

Swole Patrol

Introduction:

This milestone is about the evaluation of the Swole Patrol application. We got various people to test out our application. We had different types of testing such as heuristic, cognitive walkthroughs, think alouds, predictive evaluation, retrospective testing. Alongside that, we had a questionnaire for people to do for specific evaluations.

Heuristic Evaluation:

Testing:

Participant 1	<u>Problem</u>	<u>Severity Rating (0-4)</u>
System Status	After adding a reply on the forum, the reply should show up the forum	2
	The back on the workout log doesn't work	4
	Leaderboard title could be on the yellow title bar	1
Language & Metaphors		
Control & Freedom		
Consistency	The add buttons are different sizes on different pages and color coded differently	2
Error Prevention		
Recognition over recall		
Flexibility & Efficiency		
Aesthetic & minimalistic design		
Recognize Diagnose Recover from error		
Help	The profile pictures on the forum could be clickable to	1

	see what sort of exercise the person usually does/specialized	
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Participant 2	<u>Problem</u>	<u>Severity Rating (0-4)</u>
System Status		
Language & Metaphors		
Control & Freedom		
Consistency		
Error Prevention		
Recognition over recall	You would have to use the application multiple times in order to remember which icon to click to navigate to a specific page.	2
Flexibility & Efficiency		
Aesthetic & minimalistic design		
Recognize Diagnose Recover from error		
Help	There is no help or FAQ section in the application.	1

Participant 3	<u>Problem</u>	<u>Severity Rating (0-4)</u>
System Status	none	0
Language & Metaphors	none	0
Control & Freedom	none	0

Consistency	none	0
Error Prevention	none	0
Recognition over recall	none	0
Flexibility & Efficiency	none	0
Aesthetic & minimalistic design	Maybe slightly outdated design	2
Recognize Diagnose Recover from error	none	0
Help	none	0

Participant 4	<u>Problem</u>	<u>Severity Rating (0-4)</u>
System Status	Everything works, whatever doesn't work has been clearly stated as such	0
Language & Metaphors	Not Enough Words in the Menu option	3
Control & Freedom	Pretty easy to use	0
Consistency	consistent.	0
Error Prevention	Not many errors	0
Recognition over recall	Need some recalling	1
Flexibility & Efficiency	Not many shortcuts	2
Aesthetic & minimalistic design	Well designed	0
Recognize Diagnose Recover from error	No errors encountered	0
Help	Not visible (at least to me)	2

Participant 5	<u>Problem</u>	<u>Severity Rating (0-4)</u>
System Status		0
Language & Metaphors	There should be more words on the menu. This would help the user to know what each icon does.	2
Control & Freedom		0
Consistency		0
Error Prevention	There are multiple screens that have not been implemented yet.	1
Recognition over recall		0
Flexibility & Efficiency	I don't see very many shortcuts that more experienced users would enjoy.	2
Aesthetic & minimalistic design	I don't really like the colors but I do like the circular menu	1
Recognize Diagnose Recover from error		0
Help	It may take some time to learn the icons. Some documentation would help	1

Results:

The result from doing the heuristic evaluation has shown different functionalities that we have to change for the application. Overall, there were a few problems from a heuristic standpoint for our application, but overall it wasn't too bad. There were some issues with the status update for the application, but that was because of the prototype limitation of linking the pages together. In the final application, updating the forum will be implemented. Also we have to move some of the titles to keep the consistency and the status page correctly. Lastly, we need to

make sure every button works correctly since there was one back button that was set up correctly. For language and metaphor, one thing we are going to change is have the name of what the menu buttons appear if hover over, or when the menu buttons pop up. Also for consistency, we will be changing some of the buttons to have similar design such as the add buttons. Some of them are different throughout the pages, and we will be fixing that up. For recognition, we need to change up the design of our application so that users know what to do immediately without having to keep using the app over and over again. Some of these issues pop up when using the menu buttons and remembering what they do. For flexibility and efficiency, we don't have that many shortcuts for advance users, but we plan on finding ways to create shortcut for users that have more experience with the application. For the aesthetics of the design, our design does look outdated, but what we will be doing is looking a more modern designs and try to implement a design that uses up to date visuals. Lastly, we need to have a help documentation so that people that need help will know how to use the app. This may be like a step by step guide to help the user understand how the app works.

