# Project: smartMirror

Melanie Cisler
Team Member: User
Communications
Oregon State University
cislerm@oregonstate.edu

Cody Malick
Team Member: Group Leader
Oregon State University
malickc@oregonstate.edu

Michael Nebre
Team Member: Lead Designer
Oregon State University
nebrem@oregonstate.edu

William Selbie
Team Member: Writer
Oregon State University
selbiew@oregonstate.edu

#### **ABSTRACT**

In this paper, we'll describe our approach to performing a product evaluation. Specifically, a quick overview of the different evaluations performed, exact tasks performed in relation to specified goals, and results from the evaluation.

#### **CCS Concepts**

• Human Centered Computing -> Interaction Devices -> Imagers and Displays

#### **Keywords**

Mirror; Fashion; Clothing; Shopping; Internet Shopping; Voice Interface; Mobile App;

#### 1. INTRODUCTION

The smartMirror project aims to revolutionize modern shopping paradigms by providing easy and quick access to a virtualized wardrobe. The mirror is designed to be used at a store or conveniently in your home. It projects a retained set of digitized clothing options, representing real items that can be purchased, onto the user's body in a mirror. This paper describes how the execution of our plan was carried out, the tasks that were performed, which techniques we used and why, relevant materials, and any alterations to the original plan.

#### 2. Goals

The techniques we intend to use will be a cognitive walkthrough in order to evaluate the ease of learning of our product, and then an empirical analysis with the user in order to get real feedback. The order we chose here is so that we can iron out problems that we can come up with first, then present it to the user. By presenting to the user second, we can reduce simple problems that we notice, as well as gain more meaningful data from the user on problems that are not apparent to us.

## 2.1 Cognitive Walkthrough

Below are summarized results of the cognitive walkthrough for each of our group members. As laid out in our initial plan, we each executed the cognitive walkthrough individually. All raw notes and data from the exercise are stored in appendix C.

#### 2.2 Tasks

The tasks for cognitive analysis are fairly simple. Each user will

work through the mockups we created. Then, while going through each action, we will answer three questions: "Will the user know what to do? Will the user see how to do it? Will the user understand from feedback whether their action was correct?" While doing the walkthrough, the answers to these questions will be written down in the appendix.

#### 2.3. Materials Used For Cognitive Analysis

We used all defined materials in the plan with the addition of three standard questions for each screen. Please see Appendix C for the walkthrough questions and results, and Appendix B for the mockups.

## 2.4 Individual Results - Cody

While the basics of our layout is there, there is functionality that, as a user, I would expect. Two screens that are missing are the "Create Account" screen, and the "Barcode Scanning Results" screen. The former is important as a new user would have no way of getting into the application without credentials. The latter is important for user feedback after using the barcode scanner. Whether or not this is adding a new screen, or simply navigating the user to the "Gallery" screen is something we should look at. Otherwise, overall feedback from user actions makes sense, and we have appropriate screens.

#### 2.5 Individual Results - Michael

Reflecting back on the cognitive evaluation of our app prototype there is much that can still be improved upon in terms of user experience. In an example the hamburger screen, most apps have this located on the top left so the user can relate to it more intuitively. For improvements, the "barcode scanner" and taking "pictures screen," we have to come up with the type of feedback to show the task is successful whether that be visual or auditory feedback. Other things we need to include would be a "forgot password/username" on the homescreen and making the gallery screen more organized.

#### 2.6 Individual Results - Melanie

Overall, the user should know what to do with this product at this stage. The buttons and icons are standard for many apps and interfaces from home screens to profile information. The hamburger screen contains profile information that you would expect and it is in a location that is familiar to most people who use touchscreens. The users would understand feedback because when navigating the pages they would find what they would come to expect on the various screens because they are laid out simply and organized in a way that categorizes related items. We do have room for improvement. One suggestion is that the location button be more specific. Are we looking for a city or a zip code etc. Another suggestion would be on the Barcode Scanner page would maybe be to put a little "i" icon that the user could select to explain what the barcode is for or how you use it because some people may not be familiar with a feature like this. The user overall should understand the steps they are taking and the correct feedback from their actions.

