

# **Main Project**

## **SafeHire Migration**

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## **Abstract:**

"SafeHire Migration" is a comprehensive and forward-thinking web-based platform designed to revolutionize the process of labor migration by prioritizing the safety, well-being, and fair treatment of migrant workers. This innovative system serves as a bridge connecting migrant workers with responsible employers, government agencies, and relevant stakeholders. The platform offers a range of functionalities aimed at ensuring ethical hiring practices, document verification, health monitoring, and the protection of labor rights. Through an intuitive and user-centric interface, "SafeHire Migration" aims to redefine the landscape of labor migration by creating an ecosystem built on transparency, accountability, and empowerment.

## **Modules And Functionalities**

- **Admin**
  - User Management:
    - Register and manage user accounts for administrators, agents, and police personnel.
    - Assign different roles and permissions to each user category.
  - Document Verification Management:
    - Monitor and review document verification processes for migrant workers.
    - Approve or reject document verifications based on authenticity.
  - Worker Details Management:
    - Maintain a centralized database of all migrant worker profiles and employment records.
    - Update worker details, job assignments, and employment history.
  - Payment Management for Agents:
    - Manage and track payments to agents for successfully placing workers in job positions.
    - Generate reports for agent commissions and transactions.
  - Employer Verification:
    - Verify and approve employer profiles to ensure legitimacy and adherence to ethical practices.
  - Notifications and Alerts:
    - Send notifications and alerts to users about pending tasks, document approvals, and updates.
  - Agent Registration and Management:
    - Register and manage agent profiles, track their activities, and verify their legitimacy.

- Data Privacy and Security:
  - Implement robust data encryption and security measures to protect sensitive information.
- Reporting and Communication Tools:
  - Generate comprehensive reports for government agencies, stakeholders, and NGOs.
  - Facilitate communication with external organizations involved in labor migration.
- Integration with Authorities:
  - Integrate the system with relevant government agencies for seamless data sharing and compliance.
- **Agent**
  - Agent Profile Management:
    - Agents can register and create their profiles with personal and contact information.
    - Update and maintain their profile details.
  - Worker Profile Creation:
    - Agents can create profiles for migrant workers with personal, contact, and employment details.
    - Upload required documents, such as passports, visas, and work permits.
  - Worker Profile Editing:
    - Agents can edit and update worker profiles to reflect changes in employment or personal details.
  - Add Another Worker:
    - Agents have the ability to add multiple worker profiles through a streamlined process.
  - Payment for Worker Registration:
    - Agents can initiate and process payments for worker registration on the platform.
  - Payment History:
    - Display a history of payments made by agents for worker registrations.
  - Document Management:
    - Agents can upload and manage required documents for each worker's profile.
- **Police**
  - Agent and Worker Profile Viewing:
    - Police can access the profiles of both agents and migrant workers to review their information.
  - Document Verification:
    - Verify the authenticity of documents uploaded by workers during the registration process.
  - Face Recognition Authentication:
    - Implement face recognition technology for police officers to authenticate their access to the system.

- Approval and Rejection of Profiles:
  - Police can approve or reject agent and worker profiles based on verification outcomes.
- Document Verification History:
  - Maintain a history log of document verification actions taken by police officers.
- Profile Audit Trail:
  - Keep a track of actions performed by police officers on agent and worker profiles.
- Search and Filter Profiles:
  - Allow police officers to search and filter profiles based on specific criteria.
- Compliance Monitoring:
  - Monitor compliance of agents and employers with labor and immigration regulations.
- Suspension or Blacklisting:
  - Suspend or blacklist agents, workers, or employers found to be involved in fraudulent activities.
- Communication Tools:
  - Communicate with agents, workers, and employers for inquiries or investigations.
- Evidence Management:
  - Manage and store evidence related to investigations and incidents.
- Worker Status Updates:
  - Update worker profiles with information related to police clearance and criminal records.
- Data Privacy and Ethics:
  - Enforce data privacy regulations and ethical considerations in system usage.
- Multi-Level Authentication:
  - Implement multi-factor authentication for police officers to access the system.
- Collaboration with Other Authorities:
  - Collaborate and share information with other government agencies involved in labor and immigration oversight.
- **Users**
  - View Verified Workers:
    - Users can view and access profiles of only those workers who have been verified by the system.
  - Contact Workers via Agents:
    - Users can obtain the contact details of workers through their respective agents.
  - Search and Filter Workers:
    - Users can search and filter workers based on specific criteria, such as skills or job preferences.

- View Worker Profiles:
  - Users can access detailed worker profiles, including employment history and skills.
- Request Worker Information:
  - Users can request additional information about workers through the respective agents.
- Submit Job Opportunities:
  - Users can submit job openings that match the skills and preferences of verified workers.
- Communication with Agents:
  - Users can contact agents to inquire about worker availability, skills, and suitability for job roles.
- View Agent Profiles:
  - Users can access profiles of registered agents to understand their services and offerings.

## **Technologies**

### **Front-End Development:**

Web: HTML, CSS, JavaScript

Frameworks/Libraries: React

### **Back-End Development:**

Languages: Python

Frameworks: Django

### **Database Management:**

Relational Databases: MySQL

### **Authentication and Security:**

user authentication and authorization

secure data transmission

Encryption mechanisms

### **Mini Project:**

#### **Agent**

- ☐ Agents create their profile
- ☐ Create profile and personal information of the workers
- ☐ Add another worker

#### **Police**

- ☐ See the profile of agents and workers
- ☐ Document Verification
- ☐ They can approve or reject

#### **Employer**

- ☐ Only see the verified workers
- ☐ Contact workers by getting the contact details of agent
- ☐ Do payment for Booking worker

#### **Admin**

- ☐ View the profile of employers, agents, police
- ☐ Varify the users
- ☐ View all the worker details
- ☐ Add Work category

#### **Technology Stack**

- ☐ Frontend: HTML, CSS, JS, bootstrap for the user interface.
- ☐ Backend: Django, SQLite.
- ☐ Payment Integration: RazorPay

## **Main Project:**

"SafeHire Migration" represents a cutting-edge main project that expands upon the foundation laid by its mini-project counterpart. This comprehensive web-based platform continues to prioritize the safety, well-being, and fair treatment of migrant workers while introducing advanced functionalities to revolutionize the labor migration process. In addition to the agent module, which allows agents to create profiles and manage worker information, and the police module for document verification and interaction with verified workers, the main project incorporates groundbreaking features. Digital document authentication by police enhances security measures, ensuring the authenticity of worker identities, while real-time worker status provides an added layer of safety. The platform's commitment to the protection of labor rights extends to health monitoring and emergency services for migrant workers. Advanced document verification processes further enhance the integrity of the system. "SafeHire Migration" redefines the landscape of labor migration by creating a robust ecosystem that addresses the evolving needs of all stakeholders involved.

## **Modules And Functionalities**

- **Admin**
  - Payment Management of employers
  - Track workers current status
  - Health monitoring and Emergency services
  - Automated reporting
  - Legal compliance checker
- **Agent**
  - Track workers current status
  - Skill matching algorithm
- **Police**
  - Advanced digital Authentication of documents
  - Surveillance alert
  - Incident reporting
- **Users**
  - Submit Job Opportunities
  - Performance review
  - Pay salary for workers
- **Technology Stack**
  - Frontend: HTML, CSS, JS
  - Backend: Django, SQLite.
  - Payment Integration: RazorPay
  - Machine learning(Deep learning)