

Phase 1: Problem Definition and Design Thinking

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem. Please think on a design and present in form of a document.

Project Definition: The project involves integrating IoT sensors into public transportation vehicles to monitor ridership, track locations, and predict arrival times. The goal is to provide real-time transit information to the public through a public platform, enhancing the efficiency and quality of public transportation services. This project includes defining objectives, designing the IoT sensor system, developing the real-time transit information platform, and integrating them using IoT technology and Python.

Design Thinking:

Project Objectives: Define specific objectives such as real-time parking space monitoring, mobile app integration, and efficient parking guidance.

IoT Sensor Design: Plan the design and deployment of IoT sensors in parking spaces to detect occupancy and availability.

Real-Time Transit Information Platform: Design a mobile app interface that displays real-time parking availability to users.

Integration Approach: Determine how Raspberry Pi will collect data from sensors and update the mobile app.