Introduction

With advanced technology in the internet, increasing number of shoppers intend to purchase products through internet for the reason of convenience. Although people are interested in online shopping, products such as hand accessories is not popular because they are not able to try the products before paying money. Hence, developing an application for augmented environment is inevitable. Building the virtual world to improve hand-on experience is not only attractive for shoppers, but also is useful for hand accessories designer.

Objective

The aim of this project is to build a user friendly interface and augmented computer environment by image processing library and augmented reality tool kit.

- One of the objectives is to improve the accuracy of marker recognition and reduce response time.
- Another objective is to implement the program that can provide the way for users to control the function without using mouse or keyboard.

Specifications

1. Desktop / Laptop computer  
   with operating system: Windows Vista / 7
2. Webcam
3. Marker

Methodology

The overall system is interpreted as the block diagram shown below. The upper one is system block diagram for explaining the brief concept of the program, while the lower one is the detail flow chart of the system.

Results

Nowadays, increasing number of shoppers intend to buy products through internet for the purpose of easy transaction. Developing an application for augmented environment can improve wrist wearable trial experience. Buyers just need to print the marker at home, and then can wear different type of 3D products in front of camera before paying money. This kind of service can greatly attract more and more retailers to promote their products through computer.

Deliverable

The program is successfully executed to overlap the 3D watch on the marker to simulate the image of customer wearing the real watch. In addition, the user interface can give convenience for the shoppers to change the models, adjust the model size or capture pictures.