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SAMRUDDHI SAATHI (ROAD ASSISTANT) WEBSITE

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ABSTRACT

The "Samruddhi Saathi: Aiding Travelers on the Mahamarg Highway" project targets the gaps in the present road help and info sharing methods on the Mahamarg highway. People often find it tough to get vital services and aid during emergencies due to the lack of a complete plan. The project goal is to create a single, easy-to-use web platform, "Samruddhi Saathi." This will give smooth road help and info services, making the journey better, safe, and handy for travelers. The current road help system's gaps call for a smoother and effective plan. The suggested system aims to provide a complete solution. This will offer on-the-spot contact to key services such as hospitals, police stations, charging stations, fuel stations, and car workshops. Moreover, timely help will be provided in critical situations through a more efficient way of emergency response. There is a user-centered design in the project overview that simplifies interactions and encourages participation. The platform's homepage serves as a gateway to assistance services which range from project information to user options and personalization like login, sign-up, and subscription. The service page acts as the core of the platform that provides information on key facilities along the Mahamarg highway. Every facility is represented by separate tabs such as Black Spots identification, nearby hospitals, police stations, electric vehicle charging stations, petrol pumps and garages. These tabs offer real time updates, navigation assistance and safety tips for seamless and safe travel experience. The Emergency page has been designed to provide quick response during emergencies by allowing users to send their details with one click to hospitals or police stations for immediate help. In this regard, "Samruddhi Saathi" is an innovative solution that redefines travelling experiences on the Mahamarg highway. The comprehensive strategy of the platform enables travelers to confidently encounter difficulties as well as guarantee their security and wellbeing. This project has used tools of development which include JDK 1.8, JavaScript, HTML, CSS, XAMPP/Workbench, Eclipse during its well organized implementation. The testing environment operates in different operating systems, browsers and modem drivers ensuring that it functions properly. The block diagram is presented in a way that shows how the parts are connected and services provided by the system. "Samruddhi Saathi" project's creative approach aims to change trips thereby giving travelers an accessible and reliable platform for a better travel experience in terms of safety.

1. INTRODUCTION

The 'Samruddhi Saathi 'venture emerges as a robust initiative aimed toward addressing the restrictions inherent inside the modern Motorway assist and statistics sharing structures. The overarching intention of this proposed solution is to decorate the efficiency, reliability, and ordinary effectiveness of the prevailing infrastructure. The task envisions a complete set of upgrades that span various aspects, encompassing both technological and operational sides.

The primary objectives of 'Samruddhi Saathi' consist of optimizing the help and records dissemination mechanisms on motorways to make certain seamless and secure tour reviews for commuters. The scope of the task extends to the development of an advanced gadget that integrates cutting-edge technologies, actual-time facts analytics, and responsive verbal exchange protocols.

One of the key attributes of the proposed answer is its emphasis on person-centric design, prioritizing the desires and safety of dual carriageway users. The machine is envisioned to provide timely and accurate facts concerning site visitors situations, emergency services, and direction making plans. Furthermore, it aims to leverage trendy technologies consisting of synthetic intelligence, IoT devices, and cloud computing to facilitate intelligent decision-making and beautify the overall reliability of the toll road network.

In terms of improvement equipment, the undertaking will utilize a various set of technology, including programming languages, frameworks, and databases that align with the necessities of a scalable and green toll road guide system. Rigorous checking out environments may be hired to make sure the robustness and reliability of the machine underneath numerous scenarios, including height site visitors situations, emergency situations, and system screw ups.

A comprehensive block diagram bureaucracy the spine of the "Samruddhi Saathi" ; project, illustrating the interconnected components and their functionalities. This diagram encompasses the integration of hardware, software program, and conversation modules, highlighting the seamless glide of information and manipulate across the dual carriageway infrastructure.

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2. METHODOLOGY

- The concept of the project called 'Samruddhi Saathi' is to address the problems identified by this project.
- One of the things that Samruddhi Saathi aims to do is provide all inclusive real-time user centric solution for road users on Mahamarg highway. The foregoing are the specifications for this project:
- Comprehensive Services: This initiative will cater for the various needs of travelers by providing a wide spectrum of services such as hospitals, police stations, charging points, petrol pumps and garages.
- Real-Time Information: The platform shall use real time data to advise travelers on the availability and status of essential facilities in order to assist them in making decisions.
- User-Centric Design: It will avail a user-friendly interface prioritizing ease of use and engagement for travelers thereby creating more convenient and happier travel experiences.
- Emergency Response: In case of any emergency, 'Samruddhi Saathi' will include a dedicated Emergency page that allows users to instantly inform hospitals and police stations ensuring quick response
- Transparency: As a means to be transparent about the people involved and what it is meant for, it let us know who is behind it.

