Introduction
Nowadays, smartphone is very popular. Almost half of respondents in Hong Kong own a smartphone. Unlike the older generation of mobile phone, smartphone are now able to support more functions such as checking email, handling document, browsing internet and entertaining. In the coming years, more and more advanced functions will be introduced. The new functions may integrate to other regions related to our daily life, such as home security.

Aim and Objective
- To develop an iPhone application to detect motion
- To generate alarm after motion detected
- To increase the accuracy of the application

Methodology

Background Subtraction
if ( |background[x][y] - object[x][y]| > 32)
    output[x][y] = 255
else
    output[x][y] = 0

Notification
- After detecting a motion, the application will take ten pictures automatically.
- Then the ten pictures are combined into one picture.
- The combined picture will be attached to an email notification.

Finalized Product
- Send the email through SMTP