Project 6: Smart Parking

Phase 1: Project Definition and Design Thinking.

Definition:

Internet of thing (IoT) has the ability to transfer data through network without involving human interactions. IoT allows user to use affordable wireless technology and also helps the user to transfer the data into the cloud. IoT helps the user to maintain transparency. The idea of IoT started with the identity of things for connecting various devices. These devices can be controlled or monitored through computers over internet. IoT contains two prominent words “Internet” and “Things”, where Internet is a vast network for connecting servers with devices [1]. Internet enables the information to be sent, receive or even communicate with the devices. The parking problem causes air pollution and traffic congestion [4]. In today’s scenario, parking space is hard to search in a day to day life for the people. According to the recent survey, there will be a rapid increase in the vehicle’s population of over 1.6 billion around 2035 [7]. Around one million barrels of world’s oil is being burnt everyday [4]. Thus, smart parking system is the key solution to reduce the waste stage of the fuel.

Project sign Thinking:

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1. Project objectives: Define objectives such as real-time transit information, arrival time prediction, ridership monitoring, and enhanced public transportation services.

2. IOT sensor design: plan the deployment of IOT sensors (e.g., GPS, passenger counters) in public transportation vehicles.

3. Real-Time Transit information platform: Design a web-based platform to display real time transit information to passengers.

4. Integration approach: Determine how IOT sensors will send data to the real-time transit information platform.

Key words: public Transport, scheduling, provisioning, GPS, Passengers counters, IOT.