, ease of use, scalability, and compatibility with the project requirements. Each tool contributes significantly to the development, performance, and security of the system.

3.1 Content Management System (CMS)

The Hiring Bangla – Online Job Market Place project is developed using WordPress, which is an open-source Content Management System (CMS) widely recognized for its flexibility, scalability, reliability, and extensive community support. WordPress is one of the most popular CMS platforms in the world and is widely used for developing dynamic, content-driven, and database-based web applications.

WordPress is an ideal choice for this project because it allows developers to rapidly create, manage, and customize websites with minimal coding effort. It provides a structured framework that simplifies development while maintaining strong performance and security. The availability of thousands of themes and plugins enables easy integration of advanced features such as job posting, task management, user authentication, and payment handling.

Advantages of Using WordPress for Hiring Bangla

Ease of Use:

WordPress offers a user-friendly admin interface that simplifies content creation, editing, and website management. Even non-technical users can manage pages, posts, job listings, and user information easily through the dashboard.

Flexibility and Customization:

WordPress supports extensive customization through themes and plugins. In this project, the WorkScout theme and supporting plugins are used to implement job listings, task bidding, user dashboards, and wallet functionalities according to project requirements.

Security:

WordPress provides built-in security mechanisms such as user role management, password encryption, and data validation. Additionally, it supports various security plugins that help protect user data, prevent unauthorized access, and reduce security vulnerabilities.

Performance and Scalability:

WordPress is optimized to handle multiple users, large amounts of content, and frequent database operations. This makes the platform suitable for a growing job marketplace like Hiring Bangla, where future expansion and increased user activity are expected.

Community Support and Documentation:

One of the major strengths of WordPress is its large global community. Extensive documentation, tutorials, forums, and developer resources are available, which help in troubleshooting issues and implementing new features efficiently.

Cost Effectiveness:

Being open-source, WordPress significantly reduces development costs. Most core features are free, and additional functionalities can be implemented using free or affordable plugins, making it a budget-friendly solution for academic and commercial projects.

By using WordPress as the CMS, the development process of Hiring Bangla became faster, cost-effective, and reliable, while ensuring high maintainability and scalability. The CMS also allows easy updates and future enhancements, making the system suitable for long-term use and further development.

3.2 Plugins Used

To enhance the functionality of the Hiring Bangla – Online Job Market Place, several WordPress plugins were integrated. These plugins extend the core capabilities of WordPress and enable the implementation of advanced features such as job posting, task bidding, user registration, notifications, and dashboard management. Using plugins reduced development time and ensured system reliability without extensive custom coding.

WP Job Manager:

WP Job Manager is one of the core plugins used in this project to manage job-related functionalities. It allows employers to post job vacancies, edit job details, and manage job listings efficiently. Candidates can view available jobs, submit online applications, and track application status. This plugin plays a vital role in organizing job data and maintaining a structured recruitment process.

WorkScout Core Plugin:

The WorkScout Core Plugin provides theme-specific functionalities required for the Hiring Bangla platform. It supports features such as task management, job alerts, user dashboards, and role-based access. This plugin ensures smooth integration between the WorkScout theme and WordPress, allowing consistent design and performance across the platform.

User Registration Plugin:

This plugin manages the registration and login processes for different user roles, including employers, candidates, and freelancers. It ensures secure authentication, validates user input, and provides role-based access control. By using this plugin, the platform maintains structured user management and protects sensitive user information.

Email Notification Plugin:

The Email Notification Plugin is used to send automated messages such as job alerts, task notifications, application updates, password recovery messages, and system announcements. This feature ensures real-time communication between the system and users, keeping them informed and engaged with platform activities.

By combining these plugins, Hiring Bangla achieves a high level of functionality, flexibility, and scalability. The plugin-based approach minimizes custom development effort, improves system stability, and allows easy future enhancements, making the platform both professional and user-friendly.

3.3 Programming Languages

The development of Hiring Bangla – Online Job Market Place involves the use of multiple programming languages to ensure smooth frontend presentation and efficient backend processing. Each language plays a specific role in building a secure, dynamic, and user-friendly web application. The combination of these technologies allows the system to handle job posting, task bidding, user authentication, wallet transactions, and administrative control effectively.

PHP (Hypertext Preprocessor)

PHP is the primary server-side programming language used in the development of Hiring Bangla. Since the system is built on WordPress, PHP is responsible for handling most of the backend operations. It manages communication between the user interface and the database, ensuring that data is processed and stored correctly.

PHP is used to handle user registration and login authentication, job and task management, wallet transactions, partial payment processing, and review systems. It also controls role-based access, ensuring that employers, candidates, freelancers, and administrators can only access features relevant to their roles. Due to its compatibility with WordPress and MySQL, PHP provides flexibility, security, and scalability, making it suitable for developing complex web-based applications like Hiring Bangla.

HTML (HyperText Markup Language)

HTML is used to create the structure and layout of all web pages in the system. It defines how content such as text, images, forms, tables, and buttons are displayed on the website. Every page, including login, registration, job listing, task listing, company profiles, and freelancer profiles, is structured using HTML elements.

HTML ensures proper content organization, making the platform accessible and readable across different devices and browsers. It also works closely with CSS and JavaScript to provide a complete and interactive user experience. By using HTML, Hiring Bangla maintains a clean and organized page structure that supports usability and responsiveness.

CSS (Cascading Style Sheets)

CSS is used to control the visual appearance and design of the Hiring Bangla platform. It manages colors, fonts, layouts, spacing, and overall styling of the website. CSS ensures that the interface is visually appealing and consistent across all pages.

Responsive design techniques are implemented using CSS so that the website adapts smoothly to different screen sizes, including desktops, tablets, and mobile devices. By using CSS, the system provides a professional look and feel, improves user engagement, and enhances overall user satisfaction. The use of CSS also helps separate content from design, making the system easier to maintain and update in the future.

JavaScript

JavaScript plays a crucial role in enhancing the interactivity, responsiveness, and usability of the Hiring Bangla platform. It is mainly used on the client side to make the web application dynamic and user-friendly. By using JavaScript, the system responds instantly to user actions without requiring frequent page reloads, which significantly improves user experience.

In Hiring Bangla, JavaScript is used for form validation during registration, login, job posting, and task bidding. It ensures that users provide correct and complete information before submitting data to the server, reducing errors and unnecessary server requests. For example, JavaScript validates email formats, required fields, and password strength.

JavaScript is also used to implement dynamic content loading such as job listings, task listings, and search filters. Users can filter jobs or tasks by category, location, or budget, and the results are updated dynamically. This makes searching faster and more efficient.

Additionally, JavaScript supports interactive user dashboards by updating wallet balances, notifications, and status messages in real time. Pop-up alerts, confirmation messages, and system notifications are handled using JavaScript to guide users through different actions such as job application, task bidding, and withdrawal requests.

3.4 Database Management System (DBMS)

The Hiring Bangla – Online Job Market Place relies on a robust and efficient Database Management System (DBMS) to store, organize, and retrieve all application data. The platform uses MySQL, which is an open-source, reliable, and widely used relational database system fully compatible with WordPress. MySQL is preferred because of its stability, scalability, and high performance, making it ideal for handling large amounts of data in a web-based job marketplace environment.

Role of MySQL in Hiring Bangla

MySQL plays a central role in managing all data operations for the platform. It ensures that information related to users, jobs, tasks, wallets, and reviews is stored securely and can be retrieved efficiently whenever required. Some of the key data managed by MySQL include:

User Information:

MySQL stores all essential user information such as personal details, registration data, login credentials, and role-based information for employers, candidates, and freelancers. This enables secure authentication and ensures that users can access their role-specific dashboards efficiently.

