Group 4

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INSC 430

November 24, 2024

Usability Testing Report

Introduction

For our product, we wanted to take the existing app Pinterest and make it more accessible for those who are visually impaired. Our prototype includes added accessibility features including color contrast, focus feature, text-to-speech, and personalized text size to the photo-sharing application Pinterest. While we preserved the main interface of the application, we added these features to make it more accessible for users with visual impairments. The main feature of our prototype is the "Accessibility" menu added to the existing settings page. Our purpose for the usability testing focuses on analyzing the metrics for our system based on successes, failures, and errors. We will be looking at how accessible our added functions are and how they enhance or inhibit user experience. From the data collected, we will finetune our system in order to match user needs.

Methodology

The target participants of our usability test are Pinterest users who are visually impaired, including people who may be color blind, partially blind, legally blind, or any other form of impairment. We want to assess how successfully our prototype accommodates those who are visually impaired and adjust our prototype in order to suit their needs. We will be testing the application across different devices and models, including the website version of Pinterest and

the mobile app along with different devices such as phones, laptops, or other devices that can access Pinterest. Our test environment will be our classroom and our test subjects will be peers. For our test, we will first ask our participants to fill out a pre-test survey where they will share their age, whether they have any form of visual impairment, and their familiarity with Pinterest as an app. We will then provide them with our prototype and ask them to complete a series of tasks. During this, we will record the time it will take them to complete our set of tasks as well as note any feedback given during or after the tests. Our tasks for our participants will be to access the Accessibility tab in Pinterest's settings and toggle the accessibility features within the tab, including the color contrast settings, the focus feature, the text-to-speech setting, and the text size adjustment feature. After they complete the tasks, participants will be asked to fill out a post-test survey where they will share their thoughts on the new features we added to Pinterest and give recommendations on how we could alter these new features in order to provide a better user experience.
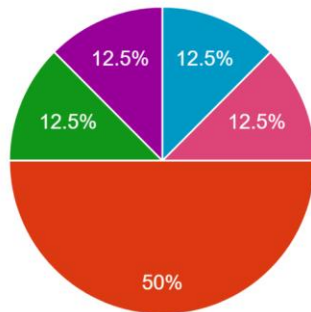
Findings

Pre-Test Survey

How often do you use Pinterest?
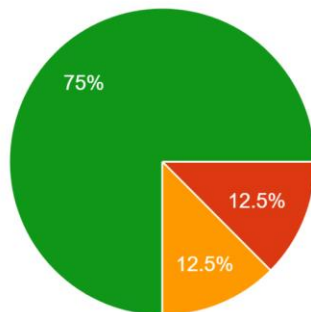8 responses
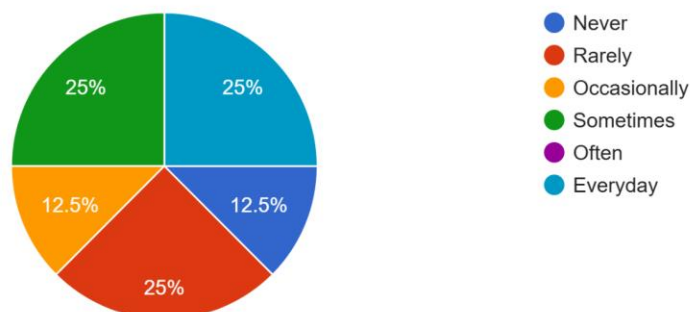
What do you use Pinterest for?
8 responses

- Business
- Leisure
- School
- Gift ideas
- Cooking
- watching some pictures while using google search
- Not a user

12.5% 12.5% 12.5% 12.5% 12.5% 50%

What technology do you use Pinterest regularly on?
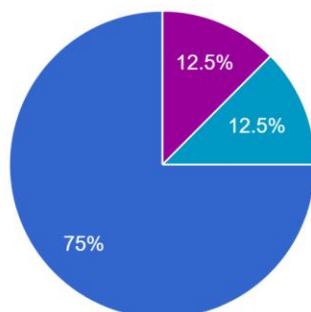8 responses

- Desktop
- Laptop
- Tablet
- Smartphone

75% 12.5% 12.5%
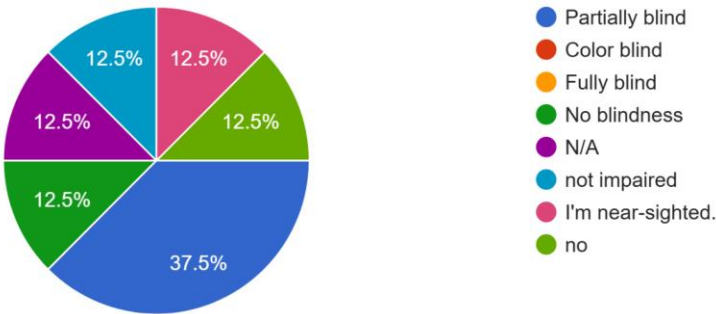
What features of Pinterest do you use the most?
8 responses

