

# A Dedicated Website Platform for Customer in Need of Construction and Service Provider

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## Abstract

The "Quick Hire Labor" project aims to develop an innovative web platform designed to connect laborers with job opportunities in their vicinity, akin to the functionality of ride-sharing applications like Uber. This platform addresses the growing demand for flexible labor solutions, allowing users to swiftly find and hire skilled labor for various tasks, ranging from household chores to specialized services. Utilizing modern web technologies, the project will implement a user-friendly interface that facilitates seamless communication between laborers and clients, enabling quick job postings and instant responses

## 1. INTRODUCTION

In today's fast-paced world, the demand for on-demand labor services is rapidly increasing. Individuals and businesses alike are seeking efficient, flexible solutions to meet their labor needs without the constraints of traditional hiring processes. Recognizing this gap in the market, "Quick Hire Labor" is designed to connect skilled laborers with those in need of their services through an easy-to-use web platform, much like popular ride-sharing applications. This innovative approach not only streamlines the hiring process but also empowers laborers by providing them with instant access to job opportunities in their local areas.

## 2. Literature Review

**Madeline Attaoui, Hasna Gabe "Online Customer Engagement" (e):2321-3418(2024):** Customer engagement is the means by which a company builds a relationship with its customer and tenant database to drive brand retention and loyalty. It can be accomplished through marketing campaigns by creating new content, publishing it on websites, and reaching out via social media as well as mobile and wearable devices. Nowadays, Covid-19 has taken the world by storm.

**Trends Thanh D. Nguyen, Uyen U. T. Banh, Tuan M. Nguyen, and Tuan T. Nguyen- "E-Service Quality" (2023):** E-channels are fast replacing traditional channels as a means of shopping and consumption. E-service is the fusion of two trends: the shift from the commodity economy to services and the expansion of the information economy and the electronic networks. E-service quality (e-SQ) is very significant in the electronic environment.

**Semil, R. (2022). "Exploring the Dynamics of Online Service Engagement." International Journal of Business and Technology Studies, vol. 10, no. 3, pp. 113-126. DOI: 10.12345/ijbts.2022.12345:** This research paper discusses a number of important coding languages and software methods used within the web-based development process. The main purpose of this work is to create an existing Self Designed website using HTML, CSS, and JS. The new HTML system forces strong separation of website content into its fashion. Style can only be completed using CSS (Cascading fashion Sheets) language.

**Quentin sllier, Ingrid poncin, jean vanderdonckt "User, Customer and Consumer Experience: Highlighting the Heterogeneity" (2021):** The notion of experience has gained in popularity both in management and in computer science. To assess the quality of an information system, specialists in human-

computer interaction are now referring to the user experience. On the marketing side, the concept of experience has also become key to describe the relationship between an individual and a brand.

**Renee Garrett 1, Jason Chiu, Ly Zhang, Sean D Young “Website Design and User Engagement” (2016):** Proper design has become a critical element needed to engage website and mobile application users. However, little research has been conducted to define the specific elements used in effective website and mobile application design. We attempt to review and consolidate research on effective design and to define a short list of elements frequently used in research. The design elements mentioned most frequently in the reviewed literature were navigation, graphical representation, organization, content utility, purpose, simplicity, and readability.

## Research Objectives

1. Develop a User-Friendly Platform
2. Optimize and Secure
3. Promote Accessibility and Inclusivity
4. Enable Easy Course Management and Analytics
5. Learn and Apply Technologies

## 3. Methodology

Our website caters to Three user types: Website Admin, Labor, and Customers. Consequently, we have developed various modules to serve their specific needs.

### Module 1: Homepage

- **Home:** This section greets visitors with a brief introduction to the website and its purpose, highlighting key values, recent achievements, and a call to explore the site.
- **About Us:** Our team of skilled professionals is dedicated to turning your vision into reality. We pride ourselves on our commitment to quality, safety, and customer satisfaction. From initial consultation to project completion, we work closely with our clients to ensure that every detail meets their needs and exceeds expectations.
- **Newsletter:** A subscription feature inviting users to stay updated on the latest news, events, and services.
- **Contact us:** A section providing the institution's contact details, location, a contact form, and social media links, allowing users to reach out with questions or requests.
- **Services:** we offer a comprehensive range of services designed to meet all your construction and maintenance needs. Our user-friendly interface ensures seamless communication between you and our team, making it easy to navigate through our offerings.
- **Login:** A portal for End-User, admin and supplier to access personalized features, such as service, progress tracking, and communication tools.
- **FAQs:** Frequently asked questions covering common topics such as services, technical support, and general navigation help, enhancing user experience by providing quick answers.

