



# Vivekanand Education Society's Institute of Technology

(Autonomous Institute Affiliated to University of Mumbai, Approved by AICTE & Recognised by Govt. of Maharashtra)  
NAAC accredited with 'A' grade

## PROJECT REPORT ON **Technix**

SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR

**SEMESTER V OF  
T.E. (Information Technology)  
D15B (Group No. 15)**

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V.E.S. INSTITUTE OF TECHNOLOGY  
2024-25**

# Introduction to the Application

**Technix** is an innovative vehicle assistance platform designed to offer on-demand mechanical help to drivers experiencing car issues. Built using the **MERN stack**, the application assigns mechanics to approach the user's location in real time. Whether a user faces car trouble during a drive or is stranded in an unfamiliar area without access to a nearby mechanic, Technix ensures rapid service delivery by connecting the user to the nearest available mechanics or garages.

The platform supports two key types of assistance:

- **Instant Assistance:** Users who experience a breakdown can immediately request service via an emergency assistance button.
- **Scheduled Service:** Users who require regular maintenance or non-urgent repairs can schedule appointments at their convenience.

Technix aims to revolutionize roadside assistance services by integrating real-time tracking, seamless payment options, and trusted service providers, thereby providing a hassle-free solution to vehicle troubles.

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## Stakeholders of Technix

Technix involves various stakeholders who contribute to the success and functionality of the platform. The following are the key stakeholders:

### Drivers (End Users)

The primary users of Technix are drivers who need assistance in the event of a car breakdown or require routine vehicle services. They are classified into two categories:

- **Emergency Users:** These drivers use the emergency assistance feature when their vehicle breaks down unexpectedly.

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## Nearby Garages

**Garage List**

**Ritu Hyundai**  
 Address:  
 Ritu Hyundai, Nr Kongaon Toll Naka, Bhiwandi,  
 Maharashtra 421311, India  
[Emergency Book Now](#)

**Sharayu Motors**  
 Address:  
 Sharayu Motors, Navi Mumbai, Maharashtra 400614,  
 India  
[Emergency Book Now](#)

**Michelin Tyres & Car Service - Premji Motors Pvt Ltd**  
 Address:  
 Michelin Tyres & Car Service - Premji Motors Pvt Ltd,  
[Emergency Book Now](#)

- **Scheduled Users:** These users schedule appointments for non-urgent repairs or vehicle services in advance.

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## OUR SERVICES

**Basic Car Service**  
₹ 4,000

**Car Inspection**  
₹ 2,500

**Used Car Inspection**  
₹ 3,000

₹ 5,000

₹ 3,500

₹ 2,000

The screenshot shows a mobile application interface for booking an appointment. At the top, there is a navigation bar with icons for car, home, services, appointment (highlighted in red), nearby garages, offline, blog, and login. Below the navigation bar is a title 'Urgent Appointment'. The form fields include:

- Full Name\***: A text input field with placeholder 'Your name'.
- Email Address\***: A text input field with placeholder 'Your email address'.
- Location\***: A text input field with placeholder 'Barrage Road, 421503, Badlapur, Thane, Maharashtra, India'.
- Select Vehicle\***: A dropdown menu with placeholder 'Choose type'.
- Select Service\***: A dropdown menu with placeholder 'Choose service'.
- Describe here\***: A text area with placeholder 'Query'.
- Use Current Location?**: A checkbox with checked status.

At the bottom right of the form is a large red button labeled 'Book Appointment'.

## Technix Employees

Technix's internal team manages the backend operations, verifying mechanics and service providers, ensuring quality, handling customer support, and continuously enhancing the user experience.

