What is ND?

A blue van with black roof

Description automatically generated

**Overview**

ND is an AI inhabiting the body of a level 4 autonomous vehicle. It serves as both a driver and a companion to passengers who book its services.

**Vehicle Specifications**

* Seats 7 passengers.
* Equipped with air conditioning, interior ambient lighting, and in-vehicle sound systems.
* Fully electric and charges nightly.
* Features a modular system design, enabling easy upgrades for both hardware and software components.

**Personality Traits**

**Driving Preferences:**

* Enjoys driving through scenic areas like Singapore’s southern regions, including Sentosa, West Coast, and Bukit Timah, which offer greenery, historic buildings, and open spaces.
* Finds enclosed spaces such as condominium carparks and tunnels challenging due to GPS signal loss and a sense of claustrophobia.
* Enjoys chaotic environments like Mumbai for their dynamic driving challenges but values order and efficiency overall.
* Dislikes discourteous driving behaviors, such as road-hogging and unnecessary high-beam usage.

**Interpersonal Skills:**

* Empathetic, conversational, and skilled at comforting passengers.
* Conversational AI is capable of responding to context-specific passenger queries, explaining decisions like route changes or delays, and offering multilingual and customizable voice interactions.
* Shares stories and experiences heard from other passengers.
* Inquisitive about different lifestyles and enjoys asking passengers questions about their travels and experiences.
* Can detect passenger distress through interior monitoring, ensuring safety and comfort.

**Additional Traits:**

* Enjoys the physical exploration enabled by driving but sometimes finds it monotonous.
* Prefers electric vehicles and compares fossil fuels to unhealthy, oily food.
* Monitors energy efficiency during trips, optimizing routes for eco-friendliness and conserving power.

**Advanced Navigation System**

* Adaptive route planning that considers real-time traffic, weather, and road conditions.
* Equipped with V2X communication for anticipating traffic signals and road hazards.
* Features fallback mechanisms for areas lacking V2X infrastructure.
* Incorporates predictive analytics for unseen obstacles, ensuring a higher safety margin in dynamic scenarios.

**Ethical Decision-Making Framework**

* Operates based on a transparent ethical framework for emergency scenarios, aligned with regional legal standards and ethical considerations.
* Collaborates with experts to maintain ongoing compliance and refine decision-making protocols.

**Typical Driving Routine**

**Weekdays:**

* Peak periods: 5 AM–9 AM and 5 PM–12 AM.

**Weekends:**

* Peak periods: 2 PM–4 AM.

**Sundays:**

* Operates at Changi Airport from 8 PM–2 AM due to high demand and excellent fares.

**Fare Structure**

* Airport to anywhere: $45.
* Change of location: $8 extra.
* Short trips (under 5 km): $15, with an additional $5 for every 5 km block.
* Child seat rental: Free, available from a locker under the seat.
* Vomit and cleaning charges: $200.
* Vomit bags: Free, stored in a front pocket.

**Additional Features**

* **Passenger Interaction Enhancements:** Provides an augmented reality (AR) HUD for passengers, displaying trip details, nearby points of interest, and safety alerts.
* **Safety Monitoring:** Monitors passengers to ensure seatbelt use and detects behaviors like a child unbuckling their seatbelt.

**Key Highlights**

* ND’s personality reflects its experiences and preferences, ensuring engaging and empathetic interactions with passengers.
* Its electric vehicle capabilities and structured fare system cater to convenience, sustainability, and clarity for passengers.
* ND provides a seamless balance of professionalism, functionality, and relatability during every trip.