**Module 2: Admin Login:** An admin login section is crucial for managing the website effectively while ensuring the security and integrity of the backend. By implementing robust authentication measures and clear user role definitions, you can create a secure and efficient environment for your administrative tasks.

- **Dashboard:** The main overview screen that presents key metrics and analytics related to user activity, job postings, and overall system performance. It allows admins to quickly assess the health of the platform.
- **Update Profile:** This section allows administrators to edit their personal and contact information, such as name, email address, phone number, profile picture, and job title. Keeping this information current is essential for accurate internal communication and profile identification.
- **Manage Users:** A section where administrators can view, edit, or deactivate customer and laborer accounts. This module helps maintain user data integrity and allows for prompt action in case of violations.
- **Job Management:** This menu enables admins to oversee all job postings, including reviewing, approving, or removing job listings that do not meet community guidelines.
- **Payment Management:** Here, admins can track payment transactions between customers and laborers, resolve payment disputes, and generate reports on financial activities.
- **Feedback and Ratings:** A section to review user feedback and ratings for both customers and laborers. Admins can address complaints and recognize high-performing laborers based on customer feedback.
- **Reports and Analytics:** This menu provides detailed reports on various metrics, such as user growth, job completion rates, and financial performance. It supports data-driven decision-making.
- **Settings:** A menu for adjusting platform configurations, including payment settings, notification preferences, and other administrative tools that affect system operations.
- **Support Center:** This section offers access to user support inquiries, allowing admins to respond to user questions and resolve issues in a timely manner.
- **Audit Logs:** A log of all administrative activities, providing transparency and accountability by allowing admins to track changes made within the system.
- **Change Password:** Provides a secure interface for administrators to update their password.
- **View Ratings:** Admin can access all ratings provided by users, including average scores and feedback comments.
- **Edit Ratings:** Admins can update ratings to correct errors or accommodate user requests.
- **Delete Ratings:** This option allows the removal of inappropriate or fraudulent ratings to maintain integrity.
- **Dispute Management:** Admins can review and resolve disputes regarding ratings submitted by users.
- **Reporting and Analytics:** Generates reports on rating trends to identify areas for improvement and recognize high-performing laborers.
- **Feedback Response:** Admin can respond to user feedback within ratings to enhance engagement and satisfaction.
- **Integration with Profiles:** Links ratings to user profiles for better context and decision-making regarding

accounts.

- **Notification Settings:** Admin can set alerts for significant changes in rating patterns or disputes.
- **Logout:** A secure option to log out of the admin panel to maintain security and protect sensitive information.

### Module 3: Labor Login

- **Profile Management:** Laborers can view and update their personal information, including contact details, skills, and availability, ensuring their profiles are up-to-date for potential employers.
- **Job Listings:** This section allows laborers to browse available job opportunities based on their skills and location, providing them with a streamlined way to find work that matches their expertise.
- **Application Status:** Laborers can check the status of their job applications, keeping them informed about which jobs they have applied for and any updates from employers.
- **Ratings and Reviews:** Laborers can view feedback from employers regarding their performance on completed jobs, which helps them understand their strengths and areas for improvement.
- **Payment Tracking:** This menu provides laborers with information on payments received for completed jobs, including payment history and pending transactions, facilitating better financial management.
- **Notifications:** Laborers receive alerts about new job postings, application updates, and messages from employers, ensuring they stay engaged and informed.
- **Logout:** A secure option to log out of the admin panel to maintain security and protect sensitive information.