### Login details of all users:

The screenshot shows the Compass MongoDB interface. The left sidebar displays a tree view of databases and collections, including 'cluster0.rqlv1.mongodb.net' (selected), 'auth-db', 'users', 'config', 'local', and 'sample\_mflix'. The main panel shows the 'users' collection with 5 documents. The document details are as follows:

- Document 1:**

```
_id: ObjectId('66fe68f87386a230d198d732')
name : "harsh"
email : "harshpadyal3@gmail.com"
password : "$2b$10$7QF8auTIKdkAGNVikVM1EuM46XdEvZGaqN01HmtwY28tbhCuMmBrm"
__v : 0
```
- Document 2:**

```
_id: ObjectId('67015bbe119abf8896202f50')
name : "abhay"
email : "abhaygupta@gmail.com"
password : "$2b$10$yhCoSy.niS05WEmafvlyelpj00EQA.8qIUIA1MBFb9FM4oLG3vh"
__v : 0
```
- Document 3:**

```
_id: ObjectId('670265f742e7f8f073b34bf1')
name : "Harsh"
email : "2022.harsh.padyal@ves.ac.in"
password : "$2b$10$uyGm1oEeyINLUYI4JNCxeMN7hymSfk/iisU176R1x6zSF0oGNC"
__v : 0
```
- Document 4:**

```
_id: ObjectId('6703c9b5f2466a05fedec255')
name : " vivek"
email : "2022.vivek.gupta@ves.ac.in"
password : "$2b$10$6YDCVlttxs1.nxvTBckuze28lTs6CjujbgIHipeokpcl4ug8Y9Yku"
__v : 0
```

## **Appointments details of users:**

The screenshot shows the Compass MongoDB interface. On the left, the sidebar displays the connection 'cluster0.rqlv1.mongodb.net' and its databases: admin, auth-db, config, local, and sample\_mflix. The 'auth-db' database is selected, and its collections are listed: users, appointments, and sample\_mflix. The 'appointments' collection is currently selected, indicated by a highlighted tab.

The main workspace shows the 'Documents' tab for the 'appointments' collection, which contains 30 documents. A search bar at the top says 'Type a query: { field: 'value' } or Generate query'. Below it are buttons for 'ADD DATA', 'EXPORT DATA', 'UPDATE', and 'DELETE'. The results list shows three documents as examples:

```
a_name : "harsh"
a_email : "2022.harsh.padyal@ves.ac.in"
a_vehicle : "Three Wheeler"
a_outlet : "421503, Badlapur, Maharashtra, India"
a_specialrequest : "jhkjdcbjc"
local_email : "2022.harsh.padyal@ves.ac.in"
__v : 0

_id: ObjectId('670b8119ca8d556f7d2226f5')
a_name : "Harsh"
a_email : "2022.harsh.padyal@ves.ac.in"
a_vehicle : "Four Wheeler"
a_outlet : "U.S. Polo Assn., Pune pune Maharashtra, Pune, Maharashtra 411030, India"
a_specialrequest : "bjmnfkjsnkjz"
local_email : "2022.harsh.padyal@ves.ac.in"
__v : 0

_id: ObjectId('6711303f0e9d3bd868b85f14')
a_name : "harsh"
a_email : "2022.harsh.padyal@ves.ac.in"
a_vehicle : "Three Wheeler"
a_outlet : "U.S. Polo Assn., Pune pune Maharashtra, Pune, Maharashtra 411030, India"
a_specialrequest : "hrhfhs"
local_email : "2022.harsh.padyal@ves.ac.in"
__v : 0
```

# Mechanics and Garages

Technix partners with local mechanics and garages who provide repair and maintenance services to users. These service providers are verified by Technix's team to ensure their credibility and quality of work.

## **Investors and Strategic Partners**

Investors play a crucial role in funding Technix's growth and technological development. Strategic partners, such as auto parts suppliers and insurance companies, collaborate with Technix to expand the services offered to drivers.

## **Business Model Selected**

Technix operates using a **B2C (Business-to-Consumer)** e-business model. It provides vehicle assistance services directly to consumers through the platform. The business model focuses on delivering value to both emergency and scheduled users by ensuring quick response times and a wide network of verified mechanics.

