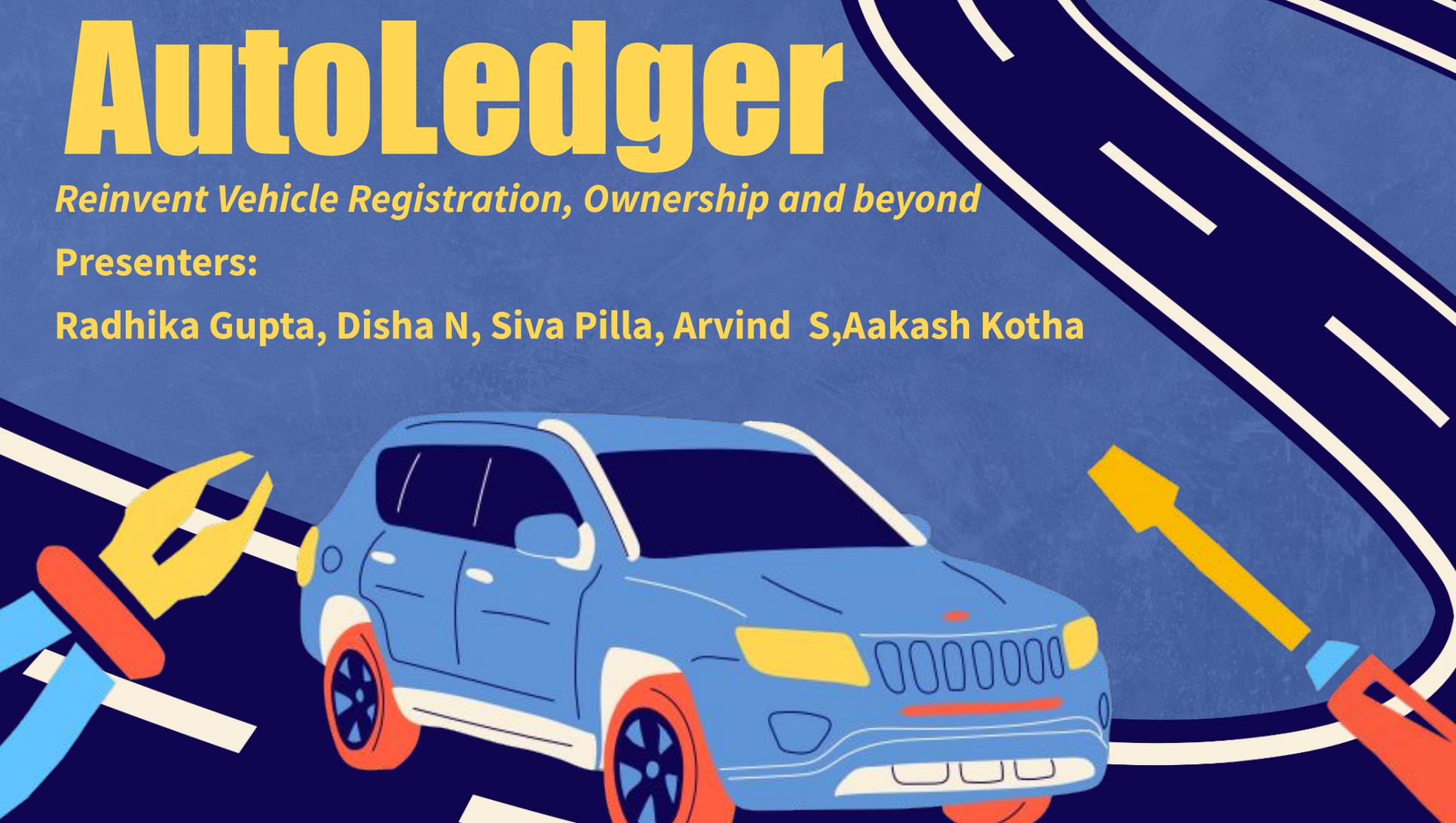


AutoLedger

Reinvent Vehicle Registration, Ownership and beyond

Presenters:

Radhika Gupta, Disha N, Siva Pilla, Arvind S, Aakash Kotha





Problems with current system





Problems



One
Odometer
Tampering



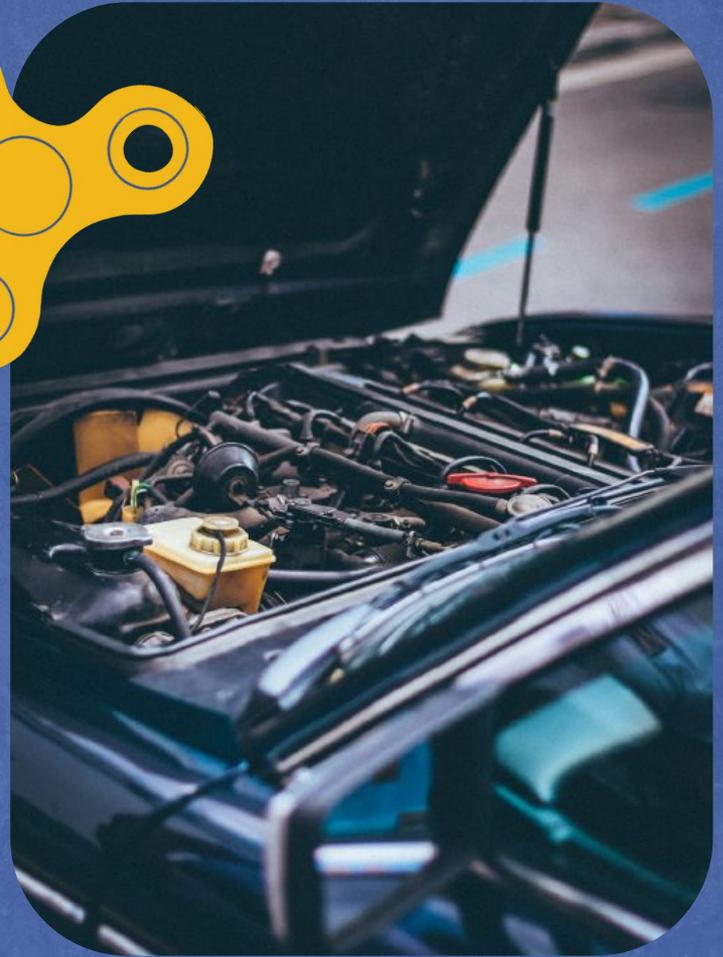
Two
Hiding the servicing
history



Three
Hiding any major
incidents

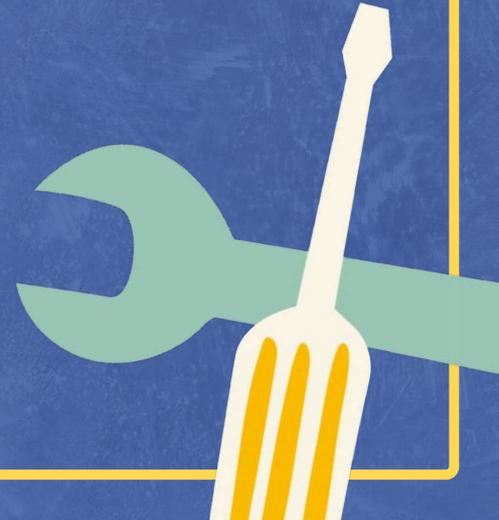


Four
Misrepresentation of