Job Listings, Applications, and Task Bids:

Job postings and tasks are stored in structured tables within the database. Candidate applications and freelancer task bids are recorded, enabling employers to review submissions, shortlist candidates, and manage tasks effectively. The database ensures that each job or task record is unique, organized, and easily retrievable.

Wallet Transactions and Payment Records:

All payment-related data, including wallet balances, partial payments, withdrawal requests, and administrative fees, are stored securely in the database. MySQL ensures that financial transactions are accurately recorded, maintaining integrity and transparency of user earnings.

Reviews and Ratings:

The database keeps track of all user reviews and ratings for jobs, tasks, companies, and freelancers. This information is essential for building trust, maintaining transparency, and improving user credibility within the platform. Storing these ratings in the database allows them to be displayed dynamically on user profiles and dashboards.

Database Management Features in Hiring Bangla

Data Security:

MySQL provides multiple mechanisms for securing data, including encryption, access control, and secure login credentials. Combined with WordPress security features, the database ensures that sensitive user information and financial records are protected from unauthorized access.

Data Integrity and Consistency:

MySQL maintains data integrity through relational constraints, which prevent duplication, missing records, or invalid data entries. This ensures that all information in Hiring Bangla remains consistent, reliable, and accurate at all times.

Automatic Database Handling:

WordPress automatically handles most database operations through built-in functions, allowing seamless interaction between the CMS, plugins, and the database. Developers can focus on application logic without worrying about direct SQL queries for routine operations, making the system easier to maintain and scale.

Efficient Data Retrieval:

The relational structure of MySQL allows fast and efficient queries. Employers can quickly retrieve candidate applications, job seekers can search jobs, and freelancers can find tasks that match their skills. This real-time access to data improves the overall performance and user experience of the platform.

Scalability:

As the number of users, jobs, and tasks grows, MySQL can efficiently handle large datasets without compromising performance. This scalability ensures that Hiring Bangla remains functional and responsive even with increasing platform usage.

3.5 Web Server and Hosting Environment

The Hiring Bangla – Online Job Market Place is a web-based platform that requires a reliable and secure server environment to handle multiple users, job postings, task management, and financial transactions efficiently. The system uses a combination of Apache web server, local development environment (XAMPP), and live hosting to ensure smooth operation, high availability, and scalability. Each component of the hosting environment plays a crucial role in the development, testing, and deployment phases of the project.

Web Server: Apache

The platform runs on an Apache web server, which is one of the most widely used open-source web servers in the world. Apache provides robust support for PHP and MySQL, which are essential for the backend operations of Hiring Bangla. Apache manages incoming requests from multiple users simultaneously and ensures that dynamic content, database queries, and server-side scripts are processed efficiently. Its reliability and stability make it suitable for hosting a platform that handles real-time job postings, task bids, wallet transactions, and review systems.

Apache also supports virtual hosting, which allows multiple websites or applications to run on a single server without conflicts. This capability was particularly useful during the development phase when testing multiple versions of the platform on the same server.

Local Development Environment: XAMPP

During development, the Hiring Bangla system was first implemented and tested on a local server environment using XAMPP, which integrates Apache, PHP, MySQL, and PHPMyAdmin in a single package. XAMPP provides a safe and controlled environment where developers can:

- Test features and functionalities without affecting live data.
- Debug code and identify errors before deployment.
- Configure database and server settings to match the live hosting environment.

Using XAMPP ensures that all development activities, including job posting, task management, wallet integration, and plugin configuration, can be tested thoroughly. This reduces the risk of errors and ensures that the system works correctly when moved to a live server.

Deployment and Live Hosting

After successful local development and testing, the Hiring Bangla platform was deployed on a live hosting server. The hosting environment was carefully selected to support WordPress installation, PHP execution, MySQL database connectivity, and secure HTTPS access for users. HTTPS ensures secure data transmission between the user's browser and the server, which is critical for protecting sensitive user information, financial transactions, and login credentials.

The hosting environment also provides continuous availability and scalability, allowing the platform to handle an increasing number of users, job postings, and tasks over time. Features like automated backups, server monitoring, and optimized database management ensure that the platform remains reliable, fast, and secure.

Integration and System Reliability

By combining Apache server, XAMPP for local development, and secure live hosting, Hiring Bangla ensures a seamless development-to-deployment workflow. Developers can safely test new features in the local environment before pushing changes to the live server. At the same time, the live server ensures that end-users experience uninterrupted access, fast page loading, and reliable system performance.

- This setup guarantees that the platform is:
- **Reliable:** Handles multiple simultaneous users efficiently.
- **Secure:** Protects user data, wallet transactions, and sensitive information.
- **Scalable:** Can grow with an increasing number of users and features.
- **Maintainable:** Easy to update and manage due to consistent server and database integration.

CHAPTER 4

ANALYSIS OF REQUIRMENT, DESIGN AND IMPLEMENTATION

This chapter provides a comprehensive discussion on the requirement analysis, system design, database design, use case scenarios, and implementation process of the Hiring Bangla – Online Job Market Place project. This chapter explains how the system was planned, structured, and developed to meet the functional and non-functional requirements of employers, job seekers, and freelancers.

4.1 Requirement Analysis

Requirement analysis is a crucial step to ensure the system meets the needs of all stakeholders effectively. For Hiring Bangla, requirements were identified by analyzing the expectations of employers, job seekers, and freelancers.

Functional Requirements:

The main functional requirements of the system include:

- **User Registration and Role-Based Login:** Secure registration and login system for employers, candidates, and freelancers.
- **Job Posting and Management:** Employers can post jobs with detailed descriptions and manage applications efficiently.
- **Job Search and Online Application:** Candidates can search and apply for jobs online using keywords, categories, and location filters.
- **Task Posting and Bidding System:** Freelancers can bid on tasks, allowing employers to select the most suitable candidate.
- **Partial Payment Option:** Employers can release a partial payment to freelancers before starting the task to ensure commitment and accountability.
- **Job Alert and Notification System:** Automatic notifications and email alerts keep candidates updated about relevant job opportunities.
- **Review and Rating System:** Two-way reviews after job or task completion help maintain trust and transparency.

Non-Functional Requirements:

- **Usability:** The system should be intuitive and easy to use for all types of users.
- **System Security:** Protect sensitive user data and financial transactions from unauthorized access.
- **Responsiveness:** Ensure the website works smoothly across devices like desktops, tablets, and smartphones.
- **Performance:** Handle multiple simultaneous users, fast database queries, and smooth feature execution.

4.2 System Design

The system is designed following a client-server architecture, ensuring separation of frontend presentation and backend processing:

- **Client Side:** Users access the platform through web browsers. The frontend interface is designed using the WorkScout WordPress theme, which provides responsive layouts, easy navigation, and a professional interface for job seekers, employers, and freelancers.
- **Server Side:** Backend operations, including business logic, database communication, and payment processing, are handled by WordPress and related plugins. PHP scripts manage server-side functionalities efficiently.
- **Role-Based Access Control:**
 - **Employers:** Can manage jobs, tasks, applications, and payments.
 - **Candidates/Freelancers:** Can search jobs, apply, bid for tasks, manage wallet, and submit reviews.
 - **Admin:** Has full control over users, job/task listings, payments, and system settings, ensuring smooth and secure operation.

The design ensures modularity, security, and scalability for future enhancements.

