SDG XI Hackathon 2025 Topic: Smart Mobility & Communities

SDG 11 – SUSTAINABLE CITIES AND COMMUNITIES

Urban mobility remains one of the biggest challenges in rapidly growing cities. Issues like poor last-mile connectivity, overcrowded public transport, housing pressures, and inefficient waste management all affect the daily lives of citizens. Existing infrastructure often struggles to adapt to changing commuter patterns, leading to congestion, long travel times, and low quality of life.

With the availability of transport, housing, and urban planning datasets, there is a need for **AI-driven solutions** that make mobility smarter, housing more inclusive, and communities cleaner and more sustainable.

Subtopic:

1. **Last-Mile Connectivity**

Improve public transport integration with AI for seamless commuting.

2. **Housing & Urban Planning**

Use AI to assess housing affordability, density, and inclusivity in urban areas.

3. **Waste & Sanitation Management**

Optimize waste collection routes and recycling systems with AI.

Available Datasets:

- Kaggle GTFS Traffic Prediction Dataset
- OpenStreetMap Transport Network Data
- Malaysia Open Data Portal – Transport
- Ride-hailing or micro-mobility datasets (sampled from Kaggle)

Possible Prototypes:

- AI model predicting commuter demand by time/location
- Smart scheduling assistant for bus/train optimization
- Real-time transport route recommender with last-mile options (bike/scooter/car-share)