#### 2.7 Individual Results - William

The layout is currently good but could certainly be improved upon. Right now, the layout is basically just a home screen that has buttons that will navigate you to all of the different options that are available, which means that there is very little in the way of gulfs of evaluation of our app. Everything that can be done is immediately apparent and labeled quite clearly, that being said there is some room for improvement in the way of making navigation easier. One of the bigger problems I found was that as the Home Screen is used to navigate to almost everywhere in the app, it should be really easy to get to the Home Screen. Most Androids use a back button of some kind, but it would be clearer if there was simply a button with a "house" icon to represent the Home Screen that were present at the same place on all of the pages for users to see. The other thing that would be ideal to add would be a "Sign Up / Create Account" button, as right now if the user does not have login credentials, it's not easy to see what to do from there. Also, while the app clearly responds when navigating to a different screen, it may not be as obvious on some of the other screens, so maybe including pop-ups or alerts notifying you of the success of your actions would be nice.

#### 3. Empirical Analysis

As we laid out in our plan, we also did an empirical analysis with a single user. Below are the details on the materials used, steps taken, description of the user, and summary of results.

#### 3.1 The User

Our user for the empirical analysis was Krystal. Krystal worked with Michael to walk through the mockups, and give us feedback on our design. The reason why we choose her is because she fits the basic demography of a typical female shopper (age range

25-30 ). She shops for designer clothing on a daily basis and uses all outlets whether that be the online or in-store. She typically averages around 5-hours shopping in-store and 3 hours online and is often frustrated when she can't find the specific clothing she is looking for.

## 3.2. Materials Used For Empirical Analysis

We used all defined materials in the plan: the mockups, our survey questions, and our empirical questions. Please see Appendix A for the questions, and Appendix B for the mockups.

#### 3.3. Analysis Tasks

As defined in our plan, we sat down with the user, and ask them the list of questions from the formative questions section. Then, after walking through all the appropriate screens, we would run through the set of survey questions listed in Appendix A.

#### 3.4. Summary of Empirical Analysis Results

Please see Appendix C for detailed survey questions and answers, recorded during the walkthrough.

We found the empirical data to show some insightful results which scores all over the place. Here we conducted a survey to extrapolate our data where we asked the user to rate her experience from a scale from 1-7 (Strongly Disagree-Strongly Agree). What stood out was how low the scores were for the interface, and overall experience focused questions compared to the questions that were more focused on the usability. Questions pertaining towards more usability, such as completing a task and the ease of using the the app, scored around the 5-7 range. In contrast, the UI and the overall satisfaction scored in the 1-3 range. In terms of development, the data for the most part, shows us the app is doing what we want it to do and we are right on track to improve the overall UI, which in turn should increase the overall experience and satisfaction of the product.

#### 4. Changes Since Original Plan

One big change that we made was adding specific questions to the cognitive walkthrough. While we fully fleshed out the questions that needed to be asked in the empirical analysis, we did not fully specify the questions we would be asking ourselves.

From the empirical analysis, we removed a question from the formative section, "How do you think this product will help you?" We moved this to the open questions section as it made more sense there

#### 5. Results

Overall, we found that we're on the right track with the designs that we've laid out. One big problem point was the lack of user feedback on a couple screens. Another is that, while the application is organized via the home screen, there's no easy way to get back to the home screen. Our empirical analysis confirmed for us that more work needs to be done on the UI. While a prototype, less boxes and more descriptive images are needed to improve the user experience.

From our original goals of finding out whether or not our app was easy to use, we found problem points, and things that worked well. Our cognitive analyses gave us unique and interesting viewpoints on different aspects of the UX that worked, while others did not. We're looking forward to iterating on our design in

the coming weeks.

## Appendix A:

# **Survey Form:**

## **Empirical Questions (formative):**

- So far how intuitive is the page/menu/interface?
- How could the layout of the screen been clearer?
- How do you think this product will help you?
- If you had to add one thing on this category what would it be?
- What would you remove on this specific screen?
- So far is there anything about the page that you found frustrating (navigation, icons, size)?
- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

## **Survey Questions (summary):**

## **Open Questions:**

- What would you expect to be able to do with our product?
- If you had a magic wand, what would you change or improve about the product?
- Would it be more convenient if we placed an additional type of menu? If so, where on the product?
- How likely or unlikely would you be to use this product once it's finished?
- What features so far do you feel are missing?

