User Experience (UX) Research Report for the Jefit website

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Executive Summary

Background

"User Experience (UX) encompasses all aspects of the end-user's interaction with the company, its services, and its products." (Nielsen Norman Group)

This report is an evaluation of the User Experience for Jefit's website (jefit.com). Due to negative customer feedback, a detailed examination of it was required to determine the direction and parameters of a redesign. Various user research techniques were employed to evaluate the site's design, functionality, information architecture, and content.

Based on the insights from this research this report concludes that the site design lacks focus on the most important goal of the users, to build an exercise routine and navigate the site to learn exercises, evaluate reports, and connect with members in the Jefit community. To address this issue, a refreshed design with an easy to navigate structure and functionality is necessary. A list of recommendations for the redesign is included in this report. These recommendations will help the site to more successfully meet user needs and expectations as well as support Jefit's business and marketing goals.

Summary

Methods used for Evaluation
For this UX evaluation the following activities were performed: Competitive Analysis, User Interviews, Surveys, Persona & Scenario generation, Card Sorting, Value Proposition Generation, Concept Model development, and Usability Testing.

Analysis
The data from the methods used for evaluation validates that the current Jefit website is not laid out in a way that makes the most sense to its users. Problem areas are most notably the top and side menus, Routine Workout Builder, and Exercise Builder.

From a Competitive Analysis, Jefit offers a wider variety of features to its users with its Routine and Exercise builder and photographic progress tracker then its competitors. Its strengths over the competition are that it has a large and supportive user social networking community, an easy to navigate area for viewing exercises for specific body parts, and a large number of generated reports for tracking progress. Unfortunately, the website suffers from a cluttered interface, numerous ads, and unclear navigations and paths.

From Usability Testing, the general consensus among participants were: the site was confusing for building a routine with workouts due to redundancy of the same buttons existing in different areas, a lack of visual ques to identify their progress in building a routine, and a lack of backward navigation buttons. Setting up a routine of workout days with exercises was problematic among users, with 1 participant not even being able to complete the task. All participants stated the website had too many ads which resulted in it feeling cluttered, "sketchy," and being unclear with who owned the website (i.e. Nike was on all the ads creating a sense that the website belonged to Nike).

Recommendations

It is recommended to change the information structure to be more consistent with the users' mental model for a fitness website. If Jefit were to incorporate unique features and well-designed areas of its competitors, the website would offer more value and be easier to interact with for its users.

Based on the analysis methods used for evaluation, the following is recommended for the new design of the site:

- Organize features and information by the following architecture:
  - Jefit Member Community
    - Friends
    - Shared
      - Shared by Me
      - Shared With Me
      - Status
      - Photos
      - Blog
      - Activity Feed
  - My Jefit
    - Routine Manager
      - My Routines
      - Featured Routines
    - Workout Plans
    - My Reports
      - My Logs
- Rename Blog to "Jefit Blog" and create an additional "My Blog" area.
- Remove "Exercise Database" feature and incorporate it into the "Exercises" feature.
- Incorporate "Routines" into "Workouts" and redefine and refunction the "Workouts" feature.
- Increase functionality for "My Logs" to allow users to see past routines and performance.
- Visually differentiate more between "Logs" and "Reports."

- Add more functionality to "My Custom Exercises."
- Add definitions of exercise types (i.e. compound, isolated, etc.) to the site.
- Consolidate the side and top menus
- Redesign the Routine feature
- Redesign exercise setup
- Reduce and re-layout ads
- Add an ability to meal plan
- Add nutrition recommendations
- Add nutrition calculators
- Add videos to exercise demonstrations
- Add live classes with time of day selections
- Consolidate Workout Plans, Exercises, and My Jefit into the side menu. Move all side menu buttons to the top.
- Redesign the Routine area so Frequency and selecting days/day number are in the same area rather than having to go to another page. Implement a calendar view for day selection.
- Create a Save button and/or progress indicator. Create a layout that shows the different days of the week in the same area.
- Refunction the Jefit Member area by consolidating the Suggested Friends and Active Jefit User area. Add a section on the Member area with a search bar to find other members.
- Add functionality to "Friends" area to allow connected members a way to challenge and hold each other accountable.
- Add functionality to "Friends" area to allow connected members to more easily share photos and routines with each other.

About the Site

"Jefit Inc. is focused upon creating a unique exercise product that keeps our users motivated and inspired to continue with their fitness goals. Jefit was founded in 2010 and is based in Sunnyvale, California. It is one of the most heavily visited fitness websites online. Jefit was formed out of the need for a unique exercise program that allows users to define their own workout program based on their own need" (Jefit)

The website is targeted toward an audience of all skill levels who are focused on their fitness. For less than the price of having to hire a trainer, the Jefit website gives users the ability to manage and track their workout all in one place. Their database is made up of over 1300+ workouts, allows users to connect with over 9.7 mission Jefit members, ability to view progress, and even receive coaching. (Jefit)

Requirements

For Business, the website:
- Shall offer products and services to the user to generate revenue
- Shall offer tiered subscriptions that offer additional features
- Shall allow managers to view open and closed bug tickets for customers
- Shall provide managers consistent and accurate data to see how users are interacting with the website
- Shall use colors and designs in accordance to the corporate style guide

For Marketing, the website:
- Shall offer a free tier version
- Shall provide rewarding congratulatory messages upon completion of workouts and fitness records to motivate users
- Shall be intuitive, responsive, and simple to use

For the User, the website:
- Shall have the following features:
    - Routine and Exercise Builder
    - Social Networking
    - Reports and logs
    - Exercise descriptions
- Shall have strong privacy and data protections
- Shall be easy to navigate

Background

Studying competitors through a Competitive Analysis is a way to see how a product compares both in terms of strengths and weaknesses. In this competitive analysis, Jefit was compared against its three top competitors: **Sworkit, Fiton,** and **Fitness Programmer**.

