

**Project Definition:**

The project involves integrating lot 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 lot 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.