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Transit Hassle Free Pick and Drop Service System

Sumeet Gupta
Department of Electronics and Telecommunication Engineering, Sanjivani College of Engineering, Kopargaon, India, 423603, Savitribai Phule Pune University, Pune.
Nikita Ghodke, Bharti Dhus, Akshata Todmal, Yashoda Chine.

Abstract
Technology has made transportation easier and more convenient. Online transportation services, like ride-hailing and delivery apps are very popular because people can use them easily with their smartphones. These services are good because they make it easy to travel and transport things. They have also created new jobs for people who can work flexible hours. In summary, online transportation services have changed the way people travel and work. This paper aims to create a platform designed to provide a convenient and efficient way for customers and drivers to connect through an application, with the goal of meeting their individual needs. This website has safe and secure registration by using documentation, afterwards a driver and customer can access the website as per their need. Both driver and customer are benefited in different ways, cost is reduced for customer and driver will carry luggage of one or more customers as per requirement of vehicle. This proposed website would be constantly helping people to transport their goods and luggage. This transportation will have some specific cost as per the km travelled by vehicle and some extra waiting charges.
Keywords: *Feedback, hassle-free, online booking, pick and drop, secure payment, service system, software, transportation, website.*

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I. INTRODUCTION

This website introduced a new and secure payment, advanced method of transporting goods and luggage. The main aim of transportation is to meet the demand for mobility and technology [9]. Presently, online transportation is considered the best solution. Online transportation is a transportation service that operates through the internet and covers the whole process, from requesting transportation to delivering goods safely. It is accessible through websites that can be accessed from anywhere using computers, laptops, and mobile phones. Nowadays, there are various platforms for online transportation, including online Taxis, Grab, Gojek, Uber, Ola, and many others. In Indonesia, online transportation is a widely used trend due to its efficiency, instant services and a larger fleet of vehicles [11]. It offers many advantages compared to traditional transportation methods.

Online transportation is a quick and cost-effective solution. The abundance of drivers associated with online transportation companies is a testament to this fact. The registration process to become a partner with these companies is hassle-free, requiring only a license or an ID card. Presently, the number of online vehicles has reached a staggering 3 million. Due to this vast network, customers can expect immediate response to their transportation request without any significant wait time. Additionally, the safe and secure transportation of goods is also ensured by these companies.

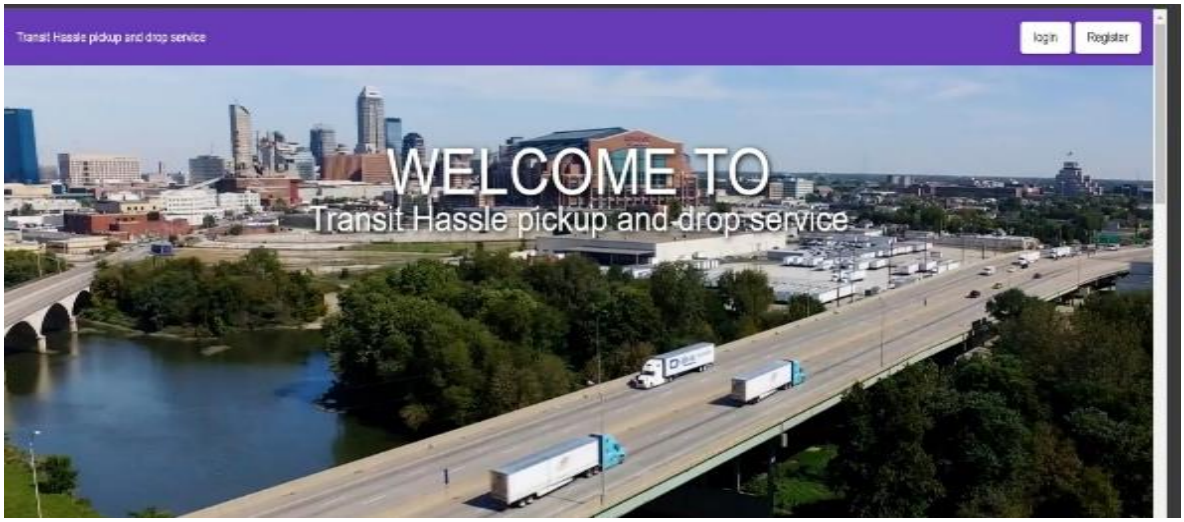

Figure 1: Welcome Page

Online transportation has become a popular choice among customers for various reasons. One of the key advantages of using online transportation is the convenience it offers. Customers no longer need to personally visit transportation services amidst their other responsibilities as the online platform provides an instant feature to cater to their needs. Transportation plays a crucial role in the supply chain, serving as a key logistical function [3,10].

This website is designed to provide a fast and efficient service to users. To ensure that users have the best experience, this website enhances the speed of web pages. This internet site is user-friendly and easy to navigate, so even normal people can use it without any difficulty. Our website takes the security of user's data very seriously, and to enhance the security of the website, various parameters are taken.