How the site compares to others

The Jefit website offers a wider variety of features to its users with its Routine and Exercise Builder and Photographic Progress Tracker. Its strengths over the competition are that it has a large and supportive user social networking community, an easy to navigate area for viewing exercises for specific body parts, and a large number of generated reports for tracking progress. Unfortunately, the website suffers from a cluttered interface, numerous ads, and unclear navigations and paths.
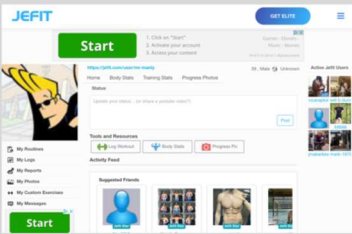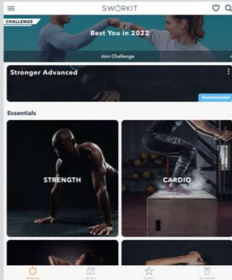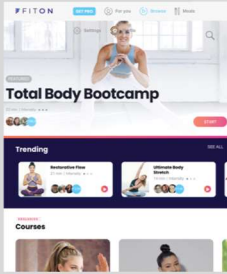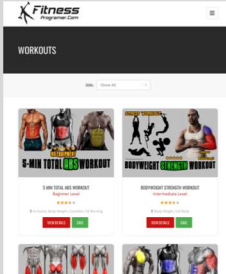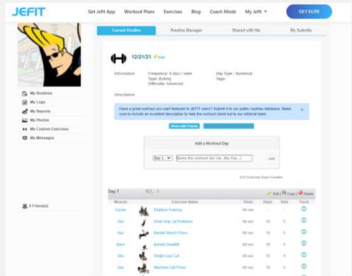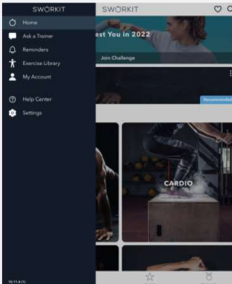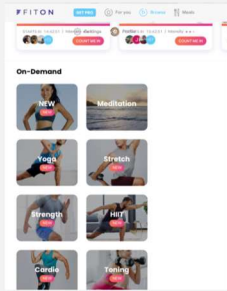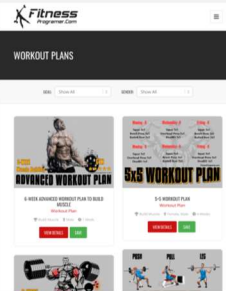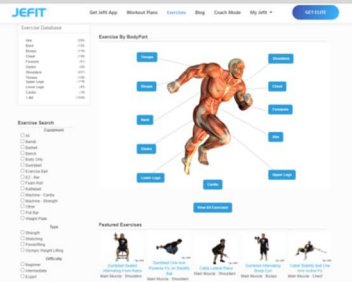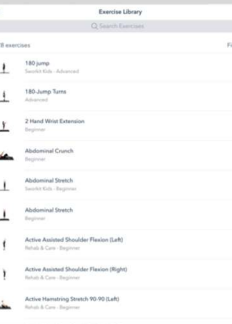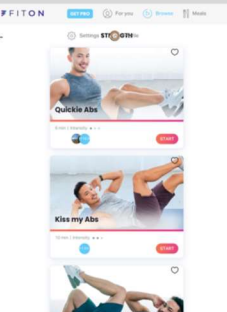
How the site would benefit from solutions from other sites

If the site were to incorporate unique features and well designed areas of its competitors, the website would offer more value and be easier to interact with for its users. Based on features competitors have, it is recommended to create the ability to add in meal planning, nutrition recommendations, and calculators. This is a large area that the site does not cover. Partnering up with the website MyFitnessPal would be a valuable strategic decision. Other recommendations include adding videos, rather than just .gifs to the site to demonstrate exercises, and adding in live classes with time of day selections.

Upon entering the Jefit website, the areas that are drawn to immediate attention are the large advertising and empty spaces. The main purpose of the website is to support users to view exercises and build their workouts and this functionality is visually minimal off to the side. Also, it is not obvious where to view different exercises. Viewing different exercises are a core feature of this site. These improvements would allow users to more quickly understand how to perform their primary tasks of setting up routines with exercises.

Competitor Analysis Cont.

Competitor Analysis Comparison Chart

	JEFIT	SWORKIT	FITON	Fitness Programer.Com
Company Info	JeFit https://www.jefit.com/	Sworkit https://sworkit.com/	FitOn https://fitonapp.com/	Fitness Programmer https://fitnessprogrammer.com
Core Features	• Workout routine creator • Exercise demonstrations • Progress reports	• Workout video selections • Trainer feedback • Workout reminders	• Group virtual classes • Meal planner	• Exercise demonstrations • Workout plans • Fitness and nutrition calculators
Unique features	• Custom exercise creator • Photographic progress tracker	• Unique workout plans (pre and post pregnancy and rehabilitation)	• Meal planning / recommendation area • Live, virtual fitness classes with other members	• Nutrition recommendations based on desired body type • Wide variety of fitness and nutrition calculators
Strengths	• Easy to navigate to workouts for specific body parts • Useful reports on past workouts and progress • Large, supportive user community	• Easy to browse all exercises with image representations • "Ask a Trainer" area for specific workout questions • Ability to set workout reminders	• Easy to select workout classes with user defined parameters • Live classes with time of day selections • Adequate list of Instructors and classes to choose from	• Easy to use fitness calculators • Motivational imagery throughout (muscle exaggerated characters) • Minimalistic layout
Weaknesses	• Cluttered interface • Many large sized advertisements • Unclear navigation buttons and paths	• Limited exercises types • Inability to create day based workout routines • Inability to create custom exercise	• Inability to create planned exercise routines • Inability to view single exercises • Meal planner has limited selection of foods	• Intimidating or unrealistic imagery • Limited pre-defined workout routines • Demonstration examples are only drawings that fade between starting and ending of exercise
Screenshots				

Background

User Interviews are performed to better understand user groups, to understand what features the user would find most valuable and why, and to validate Personas. Below is a script that will be performed at a later date for User Interviews.

Script

Introduction

<Greet participant and introduce yourself>

Thank you very much for your time! What you'll be participating in today is something called a "User Interview." Have you heard this term before? Basically we're asking people questions to help understand our potential users on our website Jefit and what features would bring them the most value.

Jefit is a fitness website that is focused upon creating a unique exercise product that keeps our users motivated and inspired to continue with their fitness goals. Jefit was founded in 2010 and is based in Sunnyvale, California. It is one of the most heavily visited fitness websites online. Jefit was formed out of the need for a unique exercise program that allows users to define their own workout program based on their own need.

Your participation in the activity will make our development easier and better to use for a large community of people. At the end of our session, as a small token of our appreciation, I'll be handing out a gift of your choice: a Starbucks gift card, Amazon gift card, or donation to a local charity. The session should take about 30 minutes and we want to let you know that there are no right or wrong answers.

If you have any questions as we go along, feel free to ask them. If you need to take a break at any point, please let me know. Do you have any questions so far?

Great! Again, thank you for your time!

Warm Up Questions

1. What's your name?
2. What types of hobbies are you into?

User Interview Questions

Fitness / Opportunities

1. How often do you work out in a week?
   - Follow up: What amount is in the gym vs at home or somewhere else?
2. How long do you work out?
   - Follow up: How intense is your workout?
3. What is your routine like? (percentage of weights vs cardio)
   - Follow up question: What types of weights and cardio do you perform?
4. What skill or fitness level do you consider yourself?
   - Follow up: What are your fitness goals?
5. What are your top challenges?
   - Follow up: For each challenge, what are things your do to combat that challenge?
6. What is your nutrition like?
   - Follow up: How do you stay on top of their nutrition?

Jefit / Competitors

1. How often do you use the Jefit website?
   - Follow up: How long have you used the Jefit website?
2. During a typical use, how long are you on the Jefit website?
   - Follow up: How do you usually access the Jefit website? (Phone, Tablet, PC, Mac, etc.)
3. What features do you use the most?
   - Follow up: Which features do you find the least valuable?
4. What similar types of websites do you use?
   - Follow up: What features do you use on those websites?
5. What similar types of websites do you use?
   - Follow up: What features do you use on those websites?

Wrap Up

1. To summarize your thoughts on the Jefit website, <state summaries>
2. Is there anything we didn't talk about that you would like us to know?

<Thank them for their time again>
<Bring back up the incentives for their time and that they are improving the Jefit website for not only themselves but for many other users>
<End interview>

Background

Surveys are a cost effective and easy way to reach a large group of participants quickly. The proposed survey should be unobtrusively prompted on the Jefit site after a successful login.

Survey Introduction

Hi! Thank you for completing our Jefit survey! This survey will help ensure that you and other users have a great experience with the Jefit website and that we continue to build features you find most valuable. In addition to helping improve the Jefit website, completion will earn you a $10 Amazon gift certificate. This survey will take approximately 5-10 minutes to complete.