4.3 Use Case Description

Employer:

- Register and log in securely
- Post jobs or freelance tasks with detailed descriptions
- Review applications and select candidates
- Provide partial payment for selected tasks
- Rate and review candidates after task completion

Candidate/Freelancer:

- Register and log in
- Search and apply for jobs
- Place bids on tasks and submit proposals
- Receive wallet-based payments
- Submit reviews for employers after completing tasks

Admin:

- Manage all users including candidates, employers, and freelancers
- Approve, edit, or remove job and task listings
- Monitor payments, wallet transactions, and financial records
- Configure system settings and maintain overall platform security

4.4 Database Design

The database is managed through WordPress and WP Job Manager. It stores:

- User and company information
- Job and task listings
- Applications and bids
- Payment record
- Reviews and ratings

4.5 Implementation

The system was implemented by installing WordPress, configuring the WorkScout theme, and activating necessary plugins. Features such as job posting, task bidding, partial payment, job alerts, and review systems were implemented using theme-supported and plugin-based functionalities. After implementation, testing was conducted to ensure all features worked according to the requirements.

CHAPTER 5

PROJECT DESCRIPTION

This chapter provides a detailed description of the Hiring Bangla project, including its structure, user interface, and main functionalities.

5.1 Home Page

The home page of Hiring Bangla is designed to provide easy navigation and quick access to job listings, tasks, companies, and freelancers. Users can search for jobs using keywords, categories, and locations. The home page also displays featured jobs and tasks.

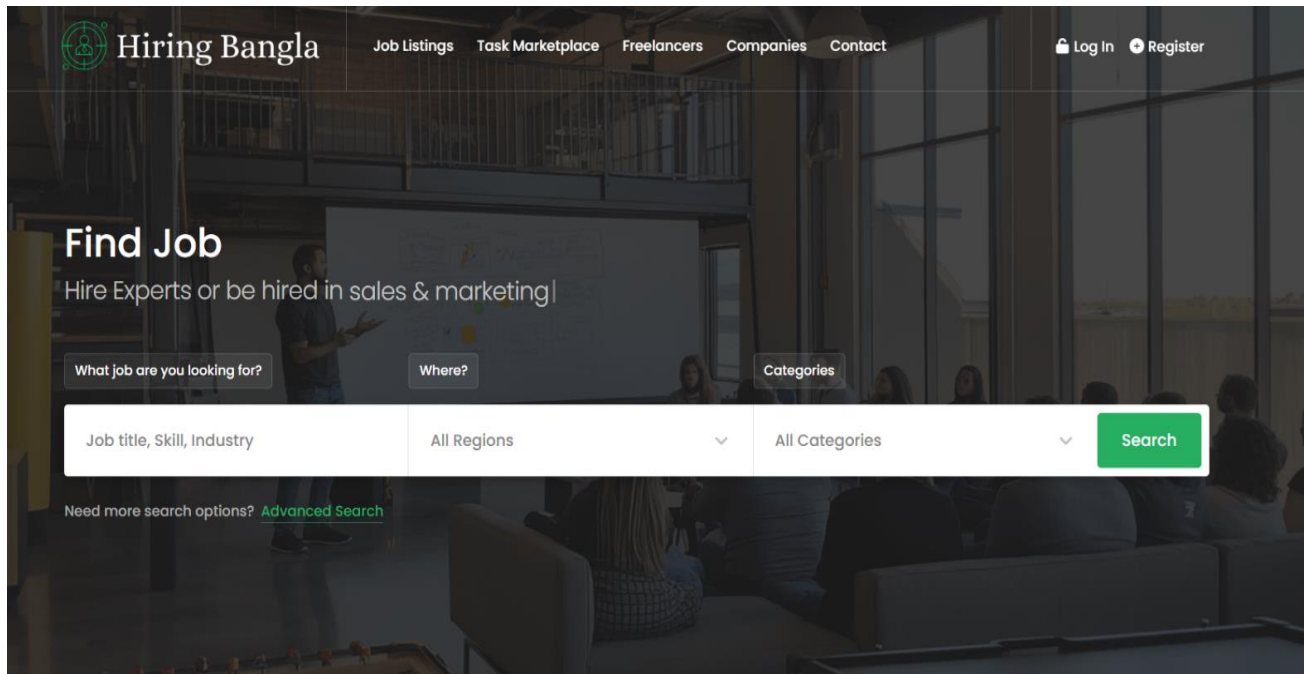
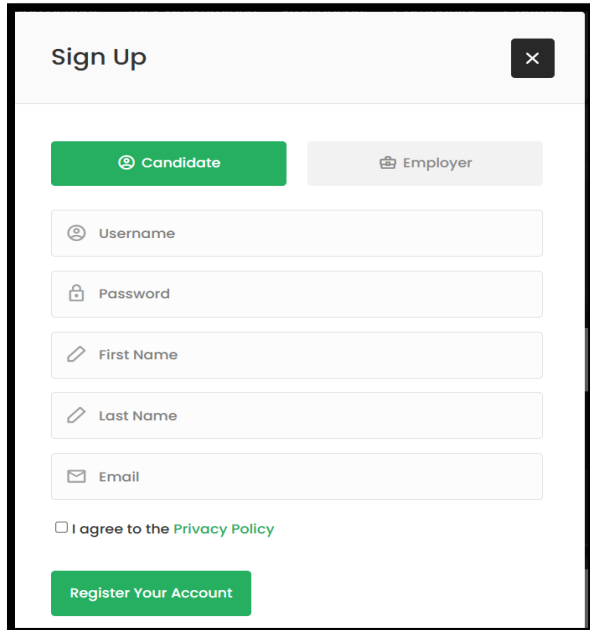


Figure 5.1: Home Page

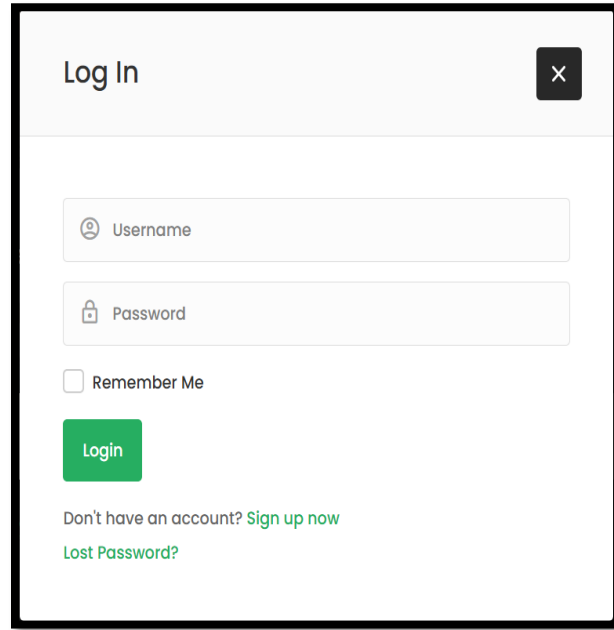
5.2 Login / Registration

The Login and Registration page enables users to securely create accounts and log in based on their role. After authentication, users are redirected to their role-based dashboard for accessing system features.



The Sign Up form is titled "Sign Up" and includes a close button (X) in the top right corner. It features two role selection buttons: "Candidate" (highlighted in green) and "Employer". Below these are input fields for Username, Password, First Name, Last Name, and Email. A checkbox labeled "I agree to the Privacy Policy" is positioned above a green "Register Your Account" button.