3. MODELING AND ANALYSIS

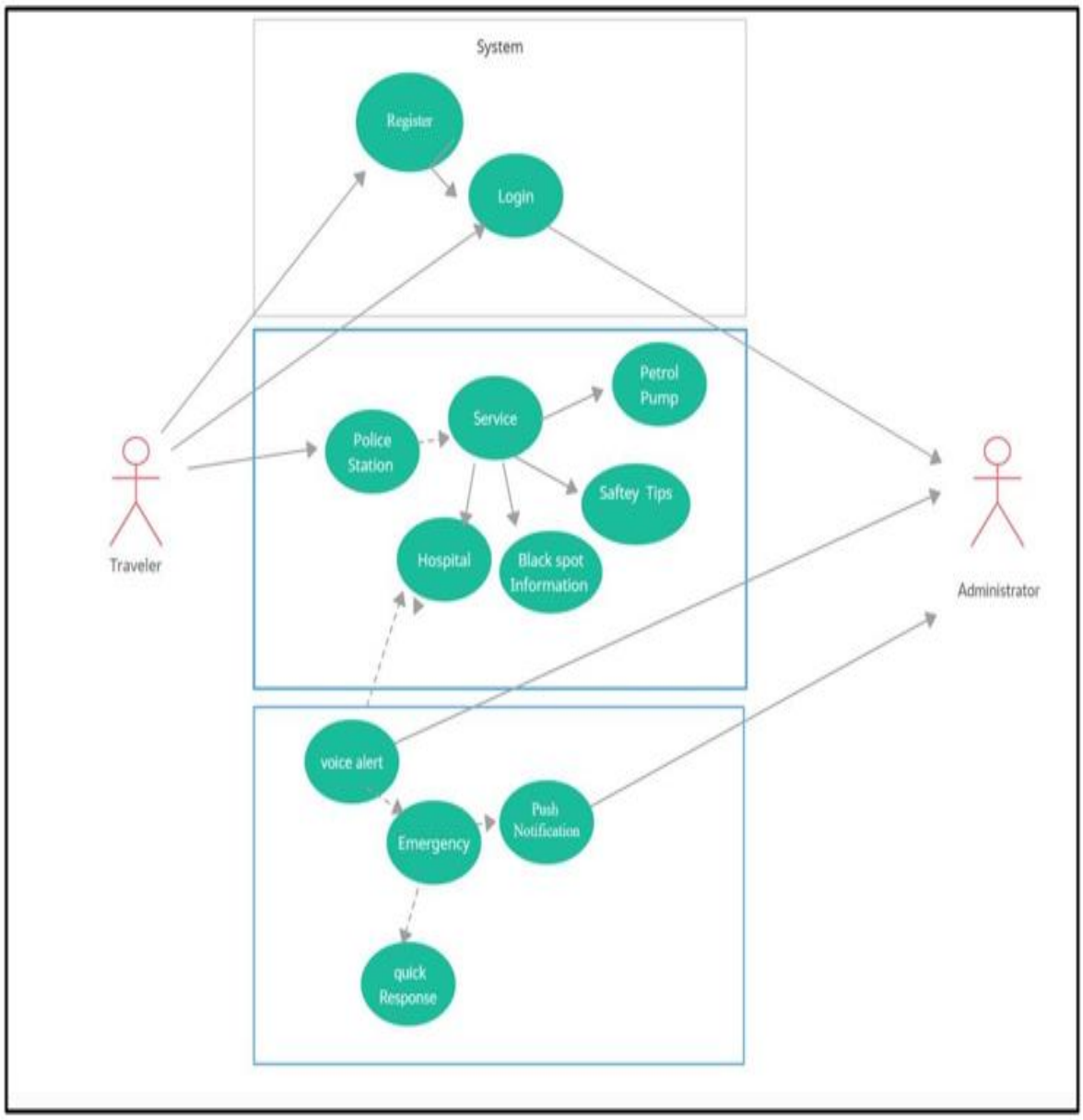

Fig:1 Use Case Diagram

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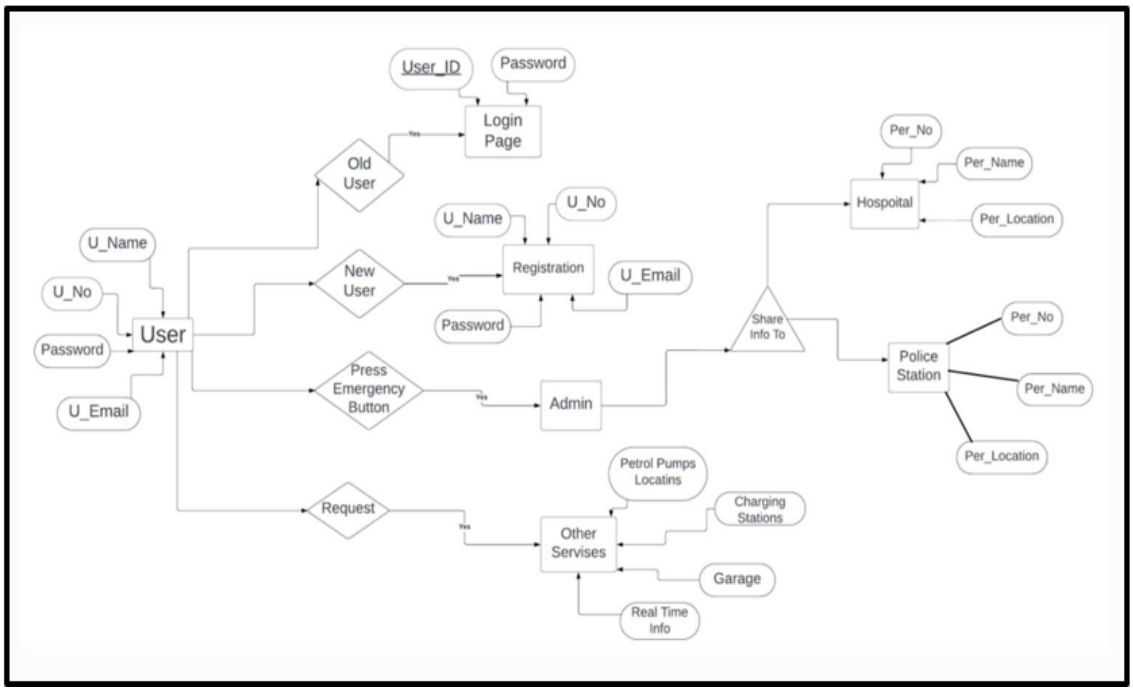

Fig:2 ER Diagram

The flowchart portrays the journey of accessing a system, particularly a website. It commences with the user initiating the process by clicking on the login button, subsequently prompting them to enter their username and password. Moving forward, the flowchart demonstrates the system's task of validating the provided credentials. If this authentication process proves triumphant, the user is granted admittance to the website. In the event that the verification is unsuccessful, a notification will be shown by the system, signifying that the user's credentials are not accurate. Additionally, the flowchart encompasses a stage wherein the system examines whether the user possesses an active account or not. If this condition is not met, the system will exhibit a message to apprise the user of their inactive account status. The login process is visually represented by a flowchart.