Cognitive Walkthrough:

- Q1: Will users understand how to start this task
- Q2: Are the controls conspicuous?
- Q3: Will users know the control is the correct one?
- Q4: Was there feedback to indicate the task was complete?

Task and Steps:

Sync Apple Health

- Enter user name in user name field Q1:Yes Q2:Yes Q3:Yes(says username)Q4:Yes
- Enter password in password field Q1:Yes Q2:Yes Q3:Yes(says password)Q4:Yes
- Click the login button Q1:Yes Q2:Yes Q3:Yes Q4:Yes (takes you to main page)
- Hit Hamburger Menu Q1:Possibly (Menu is the only button on the screen) Q2:Yes Q3:Yes Q4:Yes (Icons are displayed)
- Click Settings Icon Q1:Yes Q2:Yes Q3:Yes(Is a universal setting icon)Q4:Yes
- Switch Apple Health from off to on Q1:Yes Q2:Yes Q3:Yes Q4:Yes

Ask a Forum Question

- Hit Hamburger Menu Q1:Possibly (Menu is the only button on the screen) Q2:Yes Q3:Yes Q4:Yes (Icons are displayed)

-Click Forum Icon Q1:Yes Q2:Yes Q3: Possibly(Icon is a question mark which can be mistaken for help instead of forum) Q4: Yes (Taken to forum page)

-Hit Ask Button Q1:Yes Q2:Yes Q3:Yes(Says ASK) Q4:Yes(Takes you to new question page).

-Type Question Q1:Yes Q2:Yes Q3:Yes (Big white thread box) Q4:Yes

-Hit Submit Q1:Yes Q2:Yes Q3:Yes Q4:Yes(submits the question and takes you back to the thread with question displayed).

Synthesis

Overall the majority of tasks are simple to access and complete for users. Most of the steps have written options to let the user know what to write or what clicking this button may do. The only problem that users may run into is mistaking some icons on the menu. For example, the “?” for the forum icon can be mistaken as a help icon to some users. Another example is that the icon for calorie counter is an apple that does not really say to the user that by clicking this you are going to the calorie counter. When evaluating this app from a user perspective I can see that we tried to make the app have more simplicity, but by doing so we may run into problems with universal icons to represent certain features. Other than that once you have clicked an icon on the menu each screen seems very simple to understand each task.

Predictive Evaluation:

Predictive Evaluation Tasks using KSLM:

Login

H - home in on mouse

P - find username

P1 - click

P - find password

P1 - click

P - find login button

P1 - click

$$H + 3P + 3P1 = 0.4 + 3(1.1) + 3(0.2) = 0.4 + 3.3 + 0.6 = 4.3 \text{ seconds}$$

Create Account (from login page)

P - find create account on login page

P1 - click

P - find first name

P1 - click

P - find last name

P1 - click

P - find birthdate

P1 - click

P - find height

P1 - click

P - find weight

P1 - click

P - find select gender

P1 - click

P - find correct gender value

P1 - click

P - find phone number

P1 - click

P - find create account button

P1 - click

$$10P + 10P1 = 10(1.1) + 10(0.2) = 11 + 2 = 13 \text{ seconds}$$

Check out leaderboard (from home page and worst case scenario)

P - find hamburger menu icon

P1 - click

P - find leaderboards icon

P1 - click

$$2P + 2P1 = 2(1.1) + 2(0.2) = 2.2 + 0.4 = 2.6 \text{ seconds}$$

Select Workout (from home page and worst case scenario)

P - find hamburger menu icon

P1 - click

P - find workout icon

P1 - click

M - make decision on muscle group to workout (let's use back for this case)

P - find rotate button

P1 - click

P - find back muscles

P1 - click

$$M + 4P + 4P1 = 1.35 + 4(1.1) + 4(0.2) = 1.35 + 4.4 + 0.8 = 6.55 \text{ seconds}$$

Ask a question (from home page)