Figure 5.2: Registration Page

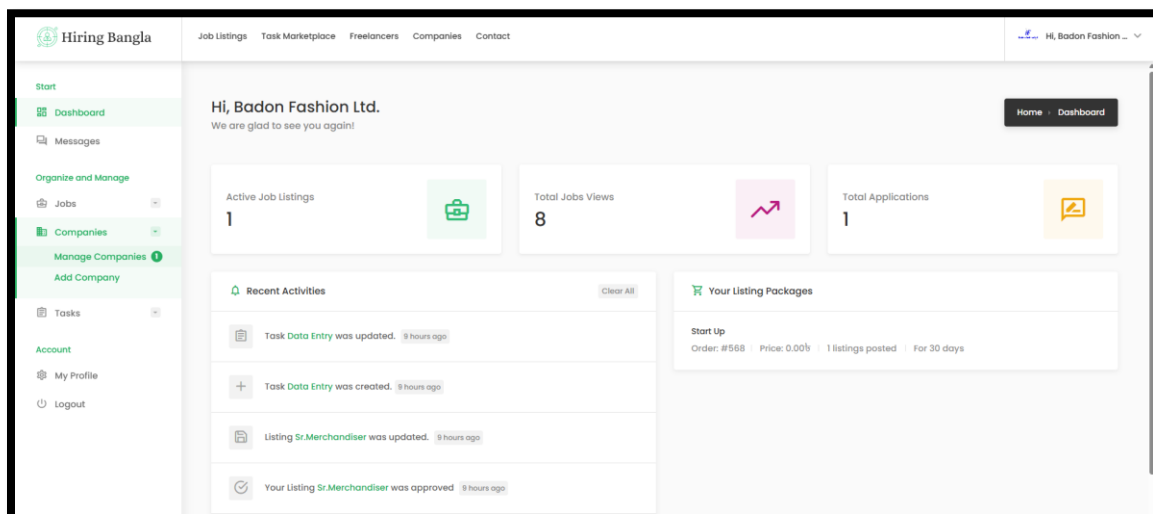


The Log In form is titled "Log In" and includes a close button (X) in the top right corner. It features input fields for Username and Password. Below these is a "Remember Me" checkbox and a green "Login" button. At the bottom, there are links for "Don't have an account? Sign up now" and "Lost Password?".

Figure 5.3: Login Page

5.3 Employer Dashboard

Employers can access a dashboard to manage job postings, view applications, and monitor task bids. They can approve or reject applications and provide partial payments to freelancers for task-based work.



The Employer Dashboard for "Badon Fashion Ltd." features a sidebar with navigation options: Start, Dashboard, Messages, Organize and Manage (Jobs, Companies, Manage Companies, Add Company), Tasks, and Account (My Profile, Logout). The main content area displays a welcome message and three key metrics: Active Job Listings (1), Total Jobs Views (8), and Total Applications (1). Below these are sections for "Recent Activities" (listing updates and creations) and "Your Listing Packages" (showing a "Start Up" package with order #568, price 0.00, 1 listing posted, and 30-day duration).

Figure 5.4: Employer Dashboard

Job Post:

The screenshot shows the 'Post a Job' interface. On the left is a navigation sidebar with sections: 'Start' (Dashboard, Messages), 'Organize and Manage' (Jobs, Manage Jobs, Submit Job), 'Companies', 'Tasks', 'Account' (My Profile, Logout). The main content area is titled 'Post a Job' and includes a 'Home Dashboard' button. The form consists of two main sections: 'Select Company' with a dropdown menu and a checkbox for 'I accept the Terms and Conditions', and 'Job Submission Form' with fields for 'Job Title', 'Location (optional)', 'Job Region', and a note: 'Leave this blank if the location is not important'.

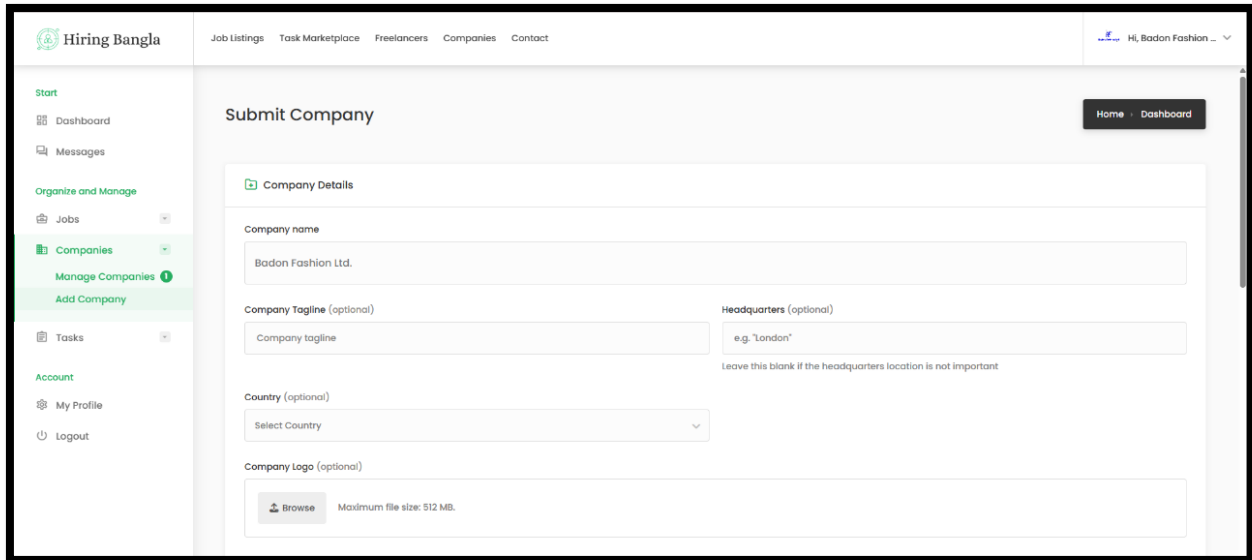
Figure 5.5: Job Post Overview

Task Post:

The screenshot shows the 'Submit Task' interface. The navigation sidebar is similar to the previous one, but the 'Tasks' section is highlighted. The main content area is titled 'Submit Task' and includes a 'Home Dashboard' button. The form consists of two main sections: 'Select Company' with a dropdown menu showing 'Private Listing', and 'Task Submission Form' with fields for 'Project Name' (e.g. 'build me a website'), 'Category' (Childcare), 'Location' (e.g. 'London, UK', 'New York', 'Houston, TX'), 'Remote Position' (checkbox), 'What is your estimated budget?' (Budget Min. and Budget Max. fields), and 'Deadline'. There is also a 'Skills' section with an 'Add Skills' button.

Figure 5.6: Task Post Overview

Add Company:



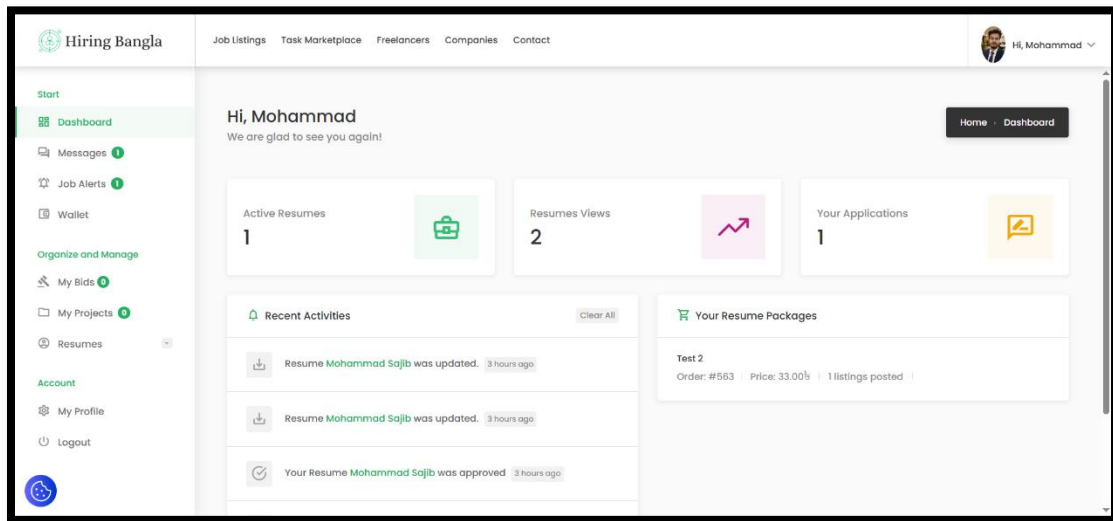
The screenshot shows the 'Submit Company' form in the Hiring Bangla application. The form is titled 'Submit Company' and is located in the 'Organize and Manage' section of the user's dashboard. The form fields are as follows:

- Company name:** A text input field containing 'Badon Fashion Ltd.'
- Company Tagline (optional):** A text input field containing 'Company tagline'.
- Headquarters (optional):** A text input field containing 'e.g. London'. Below this field is a note: 'Leave this blank if the headquarters location is not important'.
- Country (optional):** A dropdown menu with 'Select Country' selected.
- Company Logo (optional):** A file upload field with a 'Browse' button and a note: 'Maximum file size: 512 MB.'

Figure 5.7: Add Company Overview

5.4 Candidate Dashboard

Job seekers and freelancers can view and update their profiles, track applied jobs, bid on tasks, and receive notifications. After completing a job or task, candidates can provide reviews and ratings for the employer.



The screenshot shows the 'Candidate Dashboard' in the Hiring Bangla application. The dashboard is titled 'Hi, Mohammad' and is located in the 'Start' section of the user's dashboard. The dashboard features several key metrics and sections:

- Active Resumes:** 1
- Resumes Views:** 2
- Your Applications:** 1
- Recent Activities:** A list of activities including 'Resume Mohammad Sajlb was updated. 3 hours ago' and 'Your Resume Mohammad Sajlb was approved. 3 hours ago'.
- Your Resume Packages:** A section showing 'Test 2' with details: 'Order: #563 | Price: 33.00\$ | 1 listings posted'.

Figure 5.8: Candidate Dashboard

Add Resume:

The screenshot shows the 'Submit Resume' page in the Hiring Bangla dashboard. The page features a sidebar on the left with navigation options: Start (Dashboard, Messages, Job Alerts, Wallet), Organize and Manage (My Bids, My Projects, Resumes, Manage Resumes, Add Resume, My Applications), and Account (My Profile, Logout). The main content area is titled 'Submit Resume' and contains a 'Resume Submission Form'. The form includes fields for 'Your name' (Mohammad Sajib), 'Your email' (it@badanfashion.com), 'Region' (Barishal), 'Professional title' (e.g. 'Web Developer'), 'Location' (e.g. 'London, UK', 'New York', 'Houston, TX'), and 'Country (optional)' (Select Country). There is also a 'Gallery (optional)' section with a dashed border and the text 'Click here or drop files to upload'.

Figure 5.9: Add Resume Overview

Project Listing:

The screenshot shows the 'My Projects' page in the Hiring Bangla dashboard. The sidebar is identical to the previous screenshot. The main content area is titled 'My Projects' and contains a 'Projects List' section. The list shows a single project: 'Data Entry' with a status of 'Completed'. Below the project name, it indicates 'Project Completion: 100%' with a progress bar. There are two buttons: 'View Project' and 'Rate Freelancer'.

Figure 5.10: Project Listing Overview

Wallet:

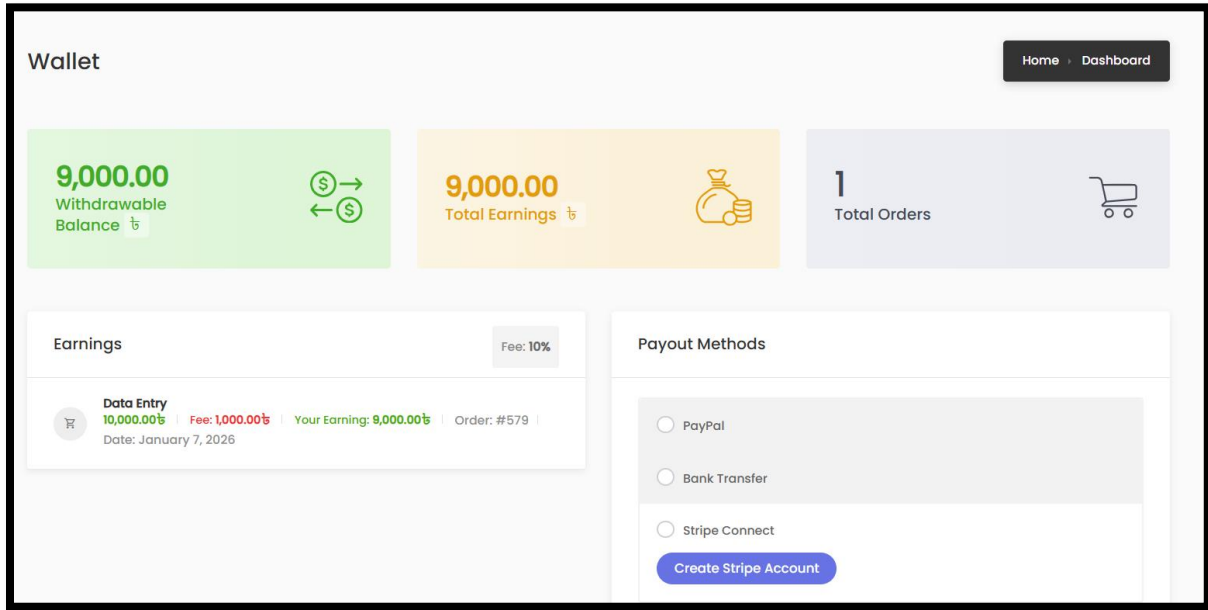


Figure 5.11: Wallet Overview

Job Alert:

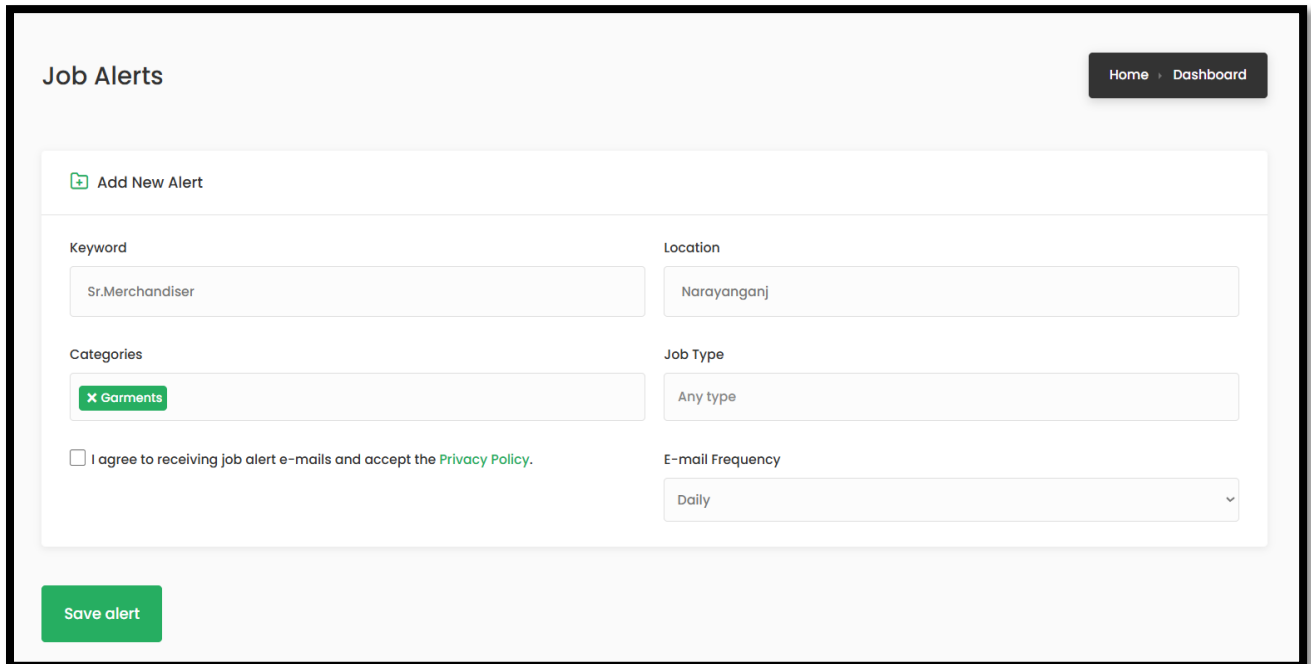


Figure 5.12: Job Alert Overview

5.5 Task Bidding and Partial Payment

Freelancers can bid on tasks posted by employers. Once a bid is accepted, employers can release a partial payment before the work begins. This system ensures trust and commitment between both parties.

Bid Listing:

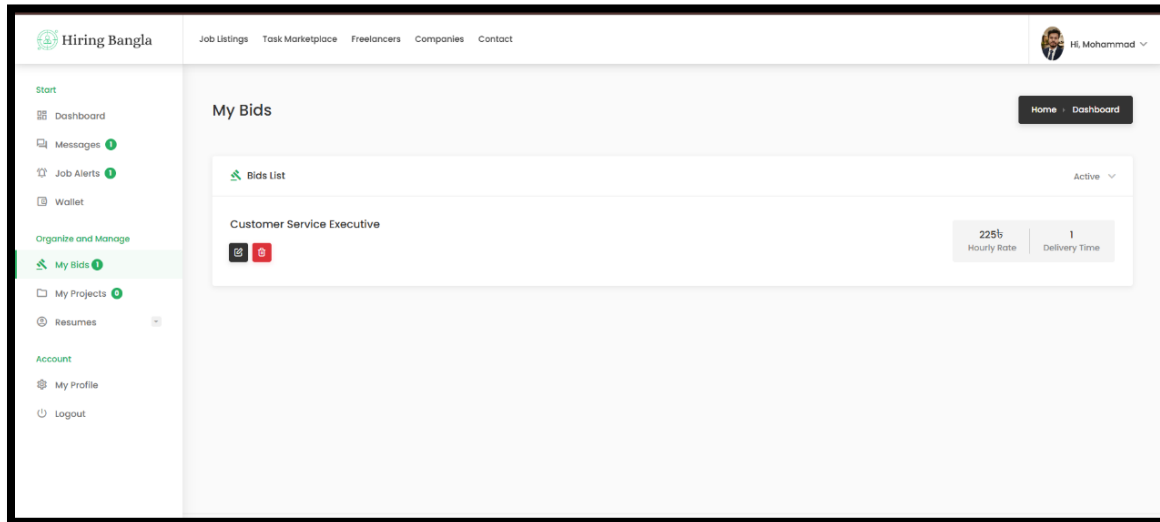


Figure 5.13: Bid Listing Overview

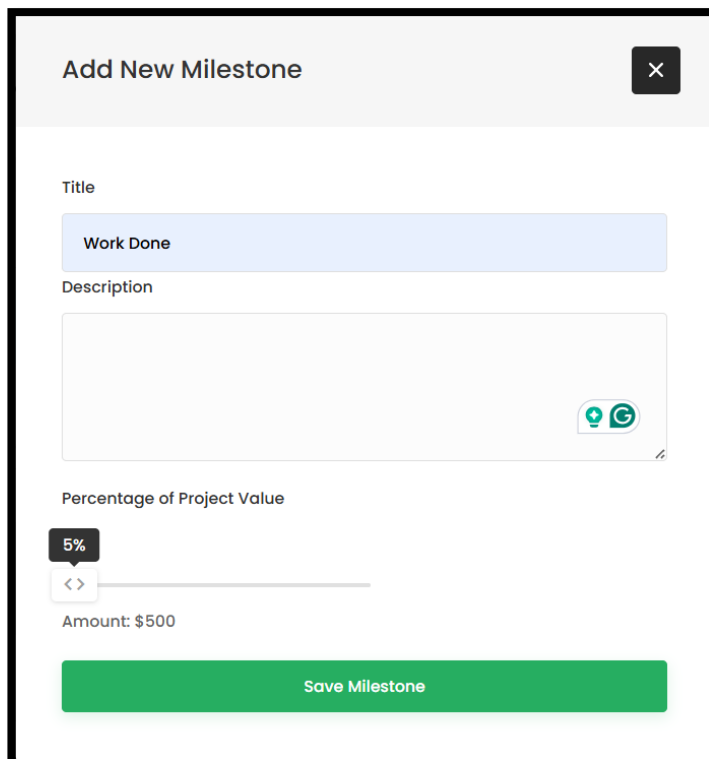
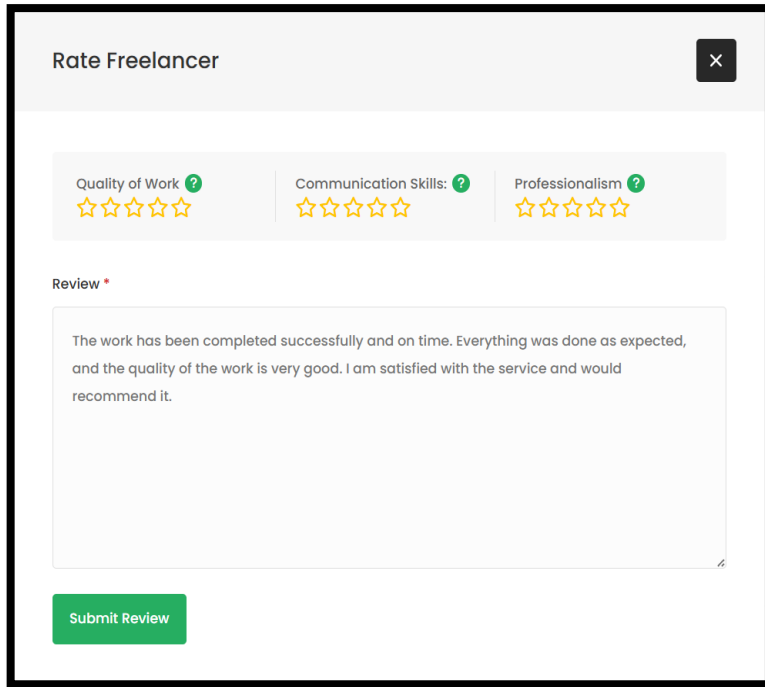


