**📘 Project Knowledge Base – "Smart City Traffic Management System"**

**1. Project Overview**

The **Smart City Traffic Management System** is being developed to monitor and optimize urban traffic using IoT sensors, AI-based traffic prediction, and real-time dashboards for city authorities.

* **Client**: City Development Authority
* **Team**: Arwatech Software Solutions
* **Project Start Date**: 1st August 2025
* **Expected Completion Date**: 31st December 2025

**2. Project Objectives**

* Reduce traffic congestion by 20%.
* Improve emergency vehicle response times by 15%.
* Provide real-time traffic analytics via web & mobile dashboards.
* Integrate AI models for predicting traffic jams.

**3. Modules & Deadlines**

**🔹 Module 1: IoT Sensor Integration**

* Description: Deploy and configure IoT sensors at 50 key intersections.
* Responsible Team: Hardware & IoT Team
* Start Date: 1st August 2025
* Deadline: 15th September 2025

**🔹 Module 2: Data Collection & Storage**

* Description: Develop data pipeline for storing traffic data from IoT sensors.
* Responsible Team: Backend Development Team
* Start Date: 10th September 2025
* Deadline: 30th October 2025

**🔹 Module 3: AI Traffic Prediction Model**

* Description: Train ML models to predict congestion and suggest alternative routes.
* Responsible Team: Data Science Team
* Start Date: 20th October 2025
* Deadline: 15th November 2025

**🔹 Module 4: Web & Mobile Dashboards**

* Description: Build real-time dashboards for city officials and public users.
* Responsible Team: Frontend & Mobile Team
* Start Date: 1st November 2025
* Deadline: 15th December 2025

**🔹 Module 5: Final Testing & Deployment**

* Description: System integration, load testing, and production deployment.
* Responsible Team: QA & DevOps Team
* Start Date: 16th December 2025
* Deadline: 31st December 2025

**4. Communication & Tools**

* **Project Management Tool**: Jira
* **Version Control**: GitHub Repository – github.com/arwatech/smartcity-traffic
* **Communication**: Slack Channel – #smartcity-traffic
* **Weekly Meetings**: Every Monday at 10 AM