

# Migrant Workers Tracking System

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**Abstract:** *The Migrant Workers Tracking System provides a facility for migrant labours to register with the state authorities would be engaged for work in the construction sector. Construction sector employs large number of migrant labours in the state. Seeking to address their issues properly and know about their whereabouts, the government is planning to engage registered labours only in the sector. The government has also introduced a safety plan to ensure the rights of labours are not violated in view of complaints about poor working conditions and mishaps on construction sites. As per the plan, builder should submit a safety plan along with the building plan to get sanction for construction. The Police has started audit of migrant workers using their ID cards. The rising rate of crimes with many of them attributed to the growing number of migrant workers has made their acceptance in to the local community harder. Thus, this system provides a facility to ensure the rights of migrant labors as well as help to track them if they were involved in a specific crime.*

**Keywords:** Migrants, MEAN Stack, Worker's listings, Document verification

## I. INTRODUCTION

Kerala is witnessing large inflow of migrant labour from different parts of the country in recent years. Though laborers from state as far as West Bengal, Bihar, Uttar Pradesh, and Orissa now flock to Kerala. Higher wages for unskilled labour in the state, large opportunities for employment and shortage of local Labour, paradoxically despite the high unemployment rate in the state, led to a massive influx of migrant labours to the state. There are many factors those are attracting migrants to Kerala. The factors are poverty, unemployment, density of population, bad yield from agriculture, low demand of workers etc. Kerala provides better employment opportunities, better life standard, high wages compared to other states, lesser communal clashes, high health indices, provision of education for children are attract migrants to Kerala.

Migrant Workers Tracking System is much more socially relevant in the current situation. Because the rising rate of crimes those are associated with migrant workers. During the last 5years approximately 1770 cases registered in the state in which migrants were accused. Drug trafficking, fake currency, robbery are major cases involving migrants, while there were brutal murder cases also in which migrants were involved.

Migrant Workers Tracking System provides a greater environment for managing the workers in an efficient way as well as ensures their safety plans in an accurate manner by associating different departments through this system.

## II. METHODOLOGY

The methodology for the implementation of the Migrant Workers Tracking System encompasses a series of strategic actions. Firstly, a centralized registration portal will be established, enabling migrant laborers seeking employment within the construction sector to register with state authorities. This registration process will involve the submission of essential personal and work-related information. Concurrently, a stringent safety plan will be introduced, necessitating builders to submit comprehensive safety protocols alongside their construction proposals. This plan aims to address concerns over inadequate working conditions and on-site accidents, thereby safeguarding the laborers' rights and well-being. Approval for construction projects will be contingent upon compliance with these safety measures.

Secondly, a digital ID card system will be integrated into the framework, facilitating regular audits by law enforcement agencies to monitor the movement and activities of registered migrant workers. This feature aims to address the rising crime rate attributed to migrant laborers, thereby enhancing community acceptance and security. Collaborative efforts

with relevant government bodies will ensure that legal, ethical, and privacy considerations are meticulously addressed, while robust data security measures are implemented to safeguard sensitive information. Additionally, educational campaigns will be initiated to promote awareness among both migrant laborers and the local populace, elucidating the system's objectives and benefits. Continuous assessment and refinement of the system will be undertaken to adapt to evolving challenges and ensure its effectiveness in upholding labor rights, fostering integration, and enhancing safety within the construction sector.

### III. EXISTING AND PROPOSED SYSTEMS

#### 3.1 Existing System:

The existing system provides to store only the details of migrant workers in the policestation. The existing system is partially computerized. There is no centralized department to track and control the migrant workers efficiently.

##### A. Limitations of Existing Systems:

The existing system has a number of disadvantages: No Online Based Salary Passing, No Proper Complaint Handling, No Proper Verification Procedure, No Work Permit Card and Implementation, Labor Commission does not get knowledge of the number of employees in each state, No Proper Insurance Management and Implementation.

#### 3.2 Proposed System: Migrant Workers Tracking System

The proposed system provides a greater environment for managing the workers in an efficient way as well as ensures their safety plans in an accurate manner by associating different departments through this system. The proposed system contains a centralized department to track and control the migrant workers efficiently. There are many factors those are attracting migrants to Kerala. The factors are like poverty, unemployment, density of population, bad yield from agriculture, low demand of workers etc.

##### A. Advantages of Migrant Workers Tracking System

The proposed system has number of advantages: Separate login area with appropriate functionality for agency and admin, A separate page where worker can post their complaint, Workers can download the card updated by insurance agency, Online tracking systems can available which is maintained by the agency, Security for the data is done easily, Validation is done to enter correct data, Memory consumption is very less, and the processing speed is fast, Data reports are presented in a neat format, It is easy to combine the database of other software and to view the records in the files and it is easy to get the reports by giving input data.

#### 3.3 Comparative Analysis:

The Migrant Workers Tracking System offers a multifaceted approach to address challenges in the construction sector. By registering and monitoring migrant laborers, it aims to manage the workforce efficiently, while safety plans and rights protection contribute to improved working conditions. The system's crime prevention measures through ID card audits aid law enforcement in tracking potential offenders. Moreover, by promoting integration into the local community, it seeks to mitigate tensions. While the comprehensive nature of the system promises holistic solutions, concerns include accurate registration, privacy implications, and successful community engagement, highlighting the need for balanced implementation and ongoing oversight.