the vehicle value





Introducing to you,
THE AUTOLEDGER



OUR SOLUTION



TRANSPARENT



RESILIENT



DATA PRIVACY

HOW WE OVERCAME



Trust and Transparency



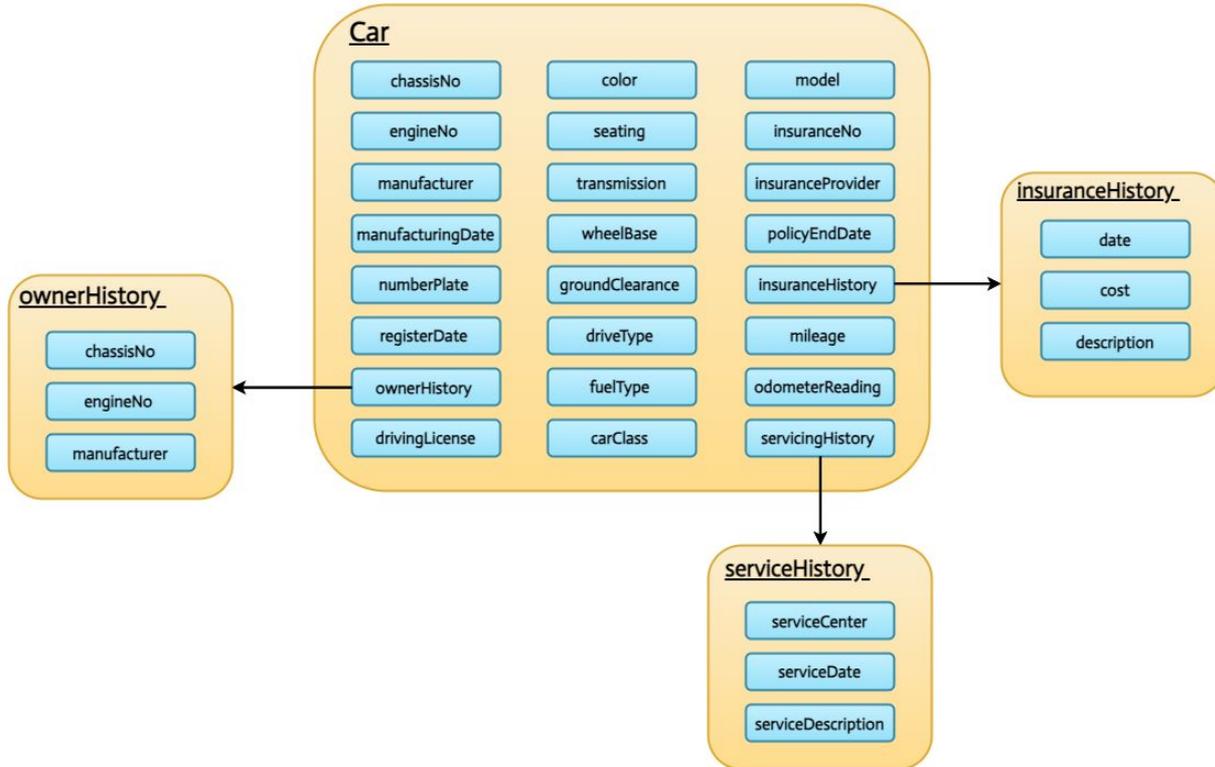
Comprehensive Car
Record



User-Friendly

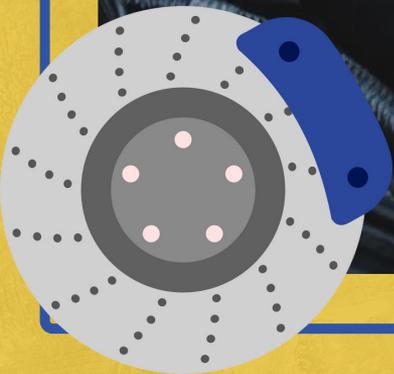
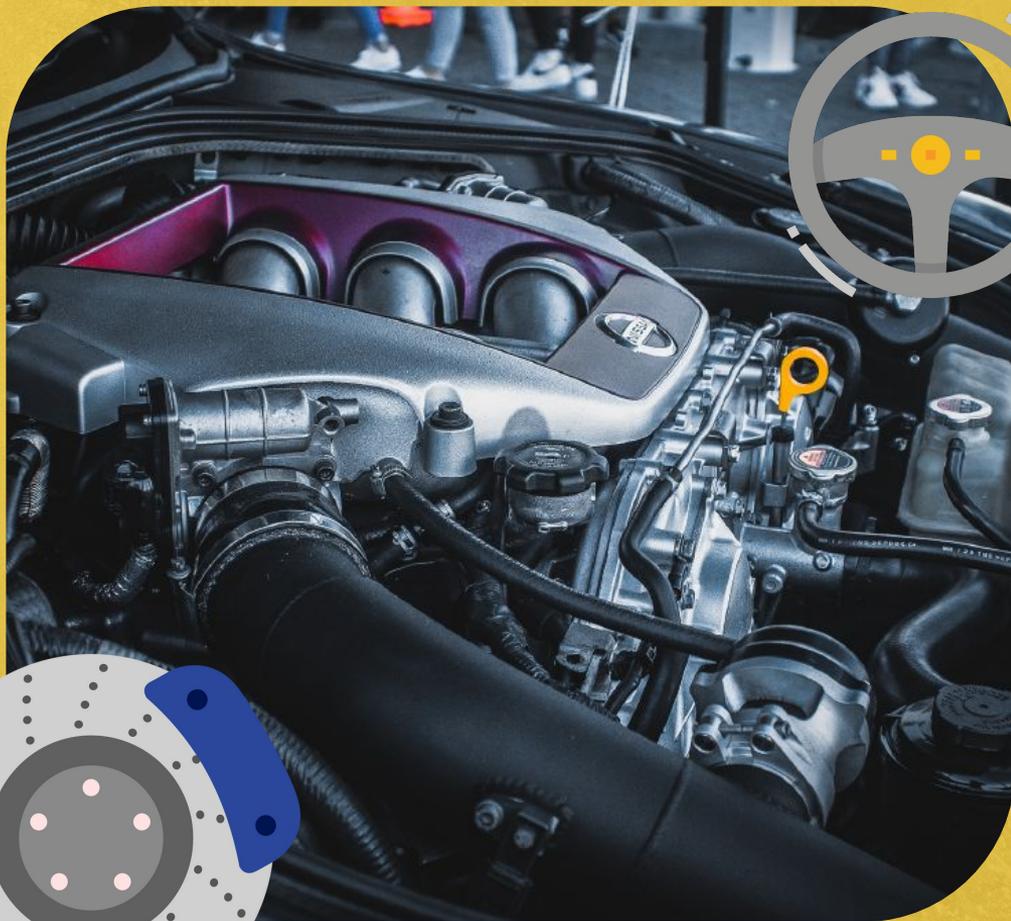