4. RESULTS AND DISCUSSION

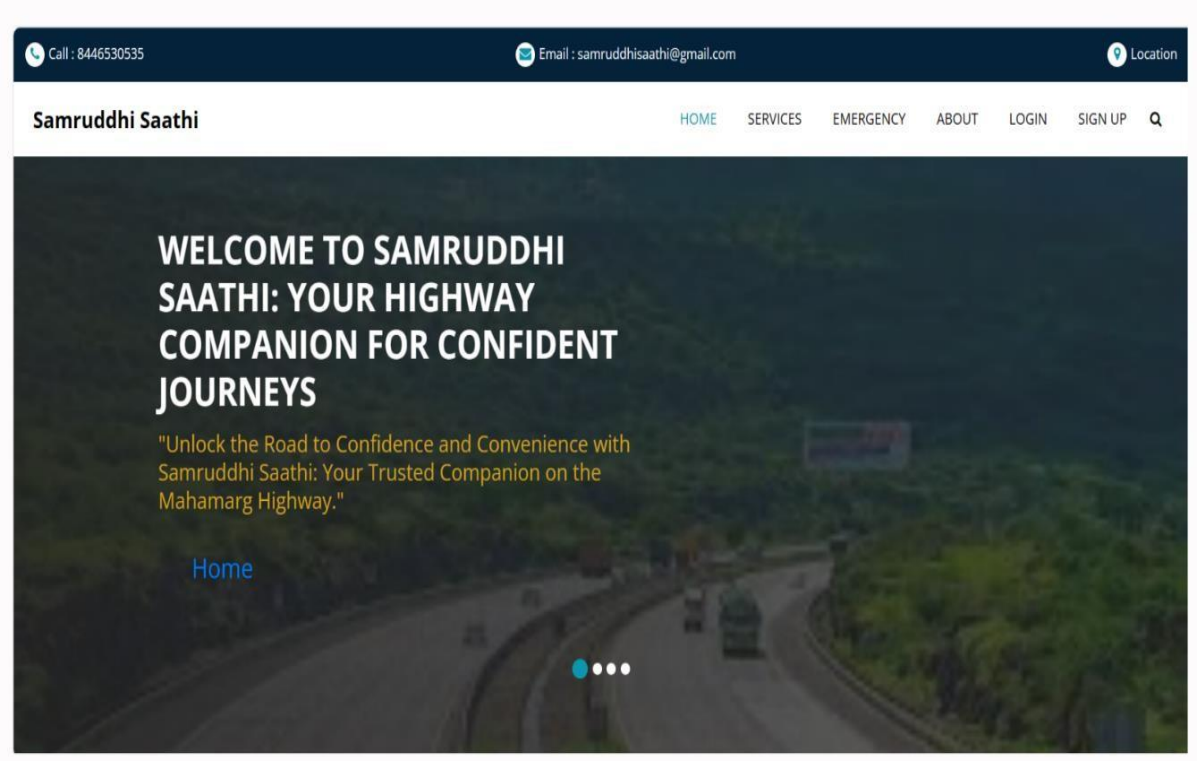

Fig:3 Home Page

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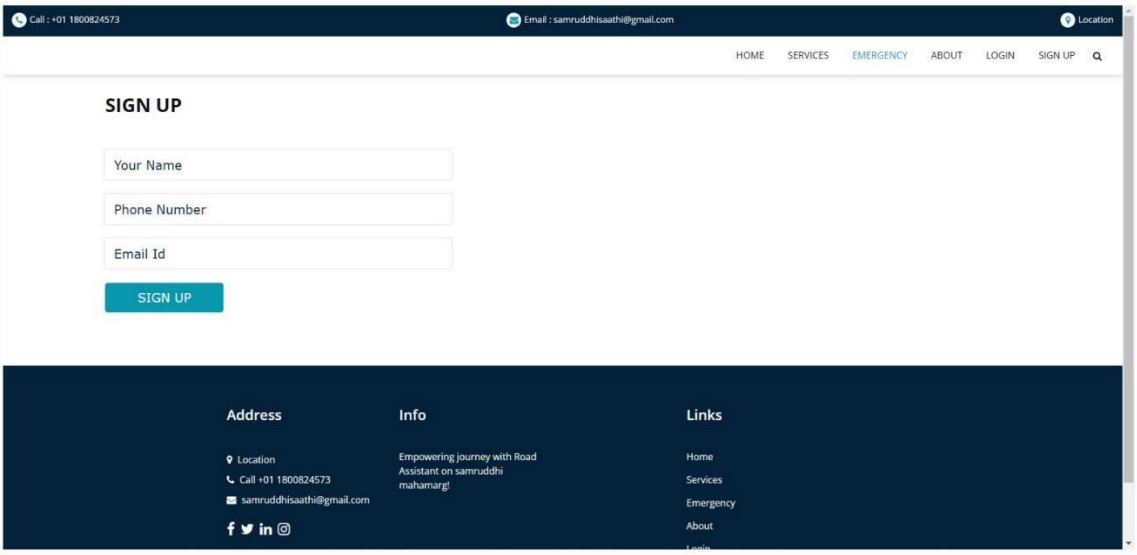