### IV. BACKGROUND

#### Technologies used in this Project:

Angular is a JavaScript-based open-source front-end web framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. HTML is a very easy and simple language. HTML can be easily understood and modified. It is very easy to make an effective presentation with HTML. It is a markup language, so it provides a flexible way to design web pages along with the text. CodeIgniter is an open-source software rapid development web framework, for use in

building dynamic web sites with PHP. MySQL is an open source, SQL Relational Database Management System (RDBMS) that is free for many uses.

**V. RESULTS AND DISCUSSIONS**

The implementation of "Migrant Workers Tracking System" has yielded remarkable results. The system contains a centralized department to track and control the migrant workers efficiently. There are many factors those are attracting migrants to Kerala. The factors are like poverty, unemployment, density of population, bad yield from agriculture, low demand of workers etc. Kerala provides better employment opportunities, better life standard, high wages compared to other states, lesser communal clashes, high health indices, provision of education for children are attract migrants to Kerala.

**VI. SCREENSHOTS**



Figure 1: Home Page

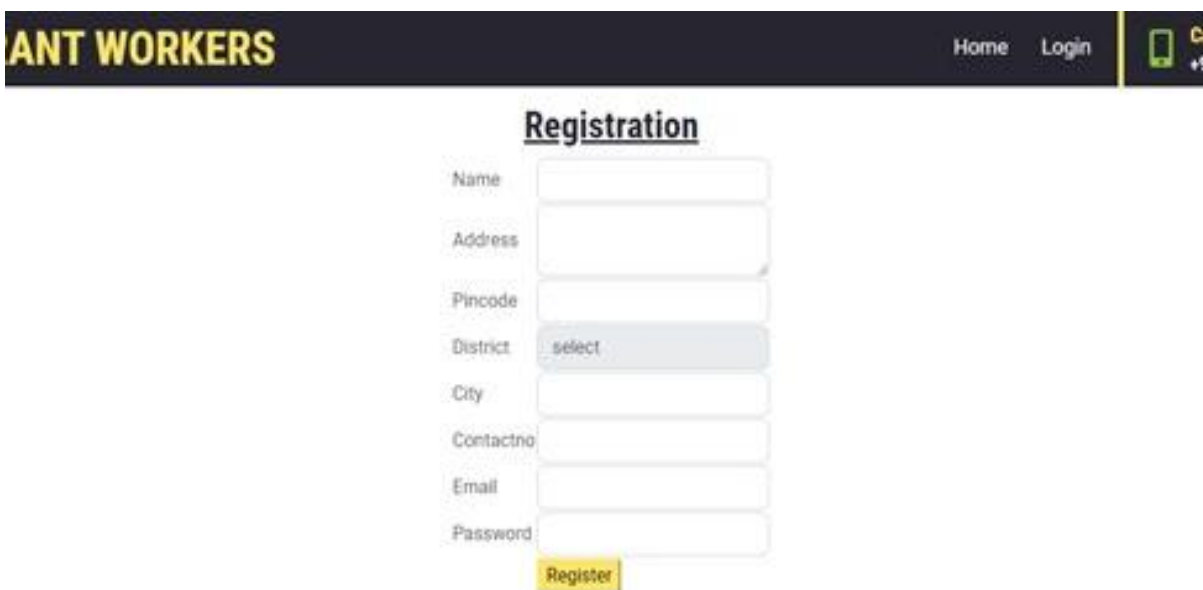
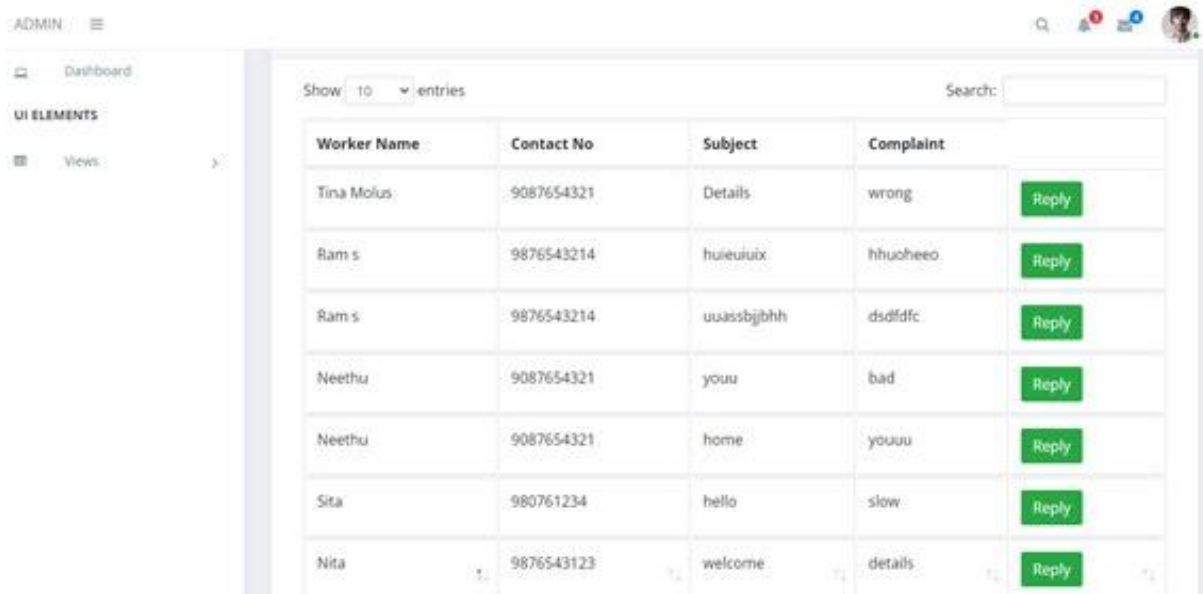
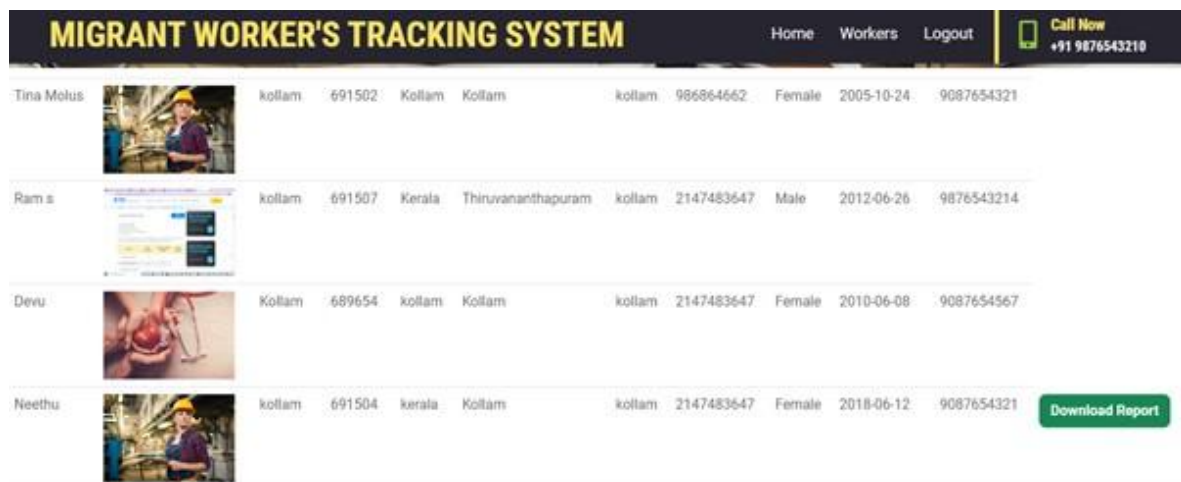