CAR SCHEMA



USER SCHEMA

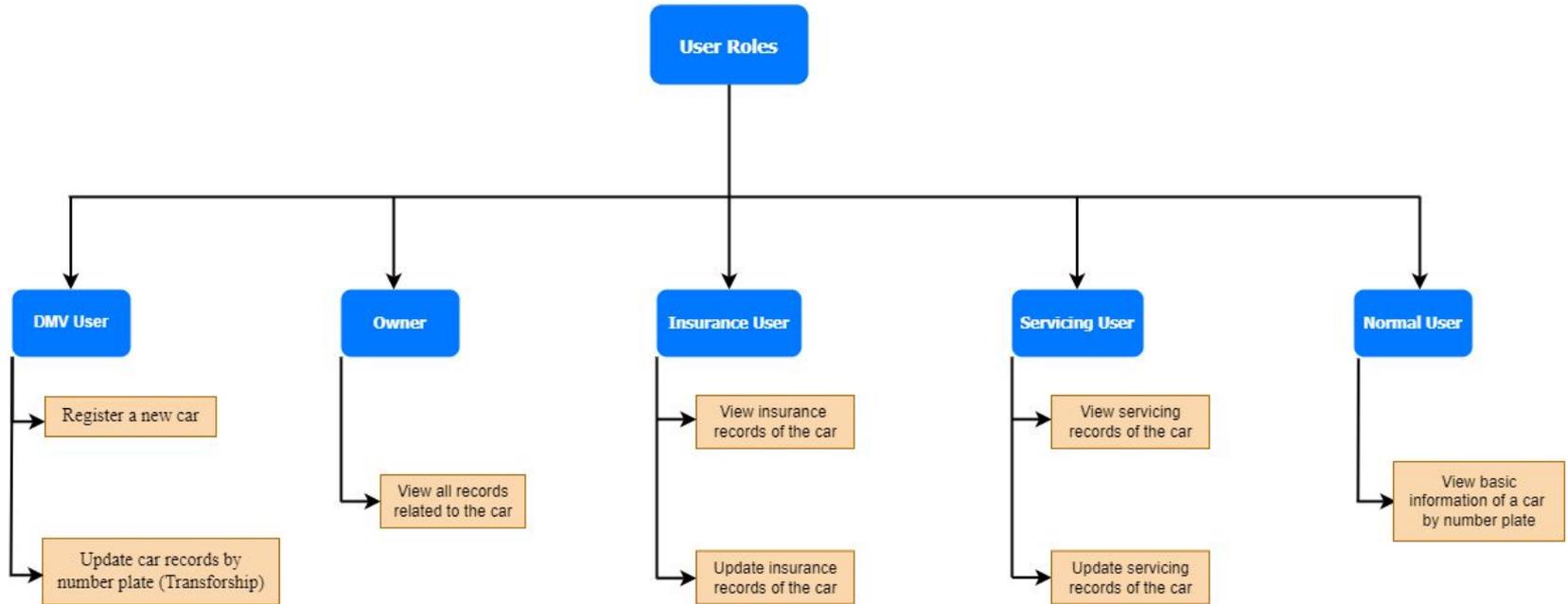




Role based access



User roles and their defined permissions





DMV Services

Operation you need to perform (DMV):

