

Team Member: Kamaal Hassan

Goal(s) of the experiment: List the goal (s) of your experiment, for example: compare design A to design B and measure which one is easier to use. Be specific!

The goal of our experiment is to compare Interface A (fixed icons at the bottom of the screen) and Interface B (nav bar fixed at the top of the screen with drop-down menus) and measure which one is more efficient, easier to use and leads to higher user satisfaction.

Methodology: specify if you are using a between or within-subjects method plus justification for your choice

We are using a within-subjects method to minimize the impact of individual differences among participants and to ensure all participants experience both interface designs.

Participants: specify how many participants you had in your experiment for this design project. You should have 2 participants for each person in your team.

Our experiment had 8 participants, with each of the 4 team members having 2 participants.

Protocol: describe the tasks, if you need to counter balance, what did you tell the participants, what did you ask them to do, the questions for your debrief.

The tasks given to the participants were to navigate to a specific feature within the app using both Interface A and Interface B. We counterbalanced the order of presentation of the two navigation designs. Participants were informed that the purpose of the experiment is to evaluate the usability of a mobile app and that their feedback will be valuable in improving the app's design. After completing the tasks, we debriefed participants with questions about their experience with each design, including ease of use, efficiency, and overall satisfaction.

Data Collection: what data did you collect (verbal data, timing of tasks, answers to questions)? In the Design Report the raw data will be placed in an Appendix.

We collected verbal data, timing of tasks, answers to debrief questions, and think-aloud data.

Data Analysis: Perform and report on the data analysis:

- **Numerical Comparison: use a table to compare condition A with condition B based on the goal of the study.**

Interface	Avg. Time Taken	Avg. Errors	Avg. User Rating
A	47.5 seconds	1.5	6.5/10
B	32.5 seconds	0.5	8.5/10

- **Aggregate data: use tables, bar charts, pie charts, graphs, summaries**

Interface A: Participants generally took longer to complete tasks and made more errors.

Interface B: Participants were faster and made fewer errors, resulting in higher user ratings.

- **Thematic Analysis: report on the common themes in the answers to your interview questions and the data from the think aloud.**

Interface A: Participants reported difficulty in finding the desired features due to the fixed icons at the bottom. Some felt overwhelmed by the interface.

Interface B: Participants appreciated the drop-down menus and the clear organization of options, which made navigation more straightforward.

Observations and Discussion: what worked well in the experiment, what worked well in your high fidelity prototype? Discuss the answers to your goals / questions the experiment was trying to answer. Are there changes that need to be made to the high fidelity prototype based on the results?

Interface B (nav bar fixed at the top of the screen with drop-down menus) performed better in terms of task completion time, errors, and user satisfaction compared to Interface A (fixed icons at the bottom of the screen).

The experiment's results suggest that the high-fidelity prototype would benefit from incorporating Interface B's design features.

Based on the results, changes should be made to the high-fidelity prototype by adopting Interface B as the primary navigation method.

Appendix: Include any raw data in the Appendix of your Design Report. Report numerical data in tables. List all interview questions and all answers from your participants. Report on the data collected from the think aloud method.

How easy or difficult was it to navigate to the task using Interface A? (Scale from 1 - very difficult to 10 - very easy)

Participant 1: 6

Participant 2: 5

How easy or difficult was it to navigate to the task using Interface B? (Scale from 1 - very difficult to 10 - very easy)

Participant 1: 8

Participant 2: 9

Which interface did you prefer and why?

Participant 1: I preferred Interface B because it was easier to find the feature I was looking for, and the drop-down menus were more organized.

Participant 2: I liked Interface B more because it was faster and more straightforward to navigate.

Think-Aloud Data:

Participant 1:

Interface A: "I'm not sure which icon to tap... Oh, there it is. It took me a while to find the right one."

Interface B: "The drop-down menu makes it easy to see all the options at once. I can find the feature I'm looking for more quickly."

Participant 2:

Interface A: "There are too many icons here. I keep tapping the wrong one."

Interface B: "I like this top navigation bar. It's much easier to find what I need with the drop-down menus."