Survey Questions

Introduction

1. How comfortable are you with using the Internet and Websites?

Very Uncomfortable		Neither Uncomfortable Nor Comfortable		Very Comfortable
○	○	○	○	○

2. How involved are you with online social networking? (1-5)

Uninvolved		Neither Uninvolved Nor Involved		Very Involved
○	○	○	○	○

3. Gender
   - ○ Male
   - ○ Female
   - ○ Other (Please Specify)

4. Age

12 or younger	13-19	20-30	31-40	41-50	51-60	61 or older
○	○	○	○	○	○	○

Surveys Cont.

Goals

5. What are your top 3 goals when interacting with the site?

≡	⬍	Setup workout routine
≡	⬍	Learn about workouts
≡	⬍	Interact with the Jefit community
≡	⬍	View progress (photos, reports, etc.)
≡	⬍	Other (please specify)

6. What are your top 4 fitness goals

≡	⬍	Gain muscle
≡	⬍	Lose fat
≡	⬍	Improve flexability
≡	⬍	Increase strength
≡	⬍	Increase endurance / speed
≡	⬍	Tone
≡	⬍	Look good
≡	⬍	Feel good
≡	⬍	Better health
≡	⬍	Other (please specify)

Surveys Cont.

Fitness/Challenges

7. On average, how many days do you work out in a week

0	1	2	3	4	5	6	7
○	○	○	○	○	○	○	○

8. On average, how many days do you work out in a week?

0	1	2	3	4	5	6	7
○	○	○	○	○	○	○	○

9. Where do you primarily work out?

○ Gym

○ Home

○ Outside

○ Other (Please Specify)

10. In a session, how many minutes do you work out with weights/bands?

0-15	16-30	31-60	61-90	91-120	121-180	Over 180
○	○	○	○	○	○	○

11. In a session, how many minutes do you work out with machines?

0-15	16-30	31-60	61-90	91-120	121-180	Over 180
○	○	○	○	○	○	○

12. What skill or fitness level do you consider yourself?

Beginner	Average	Advanced	Elite
○	○	○	○

13. How interested are you in nutrition?

Very uninterested	Uninterested	Neither uninterested nor interested	Interested	Very interested
○	○	○	○	○

14. What are your top 4 fitness challenges?

☰	⬍	Distance to gym
☰	⬍	Busyness of gym
☰	⬍	Gym hours
☰	⬍	Workout space
☰	⬍	Large enough selection of exercise equipment
☰	⬍	Free time
☰	⬍	Injury
☰	⬍	Lack of knowledge of workout
☰	⬍	Motivation
☰	⬍	Comfortability with working out around others
☰	⬍	Having a workout partner
☰	⬍	Other (please specify)

Jefit / Competitors

15. How long have you used the Jefit website?

0-1 month	2-6 months	7-12 months	More then 1 year
○	○	○	○

16. How simple is the Jefit website to use?

Very complicated	Complicated	Neither complicated nor simple	Simple	Very simple
○	○	○	○	○

17. How do you usually access the Jefit website?

- ○ Phone
- ○ Tablet
- ○ PC
- ○ Mac

18. What are the top 4 features you use the most?

≡	⬍	Workout Routine Creator
≡	⬍	Custom Exercise Creator
≡	⬍	Exercise Demonstrations
≡	⬍	Progress Reports
≡	⬍	Photographic Progress Tracker
≡	⬍	Jefit Community Network
≡	⬍	Other (please specify)
≡	⬍	None

19. What other Fitness websites do you use?

≡	⬍	Sworkit
≡	⬍	FitOn
≡	⬍	Fitness Programmer.com
≡	⬍	My Fitness Pal
≡	⬍	Apple Health
≡	⬍	Other (please specify)
≡	⬍	None

20. What top 5 features do you use on those websites?

≡	⬍	Trainer feedback
≡	⬍	Workout reminders
≡	⬍	Group virtual classes
≡	⬍	Meal planner
≡	⬍	Fitness and nutrition calculators
≡	⬍	Exercise demonstrations
≡	⬍	Progress reports
≡	⬍	Community social networks
≡	⬍	Other (please specify)

That's it! You're all done! Thank you for helping to make the Jefit website better for yourself and your fellow Jefit community members. A $10 Amazon gift card will be provided in the next screen.

Stay tuned for future updates on the Jefit website!

Personas & Scenarios

Background

Personas are fictional, general representations of primary user groups for a product. They allow for empathizing with a user group and help to identify their pain points, goals, and group characteristics. Three large user groups were identified for Jefit: **Experienced, Average,** and **Beginner** fitness skill levels. Each of these groups were further differentiated by characteristics of **age**, **goals**, **challenges**, and **technology** familiarity.

Scenarios and Use Cases were added to the Personas below. Scenarios help to set the stage on how the User Group may begin to experience and interact with the product. Use Cases demonstrate specific examples of their usage with the product.

Target User Group 1 – "Boris"

BORIS - THE BEAST
"NO PAIN, NO GAINS!"

About
- Age: 35
- Gym Frequency: 6-7 days a week
- Location: New York, New York
- Experience Level: Hardcore lifter
- Gender: Male

Technology
Internet / Websites ● ● ● ○ ○
Social Networks ● ● ● ○ ○
Software ● ● ● ○ ○

Goals
- Gains! (even bigger muscles)
- Being noticed by others in the gym
- Win competitions

Challenges
- Finding new workout routines
- Heavy enough weights
- Consuming enough protein

Scenario
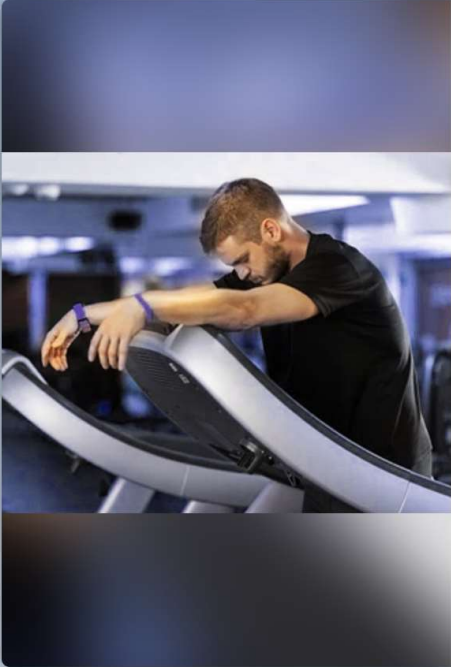
Boris needs to create a new workout routine. He is bored of his current workout and wants to do something new and challenging. His goal is to feel the burn and really make his muscles pop. The results will ultimately give him the attention he craves at the gym.

