Phase1: Problem Definition and Design Thinking

The Scope of this document to identity the problem and to find the solution for park the vehicle in public places without any congestion by IOT sensors to enhancing transportation services.

Problem definition:

The problem of smart parking involves finding innovative solutions to optimize parking space allocation , reduce the time and frustration.

To minimize traffic congestion in urban areas, enhance the overall parking experience both drivers and parking facility operators.

This is achieved through the integration of technology, sensors and data-driven approach to efficiently manage and monitor parking spaces.

Design thinking:

Empathize:

Understand the pain points of drivers when searching for parking spots. Gather data on parking behavior, such as peak hours and occupancy rates.

Prototype:

Develop a low-fidelity prototype to visualize the system's user interface and functionality. Use IOT hardware like sensors to stimulate parking spot detection and data collection. Test the prototype with potential users to gather feedback and make improvements.

Evaluate:

Deploy a small-scale pilot system in a real-world parking environment. Use data analytics to optimize parking spot allocation and pricing.