

# FIND IT

Smart watch / phone  
Finding App

Shiya Liang

# 1. DESIGN

By using GPS information, FINDIT app locate your smart watch or phone using one of the devices. In order to keep the FINDIT app simple and efficient, it provide and only one simple finding function. Before users find their devices, they have to sync the two devices together.

Assumptions:

This assignment does not have any specific technical requirement, so I design the app based on an existing smart watch - Pebble, but there's few things it can't do, so I made the following assumptions:

- The smart watch has built-in GPS.
- The smart watch has touch screen.



HCID 521 Assignment 1, Paper Prototype Project Report, Default Pages of the App.

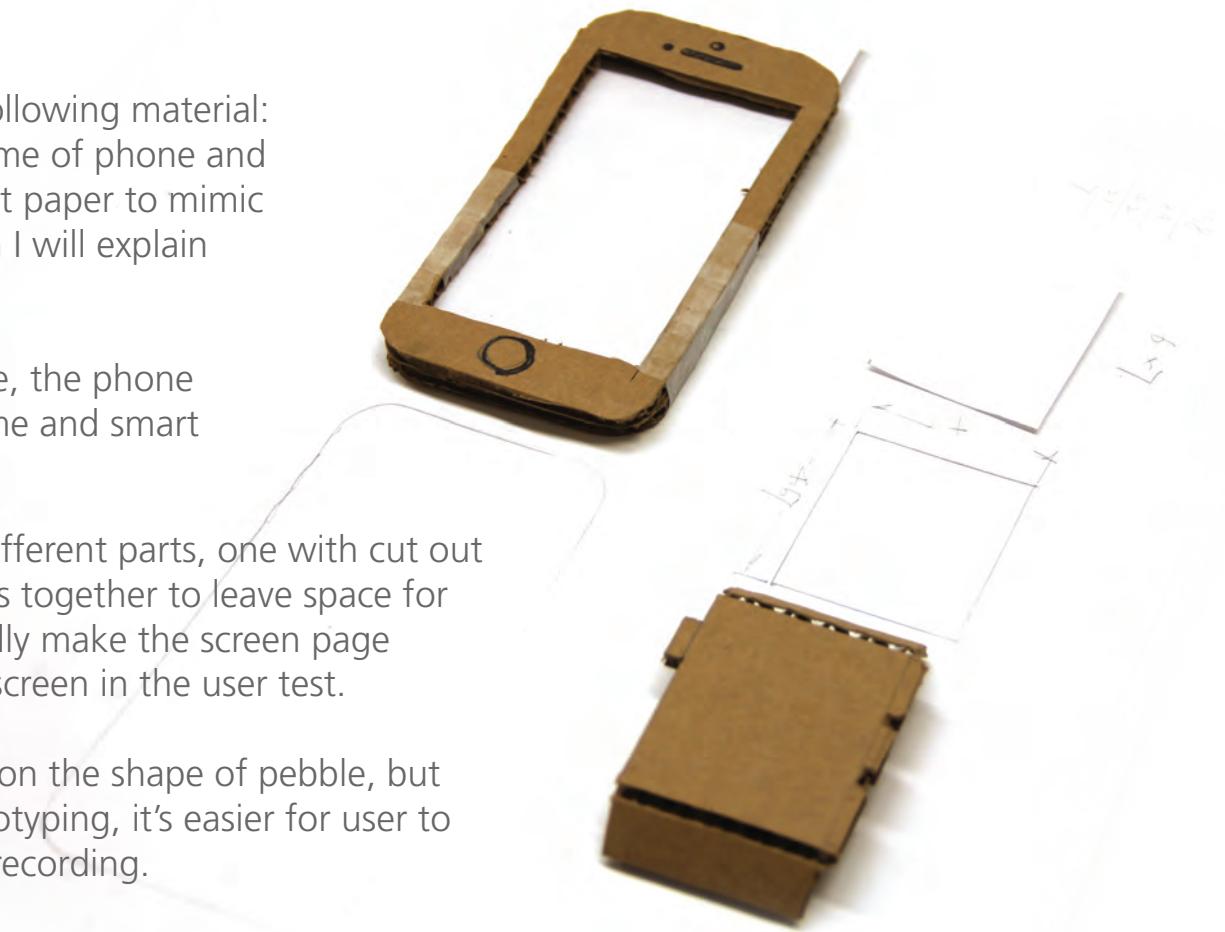
## 2. Prototype

I build my paper prototype using the following material: Paper for screen, cardboard for the frame of phone and smart watch. And I also use transparent paper to mimic the “compass” finding function, which I will explain further in this document.

There are 4 main parts of the prototype, the phone frame, phone screen, smart watch frame and smart watch screen.