Fig:4 Sign Up Page

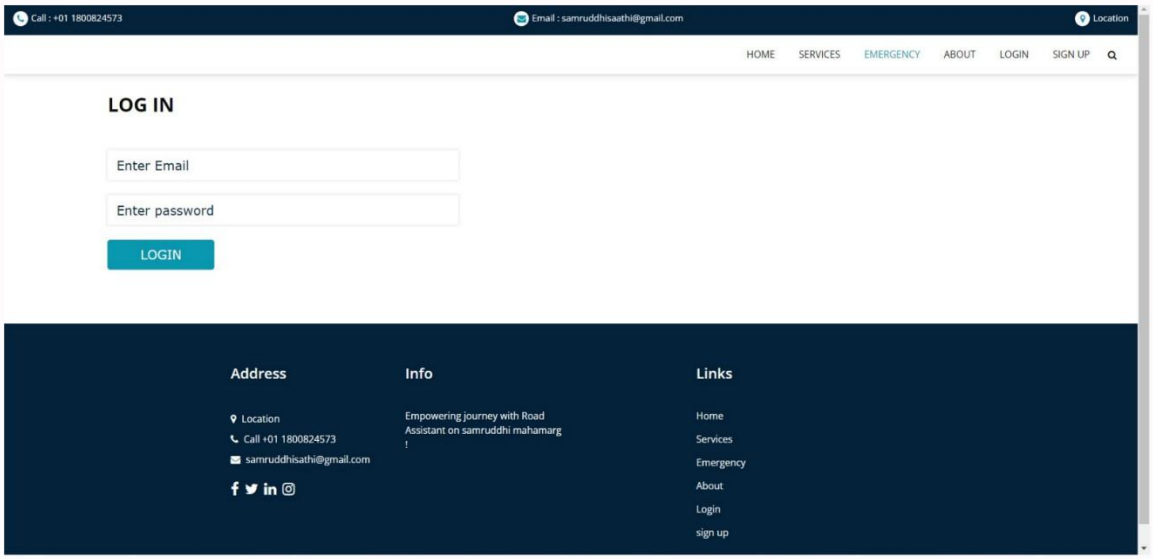

Fig:5 Log In Page

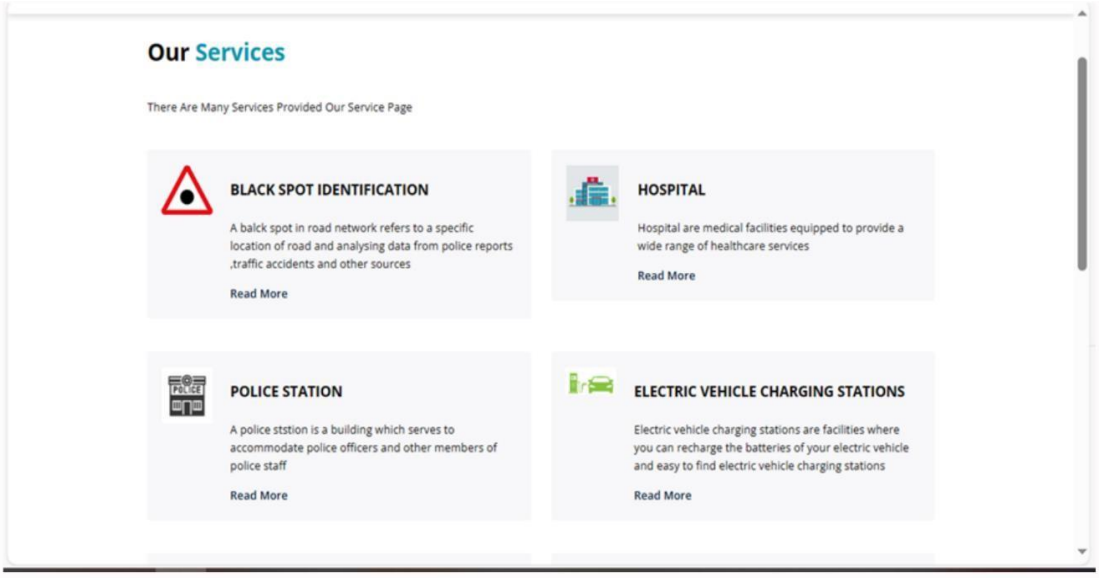