Use Cases

1. Boris logons onto Jefit.com
   - He accesses Jefit.com through his PC
2. Boris decides to look at the different exercises on the website
   - He navigates to the Exercises tab and selects various body parts from a human figure
3. He begins by researching exercises he hasn't done before that looks challenging
   - He can scroll up and down to see many workouts complete with images, descriptions, and names
4. He reads about various exercises and watches videos and images to learn how to perform each one
   - Boris selects the exercises to view supporting media
5. He finds exercises for every body part and creates his entire routine
   - While selecting exercises, he selects the "+ add to routine" button
6. Even though Boris is experienced his curiosity has him reviewing the Featured Exercises area which are highly recommended exercises from the Jefit user community
   - He looks at the bottom of the screen
7. Boris builds up his routine by adding exercises and compares how long each workout will take
   - Each work out day is shown in the Routine area. At the top is a description of that work out day along with the estimated time to complete the workout
8. Boris fine tunes his workout by adjusting how many reps, sets, and weight he would like to perform
   - Selecting an exercise in his routine, he can navigate to inputs like a scroll wheel to quickly adjust numbers
9. He uses the website throughout his workouts at the gym and can easily see how to keep pushing himself through not only the new exercises but by also increasing the reps, sets, and weight daily
   - Boris can easily view previous reps/sets/weight used in previous days for the same exercise
10. After his workouts, Boris views logs of past workouts, reports of any progress, inputs his body stats, takes photos to see his improvements, adds in his own customer exercises, and messages other Jefit users
    - The side and top areas of the website offer reports and stats to view

Target User Group 2 – "Ivan"

Ivan – The Intermediate
"Fitness is for everyone"

About
- Age: 17
- Gym Frequency: 3-5 days a week
- Location: Dallas, Texas
- Experience Level: Intermediate
- Gender: Male

Technology
Internet / Websites
Social Networks
Software

Goals
- Better health
- Run longer distances
- Feel good

Challenges
- Distance to drive to gym
- Busy gym
- Work Schedule

Scenario

Ivan needs to look at his progress chart to see the number of his personal records he's broken. He uses the information to stay energized and to push himself to the next level. His goal is to keep running further and faster.

Use Cases

1. Ivan logons onto Jefit.com
   - He accesses Jefit.com through his PC
2. He navigates to Jefit's reporting area
   - He selects "My Reports" on the left side of the screen
3. He looks for the desired report
   - He selects the "Overall Reports" tab on the top of the screen and then scrolls down to the "Records Broken" area
4. Ivan views his records
   - He views the speed and distance of his past runs

Target User Group 3 – "Nancy"

Nancy - The Newbie
"I hope no one is watching me"

About
- Age: 55
- Gym Frequency: 1-2 days a week
- Location: Sheboygan, Wisconsin
- Experience Level: Beginner
- Gender: Female

Technology
Internet / Websites ● ● ○ ○ ○
Social Networks ● ● ● ● ○
Software ● ○ ○ ○ ○

Goals
- Lose weight
- Eat better
- Improve flexibilty

Challenges
- Not knowing what to do
- Motivation
- Hurting herself
- Creepy guys at the gym

Scenario

Nancy needs to look at leg exercises and determine which ones she will do today at the gym. She is unsure of how to perform the exercises and wants to watch reference images for proper form. Her goal is to build up her legs and burn some calories.

Use Cases

1. Nancy logons onto Jefit.com
   - She accesses Jefit.com through her PC
2. She looks at the different leg exercises on the website
   - She navigates to the Exercises tab and selects the leg body part from a human figure
3. She looks at reference images and reads descriptions of various leg exercises
   - She selects a leg exercise and opens up large views of real people performing the exercise. She scrolls down to read the steps and descriptions of the exercise
4. Nancy "favorites" the exercise for quick viewing later at the gym
   - She clicks on the star next to the exercise
5. During her workouts at the gym Nancy goes back to the Jefit website to quickly review what she has favorited
   - She selects the My Jefit tab and sees her favorited exercises

Card Sorting

Background

Card sorting is a UX activity for understanding the users' mental model of an information space. It consists of representing information on individual cards and then asking target users to categorize these cards into groupings that makes sense to them (Baxter, 2015). The motivation for conducting this activity was to improve the information architecture of the Jefit website.

Method

Participants

The study consisted of four participants of ranging:

- Experiences with fitness websites and apps
- Gym usage
- Gender
- Age

Only one of the participants was familiar with the Jefit product. An equal number of participants categorized themselves as familiar or unfamiliar with fitness websites and apps. An equal number of participants identified themselves as low or high gym users. All participants identified themselves as familiar with using computers and websites.

Recruitment was based on specific criteria. The screening profile required that users:

- Could not work for a competitor
- Were over 18 years of age
- Demonstrated proficiency in the language used in the card sort

Participants were recruited over the phone and volunteered their time.

Card Sorting Cont.

Materials

Cards contained a name and description and users had the ability to write in category names. Figure 1 shows a sample card from this activity and provided description of how the description was displayed when the card's information "i" is selected.

Figure 1 Sample card and provided description upon selection.

Procedure

Before the Cart Sort, participants were informed that the purpose of the activity is to help better organize a fitness website called Jefit. To make sure participants were aware of fitness terms used on the Jefit website and in the card sorting, definitions were given beforehand for the terms Exercise, Workout, and Routine.

Participants were ask to provide their name, age, gender, and to answer the questions below:

- Are you familiar with Jefit?
- Do you use any type of fitness websites or apps? If so, which ones?
- From a scale of 0-5, how familiar are you with computers and websites? (0 as having no experience and 5 as being very experienced)
- What is your average gym frequency for a week?

Participants were told that they would receive a link to a digital activity that involved organizing and categorizing information used on the Jefit fitness website. An example of categorization was provided with categorizing a German Shepard to a dog group and a Siamese cat to a cat group and both the dog group and cat group could be categorized under a mammal group. They were informed that there are no right or wrong answers, to categorize information as they see fit, and to think out loud as to provide the moderator with an understanding to their thought process.

Card Sorting Cont.

The activity was performed by giving a link to the participant to a digital card sort on the OptimalSort website. The moderator spoke to participants over the phone before the activity and throughout the experience. Instructions were given by the moderator and were included on the website.

Card Terminology

The definitions below were provided either verbally before the activity or on the card itself:

Concept definition provided verbally before cart sort activity:
- Exercises: a fitness activity (such as a bench press, jogging, bicep curl, etc.)
- Workout: A combination of exercises for a day
- Routine: A combination of workouts for a week

Card definitions provided on the card when "i" was selected:
- Activity Feed -- Suggested "friends" from the Jefit community and their posts
- Bench Press exercise -- An exercise that works out the chest
- Blog -- Articles related to fitness and health
- Chest muscle -- A muscle specific to the chest
- Current Routine -- The selected routine you are currently using
- Exercises -- Different types of exercises for every body part
- Exercise by Body Part -- An area to access exercises specific to a muscle (i.e. Bench Press for the chest)
- Exercise Database -- A listing of Jefit exercises for all body parts
- Featured Routines -- Special Routines put together by Jefit for its members
- Exercise Type -- The type of exercise (Strength, Stretching, Powerlifting)
- Friends -- Members of the Jefit community whom which you are connected
- My Custom Exercises -- Exercises that were not listed in the exercise database that you developed
- My Jefit -- Access workouts, reports, and items specifically for you
- My Logs -- A list of your past workouts
- My Photos -- Images taken of yourself to show progress
- My Reports -- An analysis and breakdown of your past workouts and records
- My Routines -- These are where all of your compiled workouts exist
- Routine Manager -- View, edit, and select your saved routines
- Shared With Me -- Routines you have saved from other Jefit members
- Status -- A place to upload a post or media to share with the Jefit community
- Workout Plans -- View precompiled workouts (i.e. upper body workouts with running)

Cart-Sorting Process

A moderator was present during the card sorting and provided guidance and answers to participants questions. The moderator also asked questions to the participants on why cards were sorted a particular way and on their thought process throughout the sorting. Participants worked individually throughout the session and cards were randomized with each participant. At the start of each session, the OptimalSort website walked participants though the instructions. The cards to sort were displayed on the left hand side of the screen (Figure 2). It was pointed out that each card had an "i" symbol that when clicked would give a description of the card's name.