The phone frame is consisted of two different parts, one with cut out of the screen size. I taped the two parts together to leave space for multiple screen paper. And I intentionally make the screen page longer so that I can easily pull out the screen in the user test.

The smart watch frame is made based on the shape of pebble, but slightly bigger. For the purpose of prototyping, it's easier for user to see the contents and clearer for video recording.



## 2.1 Syncing Devices



First part of the prototype is the Syncing. Here the picture shows what happen on both of the devices' screen. User can't use finding until they link the two devices together. In the scenario, syncing happen way before user try to find one of the devices. And I try to keep the app simply and create a linear experience, there is no other option before the sync finish.

## 2.2 Bumping

What makes this app standing out is that FINDIT app use the unique Bumping move to trigger most of the functions.

Bumping goes beyond the 2 dimensional screen based interaction, into the 3 dimensional world. It feels natural bumping, in another word, touching the two devices to create connection.



## 2.3 Watch Finding

In this scenario, user can't find his smart watch, he starts the FINDIT application on his cell phone to find it.

When the user click the "FIND" button on the cell phone screen, both of the phone and smart watch screen show the compass and start to locate each other, so the user can smart locator to find the smart watch.

Also the phone vibrates to indicate the distance of the two devices. The closer they are, the stronger the phone vibrates.

When the two devices are closer enough, both of the screen will turn into the "Bumping" instruction page. User need to bump the two devices to end the finding.



HCID 521 Assignment 1, Paper Prototype Project Report, Watch Finding Screens.

## 2.4 Phone Finding



In the phone finding scenario, the application follows the similar mechanism, but users need to unlock the smart watch first to launch the FINDIT app in it.

The red arrow and the circle together is the “compass” for finding devices. I tried different designs, like mapping and radar, but I finally decided to use compass, it’s easy to understand, and it is also interactive between two devices. The two compasses are like poles of a magnet, they are pointing to each other.

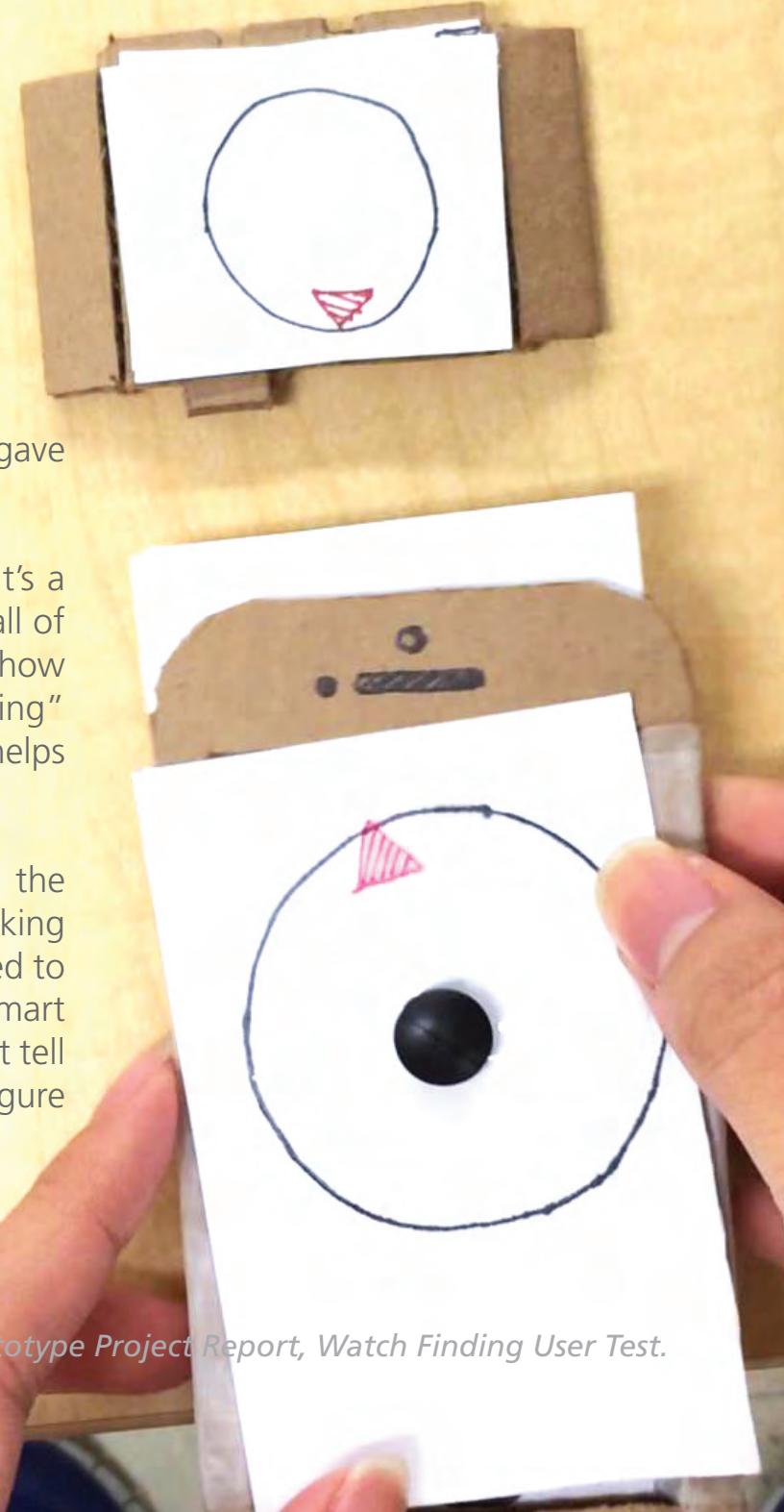
Just like the phone, the smart watch also uses vibration to indicate distance between the two devices. And it also requires bumping to finish finding.