# **Rating Questions:**

Strongly Disagree <----->Strongly Agree

1

1

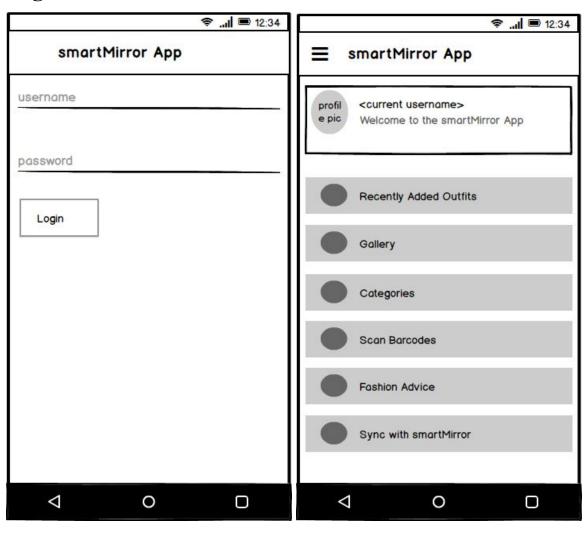
- Overall, I am satisfied with how easy it is to use this product.
- It was simple to use this product.
- I was able to complete the tasks quickly and conveniently.
- I felt comfortable using this product.
- It was easy to learn to use this product.
- I would be able to teach someone else to use this product.
- I would recommend this product to a friend.
- The information presented to me was clear.
- It was easy to find the information i needed.
- The organization of the information was clear.
- The interface of this product was pleasant.
- I liked using the interface of this product.
- This product has all of the functions and capabilities I expect it to have.
- Overall, I am satisfied with this design/product.