Card Sorting Cont.
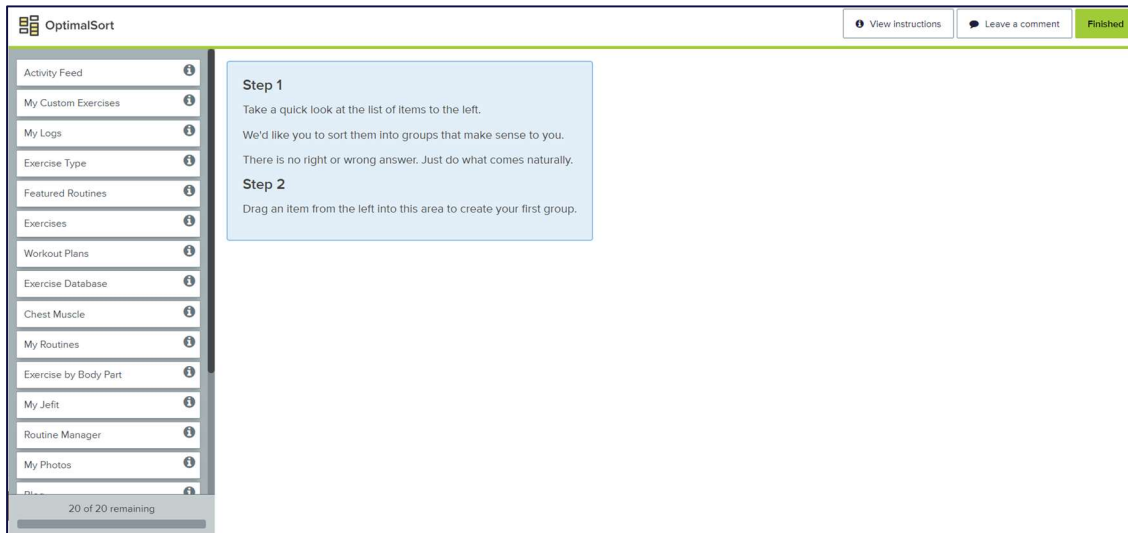
Figure 2 *Card Sort Table*

Participants first sorted the cards into logical groups by dragging them from the left to right of the screen onto an empty canvas (Figure 3). Dragging the card onto an empty space would create an empty category box where users could fill in the category name. Additional cards could be dropped into the same category box or into a new box. Cards inside of a category could be freely arranged. It is important to note that the software did not allow for sub-grouping of cards.
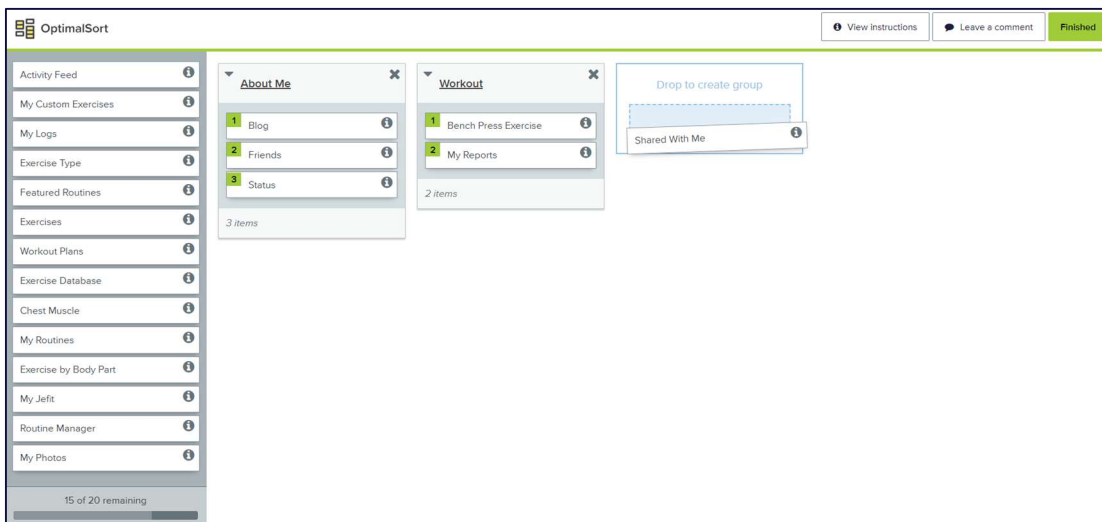
Figure 3 *Example of using the OptimalSort application*

Card Sorting Cont.

Results

Sorting Data

The card-sorting analysis was performed by OptimalSort's website through many different methods, most notably the Similarity Matrix and Dendrogram. The results of these methods can be used as a guide for determining a new menu structure.

The Similarity Matrix (Figure 4) is used to identify the strongest card pairings and potential groupings. For each pair of cards, the intersecting cell shows the percentage of participants who grouped these cards together. (OptimalSort). For example, Figure 5 shows "Blog" and "My Photos" were grouped together by participants 100% of the time.

Figure 4 Similarity Matrix Analysis

Figure 5 Similarity Matrix Blog / My Photos cards grouping

The Dendogram Best Merge Method (Figure 6) makes assumptions about larger clusters based on individual pair relationships (OptimalSort).

Card Sorting Cont.

Figure 6 *Dendogram*

Participant Comments

The card sorting activity was held as a "think aloud" where participants provided feedback on their thought process while sorting either through prompting or their own accord. The comments below are highlights from participants that reflected their groupings.

Participant Number	Comment
1	"…I would want to see only 3 main areas. One being a Custom Area for myself, two a Social Media type area, and three an area that has General Database type stuff."
2	"…I would like to see the Photos area for social media, friends, and the activity feed used to help with accountability."
3	"…I would use Photos to take pictures of workouts and routines I like and to share them in my Friends area to friends I meet at the gym."
4	"…I would expect to see all the exercise related stuff together in just the Exercise area."

Overall, most participants explained that they would group social media element together similar to how they would see it on Facebook.

Card Sorting Cont.

Card Sorting Table of Recommendations

This table provides a recommended information architecture for the menu and sub-menu of the Home page.

Menu Name	Sub-Menu Objects	Comments and Recommendations
Friends	Shared With Me	From the results of the card sort and discussions with the participants, the Friends area should provide a way to challenge and hold each other accountable and to easily share photos and routines with each other.
Blog	My Photos Activity Feed Status	Many participants used the Blog menu as a way to blog themselves. The original intent of the Blog area was a way for Jeffit to blog to its community. Depending on the future purpose of the Blog area, recommendation is to rename Blog to "Jefit Blog" and create an additional "My Blog" area.
Exercise Database		Many participants grouped Exercise Database all by itself. Based on this item's intent and how participants are viewing it as a separate entity, it seems to be unclearly understood. Recommendation is for it to be removed and its function to be incorporated into the Exercises menu item.
My Routines	My Reports Workout Plans Featured Routines My Jefit	Participants had confusion on the differences among Routines, Workouts, and Exercises. Recommendation is to incorporate Routines into Workouts and redefine and refunction Workouts on the website.
My Logs	Routine Manager	Recommendation is that My Logs will be used to see past routines and performance. Also recommend adding more information on the website to differentiate between logs and reports to Jefit users.
My Custom Exercises		Recommend adding more functionality to My Custom Exercises to give it more value for users
Exercises	Exercise Type	Recommend adding definitions of exercise types (i.e. compound, isolated, etc.) to the site to educate users
Exercise by Body Part	Chest Muscle Bench Press Exercise	To avoid having many unnecessary cards to sort, only "Chest Muscle" and "Bench Press Exercise" were specific muscles and workouts added to the card deck. The majority of participants grouped these cards and menu together.

