International Research Journal on Advanced Engineering and Management
https://goldncloudpublications.com
https://doi.org/10.47392/IRJAEM.2024.0164
e ISSN: 2584-2854
Volume: 02
Issue: 04 April 2024
Page No: 1224-1227

On Road Vehicle Helper (ORVH) React Native Application

Dr. C. Prema[1], M. Muthu Anushya[2], I. Swetha[3], V. Somasundari[4]
[1] Professor, JACSI College of Engineering, Nazareth, Thoothukudi, India.
[2,3,4]Student, JACSI College of Engineering, Nazareth, Thoothukudi, India.
Email Id: *cp20121970@gmail.com[1], anushyamuthu97@gmail.com[2], suvetha5rani@gmail.com[3], somasundarisomasundari86@gmail.com[4]*

Abstract
The On Road Vehicle Helper (ORVH) application serves as a vital tool for individuals encountering mechanical issues with their vehicles, especially in remote or faraway locations. This paper introduces ORVH as a reliable platform connecting clients with legally endorsed and proficient mechanics. Users can access a curated list of experts through a streamlined application process, facilitating prompt assistance in challenging situations arising from vehicle breakdowns. Furthermore, the ORVH framework prioritizes the engagement of accredited mechanics, ensuring quality service delivery. This paper highlights the significance of ORVH in addressing the uncertainty faced by vehicle owners regarding mechanical failures in remote areas, providing them with a feasible solution to mitigate such concerns effectively. This is a revolutionary application designed to make your travel experience seamless and convenient. Combining the power of Google Maps with features inspired by popular ride-sharing apps like Ola, it helps us discover nearby shops and reach them effortlessly during your journey.
Keywords: *React Native; Google Cloud; On Road Vehicle Helper; Google Maps Platform, Firebase.*

1. Introduction
The On Road Vehicle Helper (ORVH) application emerges as a crucial asset for individuals grappling with mechanical issues plaguing their vehicles, particularly in remote or isolated locales. [1] This paper serves to introduce ORVH as a dependable platform that bridges clients with certified and proficient mechanics, offering a lifeline during distressing vehicle breakdowns.

1.1. Overview of ORVH
ORVH provides users with seamless access to a carefully curated roster of automotive experts via an intuitive application interface. [2] This streamlined process ensures swift and efficient assistance, easing the burden of navigating through challenging circumstances stemming from unexpected vehicular failures.

1.2. Emphasis on Quality Service
Central to the ORVH framework is the emphasis on engaging [3] accredited mechanics, thereby guaranteeing the delivery of high-quality service. This commitment to excellence underscores our dedication to fostering trust and reliability among users, assuring them of dependable assistance during critical moments of need. Figure 1 shows the Flow Diagram.

1.3. Addressing Uncertainty in Remote Areas
The significance of ORVH lies in its ability to alleviate the uncertainty faced by vehicle owners when confronted [4] with mechanical breakdowns in remote regions. By providing a tangible solution to such concerns, ORVH empowers users to navigate through challenging situations with confidence and peace of mind.

1.4. Revolutionary Approach
ORVH represents a revolutionary application engineered to enhance the travel experience, making it seamless and convenient for users. By harnessing the capabilities of [5] Google Maps and drawing inspiration from the user-friendly interfaces of popular ride-sharing platforms like Ola, ORVH simplifies the process of discovering nearby automotive shops and accessing assistance during journeys.

2. Objective
The primary objective of this project is to alleviate the difficulties faced by individuals stranded with

International Research Journal on Advanced Engineering and Management
https://goldncloudpublications.com
https://doi.org/10.47392/IRJAEM.2024.0164
e ISSN: 2584-2854
Volume: 02
Issue: 04 April 2024
Page No: 1224-1227

vehicle issues in remote locations. By leveraging the convenience of mobile technology, this application aims to streamline the process of seeking assistance from nearby mechanical service providers. When we find ourselves stranded in a faraway location due to vehicle faults, it often becomes a challenging ordeal to resolve the issue promptly. It is with this predicament in mind that I [6] embarked on the development of a solution: a mobile application built entirely using React Native. This application functions akin to popular ride-hailing platforms like Ola, providing users with the means to swiftly connect with nearby mechanical shops for assistance when encountering vehicular problems.