Select an operation

Select an operation

Create a new car entry

Modify existing car entries





Service Center Form

License Plate

Date of Service

Service Center Name

Odometer Reading

Notes





Insurance Form

License Plate

Date of Insurance

Cost

Notes

Submit





Insurance Form

License Plate

Date of Insurance



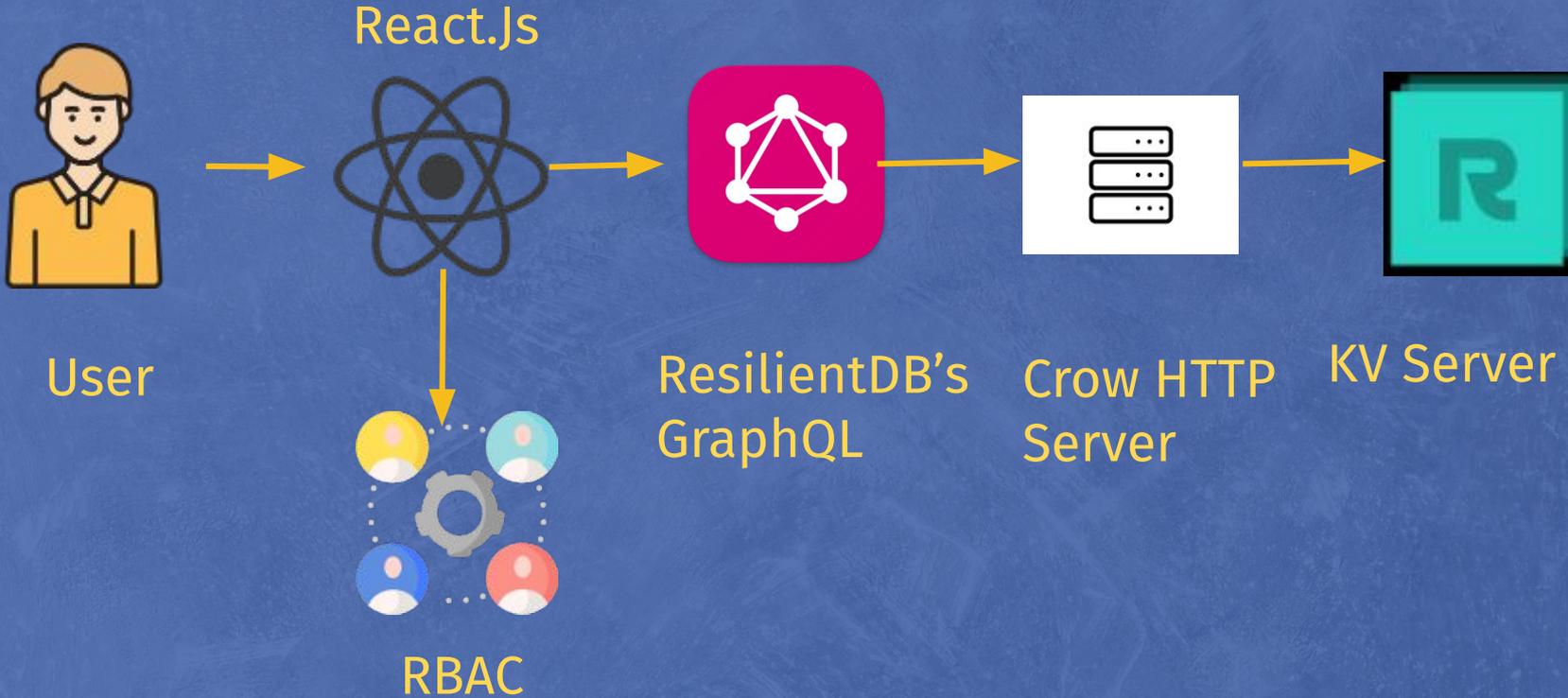
Cost

Notes

Submit



System Architecture



GraphQL APIs

For “USER” Asset

postTransaction	Register a new user
getUserTransaction	User login and display user profile
getAllUserTransactions	List all user profiles
updateUserTransaction	Update a user profile

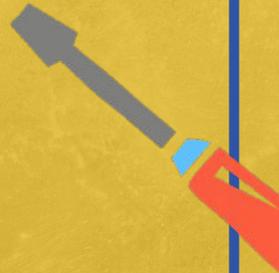
For “CAR” Asset

postTransaction	Registration of a new car
getCarTransaction	Retrieves particular car details based on number plate number of the car
getAllCarTransactions	Retrieves all cars' records
updateCarTransaction	Updates a particular car's records



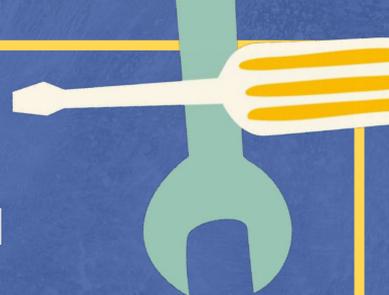
Project

Contributors



Radhika Gupta

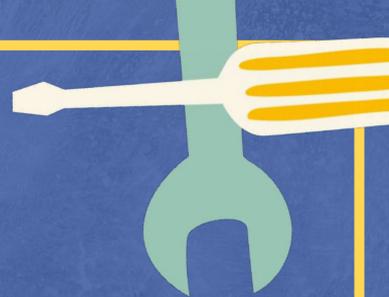
(Led the team, extensive contributor for Backend and Frontend, Major Contributor for UI design)



- **Redesigned the complete UI in last 48 hours of presentation**
- **Initial GitHub Setup:** Established the initial GitHub repository, laying the groundwork for our project's version control and collaboration.
- **Leadership and Coordination:** Led the project. Took the initiative in organizing team meetings, fostering effective communication, and ensuring coordinated efforts towards our project goals.
- **Technology Evaluation:** Tested and evaluated various technologies, including GraphQL, ResVallet, and different SDKs, to determine the best fit for our project's needs.
- **GraphQL Query Development:** Collaborated with Siva to develop and optimize GraphQL queries, ensuring they met our project requirements.
- **Frontend API Integration:** Integrated all the necessary API calls into the frontend, ensuring smooth interaction between the front and back ends.
- **UI Enhancements:** Worked with Arvind to significantly enhance the user interface across all pages, improving both design and usability.
- **Testing and Debugging:** In collaboration with Siva, involved in thorough testing of the API integration, identifying and fixing errors to enhance application stability.
- **Error Notification Implementation:** Implemented toast notifications for error reporting and API responses, improving user experience with real-time feedback.
- **Rewrote the Insurance:** The page was initially built by other members of the team but had major issues, including unnecessary fields and the absence of useState to store the values.