### 3. Analysis

I tested the prototype with three different users in total, they each gave feedback to my prototype.

First of all, all of my users like the idea of FINDIT app, they think it's a good way to keep track of their phone or smart watch. Secondly, all of the users get the idea pretty easily, I did not even need to explain how the app works, they understand the "bumping" and "compass finding" in the test quickly. One of the reason why is the visual elements helps them to undersatnd.

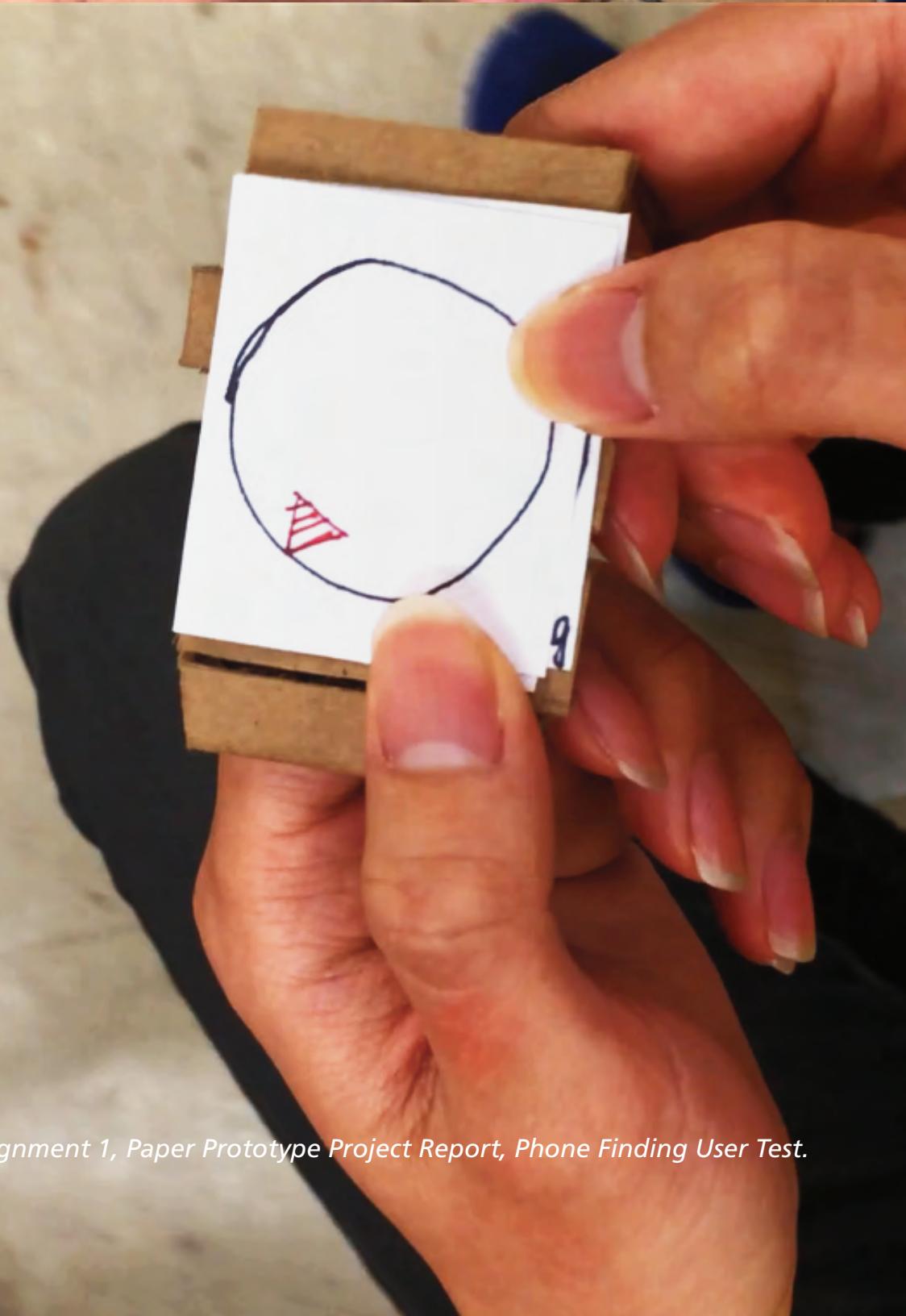
However, there are few things that surprised me. One is that, in the unlock smart watch screen, one user swipe the screen instead of clicking the physical button. That surprised me a little because it never occured to me that I can use swipe on smart watch. The other is that in the smart watch screen, lauching the app is a little confusing, because I did not tell the user the name of the app, so this user paused for a second to firgure out what to do.



