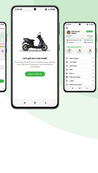
UX/UI Case Study

Enhancing Usability & Bookings for

Let's driEV



Description

Let's drIEV an electric scooter rental platform began as an initiative to help people acquaint themselves with micro-mobility and the benefits of EV. Being Gokhale's first electric scooter rental provider startup, drIEV has been providing pocket-friendly, light-weight, comfortable, noise-free and secured rides to its customers through its easy book and quick delivery mechanism. It aim to revolutionize micro-mobility and address the needs of the public through sustainable, green and future-proof models that are accessible, affordable and shareable for all. It also hope to combat climate change and global warming and preserve our resources for tomorrow.

Problem Summary

The Community model needs a dedicated mobile application that digitizes and automates the entire short-ride experience.
The app should allow students to:

- Seamlessly verify their campus affiliation through KYC.
- View and reserve scooters in real-time.
- Start and end rides within geo-fenced areas.
- Make payments via an in-app wallet, and
- Instantly calculate ride fares based on time and distance.

By solving these problems, Let's drIEV can ensure a smooth, secure, and scalable mobility experience for students while reducing manual dependency and improving operational efficiency.

Problem Understanding

Let's drIEV aims to simplify sustainable commuting through electric scooter rentals. One of its key offerings is the Community model, a mobility solution designed for students and youth within large campuses such as universities or private institutions in Bhubaneswar.
This model functions within a closed-loop, geo-fenced environment, where only affiliated users (students or staff) can access and ride scooters assigned to their specific campus. However, the current system heavily depends on manual operations and lacks a unified digital platform — leading to multiple user and operational challenges.

Current Scenario

- Students currently rely on manual booking in in-person availability checks at scooter stations.
- Payments and ride management are either handled offline or through temporary setups, with no centralized wallet or digital tracking system.
- Vehicle availability, battery status, and location details are not visible in real-time.
- Customer support and issue reporting (like breakdowns or damage) are unstructured and inconsistent.

Key Problems Identified

- **Lack of Digital Access Control**
  There's no robust mechanism to verify if a user belongs to the specific campus or ensure rides stay within the geo-fenced area. This creates operational and security challenges.
- **Absence of Real-time Availability & Tracking**
  Students have no visibility of which scooters are available, their exact location, or battery range, leading to uncertainty and wasted time.
- **Limited Payment Flexibility**
  There is no in-app wallet system, making payments cumbersome. Users can't pre-load funds, track past rides, or get instant fare summaries.
- **No Reservation or Pre-booking Feature**
  Students must physically visit the station walk to the station only to find all scooters taken. The absence of a short-term reservation option reduces convenience and trust.
- **Incomplete Ride Experience**
  There's no streamlined flow for ride start, stop, and fare calculation, leading to confusion over billing and incomplete usage records.
- **Inefficient Support System**
  Reporting issues like breakdowns, battery failures, or lost items isn't standardized. Users lack quick access to SOS or help options.
- **Lack of Clear Visual Information**
  Users don't have an intuitive interface showing vehicle availability, pricing, and battery percentage at a glance. This makes decision-making difficult and reduces confidence while selecting scooters.

User Persona

Rehuta Prasadha, (B.Plumbing, 3rd Year)
Age - 24
Location: SoA University, Bhubaneswar

About
Prasadha is a student who frequently uses Let's drIEV scooters to travel around her college and nearby places like cafés, shopping areas, and tuition centers. She loves the idea of having affordable, eco-friendly rides that give her freedom to explore the city on her schedule.

Goals

- Find and book scooters easily through a mobile app.
- Check nearby scooter availability, pricing, and battery level instantly.
- Take quick rides to nearby destinations like cafés, malls, or friends' places.
- Use wallet payments for convenience without worrying about cash.

Pain Points

- Unclear scooter availability and pricing lead to wasted time
- Sometimes scooters have low battery after reaching
- No short-reservation option – scooters get booked by others before she arrives.
- Difficulty finding parking spots or ending rides in allowed zones.

Motivation
Prasadha values freedom, flexibility, and cost-effectiveness. She wants an easy, fast, and reliable app that supports short urban rides beyond campus boundaries.

