System Design Diagram.

This document provides the system design diagram of the most complex application that I have worked on production.

Please find the link to the apps below:
https://play.google.com/store/apps/details?id=com.piedparker.piedparker&hl=en_NI&gl=IN&pli=1
https://apps.apple.com/us/app/pied-parker/id1090511575

Brief overview of the app:

The app is named Pied and it is a contactless parking app. It is an IoT based parking application that eases the traditional way of parking vehicles by fully automating it. It is based on MVVM Clean architecture. It shows you the nearby parking lots that have the services that Pied offers, The user visits the parking lot and uses his/her mobile device to connect with the gate using BLE(Bluetooth low energy) and the IoT devices placed at the parking lots and open the barrier automatically during which license plate details are captured using ALPR(Automatic License Plate Recognition) cameras and a session of the particular vehicle is started in the parking lot. The app provides different features like adding/removing cards and vehicles, subscribing to monthly permits or day passes. It also has a chat support feature that helps user with their parking inconveniences.

Below is the system design diagram of the application:
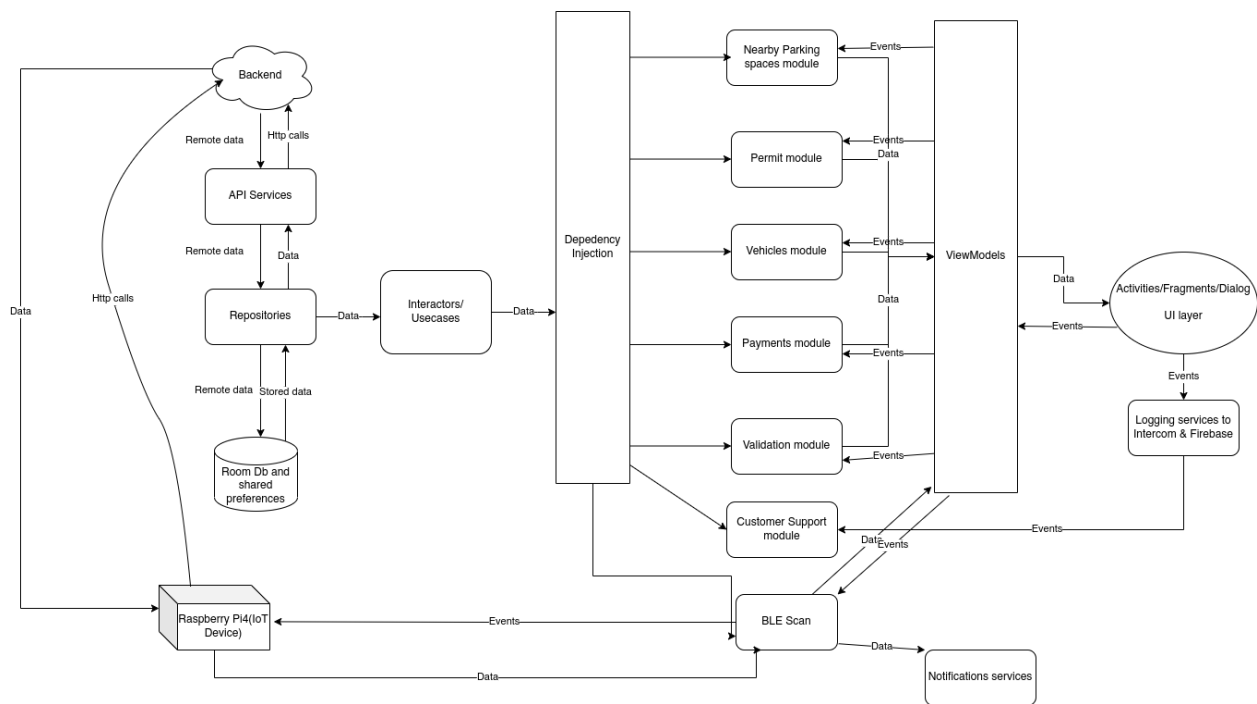
Clean Architecture of the Android App.