Chapter 2. Case studies

Case 1: Base comfort scenario "el cómodo"

- **Lighting Control**. The control of lighting is the usual first port of call for any home automation system.

- **Blinds, curtains, louvres and shutter Control**. Controlling heat entering a room is a great way to keep your house cool in summer but warm in winter.

- **Air-Conditioning and environmental control**. The control of heating and cooling within the smart house is one of the key areas where money can be saved on power bills through more extensive automation control. Sub-Segmentation and occupancy control allows only the area needed to be heated or cooled while other areas fall back to a different temperature making considerable energy savings.

- **Remote Control Systems**. For convenience value, The Smart Home of today tends to use your personal devices to double up as remote controls for your home, Whilst dedicated remote devices are also available to enhance your ability to control your Smart Home, increasingly people are becoming more confortable using just one device that they are very familiar with.

Case 2: Extended comfort and leisure scenario "el vividor"

- **Presence detectors**. Presence or motion sensors detect if someone is in the room, and can be used for a variety of applications, for example, in the morning when you head to the bathroom for your shower, the lights come on and your favourite music starts playing.

- **External equipment control**. Why stop inside the house? Control the garage door, car access gate, front gate, extending pergola, ponds, water features through the same automation system giving strict scheduled control of these features and full remote control.

- **Entertainment System control and integration**. There are many areas of home entertainment that can be enhanced through Smart Home integration. Media storage and distribution, multi-zone audio and video systems, personal music device integration, broadband Internet access and game system integration are just a few of the standard techniques that can be implemented.

Case 3: Energy efficiency scenario "la verde"

- **Control Energy Efficiency by Monitoring Energy Use**. Every time you turn something on,

you're increasing the amount of electricity that's been consumed. Not to mention the appliances that are on and using power 24 hours a day. With an automated Smart Home you have the ability to keep track of the energy use of all components drawing power.

- **Watering system control**. Having a watering system can be a very water efficient concept and saves you lots of time manually watering your garden.

Case 4: Home security scenario "el paranoico"

- **Access control**. Access Control is controlling who enters your home using an entry system that can use Smart Card readers, radio key tags, Near Field Communications NFC sensing, fingerprint recognition or even facial recognition to ensure a person should have access.

- **Security system control and integration**. A stand-alone security system for your home is a good investment, but link and integrate it with your Smart Home automation system and you will multiply its value. Security sensors can be used in a dual role as occupancy sensors, keeping your home automation system informed of your whereabouts allowing the home to make adjustments to the environment based on these input.