Figure 7 Layout Results

Card Sorting Cont.

Conclusion

Figure 7 greatly demonstrates the mindset of participants in how they interpreted areas and what they would expect to see and do in specific areas. The data validates that the current Jefit website is not laid out in a way that makes the most sense to its users. It is recommended to change the information structure to the layout results to be more consistent with the users' mental model for a fitness website.

Lessons Learned for Future Cart Sorting Activities

- **What went well:**
    - Analysis was easier and more constructive when turning on OptimalSort's feature that required participants to create headings on groups as oppose to the ability to leave group names blank.
    - User evaluation of 20 cards took only 10 minutes, faster than anticipated. This included time for a comfortable pacing of questions and read aloud.
    - Asking participants background questions on themselves and providing background information to them on the card sort beforehand allowed a natural ease into the card sorting activity. This also gave the moderator a clear picture on the participant and their thought process.
    - Asking participants their "gym frequency" was more objective in analyzing then asking "how experienced" were they with the gym."
    - Having the moderator listen for feedback during the card sort and prompting for thought processes was a good way to understand rationale during the sorting as oppose to checking in with the participant at the end and requesting their synopsis.

- **Opportunities for improvement:**
    - The card sorting software OptimalSort was limited in functionality. Would recommend chosing another software or enrolling in a higher tier functionality next time. Limitations of the software included:
        - Users were unable to make subcategories
        - Moderator was not able to include definitions beforehand on the card sort website.
    - Even though definitions were explained beforehand it appeared that participants were unclear on the differences among the terms exercises, workouts, and routines.
    - Even though the activity only took 10 minutes on average, upon participant's initial observance of the amount of cards, many felt 20 cards to look tedious. Recommendation is to have less than 20 cards at the initial sorting next time and if more cards are needed, break out the activity into separate events.

Value Proposition Generation

Background

The Value Proposition (VP) addresses what problem a product will solve and what kind of customer needs it solved the most (Levy, 2015). Having a VP identified supports the product and business model throughout development. Stakeholders and team members are able to give buy in and work together to create a common solution.

Value Proposition Generation is a systematic method that follows the guide of:
"For (target customer) who (need or opportunity) our (product category) that (statement of product/service name) is (statement of benefit)." (Pannafino & McNeil, 2017)

Value Proposition:
Using this methodology, Jefit's VP should be written as the following:

"For **fitness conscious individuals** who **need to lose weight, gain muscle, or increase their stamina**, the **Jefit** product is a **fitness tool** that **enables fitness minded individuals to create a workout routine, track progress, and interact with other Jefit members for motivational support.**"

Concept Model

Background

The Concept Model is a graphic that can help to show relationships of a complex process (Pannafino & McNeil, 2017). It can also be used for many different types of representations. It can show how users interact with the software and how they work. It is used to understand how and why a user may interact with the product. This map can show connections and patterns that will help your product support them.

The current layout, verified by 3 rounds of usability testing, has a confusing and inconsistent information architecture and is difficult to use. Below is a proposed layout of the Jefit website based off the card sorting activity's resulting dendrogram, similarity matrix analysis, and user interviews:

Jefit Website Proposed Concept Model
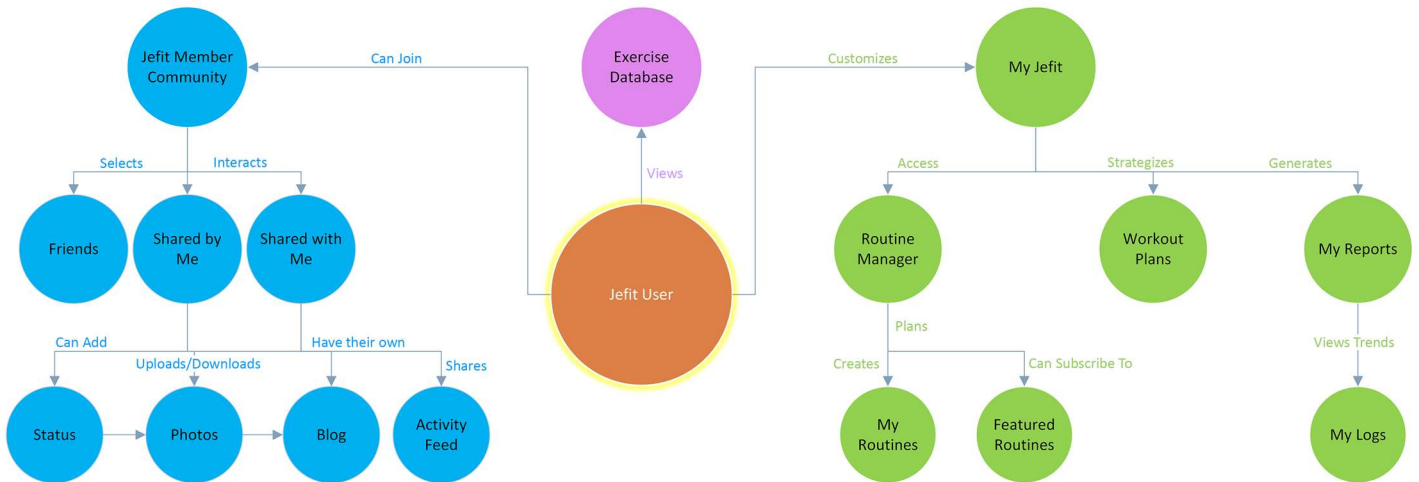
Usability Testing

Background

The purpose of Useability Testing is to understand how users interact with a website and to see where challenges exist. This is done by giving individuals tasks to perform on the website and observing their actions and spoken thought process. During this activity, the facilitator used Zoom to capture screen interactions, audio, and video of the participants.
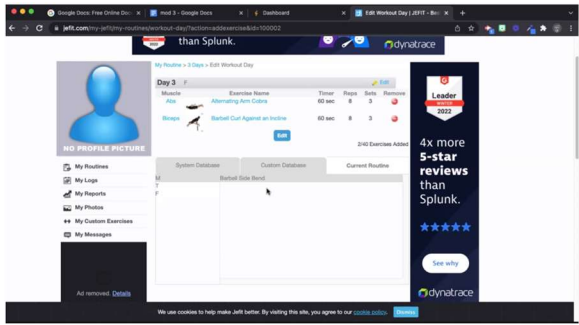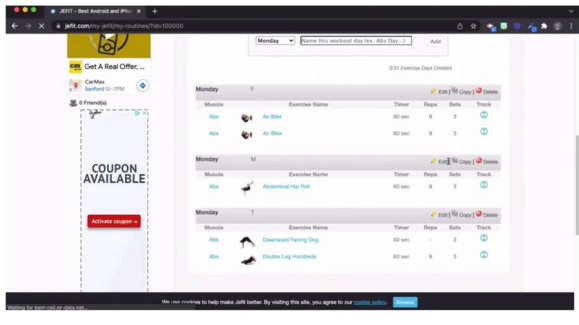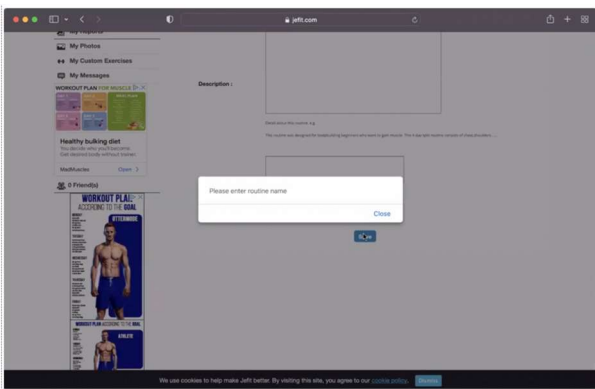
Summary