- Pinterest boards
- Creating pins
- Collages
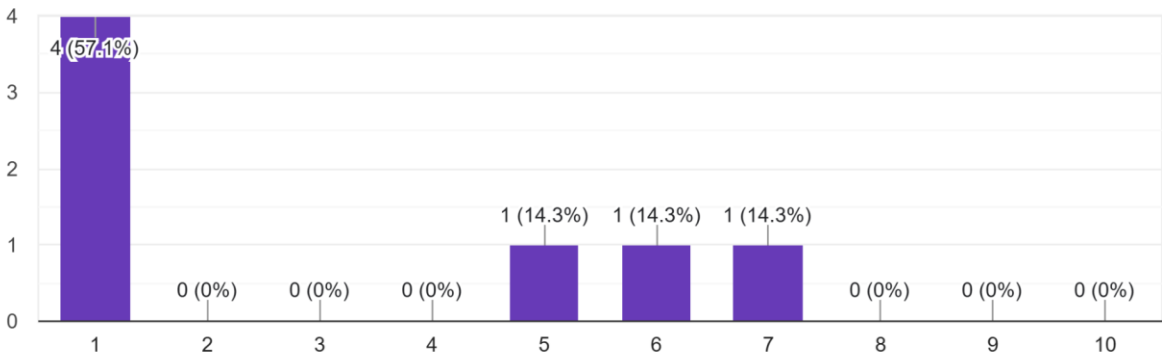- Messaging
- Browsing
- I am not a regular user

12.5% 12.5% 75%

Are you visually impaired?
8 responses

- Partially blind
- Color blind
- Fully blind
- No blindness
- N/A
- not impaired
- I'm near-sighted.
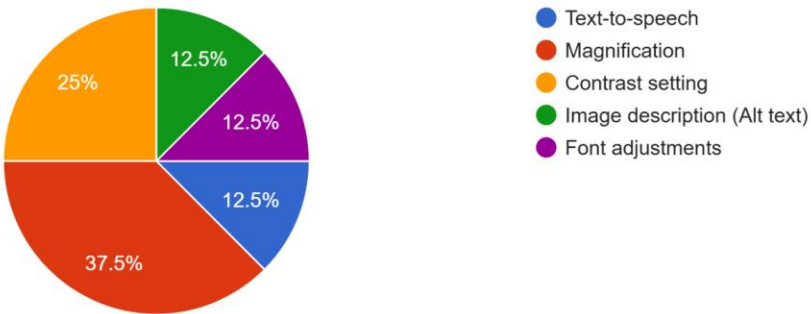- no

12.5% 12.5%
12.5% 12.5%
12.5%
37.5%

How accessible would you consider Pinterest board on your visual impairment?
7 responses

What accessibility features do you consider essential in a digital product?
8 responses

- Text-to-speech
- Magnification
- Contrast setting
- Image description (Alt text)
- Font adjustments

12.5%
12.5%
25%
12.5%
37.5%

Post Test Survey

I think that I would like to use Pinterest frequently.
7 responses

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

28.6%
28.6%
14.3%
14.3%
14.3%
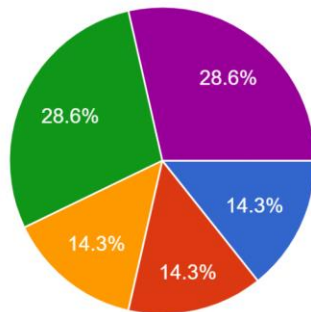
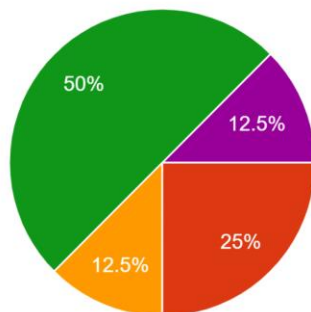## I found Pinterest unnecessarily complex.
8 responses

