# SMART PARKING USING IoT

## 1. Project Charter:

Problem Statement: Urban areas face growing parking challenges due to the increasing number of vehicles. Drivers often struggle to find available parking spaces, leading to congestion, frustration, and environmental pollution as they circle blocks in search of a spot. Parking lot operators lack real-time data to efficiently manage their spaces, resulting in suboptimal utilization and revenue loss.

## 2. Project Management Plan:

Problem Statement Recap: The Smart Parking IoT project addresses the pressing need for a smarter parking solution by leveraging IoT technologies. The system will mitigate the challenges faced by drivers and parking lot operators, ultimately improving urban mobility and reducing environmental impact.

## 3. System Architecture and Design:

Problem Statement Recap: The current traditional parking management lacks real-time data, making it difficult for drivers to find parking spots swiftly. This project seeks to deploy a robust IoT-based Smart Parking system that provides real-time information on parking availability, thereby optimizing the parking experience for users.

## 4. Requirements Documentation:

Problem Statement Recap: The inefficiencies in traditional parking management result in wasted time and fuel for drivers, contributing to traffic congestion and pollution. The Smart Parking IoT system aims to alleviate these issues by enabling drivers to easily locate available parking spaces through a mobile application, thus reducing the environmental impact of parking.

This integration of the problem statement throughout the documentation emphasizes the critical issues the project seeks to address. Tailor and expand upon these sections to further elaborate on the problem and its context within your specific project.