Fig a:6 Services Page

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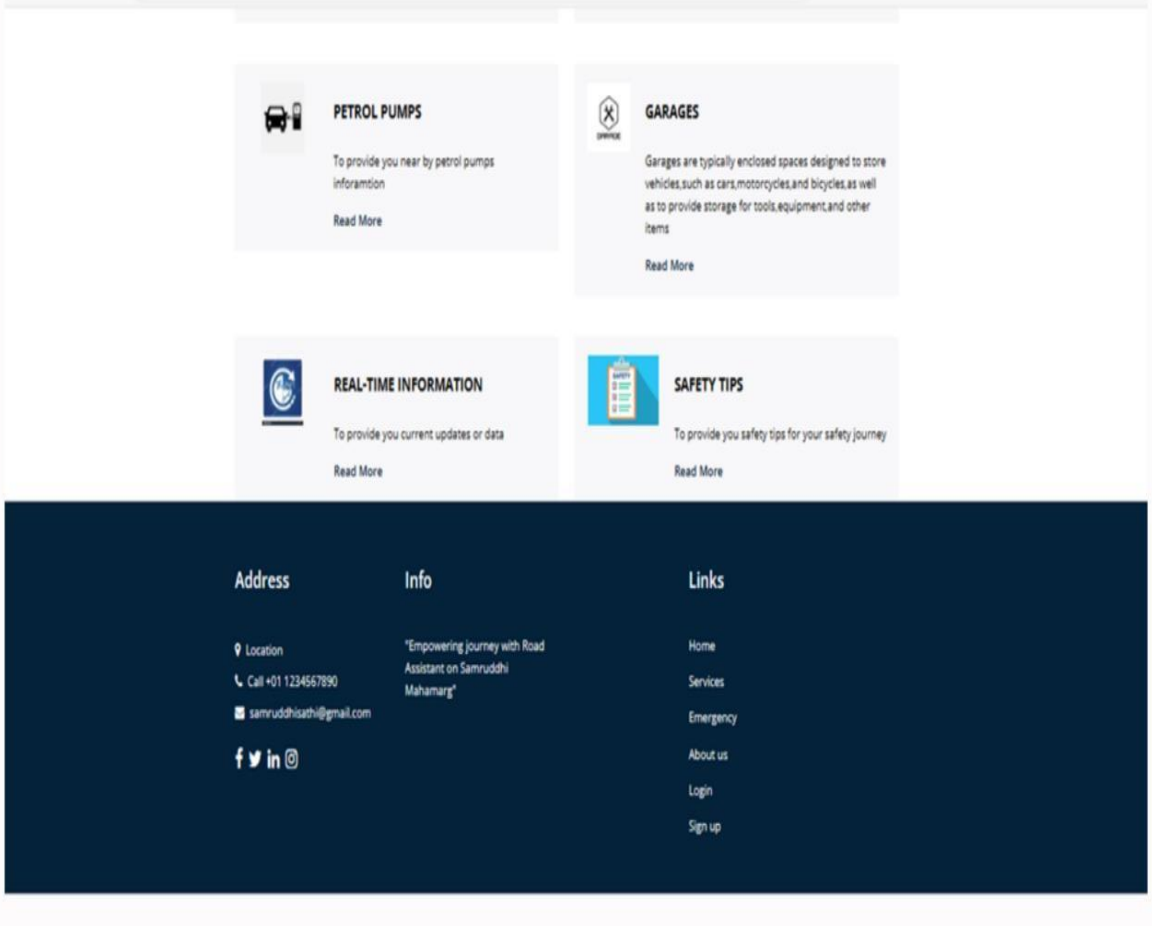