## **Key Components of the Business Model:**

- **Customer Value:** Technix's value proposition lies in offering fast, reliable, and affordable vehicle repair services. Users can access emergency repairs on-demand and schedule

services based on their availability. The ability to locate trusted mechanics in real time ensures convenience for all drivers.

- **Revenue Model:** Technix generates revenue through service booking fees and commissions from mechanics for each job completed. As the platform scales, additional revenue streams such as partnerships with spare parts vendors or insurance companies can be integrated.
- **Scope:** The target market includes drivers facing vehicle breakdowns and those looking for regular maintenance services. The platform's scope extends across urban and suburban areas, making it accessible to a broad audience of vehicle owners.
- **Sustainability:** The business model's sustainability is supported by a wide network of mechanics, providing scalable service coverage. Technix ensures user loyalty through its robust customer support system and the quality assurance of its service providers.

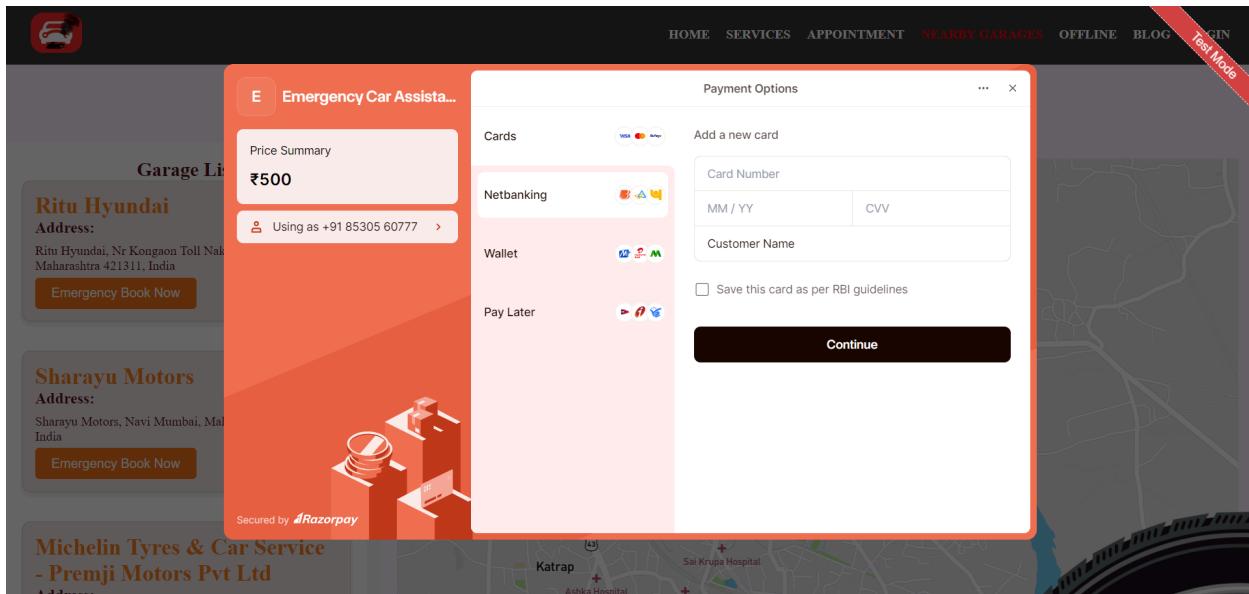
---

## Revenue Model Selected

Technix employs a multi-faceted revenue model to ensure financial stability and operational growth. The key components of the revenue model include:

### Transaction Fees

Technix charges a transaction fee on every service booking made through the platform. This ensures a steady income stream with each job completed by a mechanic.



### Service Provider Commissions

Mechanics and garages partner with Technix and pay a commission on each service they provide through the platform. This model incentivizes the growth of Technix's network of service providers while ensuring a continuous revenue stream.

## **Advertising Revenue**

As Technix grows in popularity, garages and local businesses can advertise their services within the app. These targeted ads will allow service providers to increase visibility among drivers in specific geographic areas.

