

Group 3

Ahmadjan Ataniyazov
Eian Prinsen
Joseph Gray
Heather Rohr
Tina Gada

HCI 510 – Summative Evaluation Plan

It is vital to begin designing your evaluation as early as possible, since it may affect how you implement the prototype design, as well as give you an idea of how much effort the evaluation will be. No matter how experienced you are in developing summative, controlled evaluation sessions, it is not uncommon to make a mistake in the design of your usability study or miss an opportunity to gather data that could be of great value. Best practice in many research organizations is to have an outside panel review any study design to identify any potential issues or make helpful recommendations. Your classmates will serve as outside experts to help you strengthen your study design. Each team will have class time to present their study design to the class, who will then provide constructive criticism and suggestions.

Qualtrics Link

https://oswego.az1.qualtrics.com/jfe/form/SV_8vw7IVhcOzhvfOR

Research Objectives

What will you learn from this usability test?

We need to test various tasks we have outlined in other deliverables. Mainly we will be looking at the functionality of the login page, the self-assessment survey questions, the results feature of the app, the breathing exercise, and providing specialist. The goal of this usability test is to measure with industry standard UX metrics the task completion time, task completion rate, and task-based usability of the various scenarios of the app. From this test,

we will learn how and where to make changes to enhance the usability of the mental health screening app. Our cognitive walkthrough and previous user testing pointed out some usability issues and we want to quantify what is wrong.

Tasks / Scenarios

What tasks will your users complete during the evaluation? Provide a scenario, along with the list of the tasks.

The app has 5 main tasks with subtasks outlined below:

Task 1: Login to the app

- Press the app icon to launch
- Enter Username
- Enter Password
- Press SIGN IN button

Task 2: Complete the survey

- Read and accept the disclaimer message to start
- Choose a test by pressing on one the following:
 - PHQ-9 (for depression)
 - GAD-7(for anxiety)
 - PC-PTSD (PTSD)
 - CAGE (Alcohol)
- Read question and select an answer option until finish

Task 3: View the results

- Press 'finish' button to continue and view results
 - Read the results report that explains user depression, anxiety etc.
- Press 'more information' button for further detailed report
 - This option shows the details behind the results including test scores and question responses.
- Press 'share' icon to export as pdf, email, etc.
 - Press an appropriate option to share the result

Task 4: Do breathing exercise

- Press 'exercise' button on the results screen
- Follow the instructions to do breathing exercise

Task 5: Select specialists for further help

- Press 'directory' button on the results screen
- Scroll to local providers and select one

Metrics

What metrics will you collect data on? How are they related to your research objectives?

The metrics we are going to use for this usability study is efficiency, satisfaction and effectiveness. These will be measured by task completion time, self-reported satisfaction rate, and task completion rate. The data gathering is explained further below:

Task/screen	UX Metric	Measure	Benchmark	Target
Login	Efficiency	Task completion time	15 sec	<20 sec
Complete Survey	Efficiency	Task completion time	70 sec	<90 sec
	Satisfaction	Self-reported satisfaction rate	N/A	N/A
View Results	Satisfaction	Self-reported satisfaction rate	N/A	N/A

Breathing exercise	Satisfaction	Self-reported satisfaction rate	N/A	N/A
Select specialists	Effectiveness	Task completion rate	N/A	N/A

Participants

Who are your expected users and what target user groups do they represent?

Our participants are college students (in the HCI program) ranging from 20 - 28 years of age. This does skew the results toward usability conscious people. They represent a potential target user group for a mental health app as "In 2004 the Mental Health Task Force on Graduate Student Mental Health at the University of California Berkeley surveyed its graduate students and revealed 45% had experienced an emotional or stress-related problem in the last 12 months that significantly affected their well-being and/or academic performance." This makes the subject while not varied in terms of age well suited for testing this type of app as in a real world context college students could be a major user base. Ideally we would have a larger and more varied sample set but for now we have to settle for college students.

Procedure

What will the evaluation look like? Provide a step-by-step description of what the evaluation session will look like from the user perspective (briefing, task 1, post-task questionnaire, etc.).

Users will be briefed on the nature of the study as well as offered an informed consent form. After this the user will be asked to perform the 5 tasks outlined in the "research objectives" section. Users will perform these tasks on a computer in the VR lab. After completing these tasks the users

will be asked to give their feedback so we can identify issues in the current design. We will gather feedback by asking users to fill out an ASQ to capture the sentiment of the users regarding the app.

- Users are briefed on the study and asked to sign an informed consent form
- Users will sit down with a device and be asked to complete tasks
- After completing the task users will be asked for feedback in the form of a ASQ survey
- Users will be thanked and asked if they have any questions about the study

Testing Environment

What hardware and software will you need to conduct the evaluation? Where will you conduct the evaluation?

The evaluation will take place in the VR lab on a computer provided by Group 3 to test out the app. The only software or hardware needed to carry out the evaluation is internet access and a computer or mobile phone to test the prototype out.

Appendix

Provide a script you will follow, along with all the questionnaires/observation logs you are going to administer/use.

Usability Test Script

1. *[Introduce the participant to the study]*

"Hello User X, Thank you so much for participating in this study today! As you may have guessed we have asked you to come here today to test our prototype mental health app for our term project in HCI 510. We are testing our redesigned mental health survey app. This should take no more than 20 minutes. The tasks consist of actions common to other mobile

apps. I want to make *explicitly* clear we are testing the usability of the app not your mental wellbeing. Please relax as you cannot do anything wrong!”

2. [Ask the participant to read and sign the consent form.]

“Before moving forward I am going to read an informed consent form and ask you to sign it if you agree to participate in this study.”

3. [Give the consent form to the participant and allow for sufficient time.]

4. [If they sign the consent form, proceed to explaining the procedures to the participant.]

“Here is how the session will work: You will be using this computer or your own and interacting with our app prototype, the way you would naturally. The tasks you will be asked to complete are explained here should you need to review. After completing the set of tasks you will be asked to fill out a short questionnaire about your experience completing the tasks. Once we are finished with the test, you will be asked to fill out a short survey about your overall experience with the application today. Do you have anything you’d like to ask before we start?”

5. [Instruct the user to open the prototype application on the browser]

“Please open the link on the screen and begin using the app by accessing the login page.”

6. [Help the user understand the application]

“This app works similarly to other survey or trivia apps. Please try and go through the pages as you normally would.”

7. [Explaining the tasks]

“The app has 5 main tasks which we are testing today. Task 1. Login, Task 2. Consent to Testing, Task 3. Choose Screening Test, Task 4. To Complete Questionnaire, Task 5. To View Results. The flow works like any survey would and you will answer questions to move forward. There is a back button in the top left and help in the top right. You can review the tasks here on this sheet and if you have any questions now or during the testing please stop me and ask freely. You are free to stop at any point. Please begin when you are ready”

Test Section

8. [Observe the participant. Use a stopwatch to record the time taken for each task and note in the Observation Log. Take notes about the participant's specific reactions to the interface.]

Post-Test Section

9. [Explaining ASQ survey to help us to get feedback from our users]

"Please follow the link on screen to the post test questionnaire. Thanks again for your participation!"

References

<https://www.psychologytoday.com/us/blog/theory-knowledge/201402/the-college-student-mental-health-crisis>