The planner agents within the planning subsystem work together to optimize transportation operations, ensuring that goods are transported efficiently and cost-effectively [5]. This web portal is password-protected, which means that users have complete control over their passwords, and it also helps to avoid hacking attempts. This platform has an additional personal login password system, which ensures that the customer dashboard and the driver dashboard remain separate, and neither can access the other's dashboard. This ensures that the user's data is safe and secure at all times. The output of transportation is highly dependent on the unique circumstances of each shipment, including the starting point, destination, and mode of transport [2]. In summary, we strive to provide the best service to users and are committed to ensuring that this digital site is secure, user-friendly, and fast. We believe that users deserve the best service, and will continue to improve website to meet their needs.

II. LITERATURE SURVEY

M. A. Krajewska et.al proposed, the paper "Collaborating freight forwarding enterprises Request allocation and profit sharing" in [1999] this article presents a collaborative model of independent distribution centers. In today's competitive shipping industry, freight brokers reduce fulfillment costs by using different fulfillment models. (personal fulfillment and contract work). They use their own vehicles to make claims for personal satisfaction and turn to foreign shipping companies for contract work [1].

Ozlem Ergun et.al proposed, the paper "Reducing Truckload Transportation Costs Through Collaboration" 2007 Atlanta, GA 30332-0205 In the heavy-duty transport sector, a significant portion of the truck fleet includes trucks, a movement that involves changing vehicles. Consolidation allows shippers to identify the transport system and deliver it to the carrier, reducing the carrier's need to move, thus reducing the cost of freight [4].

Pearl C. C. Shum et.al proposed, the paper "Multi-Agent System for Shipper's Truck Freight Collaboration" In the Future of Freight Transportation Conference 2010, President and CEO of the American Trucking Association (ATA) Bill Graves said that trucks will continue as a preferred mode of freight transportation. This article explores how multi-agent collaboration can be used to reduce shipping costs for shippers and improve trucking for freight forwarders. We developed the Intelligent Agent Cargo Booking Framework (IACBF) to facilitate group shipping, partner identification, and cost allocation through multi-agent solutions [7].

Santosh K S et.al proposed, the "Road Goods Transport Online Management System" 2016 International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 it would be helpful to

educate participants about existing systems and raise awareness of benefits such as trucking systems and other simple aspects of transportation management. This study has a key objective of to reveal the conditions affecting the existing systems and to try to remove them from the proposed system [8].

A M Ekasari et.al proposed, the paper Department of Urban and Regional Planning "The impact of online transportation growth on the level of road services" 2020 International Conference on Innovation In Research doi:10.1088/1742-6596/1469/1/012033 is the result of online transportation meets the needs of the citizens of Bandung in safe, fast, cheap and convenient public transportation. The reason for this consideration is to choose whether the increment in online activity influences the benefit level of the street in Bandung City. Conducted using a qualitative approach, this study aims to explore knowledge about road service as well as customer and driver-partner perceptions. The results show that for the period from 2015 to 2018, the use of online transport services for the transport of people and goods was accompanied by a decline in traffic services [12].

I Gusti Made Karmawan et.al proposed, "Online Transportation using Cloud Computing during Covid-19 in Indonesia" The convenience, affordability, safety, and efficiency of online transportation services have made them a highly sought-after option in Indonesia, with customers placing great importance on factors such as pricing, quality of service, trustworthiness, and overall satisfaction [13].

III. METHODOLOGY

The paper proposes a system which aims to provide facilities to transport the luggage of customers and prioritize the safety of both customers and drivers, while also ensuring a user-friendly experience. This model can be integrated with application through which it is convenient for every customer to transport their luggage.

Designing:

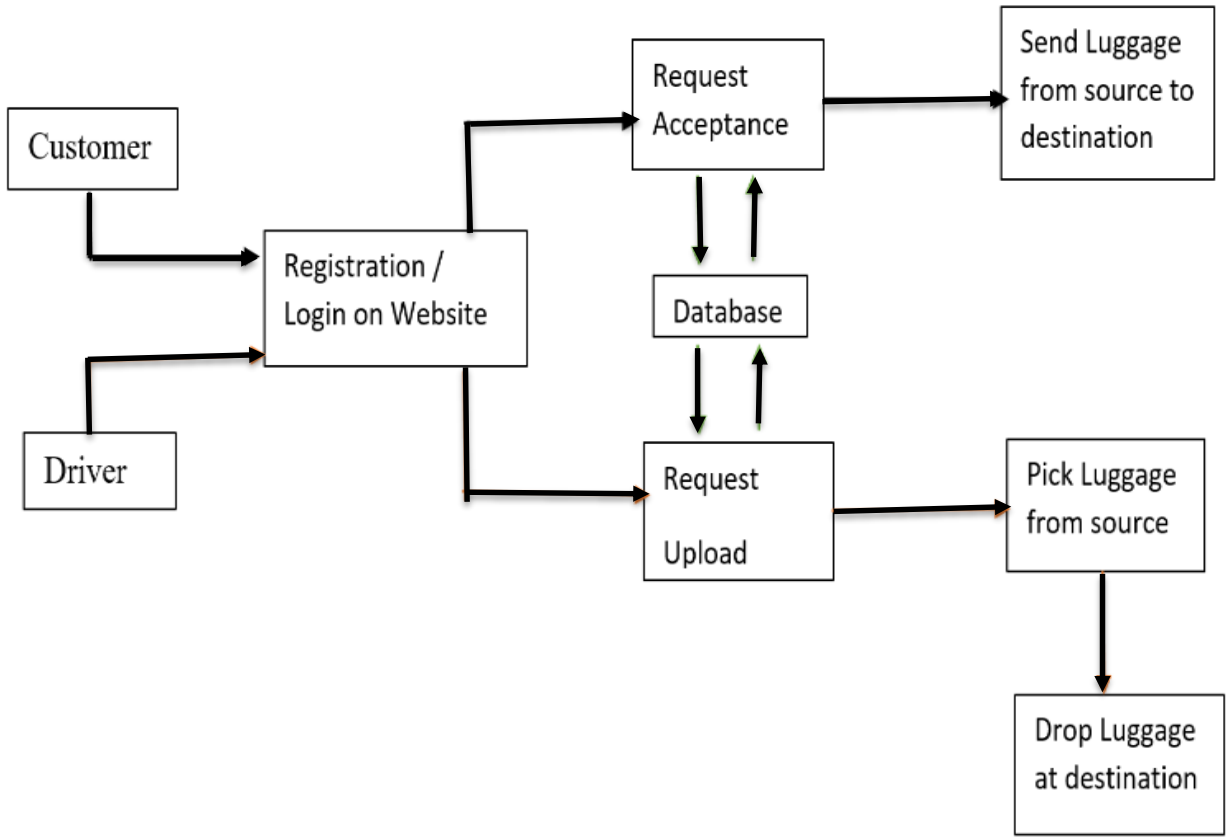

Figure 2.1: Block diagram of the Transit

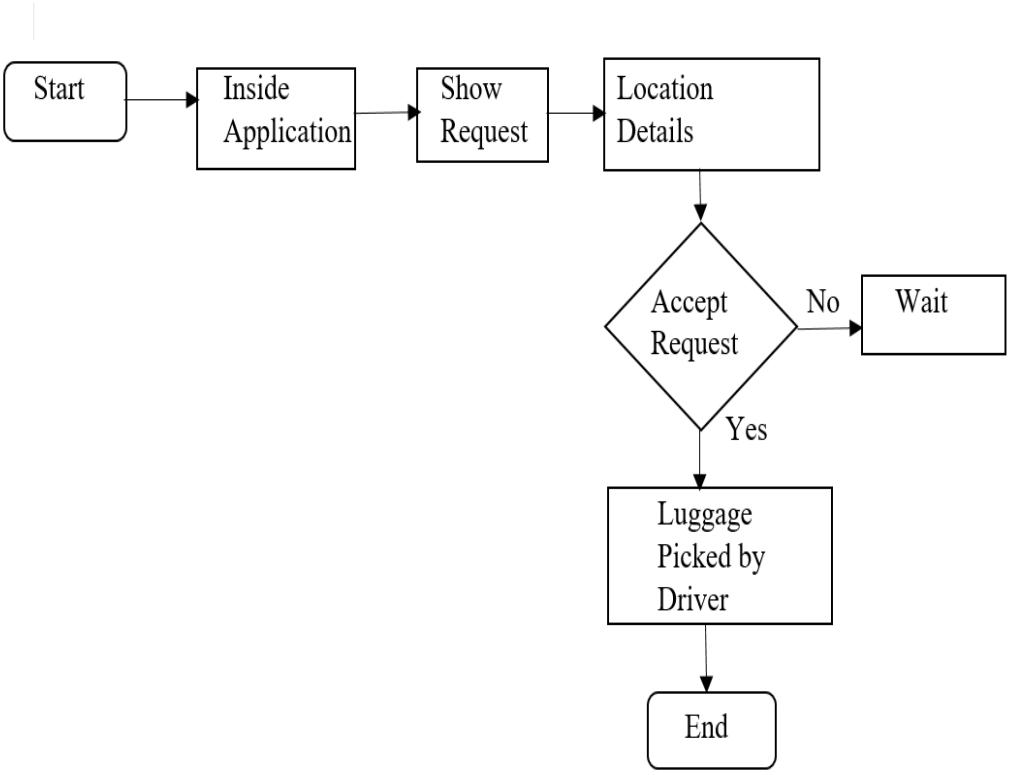

Figure 2.2: Flowchart of the Transit

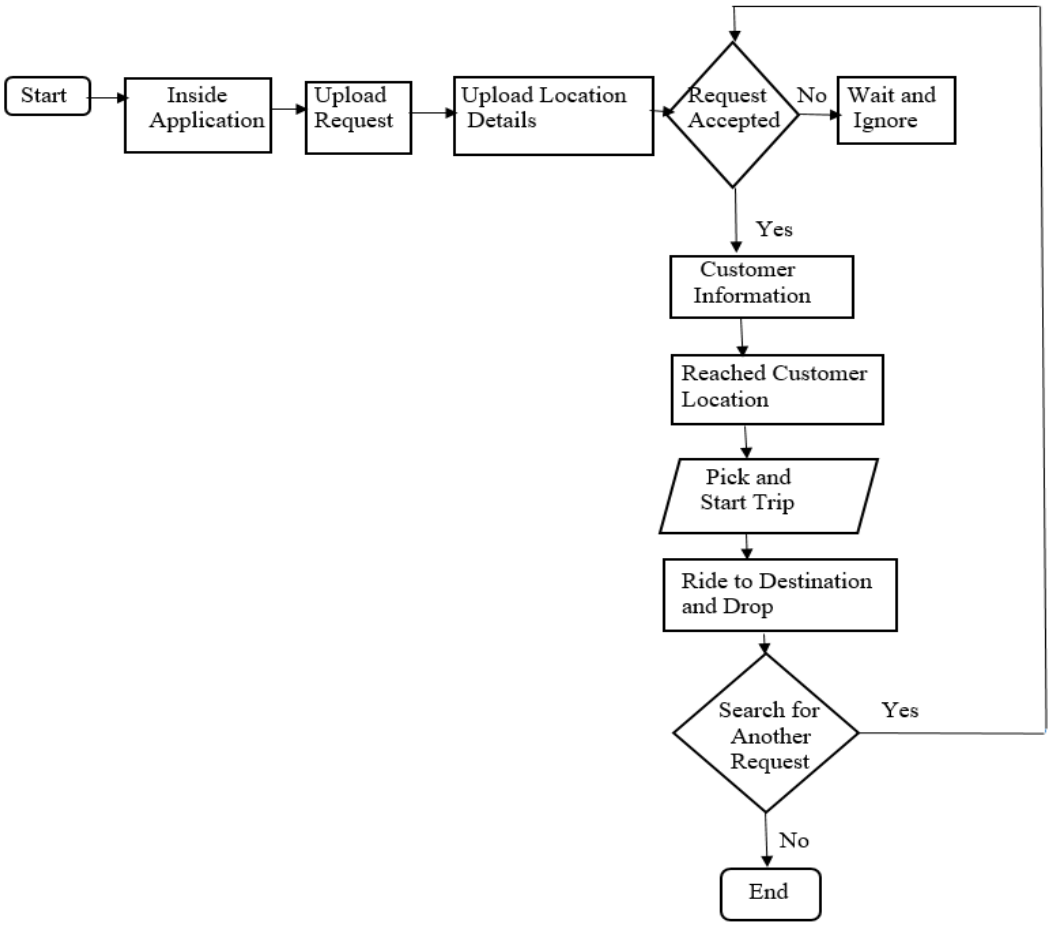

Figure 2.3: Flowchart of the Transit

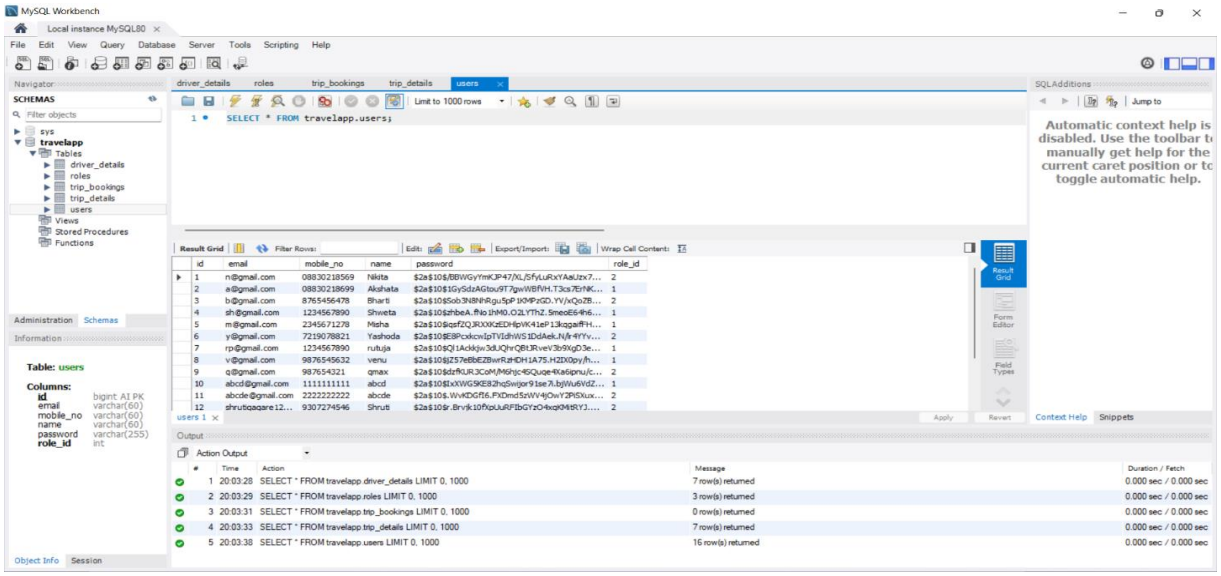

Figure 2.4: Pages of the Transit

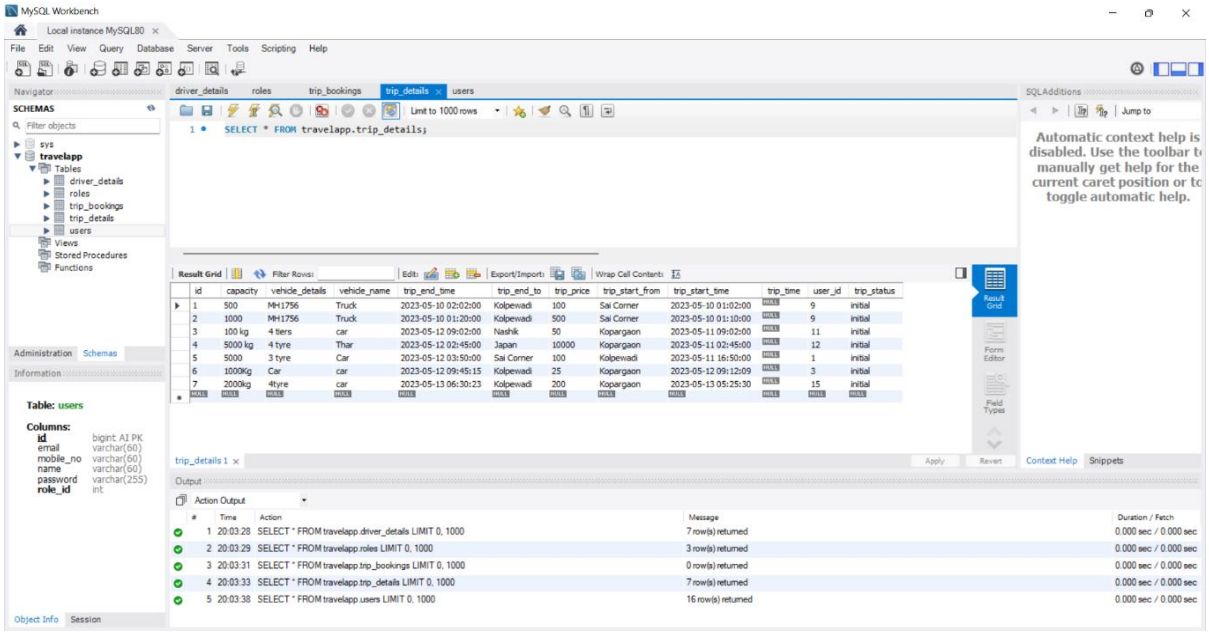

Figure 2.5: Pages of the Transit

The proposed website will allow drivers to upload requests specifying their intended travel destinations and departure times. Customers will then be able to login and view available drivers based on their preferred route, selecting a driver accordingly. To ensure the safety and security of the website, the development team has chosen to use Spring Boot, a popular Java-based framework that provides a comprehensive suite of tools for building robust and scalable web applications.

The website will be designed using a combination of HTML, CSS, and JavaScript to create an intuitive and user-friendly interface. The team will also utilize MySQL, a well-known and established database management system that ensures the safety and organization of user data and other important information. Incorporating Java, a versatile and powerful programming language, will provide the necessary functionality and flexibility to support the website's complex features and processes. Overall, the combination of these technologies will enable to create a secure, efficient, and user-friendly website for drivers and customers alike.

Once a customer accepts a driver's request, the driver will proceed to pick up the luggage. If the request is not accepted, the driver will have to wait for another customer to accept their request. This process will continue until the driver completes their journey. By using this loop, the website will be able to efficiently manage the requests and ensure that drivers and customers are matched in a timely and efficient manner.

IV. Result

The website will allow customers to view the details of driver requests and compare them based on cost, allowing them to select the best driver who best fits their budget. This will help customers save money and make the service more affordable. As a result, the website will offer a cost-effective solution for customers seeking reliable transportation services.