3. Method

This Project include two modules User and Mechanic shows in Figure 2 to 6. Mechanic Authentication done by firebase phone [7] Auth function to verify the mobile number and User can login Google auth to sign in with google. Onboarding screen built entirely using Lottie animation in React Native. With seamless transitions and eye-catching visuals.

Real-time Messaging: Users can send messages directly to nearby mechanical shops, detailing their issue and location.

Location-based Services: Leveraging GPS technology, the app identifies and connects users with the nearest available assistance.

Shop Acceptance System: Mechanic shops can accept service requests and promptly reach out to users for assistance.

4. Results

Being stranded due to vehicle issues can be a harrowing experience, especially when far away from familiar surroundings. [8-10] This app aims to alleviate such concerns by providing a reliable and efficient means of seeking assistance, thereby enhancing safety and peace of mind for travelers.

Output Screen

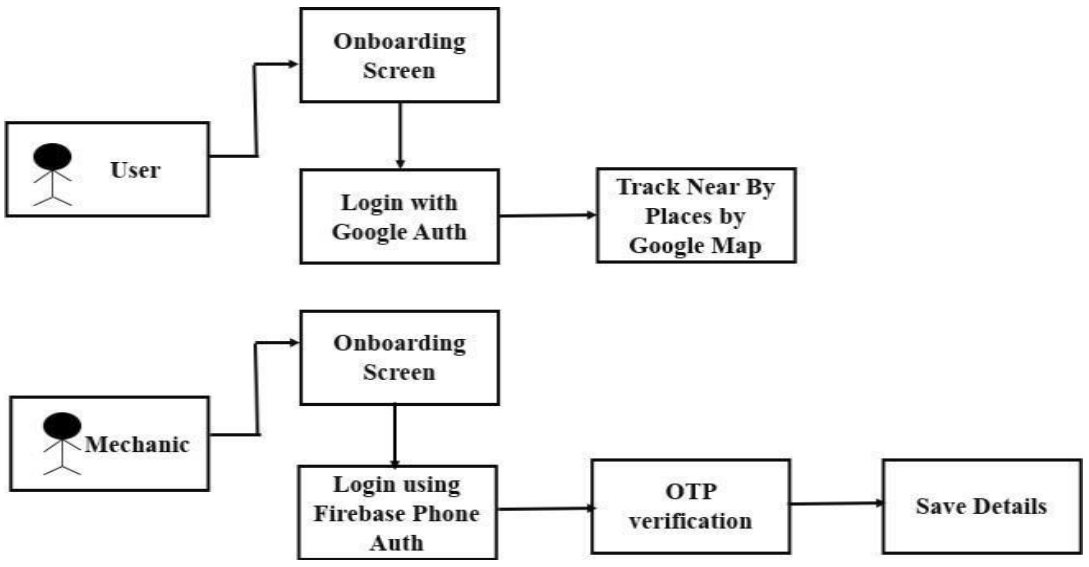

Figure 1 Flow Diagram

International Research Journal on Advanced Engineering and Management
https://goldncloudpublications.com
https://doi.org/10.47392/IRJAEM.2024.0164
e ISSN: 2584-2854
Volume: 02
Issue: 04 April 2024
Page No: 1224-1227

