Group Project 5 - Usability Testing and Heuristic Evaluation
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Part 1: Usability Testing

For this assignment, you will test your Figma prototypes with **3 or more representative users.** These users should NOT be students in the class, and should be people who would potentially use your project. Each member of your team should conduct at least **one** of the tests. If possible, the other team members should help out with these study sessions.

Prototype A:
https://www.figma.com/file/vnL7KocopAeR9RspkSQfJF/Mind-Lounge-Prototype-A?node-id=0%3A1

Prototype B:

https://www.figma.com/file/ToKEWDH1NMAOZCTRA6MFRp/Mind-Lounge-Prototype-B?node-id=0%3A1

Study Reports

Study Session 1

Date and time: 12/1/2018 3:00 pm

Location: library

Study participation info: Harris, student

Who conducted the study: Yuxuan

1. Observations from Prototype A:
    a. no trouble getting to the next page, but clicked at the fields to fill in and confusion when it didn't work (difficult to implement with figma)
2. Observations from Prototype B:
    a. same as A: no trouble getting to the next page, but clicked at the fields to fill in and confusion when it didn't work (difficult to implement with figma)
3. Participant feedback:
    a. What did you like about Prototype A?

       i.   Prototype A looks clear and simple. It's easy for me to understand each of the function.
    b. What did you dislike about Prototype A?
       i.   Hobbies I can choose in profile is limited. Some buttons are not functional.
    c. What did you like about Prototype B?
       i.   Skips an extra step of logging in/filling out profile for the first time, makes the profile optional
    d. What did you dislike about Prototype B?
       i.   Behaviour of the home button
    e. What was confusing about these prototypes?
       i.   Which functionalities work and which ones don't
    f. Do you have any suggestions for improving these prototypes?
       i.   Make sure every function is actually working and add more choices for user to choose.

<u>Study Session 2</u>

Date and time: 12/1/2018 3:30 pm

Location: library

Study participation info: Kevin, student

Who conducted the study: Yuxuan

1. Observations from Prototype A:
    a. no trouble getting to the next page, but clicked at the fields to fill in (difficult to implement with figma)
2. Observations from Prototype B:
    a. no trouble getting to the next page, but clicked at the fields to fill in (difficult to implement with figma), confused about the home button, thought it would be a drop down/sliding interface
3. Participant feedback:
    a. What did you like about Prototype A?
        i. It's easy to work with I think. I like blue.
    b. What did you dislike about Prototype A?
        i. I don't want to sign in to use an app like this. It could be optional, but in this app, it's not.
    c. What did you like about Prototype B?
        i. There's no login screen and goes straight to home menu

    d. What did you dislike about Prototype B?
- i. Home menu takes you out of the task you were doing previously, should just be a drop down that you can exit out of

    e. What was confusing about these prototypes?
- i. Having to login for prototype A

    f. Do you have any suggestions for improving these prototypes?
- i. Make the sign in interface optional for prototype A. You can set a password in order to open this app so kids won't be able to change any settings. Make a way for prototype B to not go to the home menu without option of going back to the function, a drop down that you can re-click to hide

<u>Study Session 3</u>

Date and time: 12/2/2018 3:00 pm

Location: researcher's room

Study participant info: Jane, chemistry professor

Who conducted the study: Elizabeth

1. Observations from Prototype A:
   a. Trying to finish their task or go to the next step but mistakenly tried to click return to previous step (limitations of figma)
   b. Older user so probably not as used to mobile apps as younger people
2. Observations from Prototype B:
   a. Same as A: trying to finish their task or go to the next step but mistakenly tried to click return to previous step
   b. Had trouble noticing home button
3. Participant feedback:
   a. What did you like about Prototype A?
      - i. It seems fairly simple/straightforward after getting used to it and exploring each function.
   b. What did you dislike about Prototype A?
      - i. Had some trouble navigating, confused over the "return to etc…"
   c. What did you like about Prototype B?
      - i. Home/menu button to go to home menu and quit out of a step
   d. What did you dislike about Prototype B?
      - i. Home/menu button could be more clear
   e. What was confusing about these prototypes?

          i.   Initially confused by some of the buttons and functionality and what they do

    f. Do you have any suggestions for improving these prototypes?

          i.   Label the home/menu button for prototype B, include more help/documentation for both

Part 2: Heuristic Evaluation

You will conduct a heuristic evaluation on both your A and B prototypes.

Create a table that documents who will test what:

Prototype	Heuristic	Tester
A	Visibility of system status	Yuxuan
A	Match between system and real world	Yuxuan
A	User control and freedom	Yuxuan
A	Aesthetic and minimalist design	Yuxuan
A	Consistency and Standards	Yuxuan
B	Visibility of system status	Elizabeth
B	Error prevention	Elizabeth
B	Recognition rather than recall	Elizabeth
B	User control and freedom	Elizabeth
B	Help and documentation	Elizabeth

For the actual testing, you should fill out the usability aspect report template for each problem you identify. Each person should generate at least 5 UARs. Complete this form for each problem or good aspect that you observe.

