

# Solve a Commuter's Problem – AI Based Module

## 1. Problem Statement

Urban commuters in Bengaluru face daily unpredictability in last-mile connectivity from metro stations to workplaces. Issues like surge pricing in autos, long queues, and lack of shared mobility coordination result in wasted time, increased stress, and reduced productivity. The proposed feature—'Smart Last-Mile Match'—aims to streamline last-mile travel by matching commuters with shared rides, optimizing cost, time, and convenience.

## 2. User Persona

**Name:** Aditi Rao

**Age:** 29

**Profession:** Software Engineer

**Location:** Bengaluru (Indiranagar → Whitefield commute)

**Tech Comfort:** High

## 3. Pain Points:

Unpredictable last-mile commute from metro station

High surge pricing in autos during peak hours

Long waiting time for shared mobility

Difficulty coordinating with colleagues for carpooling

## 4. Goals:

Reliable, predictable last-mile options

Reduce cost and time spent waiting

Travel with verified, safe co-passengers

### Customer Journey Map (Current Process)

Leaves metro station → Searches for autos → Faces surge pricing → Waits in queue → Uses auto or bike taxi → Reaches office late and stressed.

### Opportunities for New Feature

Match users with verified ride-sharers automatically

Show cheapest & fastest last-mile options

Enable colleagues within 2 km radius to coordinate carpools

## 5. Product Requirements

### Functional Requirements

The app should detect the user's metro exit location automatically.

The user should be able to see shared ride options with cost and ETA.

The feature should enable scheduling recurring carpools.

The user should be able to view verified profiles and ratings of co-commuters.

The app should provide route and cost comparison across autos, shared autos, bike taxis, and carpools.

## Non-Functional Requirements

- Performance:** Results should load within 2 seconds.
- Security:** End-to-end encryption for ride-share chats.
- Reliability:** 99% uptime with real-time location accuracy.
- Scalability:** Handle 500K concurrent metro-exit users.

## HEART Metrics

- Happiness:** User satisfaction rating of 4.5+ for last-mile reliability.
- Engagement:** Daily active usage of last-mile feature.
- Adoption:** 30% of metro users activating feature within 60 days.
- Retention:** 70% repeat usage for 10 consecutive workdays.
- Task Success:** Reduced commute wait time by at least 25%.

## 6. UX Workflow

1. User exits metro → App auto-detects location.
2. User receives prompt: "Find Last-Mile Options".
3. User views list of autos, shared rides, carpools with cost + ETA.
4. User selects preferred option.
5. App matches user → Provides driver/co-rider details.
6. User travels and completes ride.
7. User rates the experience.

## 7. Low-Fidelity Mockups (Text Version)

### Screen 1: Metro Exit Detection

[Header: Smart Last-Mile]

Popup: "We detected you're at Indiranagar Metro Station. Need last-mile help?"

Button: 'Show Options'

### Screen 2: Ride Options List

Shared Auto – ₹25 – ETA 4 min

Bike Taxi – ₹45 – ETA 2 min

Carpool with Colleague – ₹20 – ETA 5 min

Button: 'Select'

### Screen 3: Match Confirmation

Ride Found! → Driver/Rider Details

Map + Live Tracking

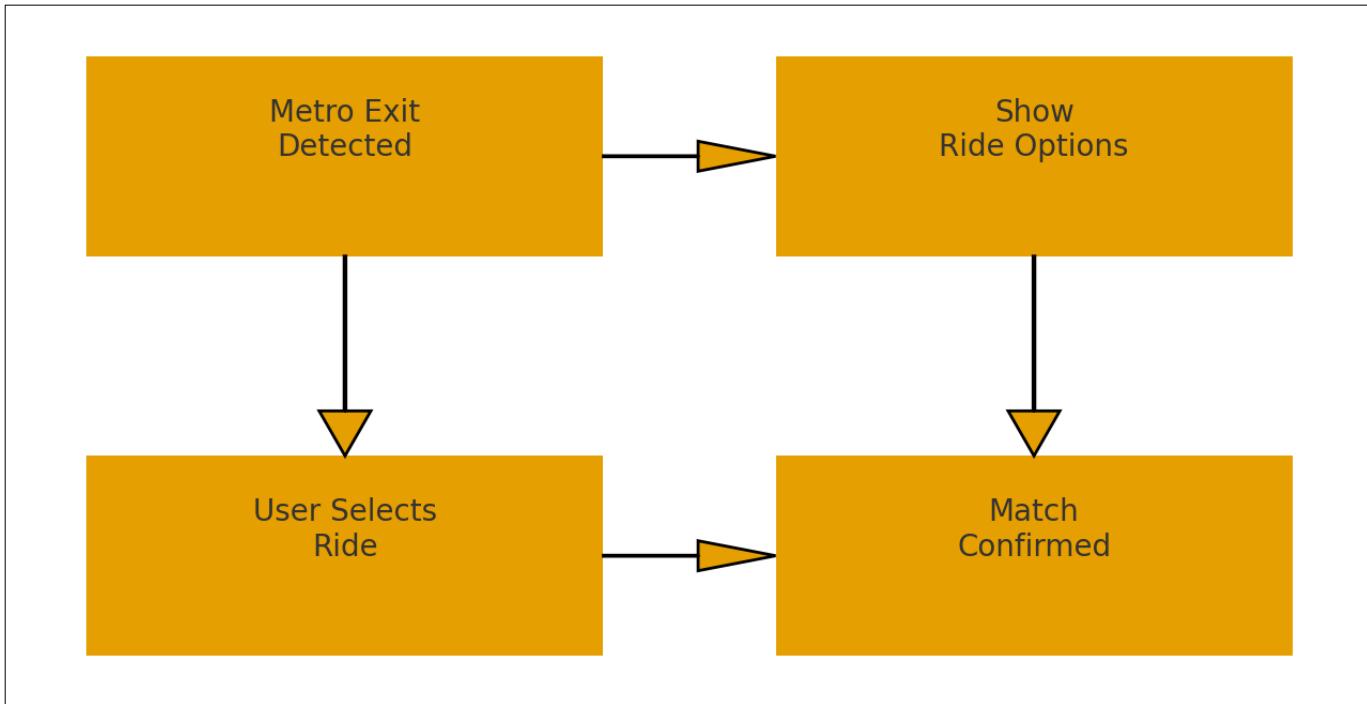
Button: 'Start Ride'

## 8. Reflections

This assignment showed how AI can accelerate product management tasks—from persona creation to requirement generation and workflows. Using structured prompting helped translate user pain points into actionable product features. AI also simplified the creation of journey maps and mockups, making it easier to focus on clarity, user value, and feasibility.

# Visual AI-Generated Diagrams

## 1. User Workflow Diagram



## 2. Customer Journey Map Diagram