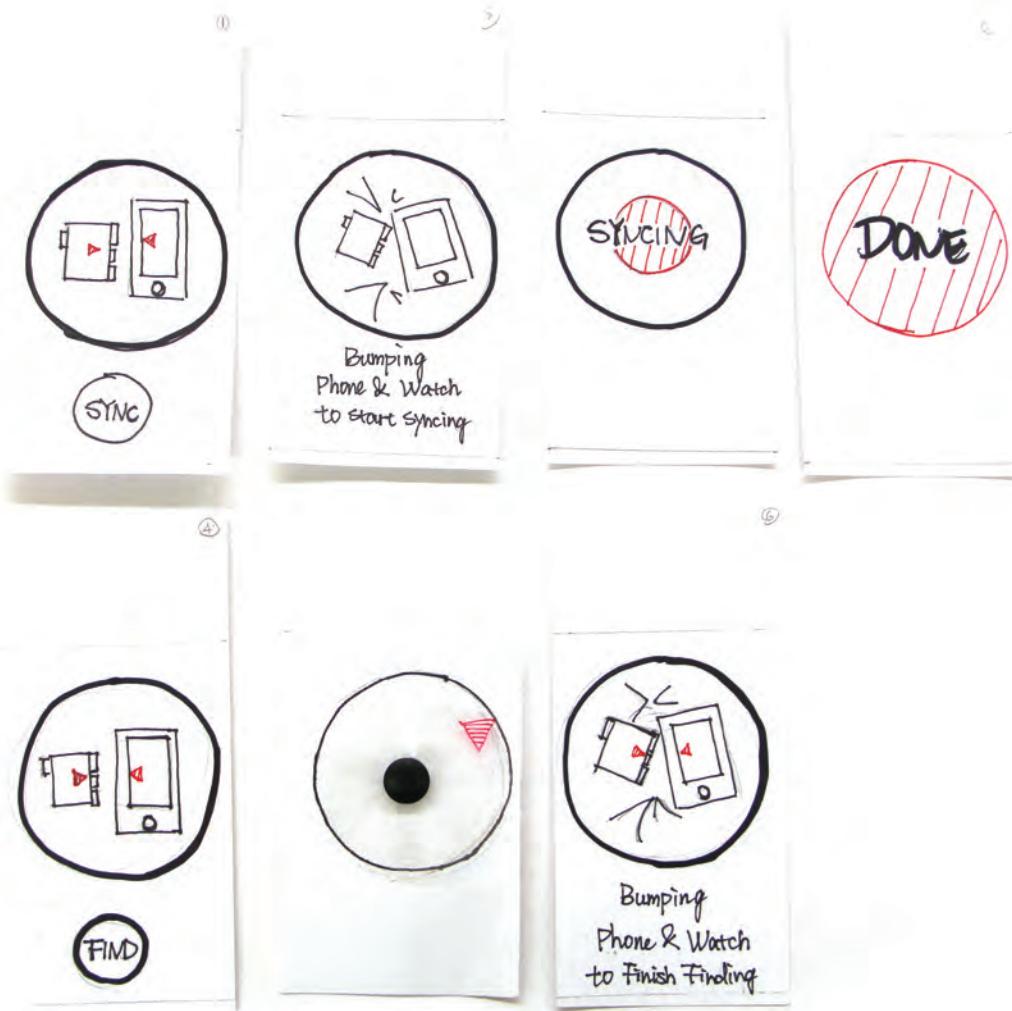
### 3. Analysis

Other general questions from users and others would be, what if I lost both of them? My answer would be, the FINDIT app does not cover this scenario, maybe I should develop computer application for it.

Another question would be, what if the two devices are far away from each other, say, one at home and one on campus? I think in this situation, we may need Mapping function to find the devices. I think it's reasonable to design GPS mapping function for further exploration.



## 4. Appendix



HCID 521 Assignment 1, Paper Prototype Project Report, Watch Finding User Test.

## 4. Appendix