Team member: Lauren Frazee

Goal(s) of the experiment: Our goal is to implement seamless navigation and reduce or prevent cognitive overload so that Thrive is utilizable by a wide range of individuals regardless of their proficiency with software applications. Another goal is to Improve the overall design and flow of the app by showing the participants an alternative design.

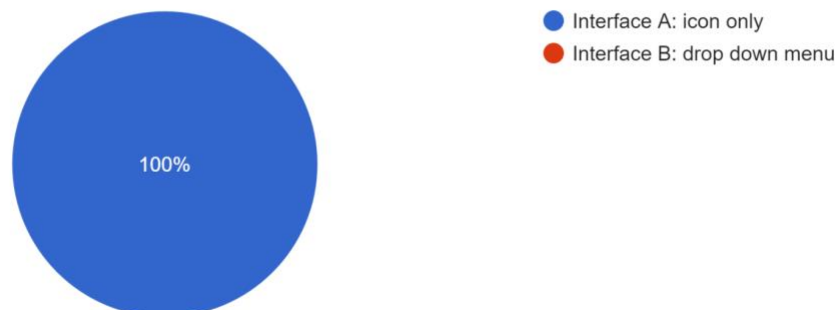
Methodology: We are going to use a within subject design, so that all participants can try both versions of the application. To prevent ordering effects, each group will complete the tasks in a different order. Since the task is relatively simple users will become familiar with the upcoming result

Participants: We will have 8 participants, 2 participants per group member, separated into 2 groups of 2. Two groups with counter balanced tasks per facilitator to reduce possibility of chance results due to slight accidental variation in the way the facilitators conduct the study. Our target demographic will range from 18 to 65. We want to find people that represent the potential users of our app. The Participants for my research are between the ages of 30 and 35, proficient software users.

Data Collection: what data did you collect (verbal data, timing of tasks, answers to questions)? To collect data I used error counting, timing of task, verbal feedback and a survey via google docs.

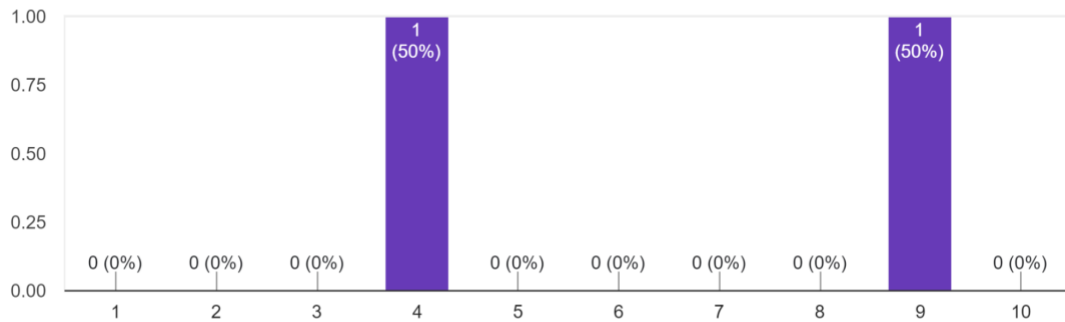
Which interface did you prefer and why?

2 responses



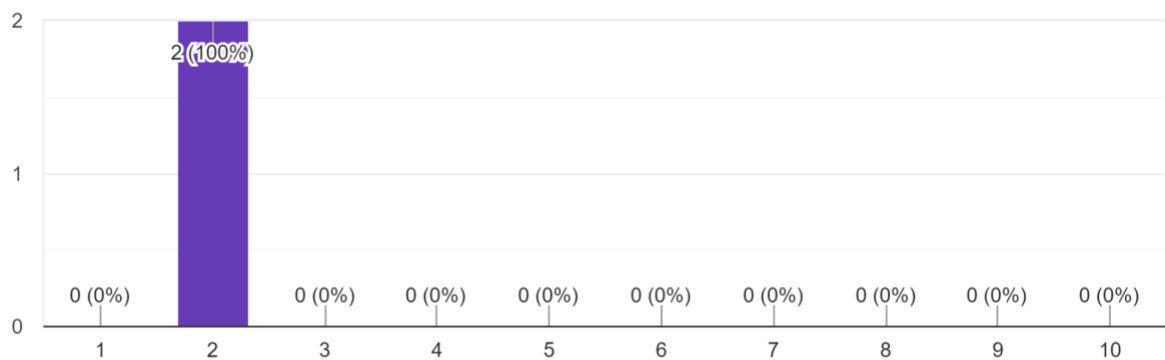
How easy or difficult was it to navigate to the task using Interface B? (Scale from 1 - very difficult to 10 - very easy)