P - find hamburger menu icon

P1 - click

P - find Forum icon

P1 - click

P - find Ask button

P1 - click

P - find the input section

P1 - click

P - find submit button

P1 - click

$$5P + 5P1 = 5(1.1) + 5(0.2) = 5.5 + 1.0 = 6.5 \text{ seconds}$$

Look at workout log (from home page and worst case scenario)

P - find hamburger menu icon

P1 - click

P - find workout log icon

P1 - click

$$2P + 2P1 = 2(1.1) + 2(0.2) = 2.2 + 0.4 = 2.6 \text{ seconds}$$

Forgot password (from login page)

P - find forgot password link

P1 - click

P - find input section

P1 - click

P - find send email button

P1 - click

$$3P + 3P1 = 3(1.1) + 3(0.2) = 3.3 + 0.6 = 3.9 \text{ seconds}$$

Add to calorie counter (from home page)

P - find hamburger menu icon

P1 - click

P - find calorie counter icon

P1 - click

M - decide if adding to lunch, dinner, or snacks

P - find plus icon in category (let's use lunch)

P1 - click

$$M + 3P + 3P1 = 1.35 + 3(1.1) + 3(0.6) = 1.35 + 3.3 + 0.6 = 5.25 \text{ seconds}$$

The predictive evaluation of these specific tasks was done using Keystroke Level Model since the testers of our application used a mouse to interact with the app. Tasks that were tested were ones that were integral for using the application from the login page and the main functions of the application. Left out are the tasks of using the timer, looking at your contacts, and logging out of the application. Since the user only has to home in on the mouse once really, it is only included in the KSLM of logging into the app. One really good attribute about our design is the circular menu that is all equal distance from the hamburger menu icon on our home page. According to Fitt's Law, objects that are closer and larger are easier to hit than ones that are smaller and farther. The equidistance of the icons definitely makes the processing of the icons and clicking them faster than the worst case scenarios presented by the KSLM evaluation conducted.

Retrospective Testing and Think Aloud Evaluation:

Retrospective Interview:

To conduct the retrospective interview, we read the instructions (provided below in the additional materials section). After reading the instructions and giving the user the tasks, we recorded, watched, and took notes as they completed the tasks. Once they finished the tasks, we asked the interview questions (also provided below in additional materials section) and had them complete the questionnaire.

Think aloud interview:

To conduct the think aloud interview, we again read the instructions (provided below in the additional materials section). After reading the instructions and giving the user the tasks, we recorded, watched, and took notes as they completed the tasks reminding them to talk as needed. Once they finished the tasks, we had them complete the questionnaire.

To get the overall gist of our app, we asked the users to do basic tasks in the main functionalities of the app. I think it helped people to get an idea of what our app did, but more specific tasks I think would have made the processor more clear and quicker. All the tasks we just our listed below in additional materials, and we chose these to test the main parts of our app. In both interviews, everyone finished most or all of the tasks. There were some users who were not able to complete the forgot password task.

After conducting the think aloud and retrospective interviews, it is obvious the good and bad about the app. Many of the users found the app aesthetically pleasing and loved the overall design. However, the majority of the users were confused by the menu and lack of labels. Also there were several times, users would repeat a task because they were not sure if it worked the first time so having more status updates would be very beneficial. Most of the users loved the body part of the app because it made it easier to select a body part to workout, especially for users new to working out. Another issue many of the users ran into was logging out, our next iteration should have a logout button on every screen to make it easy to access. Ordering the tasks differently or informing the user that they are allowed to logout would have been helpful for them to be able to complete all three tasks from the original login screen and made things more clear. These are just a few main points we learned from testing and how we could improve the app as well as the evaluation phase. The think aloud interviews were important because it was easy to pick up on their frustrations and what was confusing about the app when they spoke their thoughts; we found these to be one of the most helpful evaluations because we knew the exact point of frustration.