Rohan Das, (MBA, 2nd Year)
Age - 24
Location: KIMS, Bhubaneswar

About
Rohan is an MBA student at IIMB who often moves between the campus and city hotspots for meetings, cafés, or weekend hangouts. He prefers Let's drIEV because it's cheaper than cabs and easier than public transport for short trips.

Goals

- Access scooters anytime for short rides around Bhubaneswar.
- View scooter availability, pricing, and range before booking.
- Use wallet-based payment for quick transactions.
- Rely on the app for accurate navigation and safe parking zones.

Pain Points

- Inconsistent availability during evenings or weekends.
- Limited visibility of parking zones and restricted areas.
- Needs real-time battery and range prediction to avoid getting stuck mid-ride.
- No easy support option if the scooter breaks down outside campus.

Motivation
Rohan values freedom, comfort, and modern convenience. He wants a reliable app that supports smooth short rides around the city — from class to café to date — with minimal effort.

Research & Inspirations *(Competitive Analysis)*

To understand Bhubaneswar's micro-mobility landscape, I analyzed Royal Brothers and local offline petrol rentals — two leading platforms that cater to similar audiences in different ways. They helped identify key usability patterns, content strategies, and engagement models that could inform my solution for user's.

1. Royal Brothers

Overview:
Royal Brothers is a petrol bike rental service in Pan India. It serves tourists and occasional riders with a single pickup point. Rentals are hourly or daily, booked offline or via app.

Strengths:

- Variety of petrol bikes (Honda Activa, TVS Jupiter, Royal Enfield).
- Structured hourly/daily pricing.

Weaknesses:

- Only one pickup point – poor accessibility for students or daily users.
- Petrol vehicles – not eco-friendly.
- Limited campus/community focus.
- No real-time vehicle status or battery info.
- High rental price and high security deposit.

Key Takeaway for My Design:
Emphasize multiple campus stations for easy access.
Show real-time availability, battery %, range, and pricing.
Promote eco-friendly EVs as a differentiator.

2. Local Operators

Overview:
Small local operators offer petrol two-wheelers on hourly/daily rentals, mostly offline.

Strengths:

- Flexible pricing in certain localities.
- Familiar to local students/residents.

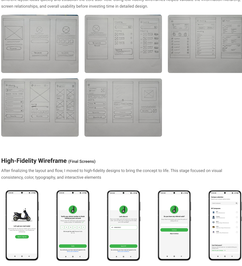
Weaknesses:

- No app or digital booking.
- Small fleet and inconsistent maintenance.
- No eco-friendly options.
- No short-term reservations or tracking.
- High rental costs and large upfront security deposits.

Key Takeaway for My Design:
Provide low-friction app-based booking.
Implement wallet system and ride history for convenience.
Include short-term reservations with small hold fee.

User Flow and Information Architecture

To ensure a seamless user experience, I first structured the Information Architecture (IA) to define how content and features are organized within the product.


Start
Splash Screen
Onboarding
Sign Up
Sign In
Home Screen
Profile
Wallet
Rides
Support
Settings
Scan QR
Start Ride
Ride Ongoing
End Ride
Payment
Ride Summary
Report Issue
Reserve
Confirm Reservation
Cancel Reservation
Map View
Filter Stations
Station Details
Battery Info
Pricing
Terms & Conditions
Privacy Policy
Logout
Delete Account
Help & FAQs
Contact Support
Report Bug
Feedback
Notifications
Ride History
Payment History
Wallet Balance
Add Money
Transaction Details
Profile Edit
Change Password
Verify Email
Verify Phone
Upload Documents
Verification Status
Home Screen
Ride Ongoing
Ride Summary
Payment
Home Screen
Profile
Wallet
Rides
Support
Settings
Home Screen
Map View
Station Details
Scan QR
Start Ride
Ride Ongoing
End Ride
Ride Summary
Payment
Home Screen
Reserve
Confirm Reservation
Cancel Reservation
Home Screen
Wallet
Add Money
Transaction Details
Home Screen
Rides
Ride History
Ride Summary
Home Screen
Profile
Profile Edit
Change Password
Verify Email
Verify Phone
Upload Documents
Verification Status
Home Screen
Support
Help & FAQs
Contact Support
Report Bug
Feedback
Home Screen
Settings
Notifications
Terms & Conditions
Privacy Policy
Logout
Delete Account
Home Screen
Map View
Filter Stations
Station Details
Battery Info
Pricing