Overview

As people in Hong Kong spend more time in working than at home, automation of home system is essential. The automation brings convenience to people. A more advanced smart home system could ensure that the room environment is fit to the user, by controlling the brightness, background music, temperature, humidity of the room, which brings comfort to people.

Instead of manual control, in this project we are going to introduce a new generation of smart home system, which is aiming to provide a more comfortable and convenient life to users, with the system controlled by Artificial Intelligence (AI).

What we are aiming to change?

- Appliances operates automatically
- User habit predictions

Methodology

- Appliances: light, fan, curtain
- Controlling by smartphone application
- Connecting the smartphone and the appliances via microcontroller and server
- Using microcontroller CC2530 as ZigBee control platform

Result

- What have we achieved?
  - reliable and secure
  - self-learning feature
  - cost effective ($900)
  - intelligent decision making