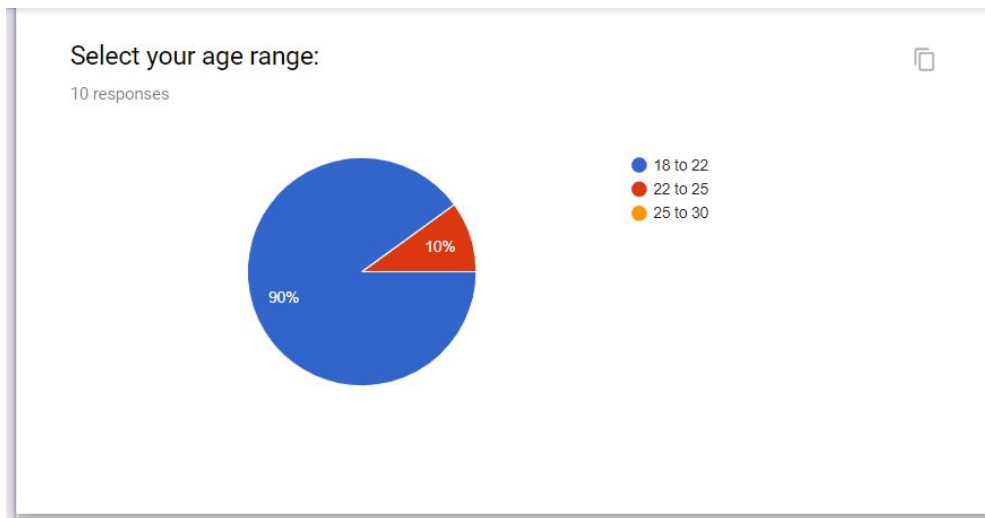
Demographics:

For the retrospective interviews and think aloud interviews, we interviewed 6 men and 4 women. Most of them were between 18 and 21, while one was between 22 and 25. Half of the users worked out once or twice a week, three of them worked out three or four times a week, and two of them worked out at least five days a week. All the users were either undergraduate students or not currently enrolled in school. Seven of them currently used a health app.

About Our Questionnaire:

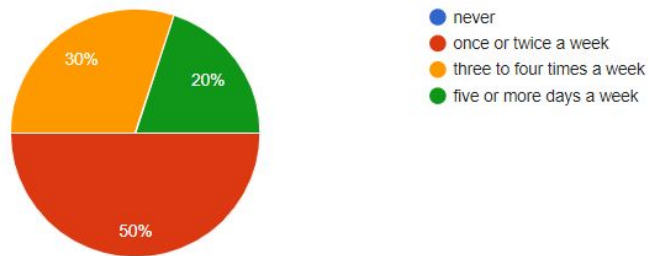
We conducted our questionnaire after our participants conducted their testing. We had a variety of questions that covered different parts of the application from different functionalities to the aesthetics.

Results: (Screenshots from form)



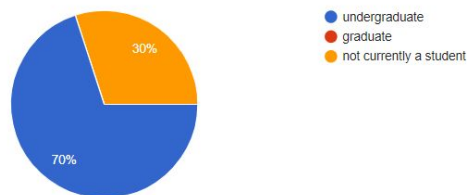
How often do you work out?

10 responses



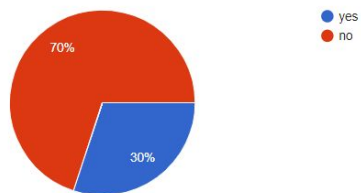
Select your degree program at UGA:

10 responses



Do you currently use any health or exercise apps on a regular basis?

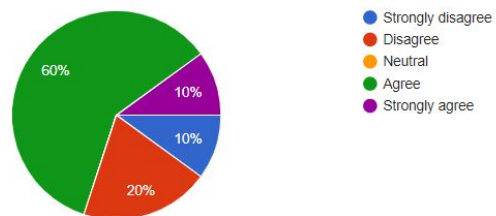
10 responses



The app was intuitive to use.

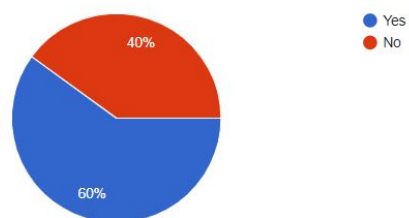


10 responses



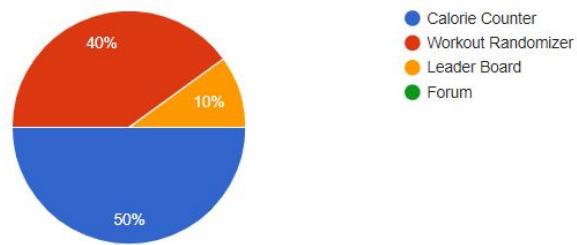
Did you enjoy using the app?

