# INFO\_5100 Final Proposal

## Problem statement

Nowadays, the safe of citizen’s property face more threats from thefts. More and more related crimes happen. Citizen look forward for an easy-using and reliable way to keep their property safe.

## Purpose:

The topic of our final project is intelligent anti-theft system and it is a perfect solution for this question. This system can send any abnormal behaviors to the apartment manager. Then the manager decides whether to contact the police or not. On the other hand, this system is able to record the crimes for further analysis. Based on this function, this system connects the real-time situation around the apartment with the manager and the police station to make sure everything is under control.

## Approach:

Basically, the core object in our project is the system object. The system object contains three different attribute classes each of which is responsible for certain a certain part. The first one is anti-theft equipment part. This part contains manufacturer, supplier, distributor, etc. The second part is government departments, such as polices station. The third part contains partner companies, such as insurance agents.

As for the object model, there are serval abstract classes: Organization Class and Enterprise Class. Enterprise Class extends Organization Class. All the enterprise type extends Enterprise Class.

## Interaction between core entities:

The interaction between equipment and the safety companies is simple. When the equipment received an alert, it will send this alert to the safety company.

The achievement of interaction between safety companies and police is through alert event. When the safety companies’ employee decides to send the crime event to the police station, then a request is created based on this crime event. When the police login in his account, all the unhandled requests of the police station would be shown. The police staff can choose and sign any request to himself. At this point, the communication between safety companies and police is done.

As for the communication between the police station and the statistics department is similar with the last discussion. When the police finish a request, he places a record, and this record is send to statistics department. Moreover, the police stations are able to extract statistics result from statistics department.

The way how customer interact with insurance company is simple. Customer send the crime event to the insurance company and get compensation from insurance company.