This project aims to simulate the effectively of a House Security system when a group of thieves try to break in. In order to do that, we will model the motion detection sensors used by the security system, the 911 emergency response system and a communication system used by the Intelligent Security system.

Geography: House, Various rooms, city, response team locations,

Objects: Motion Sensors, Security Keypad,

Functionality:

- The Security Company installs the security system in a house

- The user chooses a security code and a security keyword

- The House agent takes care of all the various sensors and authenticating the house user through the security keypad. It also takes into account the activation and deactivation of the security system

- The motion detectors communicate with the security system every second about any motion detected

- The security system takes in all these events generated by the motion detectors and raises an alarm if anything matches one of its rules

- When are rule is matched in the Security system i.e. an alarm is raised it will communicate with the security company and the house user

- The security company would in turn call the house user (and authenticate him by using the preselected keyword) and ask if the alarm is legitimate and if so would call 911 response system

- 911 response system dispatches a security team to the house based on the location and availability of teams, there can be delays

- The group of thieves would try and learn where the sensors are, on consecutive multiple break-in events; so as to avoid the sensor next time