# **Appendix B:**

# Mockups:

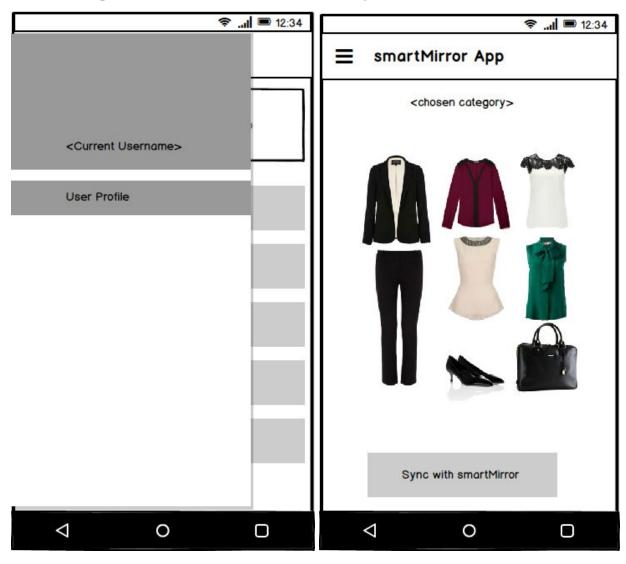
# Login

# **Home Screen**



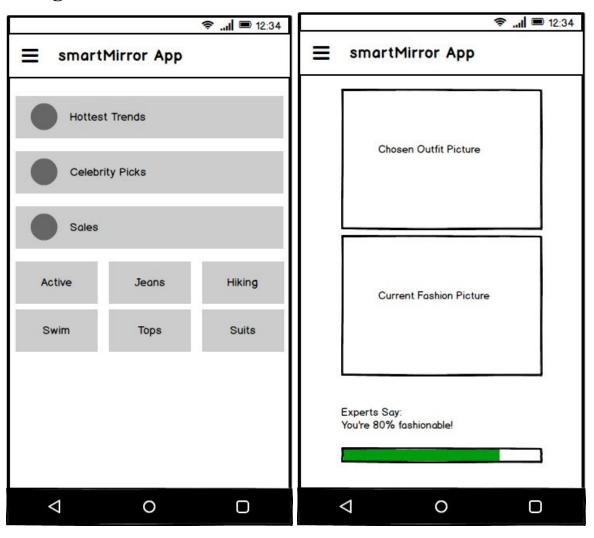
# Hamburger Menu

# Gallery



# Categories

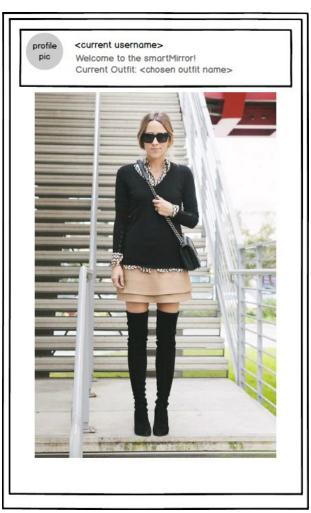
# **Fashion Advice**



# smartMirror Sync

# **smartMirror**





# **User Profile**

# **Barcode Scanner**



# **Appendix C: Cognitive Walkthrough and Empirical Data**

### Cody:

Task 1 Opening the app:

- Will the user know what to do?

Yes, if the user is familiar with mobile phones, it will be as simple as clicking an icon.

- Will the user see how to do it?

Yes

- Will the user understand from feedback whether their action was correct?

Yes

- Other notes:

None

Task 2 Logging in:

- Will the user know what to do?

Yes, the overall layout of the screen is very clear. The username and password field indicate some kind of credentials are required. One thing the user may not know how to do is create an account. It's missing that feature.

- Will the user see how to do it?

One missing feature is how to create an account.

- Will the user understand from feedback whether their action was correct?

Yes

- Other notes:

None

Task 3 Return to Home Screen:

- Will the user know what to do?

No, as there's no "home" button in the hamburger menu. It's possible to get there by hitting back enough times.

- Will the user see how to do it?

There's no obvious way to move back to the home screen.

- Will the user understand from feedback whether their action was correct?

Yes, if they get there.

- Other notes:

Task 4 Open Hamburger Screen:

- Will the user know what to do?

The user will know, at least it is intuitive to me, to hit the hamburger menu button with their finger.

- Will the user see how to do it?

Yes, it's clear where it is marked on the screens.

- Will the user understand from feedback whether their action was correct?

Yes, as a side menu opens up.

- Other notes:

Task 5 Sync with the Mirror:

- Will the user know what to do?

Yes, hit a button on the home screen

- Will the user see how to do it?

Yes, there is a button on the home screen.

- Will the user understand from feedback whether their action was correct?

Yes, as a new screen opens up, and there is a visual indication of the activity starting.

- Other notes:

Task 6 Navigate to Shopping Categories:

- Will the user know what to do?

Yes, we use usually methods in displaying navigation in an app. A clearly marked button is used on the home screen. It indicates to the user that they need simply press a button.

- Will the user see how to do it?

Yes, as there is a button on the home screen.

- Will the user understand from feedback whether their action was correct?

Yes, as a new activity for the categories screen opens.

- Other notes:

Task 7 CreateUser Profile:

- Will the user know what to do?

The user may not know to open the hamburger menu to find the profile screen, but once there, it is clear that the profile requires a couple fields to be filled out.

- Will the user see how to do it?

Yes, we use standard fields to fill out information in an application. Radio buttons for options, open text fields for name, age, and location.

- Will the user understand from feedback whether their action was correct?

After hitting save, we should add a toast (small pop up at the bottom) indicating that the information was saved successfully.

- Other notes:

Task 8 Use Barcode Scanner:

- Will the user know what to do?

If the user is trying to scan a barcode in a store, they will know what to do with the app.

- Will the user see how to do it?

Yes, as the barcode screen is simple a camera you point at the barcode

- Will the user understand from feedback whether their action was correct?

We need to add a screen that holds the data the user scanned in. For example, if he/she scanned in a shirt, then the information we have on that shirt should display in the following screen. Right now, we don't give any feedback once the user scans a barcode.

- Other notes:

#### William:

Task 1 Opening the app:

- Will the user know what to do? Yes, if the user wants to use the app, it's safe to say they will know they must open the app first.
- Will the user see how to do it? Yes, almost all apps in the same way where tapping on the app's icon will open them, the user will be familiar with this if they have a smartphone.
- Will the user understand from feedback whether their action was correct? Yes, they will be brought to the login screen which states at the top which app is in use.
- Other notes: Almost all users with smartphones will be familiar with this kind of task.