10 responses



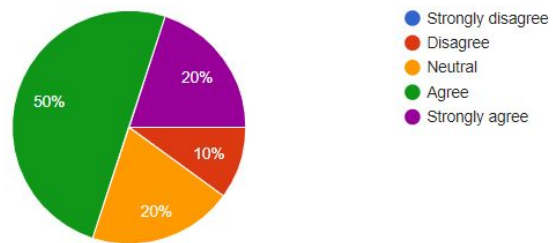
What aspect of the app did you feel you would use the most?

10 responses



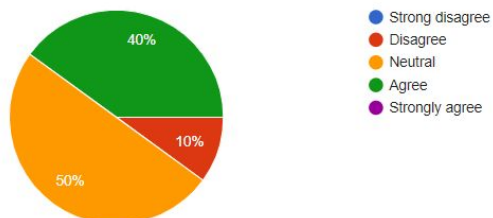
I found the calorie counter intuitive to use.

10 responses



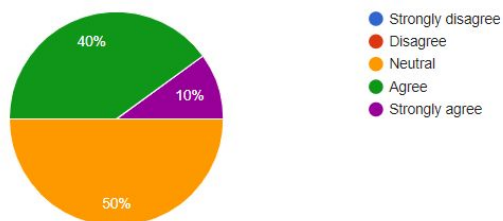
I found the leaderboard intuitive to use.

10 responses



I found the forum intuitive to use.

10 responses



Please rank the following components of the app from most to least useful in the text field below: Calorie counter, exercise randomizer, forum, leader board.

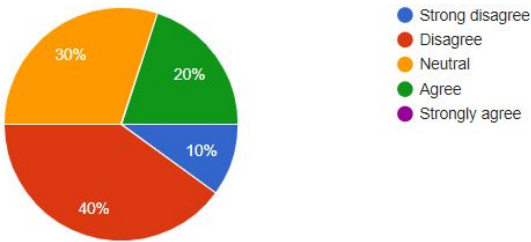
10 responses

CC, Exerise randomizer, forum, leaderboard
Exercise randomizer, calorie counter, forum leader board
Leaderboard Calories counter Exercise randomizer Forum
Leader board, forum, calorie counter, exercise randomizer
exercise randomized, calorie counter, forum, leader board
calorie counter, exercise randomizer, leader board, forum
Exercise randomizer, calorie counter, forum, leaderboard
Leader board, calorie counter, forum, exercise randomizer
Calorie, excercise, forum, leaderboard
Calorie counter, exercise randomizer, forum, leaderboard

I disliked the way the app looked.

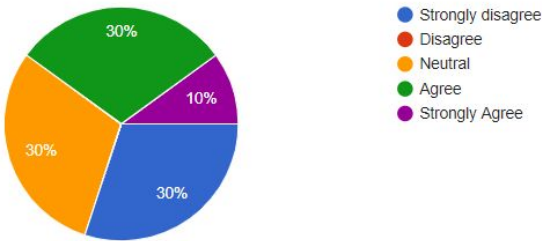


10 responses



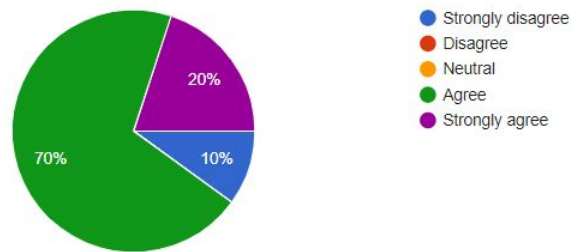
Getting the app to work correctly felt simple.

10 responses



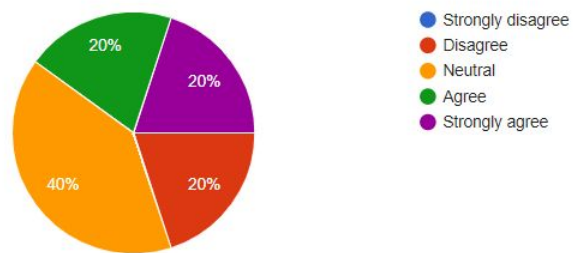
There are things I would change about the app.