Figure 5.14: Partial Payment Overview

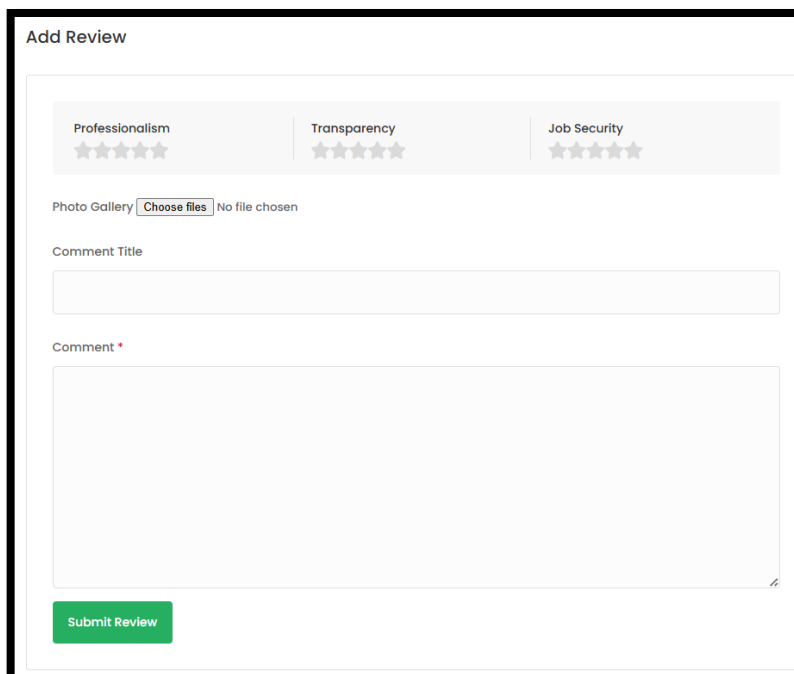
5.6 Review and Rating System

After completing a job or task, both employers and candidates can rate and review each other. This two-way feedback helps maintain transparency and improve the credibility of the platform.



The screenshot shows a 'Rate Freelancer' form. At the top, there are three rating categories: 'Quality of Work' with a 5-star rating, 'Communication Skills' with a 5-star rating, and 'Professionalism' with a 5-star rating. Below these is a 'Review' section with a text area containing the text: 'The work has been completed successfully and on time. Everything was done as expected, and the quality of the work is very good. I am satisfied with the service and would recommend it.' A green 'Submit Review' button is at the bottom.

Figure 5.15: Candidate review Overview



The screenshot shows an 'Add Review' form. At the top, there are three rating categories: 'Professionalism' with a 5-star rating, 'Transparency' with a 5-star rating, and 'Job Security' with a 5-star rating. Below these is a 'Photo Gallery' section with a 'Choose files' button and the text 'No file chosen'. There is a 'Comment Title' text input field and a 'Comment' text area. A green 'Submit Review' button is at the bottom.

Figure 5.16: Employer Review Overview

5.7 Job Listing Page

The job listing page shows all active job postings with filters for category, location, and type. Users can click on a job to view detailed information and apply online.

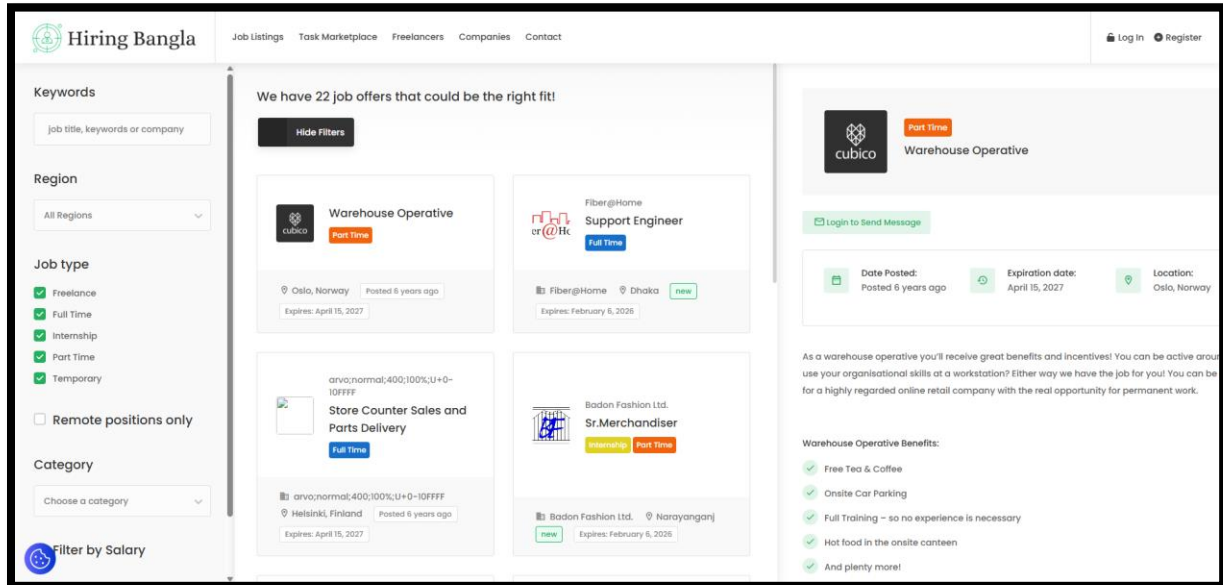


Figure 5.17: Job Listing Page

5.8 Task Listing Page

The task listing page displays all available tasks with filtering options based on category and budget. Freelancers can view task details and place bids directly through the platform.

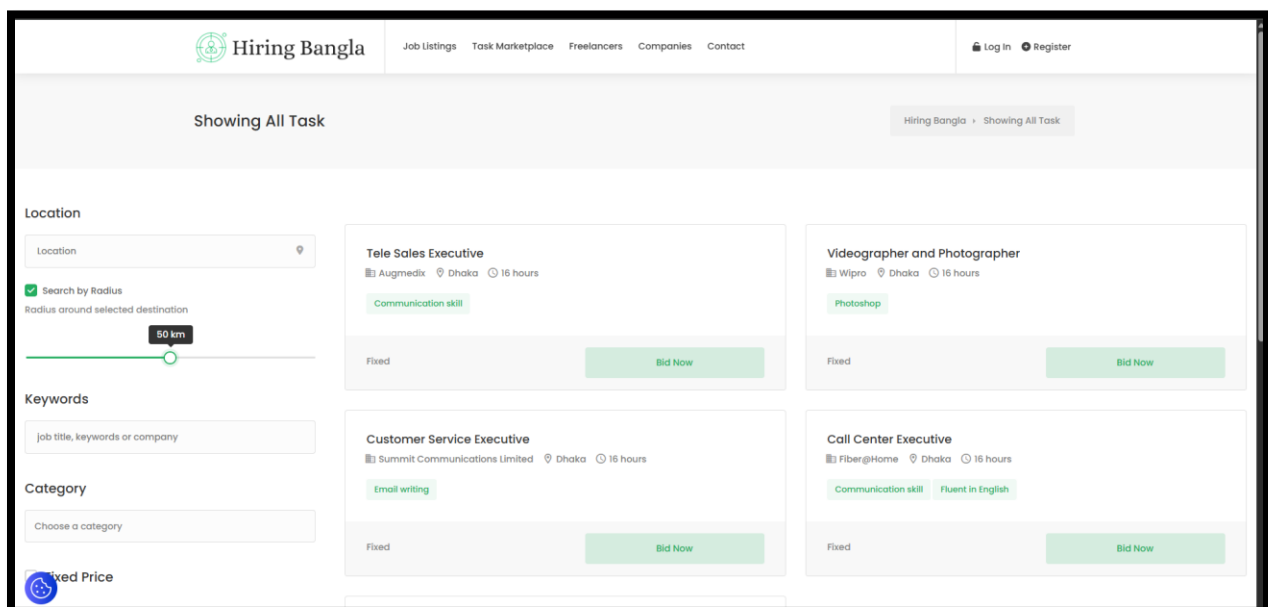


Figure 5.18: Task Listing Page

5.9 Freelancer & Companies Page

Freelancer Page:

The freelancer page displays registered freelancers with their skills, experience, and ratings. Employers can browse freelancer profiles and select suitable candidates for tasks or projects.

