

FITNESS MOBILE APPLICATION REPORT

Part 1: Competitive Analysis

Part 2: Survey and Design Discussions



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Part 1: Competitive Analysis

Introduction

With the increase in unhealthy food choices within the 21st century, especially with fast food chains expanding globally at an unimaginable rate, it is becoming a lot easier to just purchase fast food, than to shop for fresh produce and cook up a healthy meal. This creates the rising problem of unhealthy bodies and obesity, which is one of the most serious public health issues today¹. However, what adds on to this issue is the lack of fitness in people's day to day lives. Eating fast food is okay, but not exercising is what makes fast food a bigger problem than it is.

Reasons why people don't exercise:²

- Fatigue
- Lack of time
- Lack of workout equipment
- Fear of physical exertion
- **Lack of motivation**

Aim

Lack of motivation is key as to why people don't regularly exercise. Most people have obviously tried exercising, but after a few times they give up on it. Either because they get tired, they can't create a habit out of it, or because exercising is seen and perceived to be tiring, and sometimes bothersome instead of something that is fun and exciting. That is why we chose to design a fitness app, because we want to create something that motivates users to exercise, to make exercising fun and exciting with an innovating design. Additionally, by successfully getting more people to workout regularly, we can hope to commit more people into having and maintaining a healthier lifestyle overall, decreasing obesity rates.

¹

https://www.aph.gov.au/about_parliament/parliamentary_departments/parliamentary_library/pubs/rp/rp1011/11rp09

² <https://www.sharecare.com/health/fitness-exercise/some-reasons-people-dont-exercise>

Intended Users

Our intended users are a group within the domain of teenagers upwards to middle aged people, as those will be the main age groups of people who tend to exercise. However, we will mainly be focusing on younger people as they are more likely to use technology, and thus more likely to use a fitness application. Furthermore, the younger age groups will most likely have an idea of how to use technology, gestures, apps, mobile devices etcetera enabling them to relate more to a fitness application than an older generation persons who has not used much modern technology and would not intend to. For a fitness application, there are three main fitness categories that we will be focusing on: Home Fitness, Gym Fitness, and Sports Fitness.

Group 1: Home Fitness	Group 2: Gym Fitness	Group 3: Sports Fitness
Professional level: Low to High Age: 5 -64 ³ Average age: 40 ⁴ Reason to do at home ⁵ : <ul style="list-style-type: none"> • Working out at home saves time • Save your expenses • Wear whatever you want • Exercise in confidence • Schedule your time • Avoid the waiting time in gym 	Professional level: Medium to High Age: 25 - 54 ⁸ Average age: 40 ⁹ 51.1% of people are men ¹⁰ 48.9% of people are women Reason to go gym ¹¹ : <ul style="list-style-type: none"> • To participate in bodybuilding competitions • To feel better about themselves • Look better • To lose fat/weight • Passion (Social goals) Goes to gym 5 – 7 days a week Regular to intense workout 1.5 hours to 3 hours' time spend in the gym	Professional level: Medium to High Age: 17 - 40 ¹³ Average age: 26 ¹⁴ (mode) Reason to engage in sports ¹⁵ : <ul style="list-style-type: none"> • To stay fit • Love for the sport • To be a winner • To experience adversity • Teambuilding Education: Wide range, some quit to focus on sports, others engage in

³ <https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines>

⁴ <https://qz.com/536568/exercising-when-youre-40-may-be-the-most-important-time-to-slow-aging/>

⁵ <https://fitnessabout.com/reasons-to-workout-in-home/>

⁸ <http://www.fitnessforweightloss.com/gym-statistics-members-equipment-and-cancellations/>

⁹ <http://www.fitnessforweightloss.com/gym-statistics-members-equipment-and-cancellations/>

¹⁰ <http://www.fitnessforweightloss.com/gym-statistics-members-equipment-and-cancellations/>

¹¹ <http://www.fitnessforweightloss.com/gym-statistics-members-equipment-and-cancellations/>