This activity conducted the usability testing for 3 participants of varying gender, age, and occupation. Participants were asked to complete 6 common tasks on the website. The sessions took about 30 to 45 minutes each. Participants were given background information on Jefit and gave consent to having themselves recorded. They were asked several background questions before the testing. Their activity and comments were noted during the testing, along with the completion rates for each task. Throughout the session participants spoke out loud to reveal their thought process and were prompted for feedback when needed.

Overall, the general consensus with participants were: the site was confusing for building a routine with workouts due to redundancy of the same buttons existing in different areas, a lack of visual ques to identify their progress in building a routine, and a lack of backward navigation buttons. Setting up a routine of workout days with exercises was problematic among users, **with 1 participant not even being able to complete the task**. All participants stated the website had too many ads which resulted in it feeling cluttered, "sketchy," and being unclear with who owned the website (i.e. Nike was on all the ads creating a sense that the website belonged to Nike).

Usability Report Cont.

Participants

Participants consisted of 2 males and 1 female and ages ranged from late 30s to late 40s. The occupation mix was: Educator, Insurance Auditor, and Retail Employee. Even though none of the participants knew of Jefit, they all used fitness apps and the majority of them workout at least 1 day a week. They spent an average of 10 - 60 hours a week on the computer and websites for work and personal shopping.

Participant	Screenshot of Testing Session
Participant 1: Female, late 30s, Teacher	
Participant 2: Male, late 30s, Insurance Auditor	
Participant 3: Male, late 40s, Retail Employee	

Usability Report Cont.

Results

Analysis by Task

All participants were able to complete Tasks 1,2,3,4, and 6. Participants struggled with Task 4, 5, and 6 with Participant 3 not able to complete Task 5.

Time to complete task (in minutes), Completion Rates

Participant	Task 1 Find and Add a Friend	Task 2 Find Breakdown Report	Task 3 Filter Exercises	Task 4 Look up an Exercise	Task 5 Create a Routine	Task 6 Add Exercise to Routine
1	0.04	0.14	0.58	2.03	4.15	0.56
2	0.33	1.10	4.10	2.10	2.05	0.29
3	3.10	3.05	0.57	0.58	5.10*	5.13
Total Time	**3.47**	**4.29**	**6.05**	**6.11**	**11.30**	**6.38**
Completion Rates	**100%**	**100%**	**100%**	**100%**	**66%**	**100%**

* Indicates task was **not** completed

Problem Areas

- Top and side menus
- Routine workout builder
- Exercise builder

Recommendations for Improvement

The following recommendations, if implemented, would help improve the function and look of Jefit's website. The recommendations are based on the participants' comments and efforts to complete tasks in the usability test sessions.
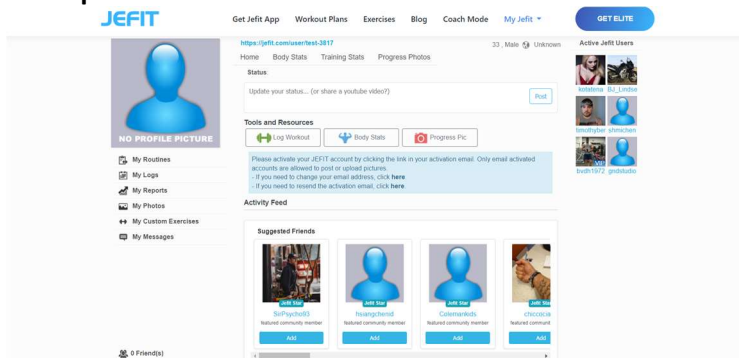
- Consolidate the side and top menus
- Redesign the Routine feature
- Redesign exercise setup
- Reduce and re-layout ads

Usability Report Cont.

Recommendation 1: Consolidate the Side and Top Menus

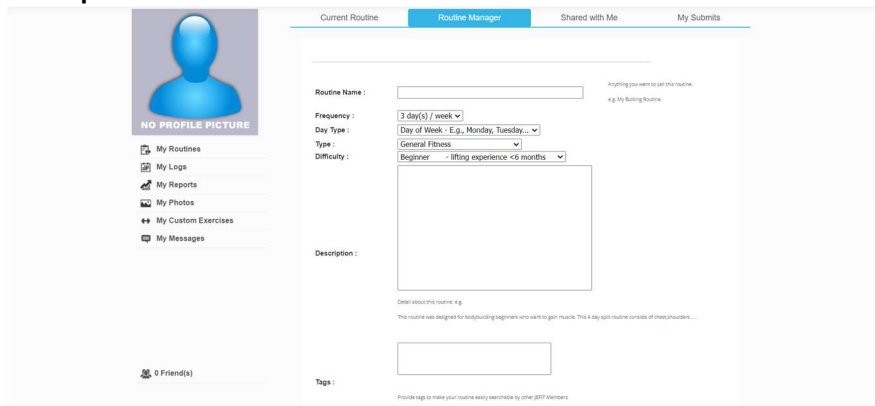| Severity	Change	Justification
High	Consolidate Workout Plans, Exercises, and My Jefit into the side menu. Move all side menu buttons to the top.	Participants were confused by seeing similarly named menu buttons on both the top and side menus. Consolidating the menus would allow more room for a functional work space in the middle of the page.

Example:

Recommendation 2: Redesign the Routine Area

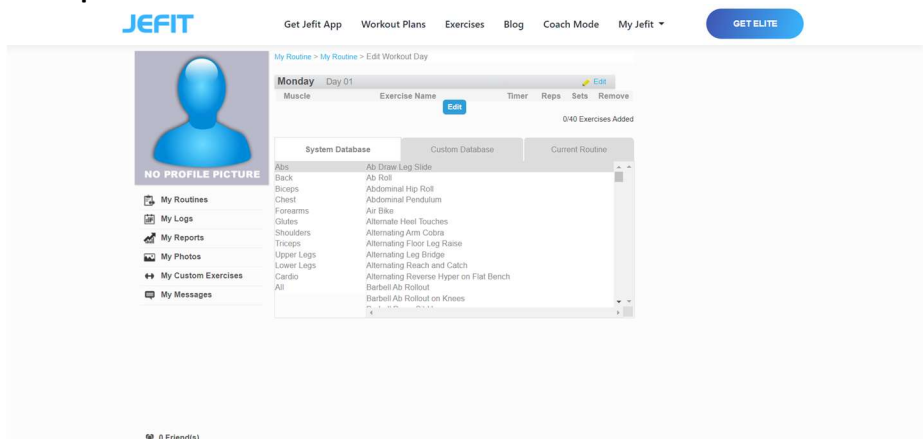| Severity	Change	Justification
High	Redesign the Routine area so Frequency and selecting days/day number are in the same area rather than having to go to another page. Implement a calendar view for day selection.	Participants were confused by the Routine Area and process in general. The Frequency drop down area and process of manually creating days in a separate page were unclear to them and they expected it to give them the ability to complete everything in one area. One participant could not complete a task of creating a Routine with days due to task complexity.