## **Affiliate Partnerships**

Technix partners with insurance companies, auto parts suppliers, and other automotive-related businesses to promote their products and services. The platform earns affiliate revenue from these partnerships, adding another revenue stream without operational overhead.

## **Subscription Services (Future)**

In the future, Technix may introduce subscription-based services for frequent users, offering benefits like priority access to mechanics, discounted rates, and premium customer support.

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# **Features of the Website**

## **i. Marketing Activity**

Technix's marketing strategy revolves around educating drivers on the benefits of the platform and engaging them through value-driven content. A dedicated **blog section** supports the marketing efforts by delivering content in the following areas:

- **Informational Content:** Articles that provide insights into vehicle maintenance, emergency preparedness, and driving safety tips.
- **Spotlighting Local Mechanics:** Highlighting high-quality service providers helps to build trust within the community and encourages users to book services with confidence.
- **SEO and Traffic Generation:** The blog section improves search engine visibility for Technix, driving organic traffic to the platform.
- **Storytelling:** Sharing success stories and testimonials from users who have benefitted from Technix's services fosters a connection with potential customers.

## **ii. Customer Support**

Technix's **Contact Us** page plays a pivotal role in addressing user inquiries and resolving issues:

- **Live Chat:** Provides instant support for users in need of immediate help.
- **Email and Phone Support:** Offers a more detailed way for users to resolve complex issues or leave feedback.

A robust feedback system ensures continuous improvements in service delivery based on user experience.

### iii. Use of Multiple Revenue Sources

Technix's diversified revenue model ensures steady income through:

- **Transaction fees** on bookings.
- **Service provider commissions** on completed jobs.
- **Affiliate revenue** from insurance companies and auto parts vendors.
- **Advertising** for local garages and related services.

### iv. Value Addition

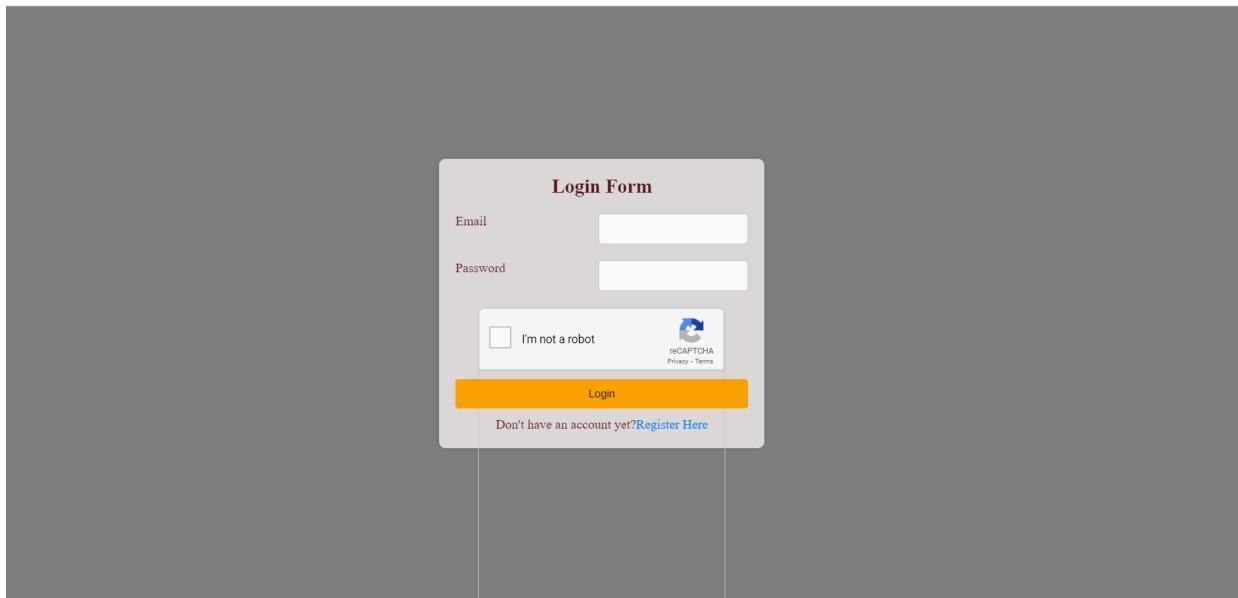
Technix offers significant value to its users by:

- **Real-time Assistance:** Instant location-based assistance ensures users get help when they need it most.
- **Verified Mechanics:** Partnering only with trusted service providers ensures high-quality service.
- **Comprehensive Services:** In addition to emergency repairs, Technix provides vehicle maintenance, roadside support, and scheduled appointments.

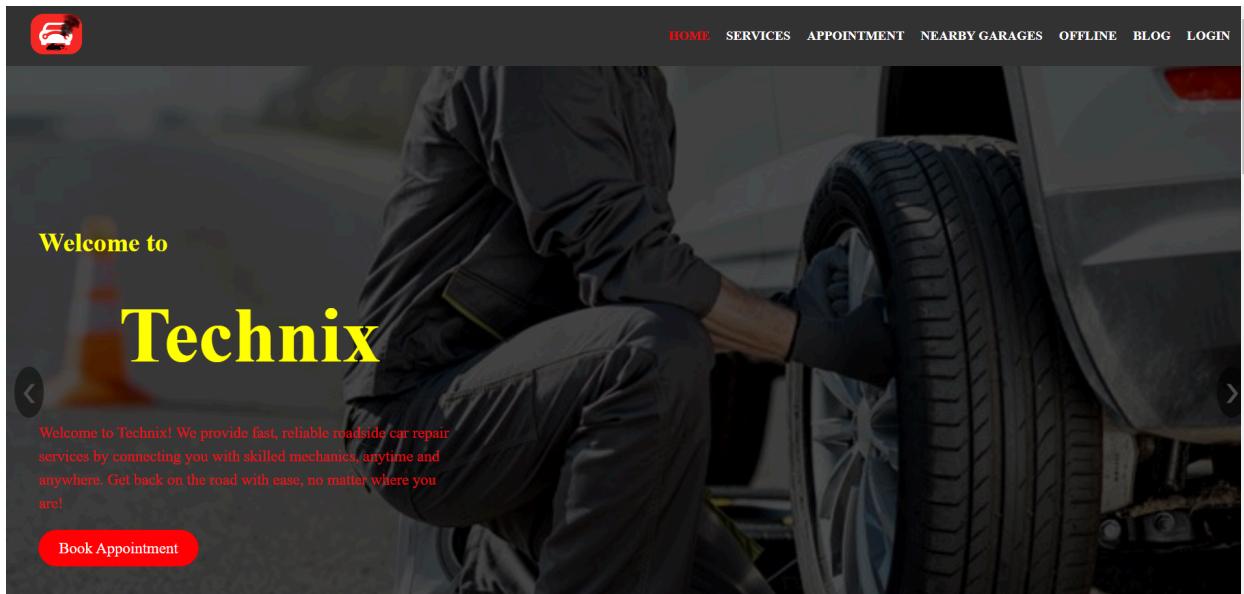
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## Implementation

Login/Singin page:



## Home Page:



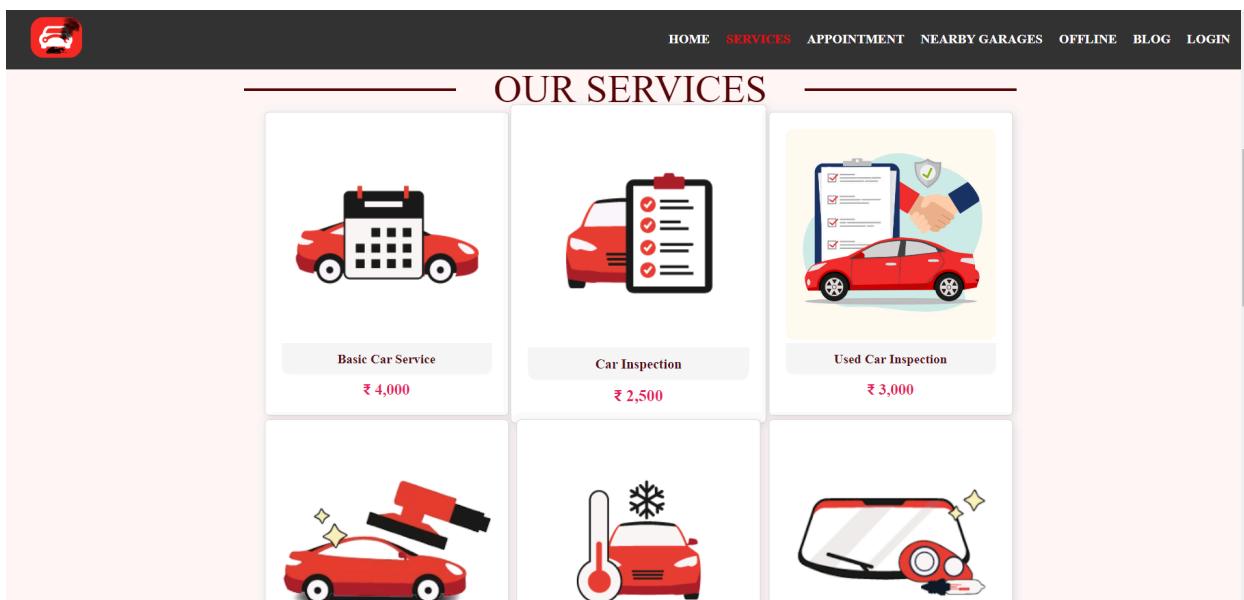
Welcome to  
**Technix**

Welcome to Technix! We provide fast, reliable roadside car repair services by connecting you with skilled mechanics, anytime and anywhere. Get back on the road with ease, no matter where you are!

[Book Appointment](#)

The page features a dark background image of a mechanic working on a car tire. The Technix logo is at the top left, and a navigation bar with links to HOME, SERVICES, APPOINTMENT, NEARBY GARAGES, OFFLINE, BLOG, and LOGIN.