¹³ <https://www.businessinsider.com.au/most-dominant-athletes-ages-2017-8?r=US&IR=T>

¹⁴ <https://www.businessinsider.com.au/most-dominant-athletes-ages-2017-8?r=US&IR=T>

¹⁵ <https://athletesinaction.org/underreview/thirteen-reasons-why-we-should-play-sports>

<ul style="list-style-type: none"> • Motivate family towards fitness • Avoid unwanted interaction at outside • Refuel yourself instantly <p>To do exercises at home is more flexible and casual.</p> <p>People could do exercises any duration in any time.</p> <p>Doing exercises at home normally take 30 to 60 minutes.</p> <p>Most people think that Yoga is a good choice to practice at home.⁶</p> <p>Exercise (Without Equipment)⁷:</p> <ul style="list-style-type: none"> • Jump Rope • Stair Stepping • The Plank • Dancing • Lunges • Water Bottle Weights • Jumping Jacks • YouTube Workouts 	<p>Very concise about their methods and routines</p> <p>Most popular 5 gym equipment user use¹²:</p> <ol style="list-style-type: none"> 1. Treadmill 2. Free weight 3. Elliptical Trainers 4. Recumbent Stationary Bikes 5. Strength Machines <p>Social Network:</p> <ul style="list-style-type: none"> • Have a personal trainer • Have friends and relatives who are into fitness and go to gym • Follows couple of mentors (who are also does gym fitness) on social media • Watches training videos, and reads guides for better efficient exercising <p>Lifestyle:</p> <ul style="list-style-type: none"> • Almost all days on diet and drinks a lot of protein shakes • Highly motivated to exercise, but can get demotivated time to time due to their social life • Usually wears a tracking device and measure it weight before and after a workout session • Would spend money to improve their health and fitness <p>Location:</p> <ul style="list-style-type: none"> • Urban to suburban areas • Average to strong network/internet connections • Lives approx. within 1km of a gym 	<p>them during their tertiary studies</p> <p>Lifestyle: Conscious of what they eat, in order to maintain their best performance level, work out regularly</p> <p>Social status: Active due to being in teams or groups</p> <p>Area of living: Urban or suburban, rarely outskirts, average to strong network connections, can easily travel to destination for the sport (e.g local basketball court)</p> <p>App user requirements: constant data connection for browsing, easy to use in-app functions that saves time</p> <p>Dependency: Can engage in sports solo, or with a team, or casually with friends</p> <p>Proficiency level: Most likely experienced in the sport they practice</p> <p>Spending: Would spend money on equipment and gear (shoes, clothes, accessories)</p>
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⁶ <https://www.doyou.com/why-do-more-people-prefer-to-practice-yoga-at-home-versus-studio-10228/>

⁷ <https://www.moneycrashers.com/indoor-at-home-exercises-without-equipment/>

¹² <https://www.sportsrec.com/87254-nordic-track-vs.-treadmill.html>

Main Competitors

Applications	Description/App Purpose	Target Audience	Features
30 Day Fitness Challenge	<p>Purpose of this app is to produce user results through the progressively difficult workouts that they are given in 30 days. As well as to help users “keep fitness and lose weight effectively¹⁶”.</p> <p>(More than 500,000 downloads)</p>	<p>This app is designed for anyone who wants to workout at home easily. As it is “suited for anybody at any time¹⁷”</p>	<ul style="list-style-type: none"> - Records training progress automatically - Reminds you to workout every day - Detailed video guides - Increases exercise intensity step by step - 30 day abs challenge - 30 day full body challenge - 30 day butt challenge - Share with your friends on social media
Fitness & Bodybuilding	<p>The purpose of the application is to help its users to stay fit and creates a personalized workout plans for bodybuilding, weightlifting and fitness with detail animations/videos¹⁸.</p> <p>(150,000 downloads)</p>	<p>This application is designed for all who workout in a gym. Foremost, this application is targeted to people who do not have any personal trainer because this application can be a replacement for a personal trainer as it gives a detailed explanation for each types of exercises</p>	<ul style="list-style-type: none"> - Video tutorials for various (but limited) types of exercises - Exercises are categorized by muscles - Exercises are also categorized by equipment needed - Able to create customized plan for workout - Have nutrition diet plans for building muscle and for lean body - Tracks and records exercises - Has a timer functionality - Free subscription limited exercises and diet plans - Monthly subscription of \$11.99 includes 150+ exercises and more robust nutrition plans

