**Attachment #10:**

**Part 5: Android Usability Testing**

Screening Script

Discussion Guide/Questions

OMB No.: 0925-0642-04

Expiration Date: 9/30/2014

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WIRB 20111501

#9264735.0

**Android Usability Testing**

**Screening Script**

“Thank you for calling about the research study. The purpose of the *Solar Cell* study is to design a smart phone application, which uses smart phone technology to aid users in protecting their skin from damaging ultraviolet radiation (UV) in sunlight, a primary cause of skin cancer.

To see if you might qualify for this study, I need to ask you some questions. You do not have to answer any questions you do not want to answer. If you do not qualify for this study, the information you give me will be destroyed immediately.”

**Screening Questions:**

1. Are you 18 years of age or older?
	1. Yes (Continue)
	2. No (Thank you for your time)
2. How well do you read and speak English?
	1. Very well (Continue)
	2. Well (Continue)
	3. Not well (Thank you for your time)
3. What is your gender?

a. Male

b. Female

*If recruiting adults under 40:*

1. Are you under 40 years of age?
2. Yes (Continue)
3. No (Thank you for your time)

*If recruiting adults aged 40 and over:*

1. Are you 40 years old or older?
2. Yes (Continue)
3. No (Thank you for your time)

*If recruiting adults with children under age 18:*

1. Do you have children under the age of 18?
2. Yes (Continue)
3. No (Thank you for your time)
4. Do you have an Android or iPhone with a data plan? Or a phone that runs a Droid or iPhone operating

 system?

* 1. Yes (Continue) List which phone participant has\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. No (Thank you for your time)
1. Have you ever downloaded an application to your smartphone? An application is a small program that can be loaded onto a smart phone that performs a task or function such as a game, mapping an address, calculating your body mass index, calculating a car loan payment, and sharing recipes.
	1. Yes (Continue)
	2. No (Thank you for your time)
2. How long have you been using your smartphone and data plan?

a. Less than six months (Continue)

b. Six months to one year (Continue)

c. One to five years (Continue)

d. More than five years (Continue)

1. How comfortable are you using applications on your smartphone?

a. Very comfortable, I use a variety of applications all the time (Continue)

b. Somewhat comfortable, I use some applications (Continue)

c. I’m still learning, I have only used one or two applications (Continue)

d. Uncomfortable, I don’t use any applications (Thank you for your time)

*IF THEY DO NOT MEET ELIGIBILITY CRITERIA:*

I’m sorry but we already have enough people with your characteristics for our cognitive interviews, so we do not need to meet with you. The information you provided to us will not be saved. Thank you for your interest in our research study. <Politely end the call>

*If they meet eligibility criteria:*

Great! You are eligible to participate in the study! We have several possible dates for the interview. Can you let me know which times work best for you from the following schedule?

Days Monday – Friday\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evenings Monday – Friday\_\_\_\_\_\_\_\_\_\_\_

Weekend Mornings\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Weekend Afternoons\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Participant Contact Information:

First Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Home Phone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Work Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Alternate Phone (Cell) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E-mail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Android Usabilty Testing**

**Discussion Guide/Questions**

*“Hello and thank you for participating in our usability test. My name is <<name of facilitator>> and I work here at Klein Buendel. We’ve asked you here to help us improve a smartphone application that can help you be more aware of the risks of the sun and things you can do to protect yourself.*

*I’m going to give you a few scenarios that we think will encourage people to use the Solar Cell application. I’ll pose a question at the end of the scenario. Then I would like you to use the Solar Cell application to answer the question, speaking aloud as you do so. The more you talk about what you are thinking and why you are doing what you are doing, the more I will learn. Tell me what you are looking for, what parts are challenging to use, what you like or dislike and anything else helpful that comes to mind.*

*Ok, let’s get started.”*

*<<Use the workbook on the next 5 pages to facilitate the usability test.>>*

**Introduction**

During this usability test, you will use a new Android smart phone application to work through some fictitious tasks and provide feedback on the ease of use and usefulness of the application.

Thank you for participating in our study. Your feedback is an important part of our product design process.

**Scenario 1**

Suppose you are at a picnic with family and friends. You plan to have lunch and then spend the afternoon hanging out, playing volleyball, visiting with friends, and enjoying the beautiful summer day.

You heard about a new Android application that gives you information about safe sun exposure. The application is already installed on the Android that you will be using for this usability test session.

1. What kinds of decisions about sun exposure would you expect the Solar Cell application to help you make?
2. Start the application and begin using it.
3. How long can you stay in the sun before you begin burning?
4. What can you do to increase the time that you can safely be in the sun?
5. Where would you look to try to tell the application that you have done these things?

**Scenario 2**

1. How do you know who the information is for?
2. What is the UVI Forecast?
3. Does it seem like the Solar Cell application is taking the current weather conditions (such as cloud cover) into account?
4. How would you confirm this or change the weather information?
5. What other factors influence the Time to Sunburn?