## Task 2 Logging in:

- Will the user know what to do? Yes, login in after opening an app is quite standard practice.
- Will the user see how to do it? Yes, filling out a username and password then tapping login is a very standard login method.
- Will the user understand from feedback whether their action was correct? Yes, they will then be navigated to the Home Screen, so there is visual feedback.
- Other notes: If the user wished to sign up rather than login, then they would not see how to do it, which is a serious design flaw.

#### Task 3 Return to Home Screen:

- Will the user know what to do? Yes, if they want to see all of their options, they know returning to the Home Screen is their best bet.
- Will the user see how to do it? Possibly, there's no concrete "Home Screen" button, rather, they would need to press the back button on their phone itself to return to the home screen. It's a common functionality in Android apps, so they may already be familiar with it, but it's not necessarily intuitive.
- Will the user understand from feedback whether their action was correct? Yes, the screen that they see will become the home screen.
- Other notes: It's possible we want to add a button with a house icon somewhere to make this task more obvious.

# Task 4 Open Hamburger Screen:

- Will the user know what to do? Maybe, probably not, the functionality of the hamburger screen is not immediately obvious. That being said, the hamburger menu icon is a common one, so at least users will be familiar with the icon and what it typically does.
- Will the user see how to do it? Yes, there is a hamburger icon in top navigation bar of a lot of apps and websites, so they should be familiar with where to find it.
- Will the user understand from feedback whether their action was correct? Yes, the screen they see will change.
- Other notes:

#### Task 5 Sync with the Mirror:

- Will the user know what to do? Probably, the idea of "syncing" devices is a common one, consoles, computers, phones, and music players all do it, so they should be at least familiar with the concept of sharing data over devices being linked with a button called "Sync"
- Will the user see how to do it? Yes, it's fairly clearly labeled on the home screen, and they will have seen it at least once when they logged in.

- Will the user understand from feedback whether their action was correct? Yes, once they press the button, they will see how the smartMirror sees them on their phones as well as on the smartMirror.
- Other notes:

#### Task 6 Navigate to Shopping Categories:

- Will the user know what to do? Yes, they'll know to look on the Home Screen for an option related to shopping or categories.
- Will the user see how to do it? Yes, they'll have seen the Home Screen at least once, so they'll have seen the Categories button. It would be better if it mentioned Shopping also though.
- Will the user understand from feedback whether their action was correct? Yes, they'll be brought to a different screen, which they will see.
- Other notes: Maybe change the button to "Shopping Categories"

#### Task 7 Create User Profile:

- Will the user know what to do? No, unlike the other tasks, there isn't an immediately obvious reason of how or why to do this.
- Will the user see how to do it? Maybe, they will either try tapping the Hamburger Menu, or the area on the Home Screen that contains their username. It could be made more clear
- Will the user understand from feedback whether their action was correct? Yes, they will be brought to a different screen which they'll see.
- Other notes: It should become clearer how to do this.

#### Task 8 Use Barcode Scanner:

- Will the user know what to do? Yes, it will be easy to know what to do.
- Will the user see how to do it? Yes, the user will have seen the Scan Barcodes button already after logging in, so it's location and purpose are clear.
- Will the user understand from feedback whether their action was correct? Yes, they will be brought to a different screen which they will see.
- Other notes:

#### Melanie:

### Task 1 Returning to the Home screen. :

- Will the user know what to do? Yes, this is pretty self explanatory if the user is familiar with a touch screen.
- Will the user see how to do it? Yes, the buttons are straight-forward and simple
- Will the user understand from feedback whether their action was correct? Yes, by tapping on the icon.
- Other notes:

## Task 2 Logging in:

- Will the user know what to do? Yes, it's a very normal and basic login process
- Will the user see how to do it? Yes they type in their info and and press login.
- Will the user understand from feedback whether their action was correct? Yes because when the appropriate info is given and logged in they will be directed to the home screen.
- Other notes:

#### Task 3 Home Screen:

- Will the user know what to do? Yes the user options are fairly obvious
- Will the user see how to do it? Yes, they can press the button of interest to navigate to the next preferred choice or page to explore
- Will the user understand from feedback whether their action was correct? yes, because the appropriate page and topic they are searching for will come up.
- Other notes:

## Task 4 Pressing Hamburger Screen:

- Will the user know what to do? Yes many interfaces have this same option, bringing up profiles
- Will the user see how to do it? Yes it looks like the standard button and is located in a usual place
- Will the user understand from feedback whether their action was correct? Yes because the appropriate screen will come up.
- Other notes:

# Task 5 Shopping Categories:

- Will the user know what to do? Yes the descriptions are simple and so are the categories of a basic shopping or clothing list.
- Will the user see how to do it? Yes the button descriptions are straightforward and selection should be simple.
- Will the user understand from feedback whether their action was correct? Yes, because their selection should direct them to the category they are searching for.
- Other notes:

#### Task 6 Creating User Profile:

- Will the user know what to do? Yes, this looks like a standard profile page.
- Will the user see how to do it? Yes the categories and choices are clear and easy to fill in
- Will the user understand from feedback whether their action was correct? Yes, because the profile categories are basic. Location could be more detailed with city or zip?
- Other notes:

#### Task 7 Using Barcode Scanner:

- Will the user know what to do? Yes i think people have used these scanners before. Maybe we could have an info tab "i" to explain what this does?
- Will the user see how to do it? Yes, the tab says barcode and is clear
- Will the user understand from feedback whether their action was correct? Yes, because the product information should come up or it should state that item was not found.
- Other notes:

#### Michael:

## Task 1 Returning to the Home screen. :

- Will the user know what to do?

Yes. By simply pressing the phone's back button. The task is relatively intuitive.

- Will the user see how to do it?

Yes visually there's a hamburger icon that the user can use for ease of navigation.

- Will the user understand from feedback whether their action was correct?

Yes, once the user is sent to the screen they desire then their actions should be correct.

Other notes:

Opening the app should be self-explanatory to those who have a smartphone and have experience.

The user will see our icon on their phone and open it. They simply have to press it.

## Task 2 Logging in:

- Will the user know what to do?

Yes.

- Will the user see how to do it?

The text boxes indicate the user will have to insert some sort of input. If the user decides to press the login button, there will be safeguards to indicate input is needed.

- Will the user understand from feedback whether their action was correct?

Once that is filled out, the next logical step in the process is to press the login button. The user will understand their login is successful once they are prompted to the home screen.

- Other notes:

#### Task 3 Home Screen:

- Will the user know what to do?

User will simply know how to execute the task of navigating by pressing on the category.

- Will the user see how to do it?

Once the user reaches the home screen, he/she will see 3 main categories.

- Will the user understand from feedback whether their action was correct?

Once the user sees the Home screen button on the top their action is correct.

- Other notes:

The hamburger icon screen, the current profile signed-in, and other navigation options to other screens depending on the user preference. Hamburger icon may be underutilized in this case depending on the user experience with phone apps. An explanation may be needed. Although the hamburger icon can be a source of curiosity therefore we may need to capitalize at the end of it by presenting a "reward."

#### Task 4 Pressing Hamburger Screen

- Will the user know what to do?

Probably depending on the user's experience with apps.

- Will the user see how to do it?

Yes. In most apps the hamburger icon is located intuitively on the top left corner.

- Will the user understand from feedback whether their action was correct?

A side bar screen will come out from the left side.

- Other notes:

The goal of the hamburger icon is to bring out a side menu with multiple actions not present on the present screen. These actions should include a sign-out option with the possibility to check out recent transactions, balance or any important notifications. Perhaps having the icon stand out to slightly grab the user's attention.

User may have trouble understanding the understanding the benefit of pressing the icon because of the lack of clear action of it.

Task 5 Syncing with the Mirror:

- Will the user know what to do?

Yes. There is a single button on the screen for a single course of action.

- Will the user see how to do it?

Yes. By pressing the button.

- Will the user understand from feedback whether their action was correct?

Yes. The feedback given here should give both auditory and visual feedback if they successfully sync with the mirror

Other notes:

Action needed to get to this point is the user needing to sync the app with the smartMirror to update his/her database on a specific type of clothing. When prompted to this screen the user has the choice to press.