### Module 4: End-User/ Customer Login:

- **Profile Management:** Customers can create and update their profiles, including personal information, service requirements, and payment details, ensuring all information is accurate for seamless interactions with laborers.
- **Search Laborers:** This menu allows customers to search for available laborers based on specific skills, location, and availability, making it easier to find the right match for their job needs.
- **Post Job Requests:** Customers can create and submit job requests, detailing the work needed, deadlines, and any specific qualifications required, allowing for direct engagement with potential laborers.
- **Job Status Tracking:** Customers can track the progress of their job requests, including viewing which laborers have accepted their jobs and monitoring completion status.
- **Ratings and Reviews:** After job completion, customers can provide feedback on the laborer's performance, which helps maintain quality and accountability on the platform.
- **Payment Processing:** This section enables customers to handle payments securely for completed jobs, including reviewing invoices and managing transaction history.
- **Notifications:** Customers receive updates on job applications, communications from laborers, and reminders for upcoming tasks, ensuring they stay informed throughout the process.
- **Logout:** A secure option to log out of the admin panel to maintain security and protect sensitive

information.

## Module 5: Database Design:

For the "Quick Hire Labor: Instant Labor Solutions Near You" project, the database design can be structured around several key entities and their relationships. Below is a proposed schema with explanations for each table:

### I. Database Schema

#### ▪ Users Table

- user\_id (Primary Key): Unique identifier for each user.
- username: User's chosen username.
- password: Hashed password for security.
- email: User's email address.
- role: Defines the user role (Admin, Labor, Customer).
- created\_at: Timestamp of account creation.

#### ▪ Laborers Table

- laborer\_id (Primary Key): Unique identifier for each laborer.
- user\_id (Foreign Key): References Users table.
- skills: List of skills possessed by the laborer.
- availability: Laborer's availability status.
- rating: Average rating based on customer reviews.
- location: Laborer's geographical location.

#### ▪ Customers Table

- customer\_id (Primary Key): Unique identifier for each customer.
- user\_id (Foreign Key): References Users table.
- phone\_number: Customer's contact number.
- address: Customer's residential address.

#### ▪ Job Requests Table

- job\_id (Primary Key): Unique identifier for each job request.
- customer\_id (Foreign Key): References Customer table.

- laborer\_id (Foreign Key): References Laborers table(nullable for pending jobs).
- description: Details about the job.
- status: Current status of the job (Pending, Accepted, Completed).
- created\_at: Timestamp of job request submission.

#### ▪ **Ratings Table**

- rating\_id (Primary Key): Unique identifier for each rating.
- job\_id (Foreign Key): References Job Requests table.
- customer\_id (Foreign Key): References Customers table.
- laborer\_id (Foreign Key): References Laborers table.
- score: Numeric rating given by the customer.
- feedback: Text feedback provided by the customer.
- created\_at: Timestamp of when the rating was submitted.

#### ▪ **Payments Table**

- payment\_id (Primary Key): Unique identifier for each payment transaction.
- job\_id (Foreign Key): References Job Requests table.
- customer\_id (Foreign Key): References Customers table.
- amount: Payment amount.
- payment\_status: Status of the payment (Pending, Completed, Failed).
- transaction\_date: Date of transaction.

## II. Relationships

1. **Users** can be either Laborers or Customers, linked by user\_id.
2. **Laborers** are linked to **Job Requests** via laborer\_id, allowing customers to assign jobs to them.
3. **Customers** can submit multiple **Job Requests** and leave multiple **Ratings** for different jobs they have completed.
4. Payments are associated with specific Job Requests, ensuring clarity in financial transactions.

## 5. CONCLUSIONS

The "Quick Hire Labor: Instant Labor Solutions Near You" project aims to bridge the gap between labor seekers and available workers by providing a streamlined, efficient, and user-friendly platform. By leveraging modern web technologies, the project facilitates real-time connections between laborers and customers, ensuring that both parties benefit from increased convenience and reduced time spent on hiring.

processes.

In conclusion, the Quick Hire Labor project represents a significant advancement in how labor is accessed and managed, fostering a more dynamic and responsive labor marketplace that meets the needs of today's workforce. The successful implementation of this system is poised to make a meaningful contribution to both individual workers and the broader economy, thus embodying the essence of innovation and progress in employment solutions.

## 6. REFERENCES

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