2 responses



How easy or difficult was it to navigate to the task using Interface A? (Scale from 1 - very difficult to 10 - very easy)

2 responses



Additional feedback:

2 responses

The menu at the top is convenient, however, its lacking consistency. After using the drop down menu to navigate to a page there are no more text guides. Interface A is better for that reason

When tried to use the app using with out using the icons, I found myself looking specific terminology that just was not there. I prefer the icons on the navigation areas.

Thematic Analysis: report on the common themes in the answers to your interview questions and the data from the think aloud.

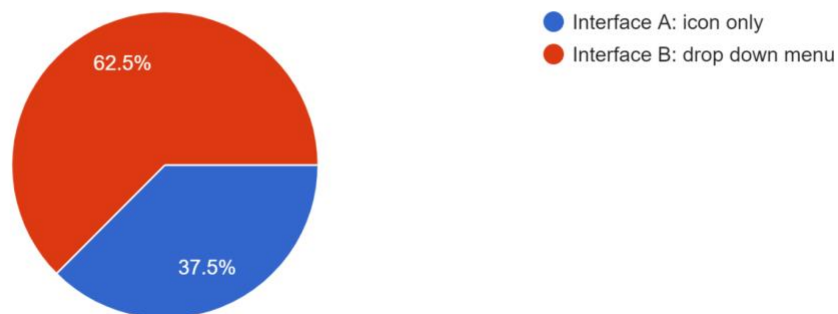
Verbal Feedback:

"I like the menu, it gives an idea of where to start." "I don't see what I'm looking for so I'm going to use the icons." "Icons are more ambiguous, what I'm looking for might be here and it may not, in contrast to text. When I don't see what I'm looking for it's a bit frustrating."

Aggregated Data:

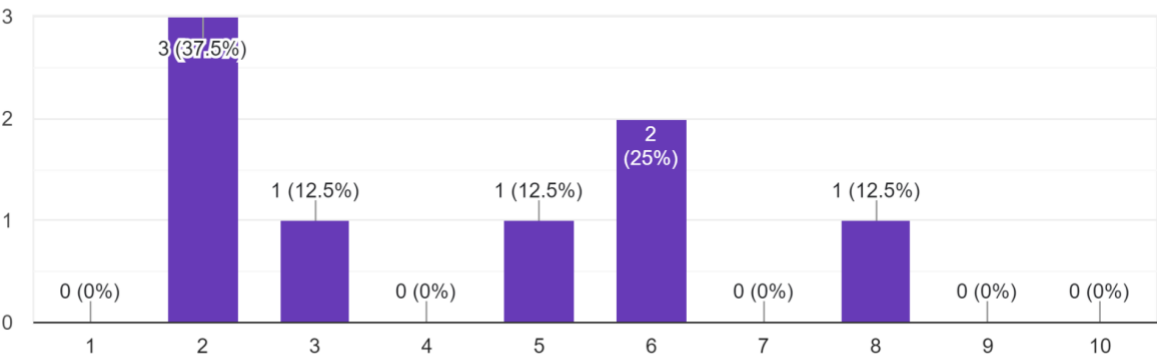
Which interface did you prefer and why?