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
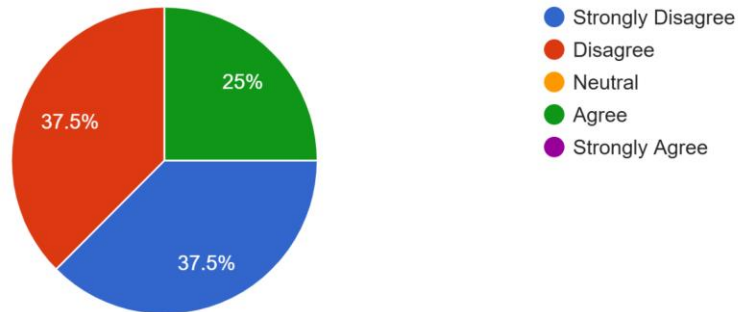
12.5%
87.5%
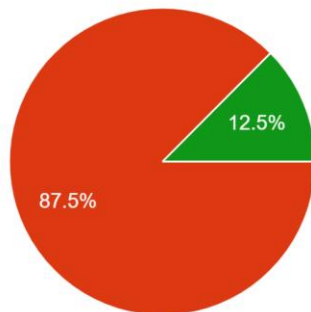
I thought Pinterest was easy to use.
8 responses

- Strongly Disagree
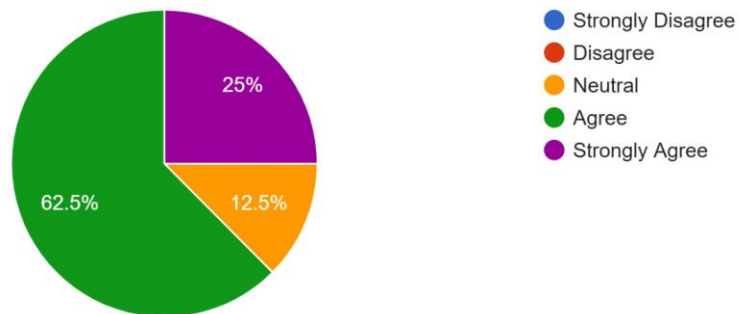- Disagree
- Neutral
- Agree
- Strongly Agree

50%
12.5%
12.5%
25%

I think I would need the support of a technical person to be able to use Pinterest.

8 responses

Legend	
🔵	Strongly Disagree
🔴	Disagree
🟠	Neutral
🟢	Agree
🟣	Strongly Agree

- 25%
- 37.5%
- 37.5%

I found the various functions in Pinterest were well integrated.

8 responses

Legend	
🔵	Strongly Disagree
🔴	Disagree
🟠	Neutral
🟢	Agree
🟣	Strongly Agree

- 25%
- 12.5%
- 62.5%

I thought there was too much inconsistency in Pinterest.

8 responses

Legend	
🔵	Strongly Disagree
🔴	Disagree
🟠	Neutral
🟢	Agree
🟣	Strongly Agree

- 62.5%
- 12.5%
- 25%
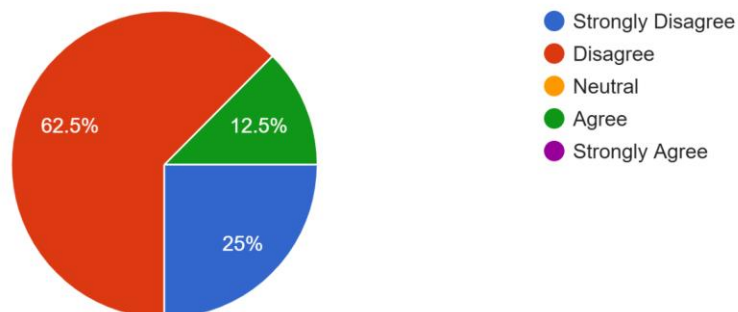
I would imagine that most people would learn to use Pinterest very quickly.

8 responses

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

62.5% 12.5% 12.5% 12.5%
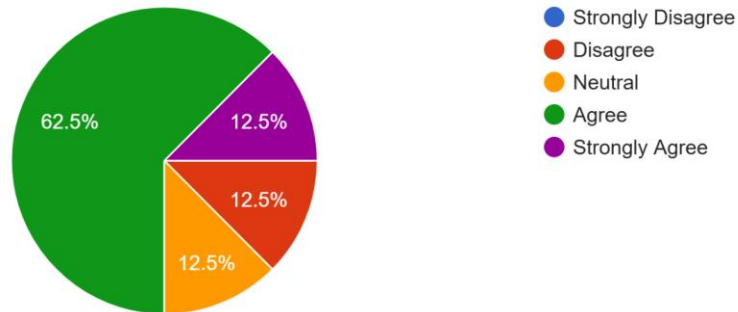
I found Pinterest very cumbersome to use.