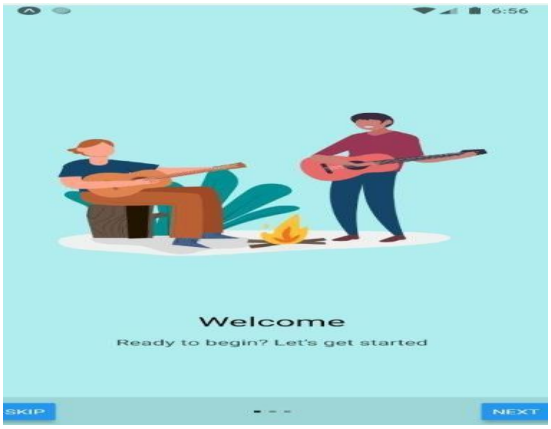

Figure 2 Onboarding Screen

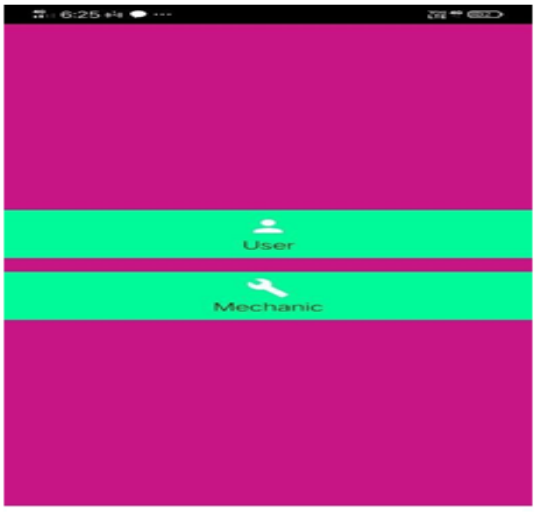

Figure 3 Loading Page

Figure 4 User Login

Figure 5 Mechanic Login

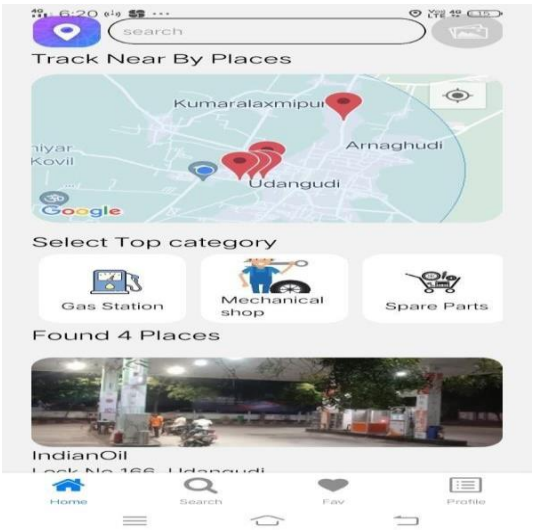

Figure 6 Track Places

Conclusion

This project represents a significant step towards addressing the challenges faced by individuals stranded with vehicular issues in remote locations. Using Firebase to authenticate the users and mechanics. This Application include Ola Application features. By harnessing the power of React Native, we have developed a user-friendly and efficient solution that aims to provide timely assistance and alleviate the stress associated with such situations.

International Research Journal on Advanced Engineering and Management
https://goldncloudpublications.com
https://doi.org/10.47392/IRJAEM.2024.0164
e ISSN: 2584-2854
Volume: 02
Issue: 04 April 2024
Page No: 1224-1227

References

[1]. Akhila V Khanapuri, Anagha Shastri, Gareth D'Souza, Shannon D'Souza (2015). International Conference on Technologies for Sustainable Development (ICTSD). To help the user whoever in the faraway location DOI: 10.1109/ICTSD.2015.7095903

[2]. Bo Pang., and Lillian Lee. (2004)'. A sentimental education: Sen- timent analysis using subjectivity summarization based on minimum cuts. In Proceedings of the 42nd annual meeting on Association for Computational Linguistics, (page 271).

[3]. Ziebinski A., Cupek R., Grzechca D., and chruszczyk L. (2017)'. Review of advance driver assistance system (ADAS) (DOI: 10.1063/1.5012394).

[4]. Singh Puneet, Kapoor Ashutosh, Kaushik Vishal, and Bindu Hima. (2010)'. Architecture for auto- mated tagging and clustering of song _les according to mood. International Journal of Computer Science Issues (IJCSI).

[5]. Jin Wei. (2008)'. Mining hidden associations in text corpora through concept chain and graph queries. ProQuest,

[6]. Thayer Robert. (1989)'. The biopsychology of mood and arousal. Oxford University Press.

[7]. Neviarouskaya A., Prendinger H., and Ishizuka, M (2009)'. Semantically distinct verb classes involved in sentiment analysis. In: Proceedings of the International Conference on Applied Computing (AC 2009), Japan, (pp. 27–34).

[8]. Haridas K,Ahmad S.Baharudin, Kamal & Karkonasasi(2016)'. Automotive Servicing and Breakdown Assistance System (ASBAS): Impact of Perveived Ease of Use (PEOU) and Vehicle Breakdown Servicing Necessity (VBSN) on Vendor's Intention to Adopt (ASBAS).'

[9]. Kumaar.A, Balakrishna, Subha.S, Harin.K (2019)'. On Road Vehicle Service finder.'

[10]. Kapadi V., Guruju S., & Bojja B., (2017); Emergency Breakdown