## Services:

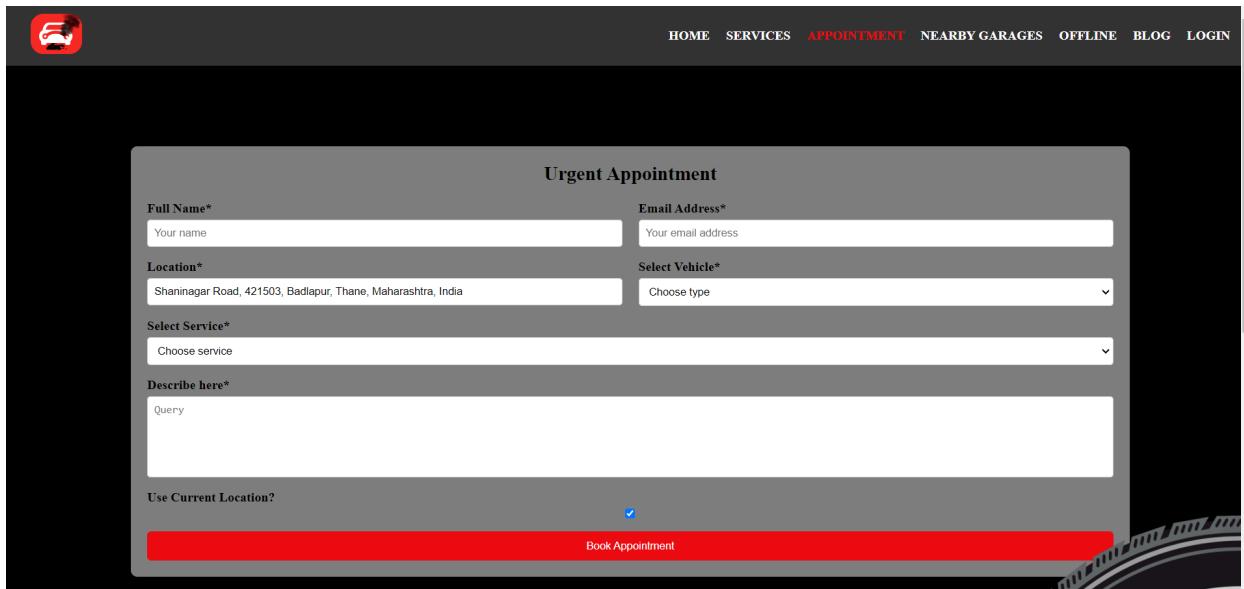


### OUR SERVICES

 Basic Car Service ₹ 4,000	 Car Inspection ₹ 2,500	 Used Car Inspection ₹ 3,000
		

The Services page has a header with the Technix logo and a navigation bar. Below the header, it says "OUR SERVICES" and lists six service options with icons and prices. The services are: Basic Car Service (₹ 4,000), Car Inspection (₹ 2,500), Used Car Inspection (₹ 3,000), Car Recovery, Car Cooling, and Windshield Repair.

## Appointment:



The screenshot shows a dark-themed appointment booking form titled "Urgent Appointment". The form includes fields for "Full Name\*", "Email Address\*", "Location\*", "Select Vehicle\*", "Select Service\*", and "Describe here\*". There is also a checkbox for "Use Current Location?" and a prominent red "Book Appointment" button at the bottom.