8 responses

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

75% 12.5% 12.5%
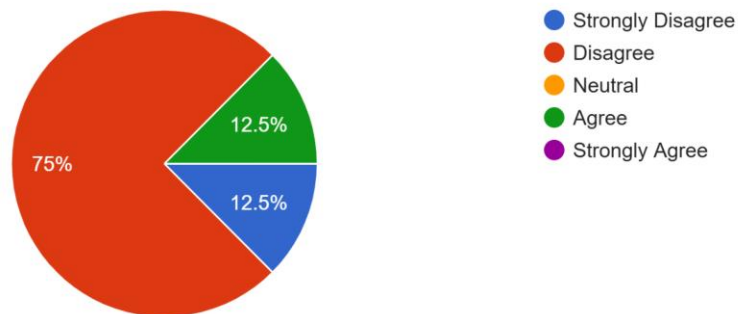
I feel confident using Pinterest.

8 responses

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

25% 62.5% 12.5%
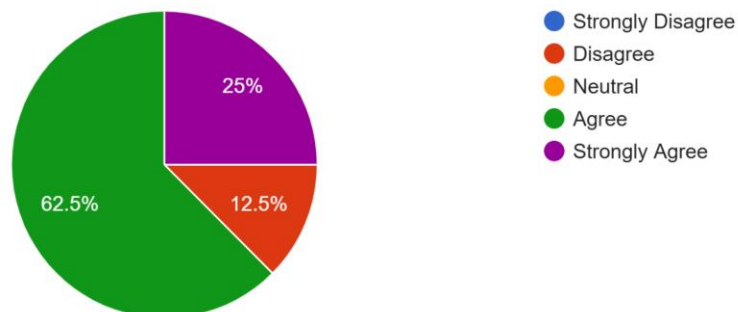
I need to learn a lot of things before I could get going with Pinterest.
8 responses

- ● Strongly Disagree
- ● Disagree
- ● Neutral
- ● Agree
- ● Strongly Agree
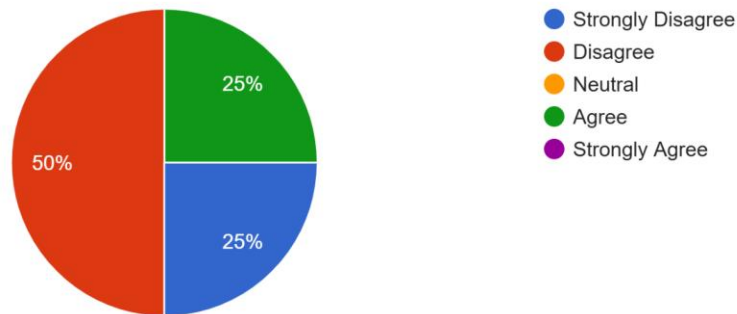
For our testing, we managed to survey participants with various types of visual impairment as well as participants who did not have any form of visual impairment. We found that most of our participants were already familiar with Pinterest and used it fairly frequently. The device that the users used the most when on Pinterest was a smartphone. After we asked participants to perform our tests, we got feedback on our prototype and our added accessibility features. Most users found that it was easy to use the app and that they felt they would not need any additional help to figure out the functions. While many were confident, there were some users that felt otherwise or were neutral on the matter. We found that users who were not familiar with Pinterest had a hard time finding the accessibility option in the Pinterest app and recommended a gear icon to make it more obvious to find settings. Overall, user feedback was positive, but there are still some outliers that we would need to adjust our prototype for.

Recommendations

The most requested recommendation after our testing was to adjust the font size feature we implemented in our new "Accessibility" tab. Participants found it difficult to toggle between smaller and larger font sizes and recommended that the buttons for different text sizes be larger

in order to make the function more accessible and easier to use. Additionally, we found that users who were not familiar with Pinterest had a harder time navigating the new functions we added to the app compared to other users. In order to adjust for this, participants recommended we add a feature such as a walk-through or something similar so that users who had never used the Pinterest app had some form of guidance.

Conclusion

In conclusion, this project aimed to enhance the accessibility of Pinterest for individuals with visual impairments by incorporating features such as color contrast, focus mode, text-to-speech, and adjustable text sizes. While most participants found the prototype relatively easy to use, some - particularly those unfamiliar with Pinterest - experienced difficulty locating and utilizing the new features. Key recommendations included increasing the size of the font adjustment buttons and adding a walkthrough feature for first-time users. Overall, the feedback we received was positive, and these suggestions will be considered in future iterations to further improve the accessibility of Pinterest for visually impaired users.