PROJECT TITLE: SMART PARKING

PHASE 1: Project Definition and Design Thinking

**PROBLEM :**

Traditional parking lots of become congested, leading to wasted time and increased pollution from idling vechiles.

Smart parking systems help drivers find available spots efficiently, reducing congestion.

**Project Definition:**

The Project involves integrating IOT sensors into public transportion vechiles to monitor ridership, track location, and predict arrival times. The goal is to provide real time transit information to the public through a public platform.

**Design Thinking:**

1.Project Objectives:

* Efficient parking Management
* Real Time Monitoring
* It is Environmental impact

2.IOT Devices designs:

a) Sensors that detect things like vehicle counts. The sensors like infrared and radar sensors.

b) Select a microcontroller, like raspberry pl or arduino. Ensure it has enough input pins for sensors and supports the chosen communication method.

3. Data sharing platform:

a) The online storage where the data is kept and analysed. Using platform like AWS IOT or google cloud IOT.

4. Integration Approach:

a) Depending on the chosen data sharing platform to configure IOT device to communicate with the platform specifically.

b) Integration might also involves setting up SDK’s or libraries specific to the platform on IOT devices to stream communication.