Task 5 Shopping Categories:

- Will the user know what to do?

Yes the user will know what to do on this screen.

- Will the user see how to do it?

Straight-forward the user will see the designer clothing that appeals to him/her and press on it for

more info.

- Will the user understand from feedback whether their action was correct?

Yes once the screen navigates out of the shopping screen and into a more specific screen on the item pressed.

- Other notes:

Task 6 Creating User Profile:

- Will the user know what to do?

Yes.

- Will the user see how to do it?

Yes. The text boxes will indicate to the user that /he/she has to fill something out and log in.

- Will the user understand from feedback whether their action was correct?

Yes. Once the login was successful the user will be directed into the home screen.

- Other notes:

Task 7 Using Barcode Scanner:

- Will the user know what to do?

Yes.

- Will the user see how to do it?

Yes. The screen self-explanatory with one button.

- Will the user understand from feedback whether their action was correct?

Auditory feedback given will be when the button scanner button was pressed

- Other notes:

## Empirical Analysis Write-Up

User: Krystal

Login:

- So far how intuitive is the page/menu/interface?

"Seems pretty simple."

- How could the layout of the screen been clearer?

"It looks fine to me"

- If you had to add one thing on this category what would it be?

"nothing"

- What would you remove on this specific screen?

"nothing"

- So far is there anything about the page that you found frustrating (navigation, icons, size)?

"no"

- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

"Seems pretty simple"

#### Home Screen:

- So far how intuitive is the page/menu/interface?

"Seems pretty simple"

- How could the layout of the screen been clearer?

"Not quite sure what categories is...Is that where you shop? I feel like that should be clearer"

- If you had to add one thing on this category what would it be?

"I feel like it there should be more pictures instead of boxes"

"I think there should have been a trending option"

- What would you remove on this specific screen?

"I would have the categories bigger. I feel like it's too bunched up. Maybe re-organize it? Like instead of pressing the categories have tabs like in google play where you can swipe left or right?"

- So far is there anything about the page that you found frustrating (navigation, icons, size)?

"Like I said it should have a list of all the categories of the home screen except more like the sign out feature. Maybe a profile picture?"

- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

"Simple to use"

#### Hamburger Menu:

- So far how intuitive is the page/menu/interface?

"Very. There's almost a hamburger icon in every app I use so it's pretty intuitive"

- How could the layout of the screen been clearer?

"Its pretty clear to me."

If you had to add one thing on this category what would it be? "Friends list...Picture Profile on the top and settings maybe. But definitely friends list." What would you remove on this specific screen? "Not really. Everything was straightforward" So far is there anything about the page that you found frustrating (navigation, icons, size)? "It was cool. Not to fancy." So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc? "Convenient to have a hamburger incase I get lost." Gallery: So far how intuitive is the page/menu/interface? How could the layout of the screen been clearer? How do you think this product will help you? If you had to add one thing on this category what would it be? What would you remove on this specific screen? "nothing" So far is there anything about the page that you found frustrating (navigation, icons, size)? "no" So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

## Categories:

- So far how intuitive is the page/menu/interface?
- How could the layout of the screen been clearer?

"More pictures. This screen you have to show what you're selling not with just words."

- If you had to add one thing on this category what would it be?
- What would you remove on this specific screen?

"I would remove the circles, too small to see what's inside anyways"

- So far is there anything about the page that you found frustrating (navigation, icons, size)?
- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

#### Fashion Advice:

- So far how intuitive is the page/menu/interface?

"Not really. Why would i need advice? Who's giving me it"

- How could the layout of the screen been clearer?

"Oh maybe change the category name to Experts"

"and Not sure what the percentage means nor "Fashionable". Assuming that's a good thing?""

- If you had to add one thing on this category what would it be?

"It would be cool if instead of experts but if friends can vote on if an outfit looks good on me"

- What would you remove on this specific screen?

"Fashionable and the percentage screen. Just keep the bar"

- So far is there anything about the page that you found frustrating (navigation, icons, size)?

"I just don't know what fashionable means I guessing stylish? I think it was a little frustrating because it was unclear on who is giving the advice."

- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

#### smartMirror Sync:

- So far how intuitive is the page/menu/interface?

"Its pretty intuitive so far"

- How could the layout of the screen been clearer?

"Its pretty clear to me."

- If you had to add one thing on this category what would it be?

"Maybe a complete sync message?"

- What would you remove on this specific screen?

"None."	,						
	a	C	.1	41.	1	 1	.1

- So far is there anything about the page that you found frustrating (navigation, icons, size) ? "No"  $\,$
- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc? "Not that I can think of on this screen"

#### smartMirror:

- So far how intuitive is the page/menu/interface?

"Yes"

- How could the layout of the screen been clearer?

"It's pretty clear"

- If you had to add one thing on this category what would it be?

"nothing"

- What would you remove on this specific screen?

"nothing"

- - So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc?

#### User Profile:

- So far how intuitive is the page/menu/interface?

"Its pretty clear to me"

- How could the layout of the screen been clearer?

"When i press save I expect it show if it was successful or not."

- If you had to add one thing on this category what would it be?

"Email option would be great"

- What would you remove on this specific screen? "nothing"

- So far is there anything about the page that you found frustrating (navigation, icons, size)? "no"

- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc? "I sort of find the location of the button"

#### Barcode Scanner:

- So far how intuitive is the page/menu/interface?

"Yeah i've used something like this before. Will it show the prices of all clothing in every store around my area of whatever I scan?"

- How could the layout of the screen been clearer?

"Layout is already clear already. Maybe make the button bigger?"

- If you had to add one thing on this category what would it be?

"A history button to see my previously scanned items"

- What would you remove on this specific screen?

"Nothing"

- So far is there anything about the page that you found frustrating (navigation, icons, size)? "Not really"

- So far what's your overall impression of the interface: what's convenient, inconvenient, odd, etc? "So far it's still convenient"

## **Survey questions (summary):**

# **Open Questions**

- What would you expect to be able to do with our product?
- How do you think this product will help you?
- If you had a magic wand, what would you change or improve about the product?
- Would it be more convenient if we placed an additional type of menu? If so, where on the product?
- How likely or unlikely would you be to use this product once it's finished?

- What features so far do you feel are missing?

# **Rating questions**

Strongly Disagree <----->Strongly Agree

1 7

- Overall, I am satisfied with how easy it is to use this product.

I think that it's not very good right now. The navigation part was easy, but it needs more pictures to feel more like a fashion app.

- It was simple to use this product.

Yes, but some of the screens were confusing.

- I was able to complete the tasks quickly and conveniently.

Kind of. I didn't feel like the barcode screen was clear, and the fashion advice thing doesn't make sense. Who would be giving me fashion advice? Why do I need them to give me that advice?

- I felt comfortable using this product.

Yes.

- It was easy to learn to use this product.

Yes, it was like other apps.

- I would be able to teach someone else to use this product.

Kind of? I don't think people teach each other to use apps.

- I would recommend this product to a friend.

Not with how this is now. It doesn't feel like a finished app.

- The information presented to me was clear.

Yes, but the app needs more pictures.

- It was easy to find the information I needed.
- The organization of the information was clear.

Mostly.

- The interface of this product was pleasant.

No, it needs more pictures.

- I liked using the interface of this product.
- This product has all of the functions and capabilities I expect it to have.
- Overall, I am satisfied with this design/product.

#### User (Krystal) survey questions:

## **Rating questions**

Strongly Disagree <----->Strongly Agree

		1	7
	-	Overall, I am satisfied with how easy it is to use this product.	
4 7	-	It was simple to use this product.	
6	-	I was able to complete the tasks quickly and conveniently.	
5	-	I felt comfortable using this product.	
7	-	It was easy to learn to use this product.	
7	-	I would be able to teach someone else to use this product.	
6	-	I would recommend this product to a friend.	
7	-	The information presented to me was clear.	
4	-	It was easy to find the information i needed.	
7	-	The organization of the information was clear.	
1	-	The interface of this product was pleasant.	
3	-	I liked using the interface of this product.	
٥	_	This product has all of the functions and capabilities I expect it to have	

Overall, I am satisfied with this design/product.