Figure 2: Registration



Worker Name	Contact No	Subject	Complaint	Reply
Tina Molus	9087654321	Details	wrong	Reply
Ram s	9876543214	huleuiuix	hhuoheeo	Reply
Ram s	9876543214	uuassbjbhh	dsdldfc	Reply
Neethu	9087654321	youu	bad	Reply
Neethu	9087654321	home	youuu	Reply
Sita	980761234	hello	slow	Reply
Nita	9876543123	welcome	details	Reply

Figure 3: Admin Complaint View



Worker Name	Location	ID	Gender	Date of Birth	Contact No	Download Report
Tina Molus	kollam	691502	Female	2005-10-24	9087654321	
Ram s	kollam	691507	Male	2012-06-26	9876543214	
Devu	Kollam	689654	Female	2010-06-08	9087654567	
Neethu	kollam	691504	Female	2018-06-12	9087654321	Download Report

Figure 4: Worker View

## VII. CONCLUSION

The project report entitled “Migrant Workers Tracking System (MWTS)” is mainly focused on tracking the workers from different states to Kerala. Higher wages for unskilled labor in state, large opportunities for employment and shortage of local labor, paradoxically despite the high unemployment rate in the state, led to the massive influx of migrant labors to the state. The implementation of the tracking system has resulted in several benefits. Firstly, it has enhanced transparency and accountability in the labor migration process. Authorities can easily monitor the movement of workers, ensuring their adherence to legal requirements and preventing human trafficking or illegal practices. This has significantly improved the overall safety and security of migrant workers. Secondly, the tracking system has streamlined administrative processes related to migration, such as visa applications, work permits, and documentation. By digitizing these processes, the system has reduced paperwork, minimized errors, and improved efficiency. This has resulted in a more streamlined and organized system, benefiting both workers and government agencies. Moreover, the tracking system has facilitated effective communication and support services for migrant workers. Authorities can provide real-time information and assistance to workers, ensuring their access to essential services, healthcare, and emergency support. This has enhanced the overall well-being and welfare of migrant workers.

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- [10]. "Handbook of Indian Labour and Employment Law" by S.R. Srivastava - This book provides a comprehensive overview of labor and employment laws in India, which may include discussions on migrant worker tracking and management