

User Testing 2 Test Plan

1. Summary

The purpose of this document is to define the objectives, scope and deliverables for planning User Testing 2 (UT2).

At the conclusion of our UT2, we will consolidate the test results and report on the actions to be taken.

2. Objectives

The objective of our UT2 is to ensure that our current application can run without any of the programmers present. We are collecting useful usability and gesture feedback from our testers to better understand their natural response and ways for us to improve our existing application.

Our key objectives include:

- Verify if shoppers can react to AlterSense without prompting
- Test the intuitiveness of our user interface (photo taking) and hand gestures
- Gather user opinion on AlterSense feasibility in a mall setting
- Test the accuracy of gender recognition in a mall setting

3. Testers, Schedule & Venue

Testers

We aim to have a total of 50 shoppers – 25 females and 25 males.

We would analyse whether the shoppers' response to our application would differ according to age and/or gender by collecting the following data from the shoppers:

- Age
- Gender

Schedule & Venue

Timing: 5 November 2012, 12pm – 6pm

Location: Level 4 of new extension between Plaza Singapura and Dhoby Ghaut



Proposed location for UAT #04-69

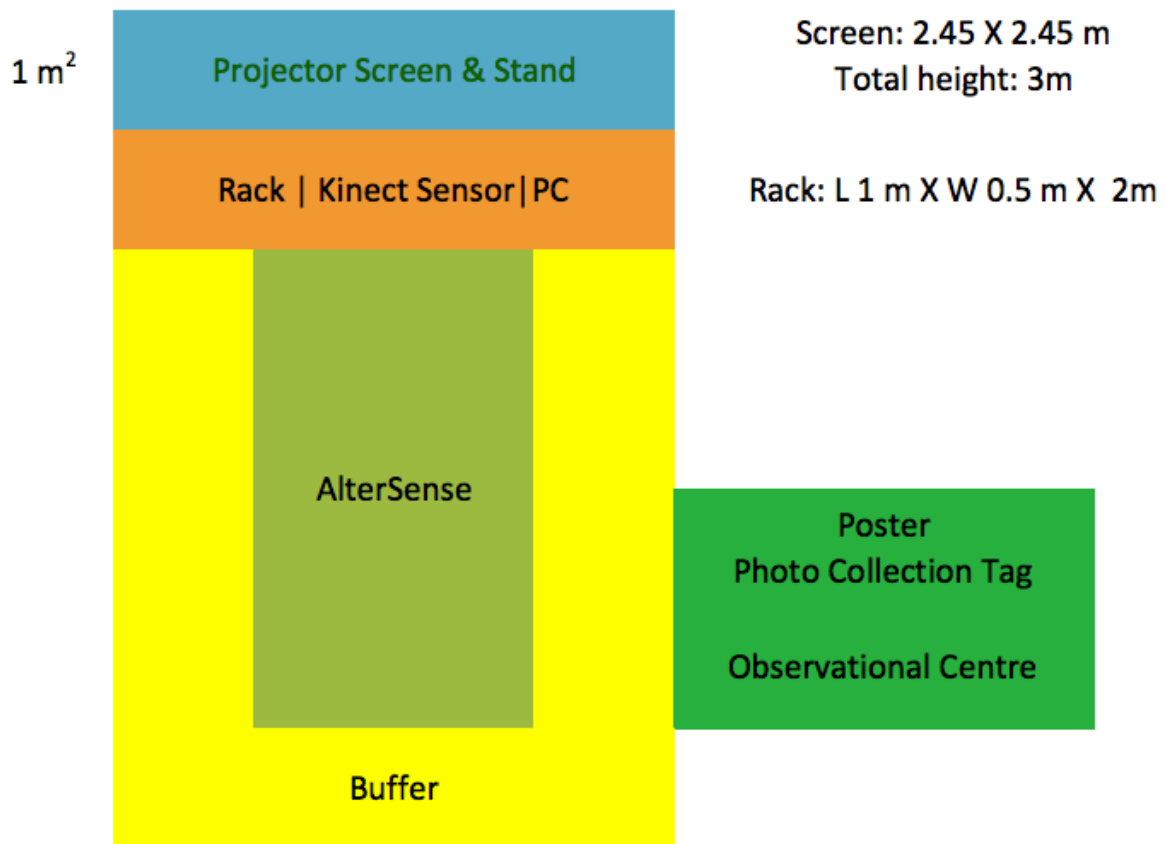
4. Set-up

Equipment/Resources Checklist:

#	Item	Qty
1	Kinect (1 on standby)	2
2	Projector screen	1
3	Projector	1
4	Rack	1
5	Camera	1
6	Poster printout	2
7	Poster easel	1
7	Masking tape	2
8	Cable extension	1
9	iPad	4
10	Laptop	2
11	Tag for photo landing page (printed out)	1
12	iPad charger/adapter	2
13	Laptop charger	2
14	Dongle	1
15	Camera	1
16	Stopwatch or iphone with stopwatch	4

Layout:

Layout - 7 m X 7 m



Unlike our previous user testing UT1, there would not be any demarcation marking the recommended standing position for shopper (about 4 metres away from the Kinect sensor) on the floor. AlterSense has been improved to use real world values; hence it does not matter where the shopper stands as long as shopper's whole figure is still captured by Kinect.

Additional setup requirements:

1. 1 x power outlet
2. 1 x power extension cable (to provide power for laptop and Kinect sensor)
3. Internet access (dongle is preferred, else user name and password to access wireless network is acceptable as well)
4. 7m x 6m (~452 sq ft) of floor space
5. Plain wall background on one side of the booth, or a large plain partition board as background; for Kinect sensor performs best with plain background

5. Execution flow:

1. Ask shopper if they have a smartphone and to download Microsoft Tag if they have one. If they are unwilling to download, we lend them our phones.
2. Let shopper use AlterSense by himself/herself
3. Observe shopper if he/she has any difficulties responding to AlterSense
4. Measure the time taken for shopper to raise his/her right hand and to scan the Microsoft tag

5. Let shopper complete a survey form

6. Testing Methods:

a. Collecting qualitative metrics

Facilitators will be observing for errors or problems that the testers faced. Upon completion of all the tasks, the tester will be presented a survey form in which he/she will be asked about their opinion and satisfaction level of the application.

Survey form link:

<https://docs.google.com/spreadsheet/viewform?formkey=dFhOa2JyRUE5bmpnYkU4bHdURmF1aGc6MQ>

b. Collecting quantitative metrics

Quantitative metrics to be measured include:

- Time taken for shopper to raise both hands
- Time taken to choose a hat
- Time taken to raise right hand
- No. of failed detections of raising of both hands
- No. of failed detections of choosing a hat
- No. of failed detections of raising his/her right hand
- Whether male shoppers had picked the top hat and female shoppers had pick the ladies' hat
- Whether shopper has been able to complete the whole flow
- Response time to scan the Microsoft Tag
- No. of failed attempts to scan the Microsoft Tag

Observation form link:

<https://docs.google.com/spreadsheet/viewform?formkey=dGikMVZ4WWRqVHILUTNsVWFTV0JUyXc6MQ>

7. Process:

We will be observing:

- Time taken to choose a door (moving left & right to choose a door)
- Time taken for shopper to raise both hands
- Time taken to choose a hat
- Time taken to raise right hand
- No. of failed detections of raising of both hands
- No. of failed detections of choosing a hat
- No. of failed detections of raising his/her right hand
- Whether male shoppers had picked the top hat and female shoppers had pick the ladies' hat
- Whether shopper has been able to complete the whole flow
- Response time to scan the Microsoft Tag

- No. of failed attempts to scan the Microsoft Tag

How we will be observing?

We split ourselves into groups of two and ensure that there will always be two team members in charge of each shopper. When shopper is about to start interacting with our application, we will signal to one another who to take charge. One member will then be using his/her iPad to record down his/her observations into the observation form while the member will be using the stopwatch function in his/her phone to measure the various timings needed as stated above.

8. Results Analysis & Action Plan

Data collected

- Collate survey form responses
- Collate quantitative metrics

Evaluation & Analysis

- Collate a comprehensive feedback list from data collected
- Categorize change requirements into those that we would be implementing and those that we would be handing over to CMA