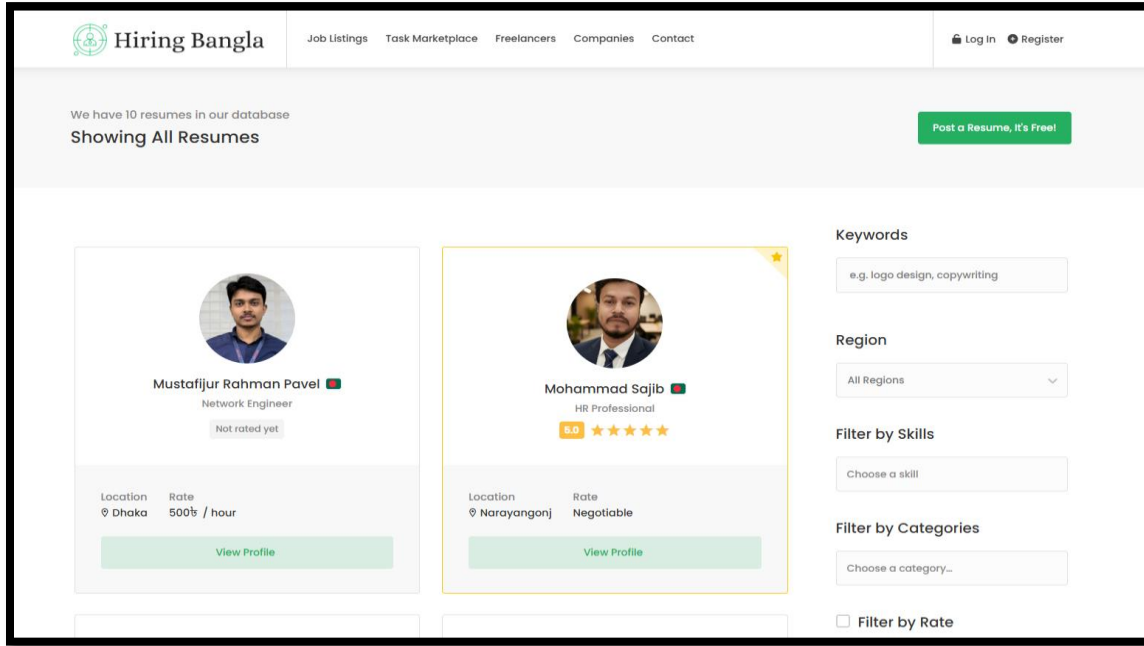


Figure 5.19: Freelancer Listing Page

Companies Page:

The companies' page shows a list of registered companies along with their profiles and posted jobs. Users can view company details and available job openings easily.

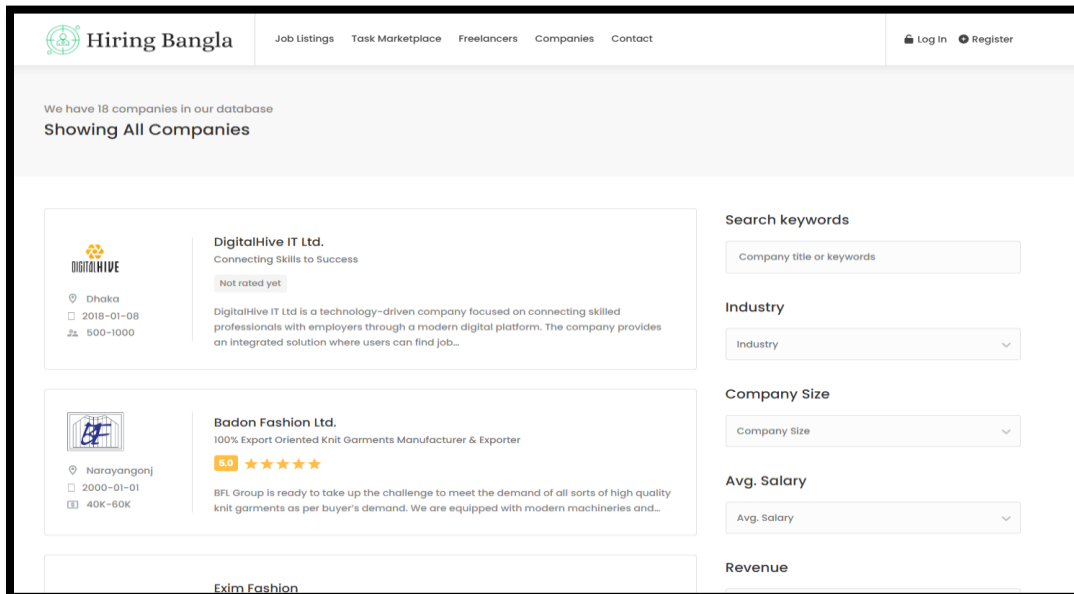


Figure 5.20: Companies Listing Page

CHAPTER 6

CONCLUSION

6.1 Conclusion

This project is designed and developed a job and task marketplace system that allows job seekers and employers to interact on a single platform. Job seekers can search and apply for available jobs and also bid on tasks similar to a freelancer system. Employers can post job vacancies as well as task/projects.

The system combines the features of traditional job portal and a freelance marketplace, which helps users save time and effort. Job seekers are given more opportunities to find work based on their skills and employers can easily find suitable candidates for both long-term jobs and short-term tasks.

This platform provides a comprehensive solution for employment and freelance task management. It has the potential to enhance workforce engagement, improve hiring efficiency and adapt to future labor market trends.

6.2 Future Scope

- Integration of online payment systems
- Advanced reporting and analytics
- Mobile application development

REFERENCES

1. Online Job Portal Research Articles.
2. WordPress.org. (2024). WordPress Content Management System.
 - a. Available at: <https://wordpress.org>
3. Automattic Inc. (2024). WordPress Developer Resources.
 - a. Available at: <https://developer.wordpress.org>
4. WP Job Manager. (2024). WP Job Manager Documentation.
 - a. Available at: <https://wpjobmanager.com/documentation>
5. WorkScout Theme. (2024). WorkScout – Job Board WordPress Theme.
 - a. Available at: <https://workscout.in>
6. PHP Documentation Group. (2024). PHP: Hypertext Preprocessor.
 - a. Available at: <https://www.php.net/docs.php>
7. W3C. (2024). HTML5 Specification.
 - a. Available at: <https://www.w3.org/TR/html5>
8. W3C. (2024). Cascading Style Sheets (CSS).
 - a. Available at: <https://www.w3.org/Style/CSS>
9. Mozilla Developer Network (MDN). (2024). JavaScript Guide.
 - a. Available at: <https://developer.mozilla.org/en-US/docs/Web/JavaScript>
10. Oracle Corporation. (2024). MySQL Database Documentation.
 - a. Available at: <https://dev.mysql.com/doc>
11. Apache Software Foundation. (2024). Apache HTTP Server Documentation.
 - a. Available at: <https://httpd.apache.org/docs>
12. Sommerville, I. (2016). Software Engineering (10th ed.). Pearson Education.
13. Pressman, R. S. (2014). Software Engineering: A Practitioner’s Approach (8th ed.). McGraw-Hill.