8 responses



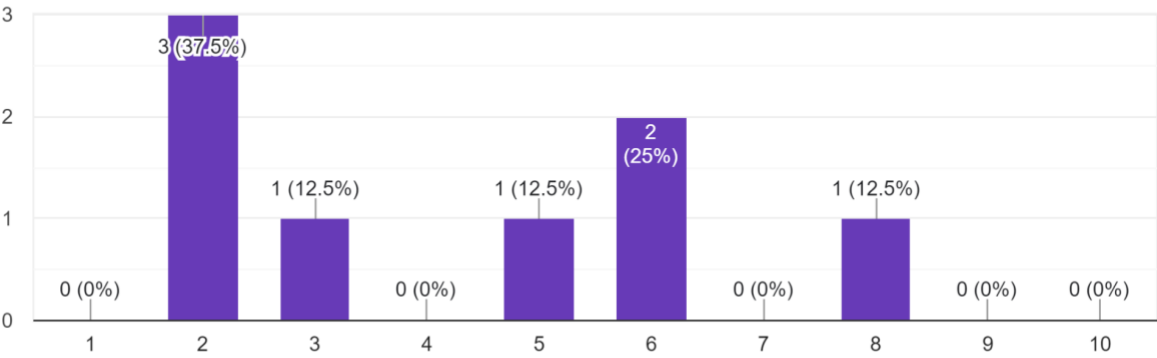
How easy or difficult was it to navigate to the task using Interface A? (Scale from 1 - very difficult to 10 - very easy)

8 responses



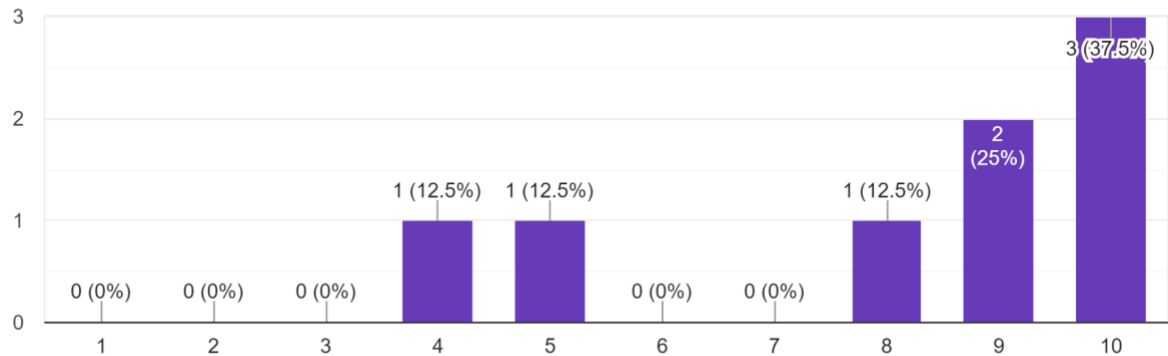
How easy or difficult was it to navigate to the task using Interface A? (Scale from 1 - very difficult to 10 - very easy)

8 responses



How easy or difficult was it to navigate to the task using Interface B? (Scale from 1 - very difficult to 10 - very easy)

8 responses



Additional feedback:

7 responses

The menu at the top is convenient, however, its lacking consistency. After using the drop down menu to navigate to a page there are no more text guides. Interface A is better for that reason

When tried to use the app using with out using the icons, I found myself looking specific terminology that just was not there. I prefer the icons on the navigation areas.

I preferred Interface B because it was easier to find the feature I was looking for, and the drop-down menus were more organized

I liked Interface B more because it was faster and more straightforward to navigate.

I like the drop down menu so I can quickly go to any section that I want to.

The drop down menu is great. I like it because I can access it at any point while using the app.

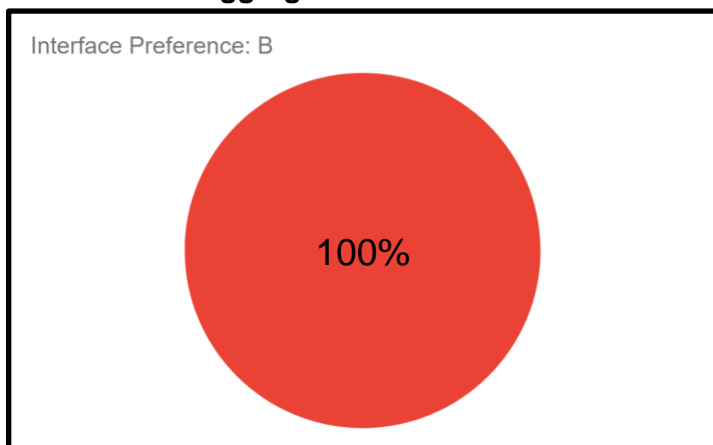
Although interface A is easy to use I like not having to guess what page each icon leads me to with interface B.