Fig b: 7 Service Page

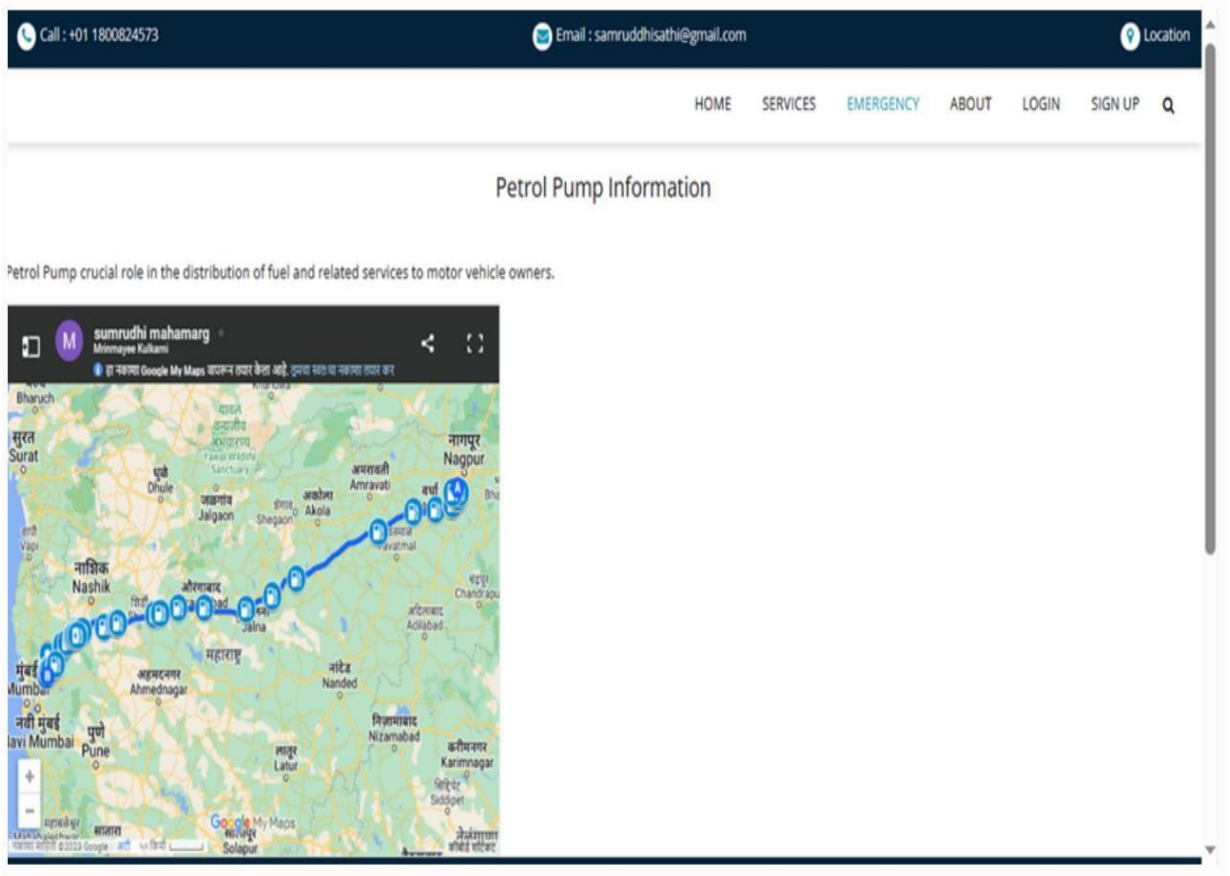

Fig:8 Petrol Pump Information

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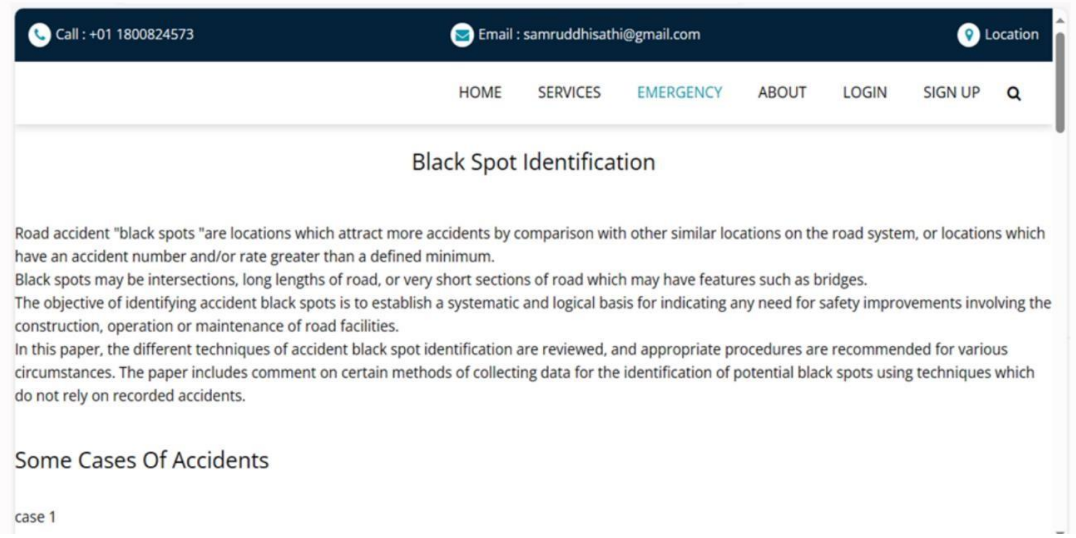