Siva

(Major Contributor for Backend Development)



- **Installed and configured ResilientDB's KV server, HTTP Crow server, and GraphQL server (all backend servers) and orchestrated their seamless integration.**
- **Led the design and development of backend APIs (POST, GET, UPDATE) for both 'user' and 'car' assets, rigorously testing them on the local GraphQL server. (Major Contributor)**
- **Actively contributed to the frontend-backend integration and associated testing processes.**

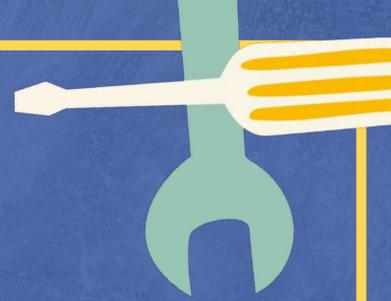
Arvind

(Major Contributor for Frontend Development)



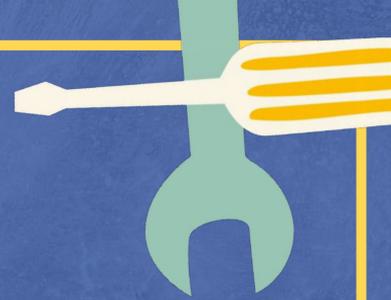
- **Core Page Development:** Developed key pages, including the homepage, search page, rewrote the service center page, and registration page, focusing on user-centric design for seamless navigation and cohesive aesthetics.
- **User Experience Enhancement with Cookies:** Integrated cookies to improve user experience and streamline session management, making the application more intuitive and user-friendly.
- **Interactive Feature Implementation:** Designed and implemented engaging interactive elements, such as a modal-based registration form and a sophisticated vehicle information page using card components. Also developed an adaptive navbar that intelligently displays components based on user roles, enhancing the user interface.
- **Integration of Team Members' Work:** Efficiently integrated the DMV page, user profile, and sign-up page and footer developed by teammates, Aakash and Disha. Focused on significantly improving the UI and design of these pages.
- **Front-End Validation for Data Integrity:** Implemented front-end validation mechanisms to maintain data accuracy and enhance user interaction, providing immediate feedback to users on all pages.
- **Frontend Testing:** Thoroughly tested the frontend, ensuring all components worked perfectly and contributed to a flawless user experience.

Disha

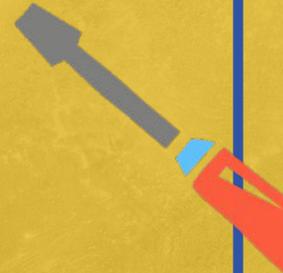


- **Setup:** Played a key role in including the establishment of a resilient database on local machine. Collaborated with Siva to configure various components such as ResilientDB's key-value server, HTTP Crow server, and GraphQL server.
- Elevated the user interface by introducing additional components (footer, links, and GitHub icon).
- Participated in discussions with Radhika for UI enhancement.
- Built front end foundation for insurance, service center page, and user profile, registration, and signup page.

Aakash



- **Frontend Development and Refinement:** Primary focus was on the development and refinement of key pages, particularly the DMV pages within the React framework.
- **API Call Request Structure Creation:** Collaborated closely with Siva to help in the creation of a well-defined API call request structure.
- **Project Overview Blog Website:** Took the initiative to create a Blog website for external stakeholders, providing a simplified and accessible overview of our project.
- **Special credits for the blog website.**



Thank you