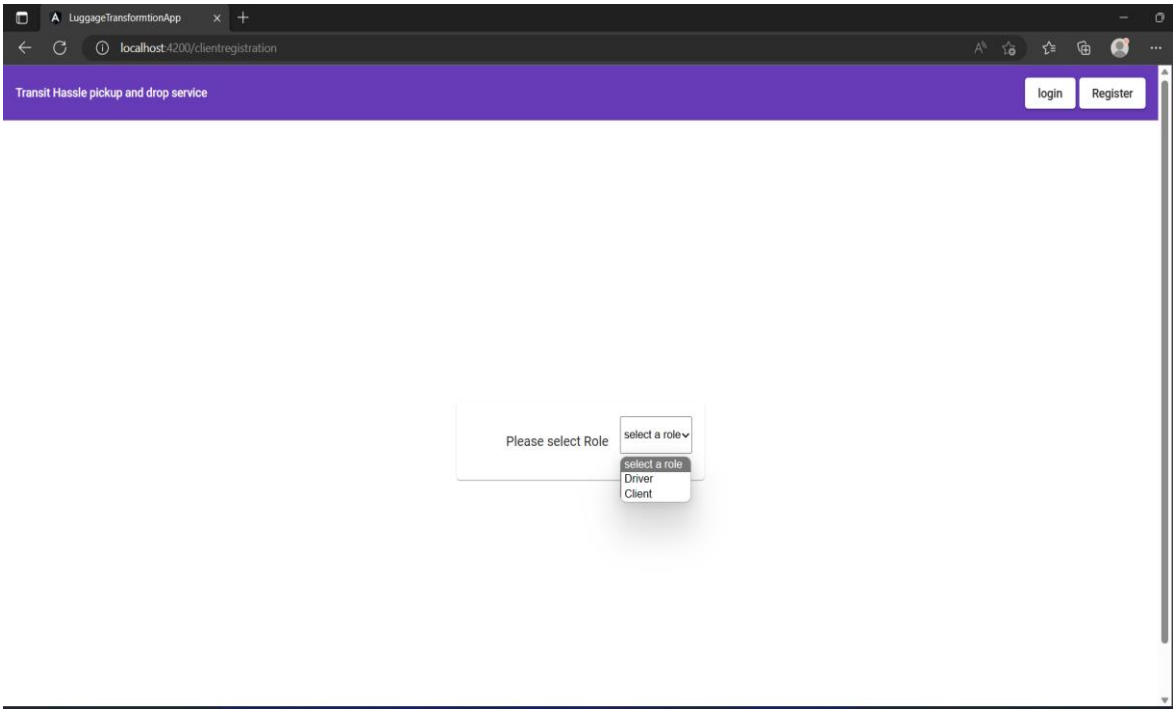

Figure 4.1: Pages of the Transit

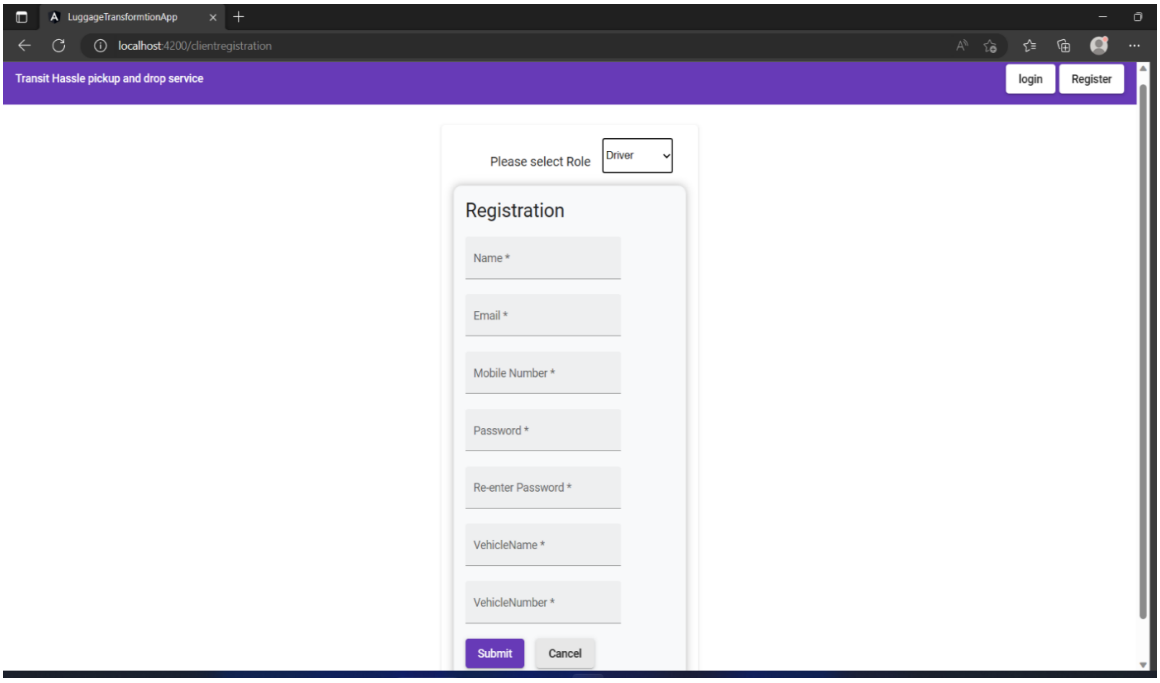

Figure 4.2: Pages of the Transit

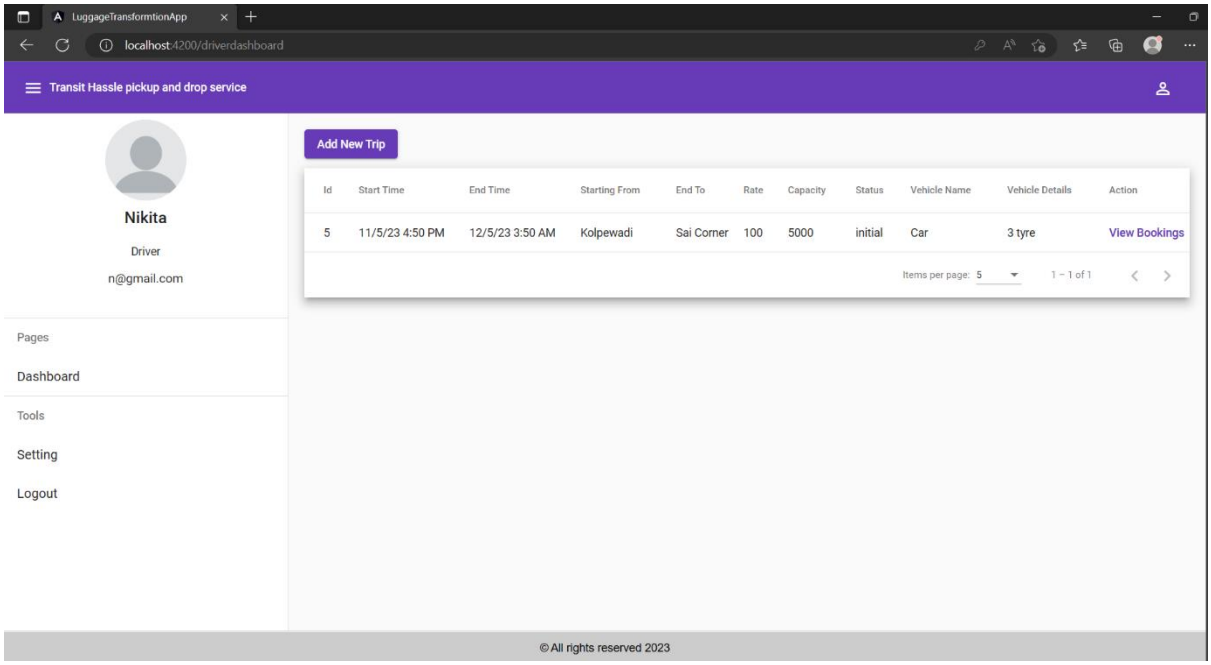

Figure 4.3: Pages of the Transit

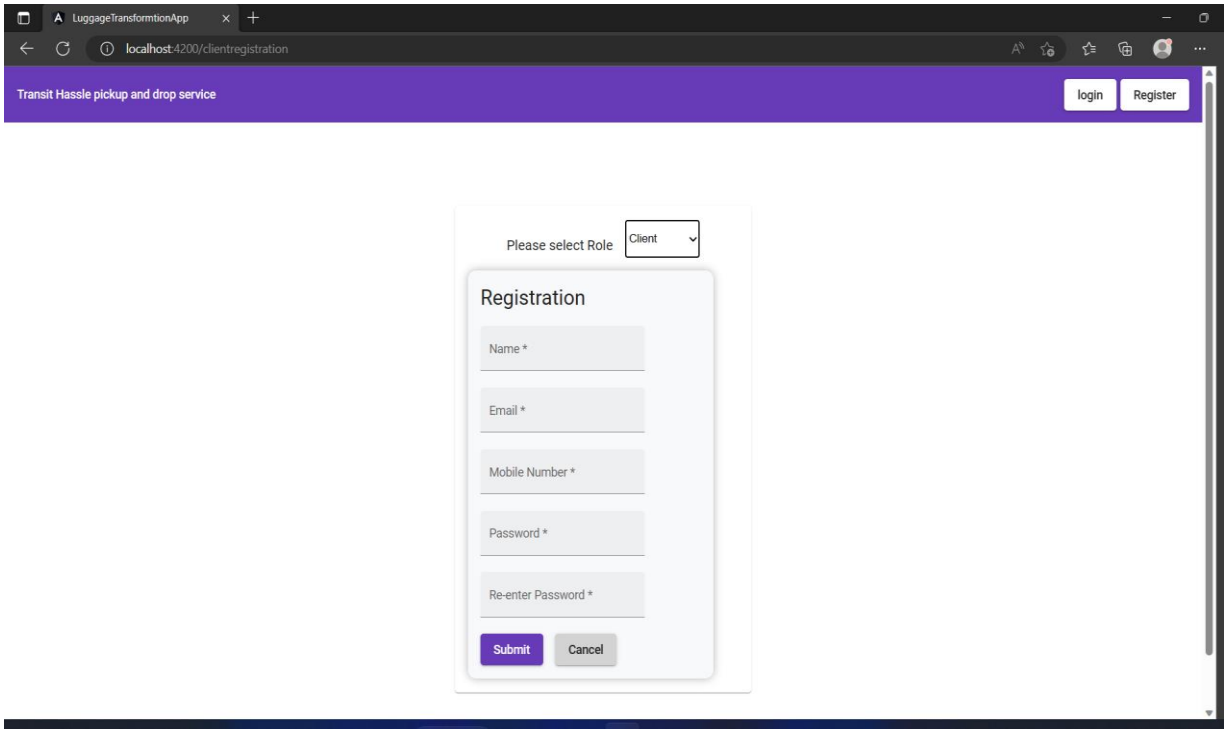

Figure 4.4: Pages of the Transit

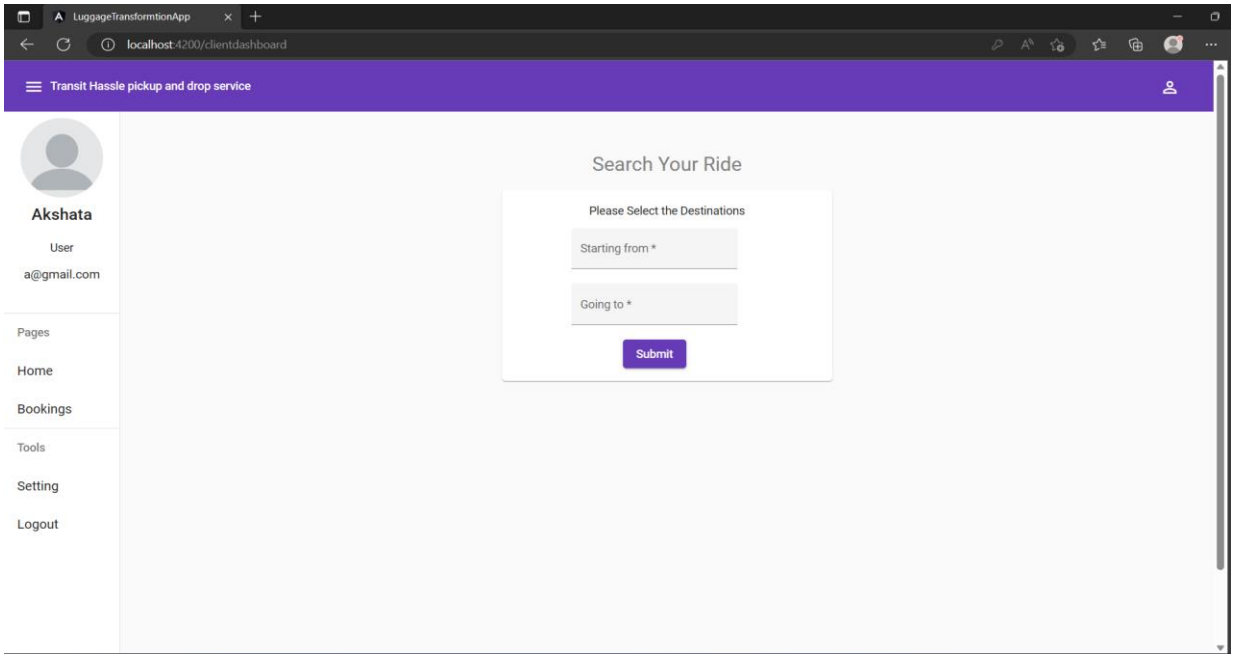

Figure 4.5: Pages of the Transit

V. CONCLUSION

This paper presents a secure and reliable website for online transportation of goods. By implementing bidirectional services, the system reduces costs while maintaining high levels of safety. The platform fosters effective communication and collaboration among stakeholders, streamlining logistics operations. Robust security measures, including encryption algorithms and authentication protocols, ensure the confidentiality and integrity of transactions and user data. The website's secure framework defends against malicious activities and unauthorized access. The bidirectional nature of the platform leads to significant cost reductions and improved efficiency, benefiting businesses and individuals in the transportation industry. Overall, this paper offers valuable insights and recommendations for advancing secure and cost-effective online logistics systems.

VI. FUTURE SCOPE

As in earlier this website will be going to implement for the Kopargaon city. Moving forward, the next step would be to expand the website's scope to cover the entire district, thereby increasing the service provider's capabilities. And eventually, we could take it to a national level to offer the best possible service to users across the country. For now, this website is available for transportation of luggage afterwards we are going to implement it for farmers as well as for business purpose.

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