Fig:9 Black Spot Identification

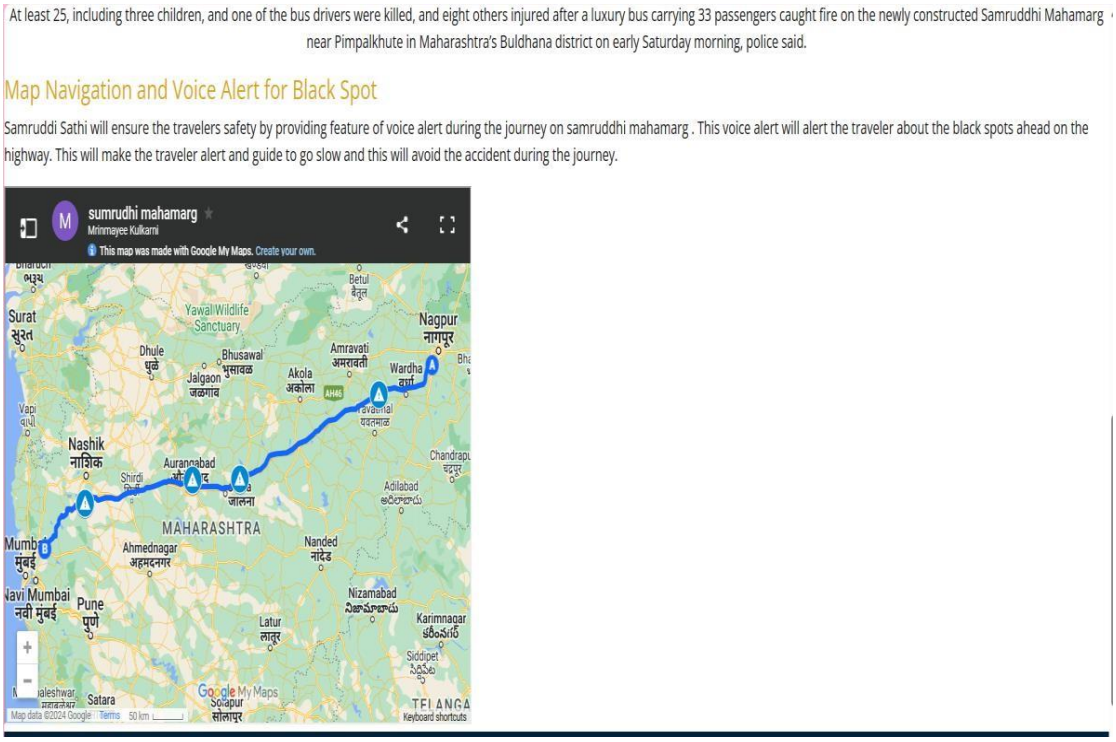

Fig:10 Black Spot Identification

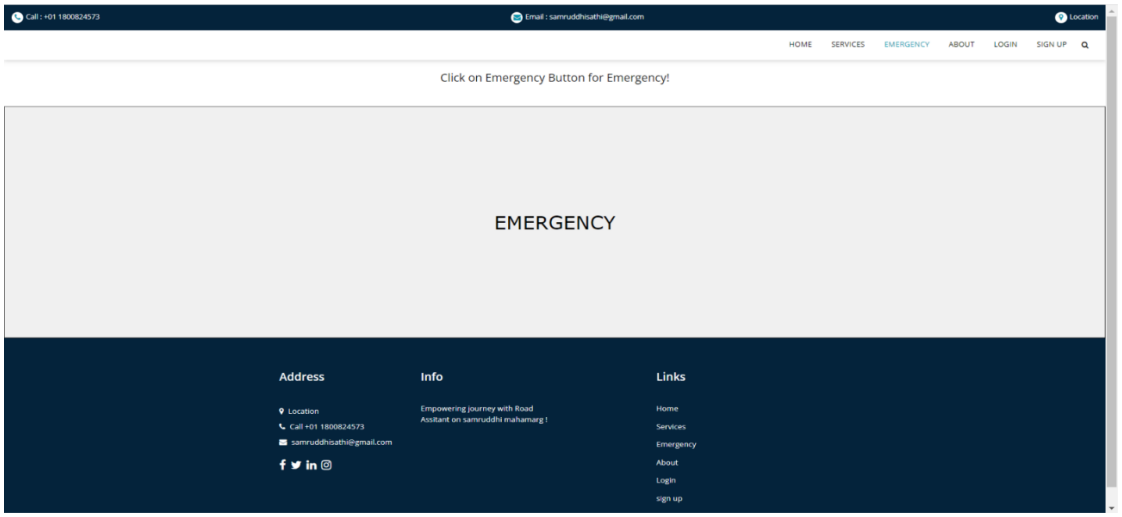

Fig:11 Emergency Page

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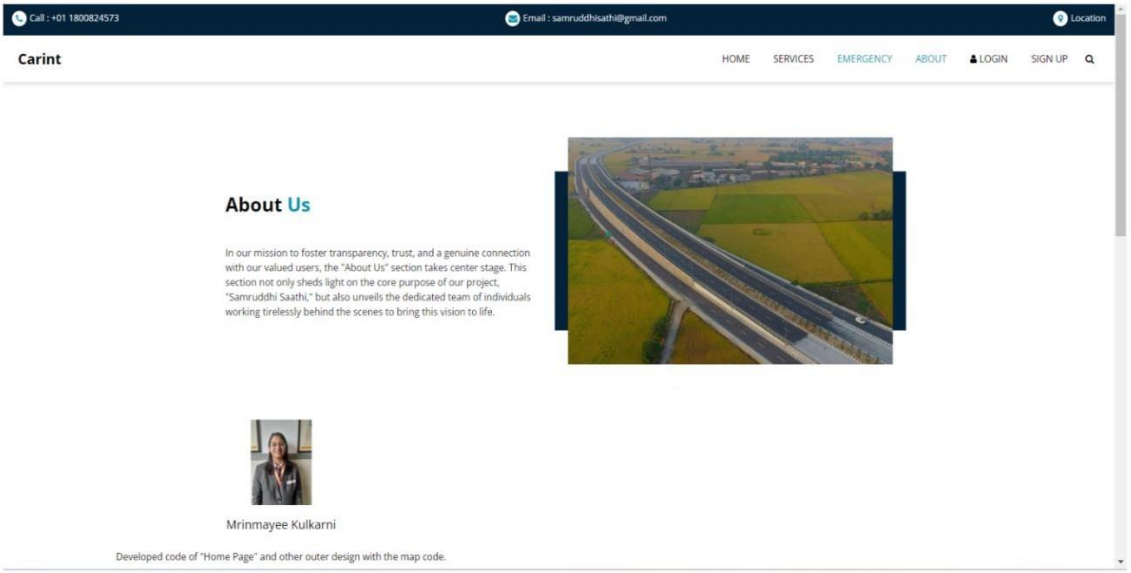

Fig:12 About Us Page

The "Samruddhi Saathi" initiative has been set in motion to tackle the deficiencies in the road assistance and information sharing methods on the Mahamarg highway. Its main objective is to establish a user-friendly web platform that offers crucial services and prompt aid during emergencies. This platform encompasses various features like identifying hazardous areas, locating nearby medical facilities, police stations, electric vehicle charging stations, petrol pumps, and garages. It provides real-time updates, guidance for navigation, and safety tips. To accomplish this project, development tools such as JDK 1.8, JavaScript, HTML, CSS, XAMPP/Workbench, and Eclipse have been employed. Thorough testing has taken place across different operating systems, browsers, and modem drivers. The block diagram of the platform illustrates how its components are interconnected and the range of services it offers. Ultimately, the goal is to enhance the safety and accessibility of travelers' journeys

5. CONCLUSION

Existing road assistance is addressed by the "Samruddhi Saathi" project, tackling its shortcomings. Mahamarg highway system, an innovative web-based and comprehensive. The platform provides a valuable service by granting immediate access to essential resources and ensuring a prompt and effective response during emergencies. Empowers travelers to embark on that enhance travel experiences. Embarking on their odysseys with unwavering assurance and a sense of safety, individuals navigate through the labyrinthine pathways of life. Equipped with an array of proficient instruments for progress and fortified by the rigorous process of examination and experimentation, they forge ahead in their quest for growth and enlightenment. The robustness and functionality of the environment are enhanced by the detailed block diagram. solution envisioned.

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