**Scenario 3**

1. Try changing the alert settings.
2. Suppose that Solar Cell alerts you that it’s time to apply more sunscreen. How would you tell the application that you have applied more sunscreen?
3. How does Solar Cell tell you that it is time to get out of the sun?
4. How do you tell Solar Cell that you are moving into a shaded area?
5. You are going inside for a lunch break, how would you tell Solar Cell that you are getting out of the sun for a period of time?

**Scenario 4**

1. When you set up your profile, did you notice that you could have entered clothing and sunscreen details?

🞏 Yes 🞏 No

1. How do you think the Solar Cell application will use this information?
2. Try to go back into your profile and add the information now.
3. Would you save clothing and sunscreen details for the next time you use the application?

**Scenario 5**

1. When you set up your profile, you chose to enter clothing and sunscreen details. How do you think the Solar Cell application will use this information?
2. Would you save clothing and sunscreen details for the next time you use the application?

**Scenario 6**

You’ve just read an article about the healthful benefits of vitamin D. You know that you can get vitamin D from your diet and that sun exposure helps you to make vitamin D naturally, too.

1. What does the Solar Cell application tell you about your vitamin D production?
2. How you would use the application to learn more about vitamin D?
3. The Solar Cell application tells you how much daily vitamin D your skin creates. What would you do once you’ve reached the maximum?

🞏 Get out of the sun.

🞏 Stay in the sun, as long as I haven’t started burning.

🞏 Apply more sunscreen and/or add clothing.

🞏 Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Scenario 7**

1. Do you know that some medications can increase your risk of sunburn?

🞏 Yes 🞏 No

1. Your doctor prescribed a new medication and when you filled your prescription the pharmacist told you that the medication will make you more sensitive to the sun and increase your risk of burning.

How would you let the Solar Cell application know about this change to your skin’s risk of being sunburned?

**Scenario 8**

1. Suppose you have a 5 year old child. When determining sun exposure and risk, would you expect the Solar Cell application to provide different exposure and risk information for your child than it does for you?

🞏 Yes 🞏 No

1. How would you create a profile for your child? Go ahead and create the profile.
2. Look at the Sun Exposure page (the screen that shows the main information). Is it showing information for you or for your child?
3. How would you view the information for the other person?
4. How would you use Solar Cell to determine safe sun exposure levels for your child:

🞏 Use the Solar Cell application for myself and use that information to make sun exposure decisions for both myself and my child.

🞏 Use the application for my child and use the information to make sun exposure decisions for both myself and my child.

🞏 Run the application for both my child and myself and make decisions about sun exposure based on our individual UV Forecasts.

**Scenario 9**

1. The Solar Cell application will offer a Planning function. Find the Planning function.
2. Is this what you would expect to be able to do in Planning?

**Closing Questions**

List some situations in which you might use the Solar Cell Application.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Compared to your current methods of determining how long you should stay in the sun, how would you rate the usability of Solar?

🞎 Solar Cell is easier

🞎 They are about the same

🞎 My current approach is easier

If a smart phone application like Solar Cell were available, would you use it?

🞎 Yes

🞎 No (Why not?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Would you pay for the application? 🞏 Yes (how much? \_\_\_\_\_ ) 🞏 No
Would you tell your friends about it? 🞏 Yes 🞏 No

How likely would you be to use Solar Cell in these types of situations?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | I would never use it. | I would use it once and then remember the information for future situations like this. | I would use it occasionally, for example in different weather conditions. | I would use it every time. |
| At a restaurant, deciding whether to sit inside, outside in the shade, or outside in the sun. |  |  |  |  |
| At a picnic or other outdoor event that is several hours long. |  |  |  |  |
| During daily activities such as walking to work, at work, running errands, and so on. |  |  |  |  |
| While exercising, for example on a run, hike, or while skiing. |  |  |  |  |

List 2 things you liked most about Solar Cell:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List 2 things you liked least about Solar Cell:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please circle the number that reflects your immediate response to each statement. Don’t think too long about each statement. Make sure you respond to every statement. If you don’t know how to respond, simply circle the number “3.”

|  |  |  |
| --- | --- | --- |
|  | Strongly Agree | Strongly Disagree |
| 1. I think that I would like to use this product frequently.
 | 1 2 3 4 5 |
| 1. I found the product unnecessarily complex.
 | 1 2 3 4 5 |
| 1. I thought the product was easy to use.
 | 1 2 3 4 5 |
| 1. I think that I would need the support of a technical person to be able to use this product.
 | 1 2 3 4 5 |
| 1. I found the various functions in the product were well integrated.
 | 1 2 3 4 5 |
| 1. I thought there was too much inconsistency in this product.
 | 1 2 3 4 5 |
| 1. I imagine that most people would learn to use this product very quickly.
 | 1 2 3 4 5 |
| 1. I found the product very awkward to use.
 | 1 2 3 4 5 |
| 1. I felt very confident using the product.
 | 1 2 3 4 5 |
| 1. I needed to learn a lot of things before I could get going with this product.
 | 1 2 3 4 5 |

Overall, I would rate the user-friendliness of this product as:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Worst Imaginable | Awful | Poor | OK | Good | Excellent | Best Imaginable |