10 responses



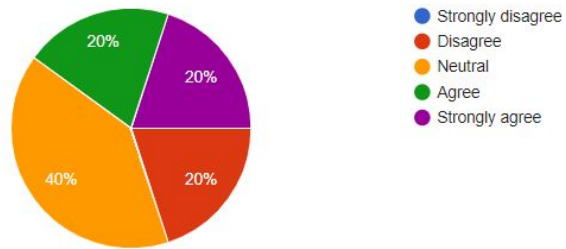
The color scheme was visually appealing.

10 responses



The color scheme was visually appealing.

10 responses



It took several attempts to make a feature of the app work like I wanted.

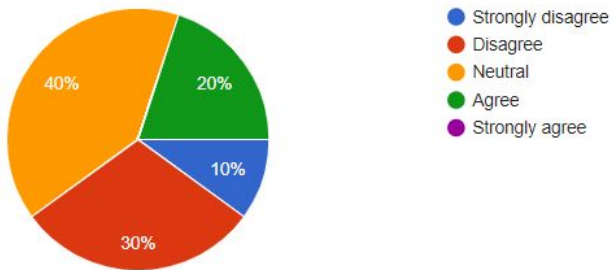
10 responses



I felt that some features could be removed to simplify the app.

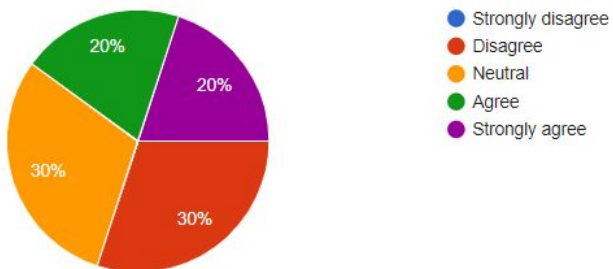


10 responses



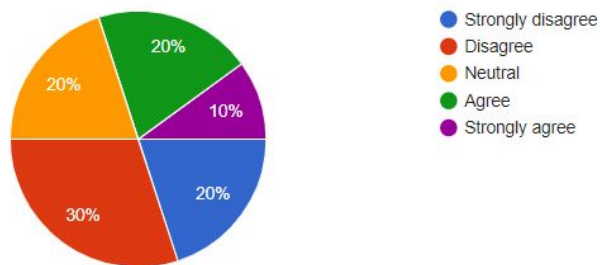
The process of testing the app was confusing.

10 responses



I would download and use this app on a regular basis.

10 responses



Please let us know how you would change any part of the app to be easier to use.

10 responses

Change the colors
Providing directions on how to use the app once signed in. Maybe a tutorial.
Label small menu when mouse hovers
I would add more instructions
finding the forgot password
add labels to the app so you know what the heck you were doing
Add labels when you hover over a button
Labeling and change everything
Have people verified on the forum so people aren't giving improper advice.
I have no suggestions

Please leave us additional comments on how we can best improve the app.

10 responses

Please change the colors
App was a success just some minor tweaks and you're in good shape!
I liked it
Make it pretty or something
labeling some of the symbols
N/A
None
I wish I knew
Good
Make it prettier!!

Future Plans:

Given another semester to work on our app, there would be several things that we would implement in addition to what we already have completed. We would add features like ‘forgot password’ so that logging in would be easier for the user. We would also need to add a more intuitive log out feature on every page. Since the menu seemed to confuse a lot of the users, we would label our widgets so that navigating the app was more intuitive. Also, we would give more status updates to the user so that they knew when they successfully completed a task. Lastly, we would change the appearance and color of the application. We were trying to experiment with a more calmer color scheme and design, but people prefer for us to change the way it looks. We would definitely consider changing and experimenting with the design and see which one people enjoy more. Once all these changes were made, we would then run more user evaluations to make sure the changes made things better for the user. And from those evaluations we would make more edits if the users evaluated revealed any other issues that needed our attention.