

**SYSTEM DESIGN FOR URBAN VEHICLE TWO-WAY  
CONNECTION MONITORING SYSTEM**

The project report is presented in fulfillment for the requirement of  
Bachelor of Engineering (Hons.) in Electronics Engineering (Electronic)

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## **ABSTRACT**

This project put forward a System Design For Urban Vehicle Two-way Connection Monitoring System which is designed based on the condition of hijacked vehicle. The objective of this project is to create a sensing module that able to detect the presence of thief after the vehicle is centrally locked when the engine is off. Available current solution for vehicle security system is rely on action of people close to the vehicle because there is no communication involved when the owner and vehicle are separated. The monitoring system framework is divided into 3 modules: sensing, action and communication module. Whenever the sensing module is triggered, the signal will become the input for the control unit. The action module is equipped with GPS and camera triggering and interfacing, controlled by an algorithm programmed to the suitable microcontroller platform. Meanwhile the communication module will communicate between the sensing module and the action module based on two approaches: SMS protocol and TCP/IP protocol. When the presence of thieves is detected by the sensor, the control unit is expected to send out notification to the vehicle's owner. On the contrary, the owner can request for the coordinate or image from the provided action module. The usefulness of the system is that the owner now has access to monitor his vehicle continuously from the available communication network.

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# CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION

This chapter explained the overview of System Design For Urban Vehicle Two Way Connection Monitoring System, which include the project background, problem statement and the objective of this project.

### 1.2 PROJECT BACKGROUND

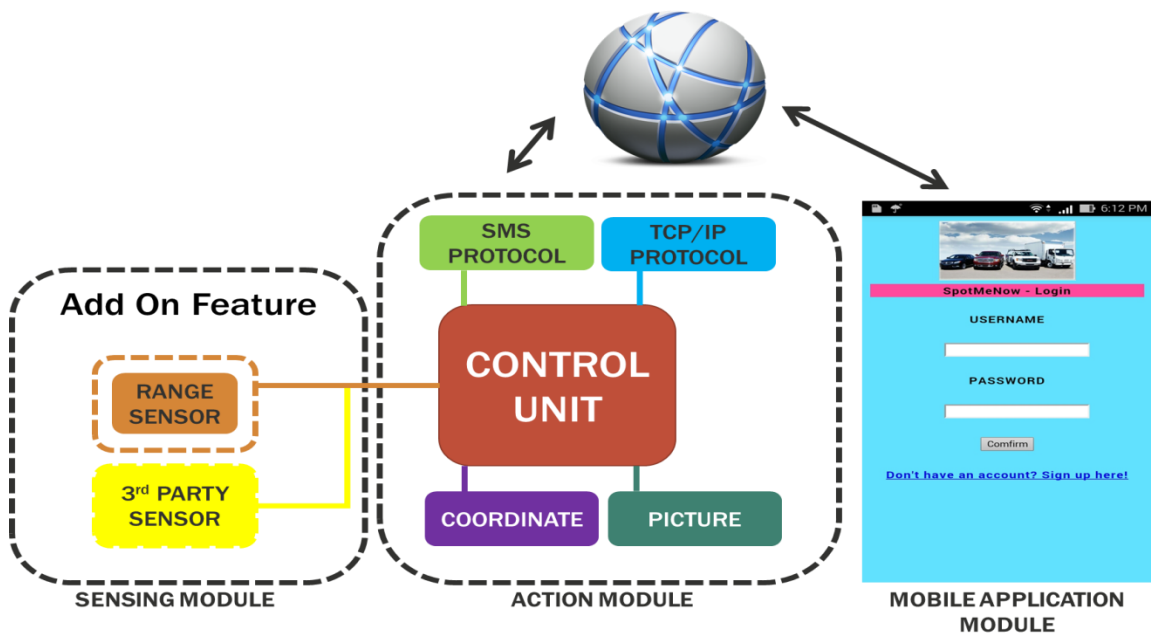


Figure 1.1: Overall block diagram