UAR #1	**Problem/Good:** Problem	**Rated by:** Elizabeth

Name:
 Prototype B loading between pages

Relevant heuristic:
 Visibility of system status

Steps to reproduce:
 Click buttons to go to the next step

Detailed explanation:
 If the button is clickable, it transitions instantly or near-instantly to the next step, there is no loading in between, but if a button is not clickable, it may not be immediately obvious

Possible solution:
Have a quick "loading"/transition screen in between each step after a button click

Severity (low, medium, high, critical): low	**See also: UAR #2**

UAR #2	**Problem/Good:** Problem	**Rated by:** Yuxuan

Name:
 Prototype A lack of progress bar

Relevant heuristic:
Visibility of system status

Steps to reproduce:
Clicking through steps/screens for a function, check which step out of the total steps user currently at

Detailed explanation:
 No progress bar to indicate whether a step is finished or almost done

Possible solution:
Put the progress bar at the top of the page to show people which step they are in

Severity (low, medium, high, critical): low	**See also: UAR #1**

UAR #3	Problem/Good: Problem	Rated by: Elizabeth

Name:
Prototype B lack of confirmation/error messages

Relevant heuristic:
Error prevention

Steps to reproduce:
Go through steps for a function (like setting app limits) and finish/apply changes

Detailed explanation:
There's no check after completing an action, and doesn't present users with a confirmation option before they commit to the action.

Possible solution:
Present users with a confirmation checkbox before making changes or a confirmation page after applying the changes and an option to go back.

Severity (low, medium, high, critical): medium	See also: UAR #2

UAR #4	Problem/Good: Good	Rated by: Yuxuan

Name:
Prototype A Readability

Relevant heuristic:
Match between system and real world

Steps to reproduce:
Going through home menu and seeing the labels for each option (app functions, music channel, profile) as well as labels for each options in app functions

Detailed explanation:
In each page of prototype, it clearly shows every functions we have and easy for user to read and choose

Possible trade-offs:
Different user groups in other countries/cultures can have different conventions from what we're currently using and testing with the people around us

Benefit (low, medium, high, critical):	**See also: UAR #5**
medium	

UAR #5	**Problem/Good:**	**Rated by:**
	Good	Elizabeth

Name:
Prototype B labeling and options

Relevant heuristic:
Recognition rather than recall

Steps to reproduce:
Going from home menu to any of the selections (app functions, music channel, profile)

Detailed explanation:
The user's memory load is minimized by labeling each screen with the name of the option after selecting that option. There are instructions for most of the steps in each selection and descriptions in the labels for the menus.

Possible trade-offs: Labeling each screen can make it cluttered and it may be more difficult to see smaller descriptions in each option button

Benefit (low, medium, high, critical):	**See also: UAR #4**
medium	

UAR #6	**Problem/Good:**	**Rated by:**
	Good	Yuxuan

Name:
Prototype A limitation set up

Relevant heuristic:
User control and freedom

Steps to reproduce:
Choose any of the functions in the menu, return to the menu immediately after selecting the function

Detailed explanation:
When users set up app limits, content restriction, or other app functions there is a "return to …" button to go back to previous screens and redo the action or do a separate action

Possible trade-offs: Becomes cluttered with options to undo/redo options and exit out of functions in the app

Benefit (low, medium, high, critical): high	See also: UAR #7

UAR #7	Problem/Good: Problem	Rated by: Elizabeth

Name: Prototype B emergency exit

Relevant heuristic:
User control and freedom

Steps to reproduce:
Going through any of the functions menu options like downtime, app limits, prioritize, and content restrictions will have a button in the top left corner (3 bars) that takes the user back to the home menu

Detailed explanation:
If the user wants to back out of the any of the functions menu options, they can click the button in the top left corner to immediately go back to the home menu and exit out of the option they had selected in the functions menu. Unfortunately this is a problem because it isn't very clearly marked and there is no way to undo the action and go back to what the user was previously doing if they had clicked it by mistake.

Possible solution:
Change the behavior of the home menu button so that it acts like a drop-down menu and can be closed to go back to the previous screen that the user was on if the user decides not to go to a different option from the home menu.

Severity (low, medium, high, critical): high	See also: UAR #6

UAR #8	Problem/Good: Good	Rated by: Yuxuan

Name:
Prototype A button arrangement

Relevant heuristic:
 Aesthetic and minimalist design

Steps to reproduce:
 Clicking through the start page to home menu to the 3 options (functions menu, music channel, profile) shows the buttons arrangement and design

Detailed explanation:
Each of the button are arranged properly on the screen. The size of the buttons and words is clear for user to read and find out the one they want to choose quickly without getting cluttered.

Possible trade-offs:
User could want more information from the design or more options

Benefit (low, medium, high, critical): medium	See also: UAR #10

UAR #9	Problem/Good: Problem	Rated by: Elizabeth

Name:
Prototype B lack of help/documentation

Relevant heuristic:
Help and documentation

Steps to reproduce:
Going through any of the home menu options or functions menu options, the descriptions/instructions may not be clear enough for some users

Detailed explanation:
Even though it is better if the app can be used with the current descriptions and instructions attached, it may be necessary to provide more help and documentation. The additional information or instructions has not been added beyond brief summarizations.

Possible solution:
Include a link to go to a more detailed page about the options and what they do, or have a collapsible blurb with info about the action to be performed attached to each page.

Severity (low, medium, high, critical):	**See also: UAR #**
low	

UAR #10	**Problem/Good:** Good	**Rated by:** Yuxuan

Name:
Prototype A design consistency

Relevant heuristic:
Consistency and standards

Steps to reproduce:
The standard size and color is consistent from clicking through the home page to each of the subpages.

Detailed explanation:
The size of the buttons, words, and pictures on each page is consistent. Also, we use the same background color and model in each page. The users will be able to know which clickable items are menu options and which will have different purposes of moving back and forth between the pages and get used to navigating with consistent options.

Possible trade-offs:	
When users go into certain step, it always keep a similar arrangement to other screens/options which may be boring to the user and could stifle design creativity.	
Benefit (low, medium, high, critical): Medium	**See also: UAR #8**