Example:

Recommendation 3: Redesign Exercise Setup

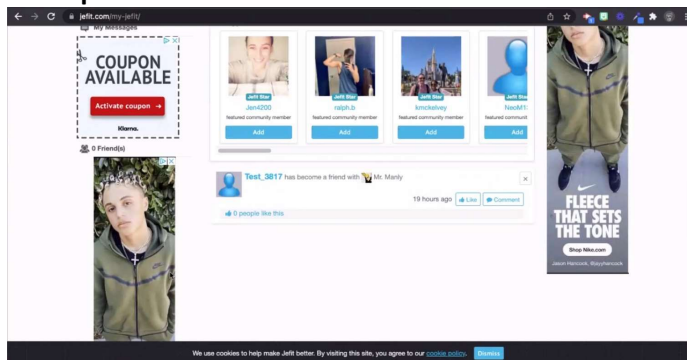| Severity	Change	Justification
High	Create a Save button and/or progress indicator. Create a layout that shows the different days of the week in the same area.	All participants were unclear if their inputs were being saved and struggled with adding exercises to different days of the week. All participants expected to see a back button symbol on the interface. Two participants were unclear with what the exercises were in the list.

Example:

Recommendation 4: Adjust Ads

| Severity	Change	Justification
High	Reduce the number of ads and limit them to only one area of the page. Adjust ad content so one product doesn't show in all ads.	Participants stated the home page looked cluttered and they were disorientated by the high number of ads. The ads tended to show the same advertised product which lead to confusion on site ownership.

Example

Recommendation 5: Refunction the Jefit Member Area

Severity	Change	Justification
Medium	Refunction the Jefit Member area by consolidating the Suggested Friends and Active Jefit User area. Add a section on the Member area with a search bar to find other members.	On average, participants unsuccessfully examined the Suggested Friends area to add a friend. There are 3 social friend related areas located throughout the page and participants were not sure where to go to find a member. Adding a search bar and consolidating the areas into one would save space, make the purpose of the area more clear, and give users an easily identifiable tool.

Example
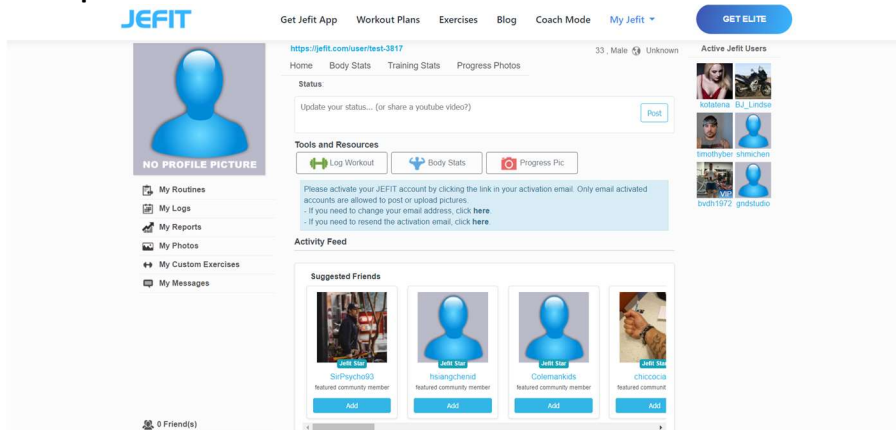
Conclusion

This Usability Testing activity consisted of participants with various gender, age, and occupational differences. The sessions took longer than expected at around 30 to 45 minutes. Participants most struggled with the Routine and Exercise Builder and with determining their navigation paths through the top and side menus. **Redesigning the Routine / Exercise Builder, Ads, and Top/Side menus would offer the most impact for improvement.**

Usability Report Cont.

Script

<Greet participant and introduce yourself>

Thank you very much for your time! What you'll be participating in today is something called "Usability Testing." Have you heard this term before? Basically we're asking people to try a website we're working on so we can see whether it works as intended and to give ourselves a chance to hear your feedback. That's it! The session should take about 30 minutes.

The website that you'll be testing a website called Jefit. Your participation in the testing will make the website easier and better to use for a large community of people. At the end of our session, as a small token of our appreciation, I'll be handing out a gift of your choice: a Starbucks gift card, Amazon gift card, or donation to a local charity.

A big point I want to make first off is that we're testing the site, not you. You can't do anything wrong here.

As you use the site, I'm going to ask you as much as possible to try to have you think out loud, so say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us.

Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the site, so we need your honest reactions.

If you have any questions as we go along, feel free to ask them. I may not be able to answer them right away, since we're trying to see what you would really do if you were at home on the website. If you need to take a break at any point, please let me know.

With your permission, we're going to audio record our conversation and what happens on the screen. The recording will only be used to help us figure out how to improve the site, and it won't be seen by anyone except the people working on this project.

If you would, I'm going to ask you to sign a simple consent form for us. It essentially says that we have your permission to record our conversation, how you interact with the site, and that the recording will only be seen by the people working the project. Do you have any questions so far?

Great! Again, thank you for your time!
<Hand out Recording Consent Form and a pen>
<After they sign it, start the screen and audio recorders>

Usability Report Cont.

Questions & Tasks

Warm up questions:

1. Name / age / gender / occupation
2. Are you familiar with Jefit?
3. Do you use any type of fitness websites or apps? If so, which ones?
4. Roughly on average, how many hours do you spend on websites in a week? On which types of websites?
5. What is your rough average fitness or gym frequency for a week?

Initial Feedback questions:

<Script: You can scroll around if you want to but don't click on anything just yet. Look around and give me a little narrative>

1. Look at the page and what do you think about it?
2. Whose site do you think it is?
3. What type of stuff do you think this site is for?
4. What types of things do you think you can do here?

Tasks:

<Script: Now I'm going to ask you to do some specific tasks. I'll read each one out loud and give you a printed copy. To help us as much as possible try to think out loud as you go along>

1. Your friend "Mr. Manly" told you that he's a member on the Jefit website. Find him in the Jefit community and add him as a friend.
2. You've been working out for a few weeks and want to see your progression. Find your Training Breakdown report.
3. You would like to work out your legs but am not sure which exercises to add. Filter Jefit's exercises so that only leg exercises are shown.
4. You're interested in learning about how to work out the chest with a barbell bench press. Look up the barbell bench press exercise and read its description.
5. You've enrolled into a gym and want to set up a new routine for days of the week you plan to exercise. Create your own routine consisting of 3 workout days.
6. You have a planned a weekly routine with your workout days. Add 1 exercise that vary by body part to each workout day.

Usability Report Cont.

Recording Consent Form

https://www.jefit.com/

I understand that my usability test session will be screen and voice recorded. I grant Jefit permission to use these recordings for internal use only, for the purpose of improving the designs being tested.

Signature: _____

Print your name: _____   Date: _____