Full Name\*  
Your name

Email Address\*  
Your email address

Location\*  
Shaninagar Road, 421503, Badlapur, Thane, Maharashtra, India

Select Vehicle\*  
Choose type

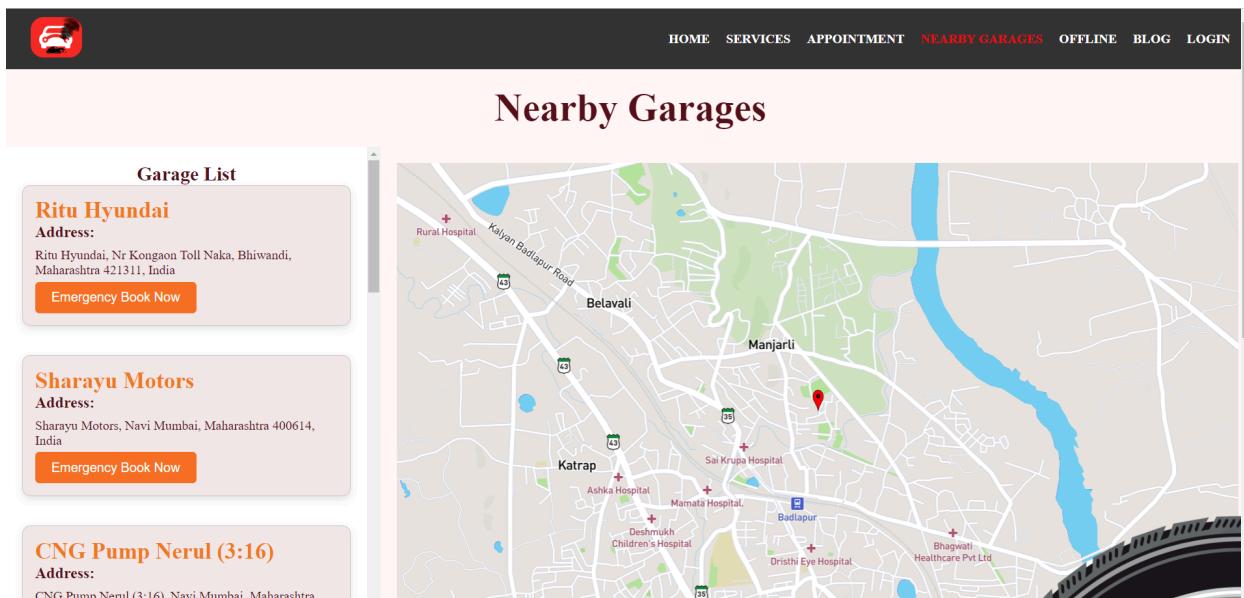
Select Service\*  
Choose service

Describe here\*  
Query

Use Current Location?

Book Appointment

## Nearby Garages(by fetching your Live Location):



The screenshot displays a map titled "Nearby Garages" showing the locations of various garages in the Badlapur area. The map includes labels for Belavali, Manjari, Katrap, Badlapur, and several hospitals like Rural Hospital, Kalyan Badlapur Road, Ashka Hospital, Deshmukh Children's Hospital, Sai Krupa Hospital, Marmata Hospital, Drishti Eye Hospital, and Bhagwati Healthcare Pvt Ltd. Three garage listings are shown on the left: Ritu Hyundai, Sharayu Motors, and CNG Pump Nerul (3:16), each with an "Emergency Book Now" button.

Garage List

**Ritu Hyundai**  
Address:  
Ritu Hyundai, Nr Kongaon Toll Naka, Bhiwandi,  
Maharashtra 421311, India  
**Emergency Book Now**

**Sharayu Motors**  
Address:  
Sharayu Motors, Navi Mumbai, Maharashtra 400614,  
India  
**Emergency Book Now**

**CNG Pump Nerul (3:16)**  
Address:  
CNG Pump Nerul (3:16), Navi Mumbai, Maharashtra

Nearby Garages

Rural Hospital, Kalyan Badlapur Road, Belavali, Manjari, Katrap, Badlapur, Ashka Hospital, Deshmukh Children's Hospital, Sai Krupa Hospital, Marmata Hospital, Drishti Eye Hospital, Bhagwati Healthcare Pvt Ltd

## Offline Map showing location of garages:

The screenshot displays a map of Mumbai, specifically the Chembur and surrounding areas, with a focus on garages near VESIT. The map includes major roads like Sion-Panvel Highway, MG Road, and GMLR, along with local streets and landmarks such as Lokmanya Tilak Terminus, Bhabha Hospital, and various neighborhoods like Kurla West, East, and Chembur. Blue diamond icons represent the locations of several garages, including Sai Service Garage, Bafna Motors Garage, and Chembur Auto Garage, which are highlighted with larger boxes containing their details. The top navigation bar features links for HOME, SERVICES, APPOINTMENT, NEARBY GARAGES, OFFLINE (which is highlighted in red), BLOG, and LOGIN.

**Sai Service Garage**  
Shop No. 15, Chembur Camp, Mumbai, Maharashtra 400074  
02225288811  
Open until 08:00 PM

**Bafna Motors Garage**  
V N Purav Marg, Chembur East, Mumbai, Maharashtra 400071  
02225228855  
Open until 07:30 PM

**Chembur Auto Garage**  
Shivaji Nagar, Chembur East, Mumbai, Maharashtra 400043  
02225291112

localhost:5173/outlets 09:00 PM

## Conclusion

Technix provides a one-stop solution for vehicle breakdowns and routine maintenance, leveraging real-time location tracking and verified mechanics to create a reliable and efficient service for drivers. The platform's unique value proposition, diverse revenue model, and potential for future partnerships with insurance companies and spare parts vendors ensure that Technix is well-positioned for growth in the automotive assistance industry.

By focusing on user convenience, verified service providers, and comprehensive customer support, Technix has the potential to become a go-to solution for drivers in need of emergency and scheduled vehicle services, creating value for both users and service providers alike.