Team Member: Dayyana Wells

1. **Goal(s) of the experiment:** The goal of the experiment was to compare Interface A and Interface B. Interface A consists of fixed icons on the screen and Interface B is a navigation bar with drop-down menus. We want to compare them to see which can improve the usability and efficiency of our app.
2. **Methodology:** We are going to use within-subject which allows each participant to try out both Interface A and Interface B.
3. **Participants:** For our experiment we had 8 participants. Each member of the group was responsible for 2 participants.
4. **Protocol:** Same as above.
5. **Data Collection:** Verbal feedback and google docs survey.
6. **Data Analysis:**
 - a. **Numerical Comparison:**

Interface	Participant	Preference
A	1	B
B	2	B

b. Aggregate Data:



- c. **Thematic Analysis:** Both participants preferred Interface B. Participant 1 and 2 liked Interface B because they can access any part of the app at anytime.

7. **Observations and Discussion:** Interface B worked well in our experiment. Participants enjoyed the freedom of being able to do anything they wanted with the app.

Team Member: Syniah Peterson

1. **Goal(s) of the experiment:** The goal of this experiment was to compare interface A which is a fixed icon based navigation system vs interface B which is a fixed dropdown menu based navigation system to see which one better suits the applications intended audience.
2. **Methodology:** This experiment used within-subjects method to reduce the appearance of individual differences within the data as well as to ensure all users tested both interfaces.
3. **Participants:** This experiment had two people. Person 1 was 22 and Person 2 was 70.
4. **Protocol:** The task given to the users was to navigate to the notification page using interface A and interface B. The order of the product testing was counterbalanced with interface A and interface B. The users were informed that their feedback on completing their task was extremely important in modifying the app to better its usability. The users were asked questions after the experiment to gather more data.
5. **Data Collection:** The data collected included: verbal data, timing start to finish for the task, answer to post experiment questions, and users think aloud data.
6. **Data Analysis:**
 - a. **Numerical Comparison:**

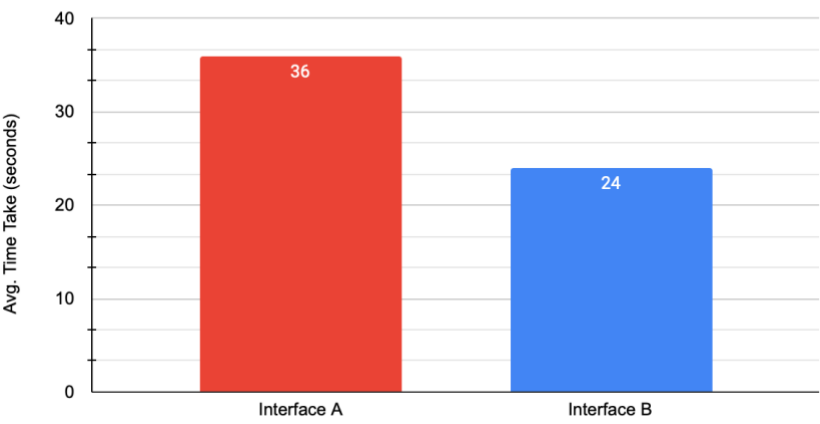
Interface	Average Time Taken	Avg. Errors/Hesitations	Avg. Rating
A	36 seconds	1	4.5/10
B	24 seconds	0.5	7.5/10

b. Aggregate Data:

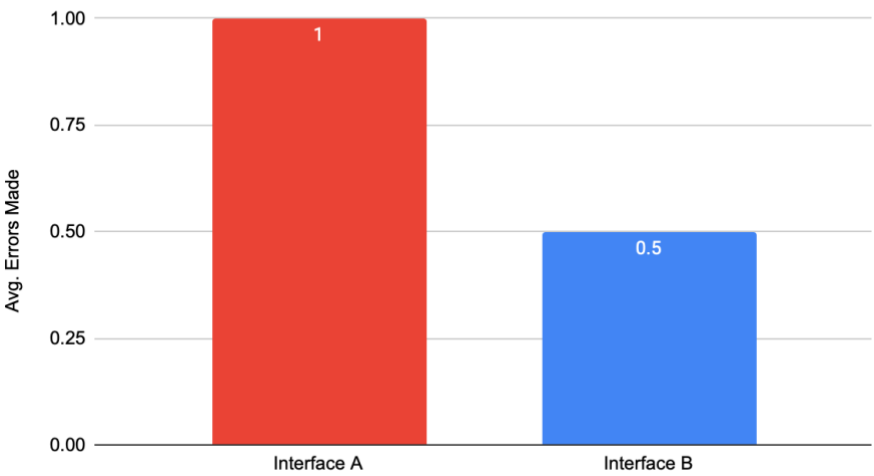
Which interface do you prefer?



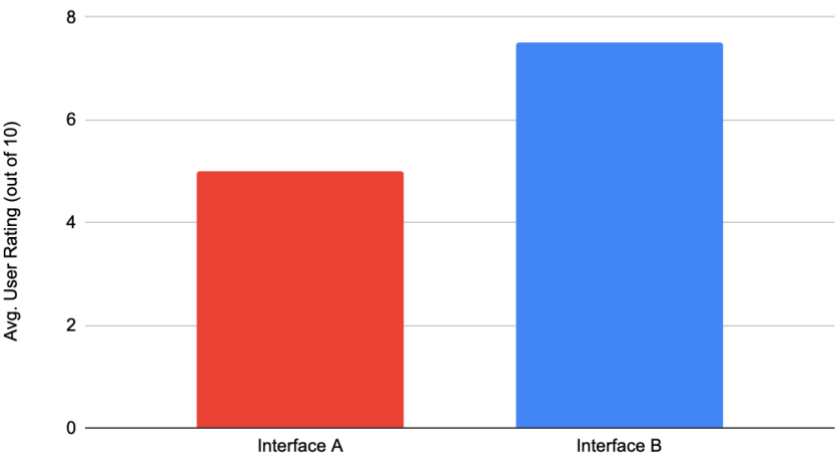
What was the average number of seconds taken to complete each task?



How many errors were made with each interface?



What do you rate each interface?



- c. **Thematic Analysis:** With interface A users took more time to navigate to the notification bell to see what notifications they had. Users reported that it was harder to know what page they were gonna land on with the icons because there were no words telling them which was which. With interface B users took less time to navigate to the notification bell to see what notifications they had. Users reported that it was easier to navigate to a page because they knew what would happen when they clicked on one of the drop down menu options.
7. **Observations and Discussion:** Interface B outperformed interface A as far as time and general user feedback. The users were happier and less confused meaning they made fewer errors with interface B so I would suggest change interface A to incorporate the fixed drop down menu navigation system as it would cut down on time to complete a task and would not stress the customers, especially the older market.
8. **Appendix:**
Q: Which interface did you prefer and why?

A1: "Both interfaces were easy to use I just prefer interface A because of the icons. Icons are less work. I can click an icon and get to where I want faster than looking for the page name in a drop down menu."

A2: "Interface A wasn't too bad but I like words more than pictures so I know what page I will get to if I click something."

Q: How would you rate navigating to the task using interface A?

A1: 9

A2: 1

Q: How would you rate navigating to the task using interface B?

A1: 7

A2: 8

Think Aloud Data:

A1: "The icons are fast and the pictures are descriptive enough for me to find out where I need to go."

A2: "I'm confused...what does that mean?... I don't know how to do this. Which one do I click on?"

B1: "The icons were faster than searching in a drop down menu."

B2: "This is better I just click the words and I know where its going. The other one had me confused. Now, I like this. I can just click the words."