¹⁶ https://play.google.com/store/apps/details?id=com.popularapp.thirtydayfitnesschallengepro&hl=en_AU

¹⁷ https://play.google.com/store/apps/details?id=com.popularapp.thirtydayfitnesschallengepro&hl=en_AU

¹⁸ <https://play.google.com/store/apps/details?id=softin.my.fast.fitness&hl=en>

MyFitnessPal	<p>This app is designed to help users keep everything related to health and exercise in one place, just like a mini fitness diary. In addition to fitness, the app's nutrition report is also designed to help users better understand their daily food intake and aims to achieve some goals, such as enhancing physical fitness etc.</p> <p>(More than 50,000,000 downloads)</p>	<p>The app targets to anyone who is conscious about their health and fitness. These types of users are very reflective on themselves because they would record their calories consumed and how much they burned.</p>	<ul style="list-style-type: none"> - Track all kind of nutrients - Barcode scanner which can scan and log any food items with detailed nutrition involved - Gives insight on almost all types of food, teaching users on correct healthy choices - Can track all kinds of nutrients consumed - Can create customized and personalized meal plans - Can set goals to achieve - Can record all types of exercises
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Why did we choose these applications as the main competitors?

The reasons to choose these applications as the main competitors is because the aim of these applications is very similar to our application. Foremost, the main goals of these applications are to make its user healthier and fitter. All apps remind its users to be more active, while keeping track of exercise done. All the apps have different approaches and methodology of designing in order to achieve its purpose. For instance, Fitness & Bodybuilding app has customized, and personalized workout plans for its users. This feature can be very important in order to motivate users to be stay healthy, as personalized plans can give users a freedom of comfortability and accessibility. In addition, these apps are designed to target similar groups of users. However, none of the apps targets all three groups of users as compared to our application.

It is important to know our competitors as these can provide some very meaningful secondary data. The information can include about designs and features. It can also tell us whether a feature has been successful or not.

Identify Main Tasks

Main purpose

Fitness & bodybuilding's main purpose is to provide users with variety of routines, exercises and diet plans while tracking and recording them. It also allows users to customize their daily workout plans making it suitable for every single user.

This app behaves like a personal trainer and allowing users to get fitter and healthier by providing more than 150 exercises ranging from shoulders to legs and from bodybuilding to fat burner routines. Although, getting a paid subscription of the app can give access to more routines and exercises, but even for the free plan, users can have access to various exercises. This app motivates all users to be fitter even if they do not purchase a subscription. Hence, achieve is main aim to motivate everyone.

Main Tasks:

1. Recording exercises weight and repetitions (See appendix A.1)

The app allows users to input their weight and the repetition of an exercise daily. This data is recoded, allowing the users to see the trend over the weeks and months. The application hinders this task because the users must manually enter weight and repetitions for every single exercise they have done. This can be very time consuming and can make a user spend less time doing exercises

2. Unlimited personalized workout plans (See appendix A.2)

Users can engage with custom workout plans. There are two types of plans the app offers to user either pre-made plans or creating user's own plan. The pre-made plans are designed to be professional routine and the customized feature allows users to make plans according to their desire and suitability. This task is helped by the application as it very easy to create and initiate both pre-mad plans and customized plans

3. Timer for doing sets and intervals (See appendix A.3)

The app also has a functionality where a user can start a timer for each set of exercise and have a timer for intervals between sets for users to rest for few seconds. This task is helped by the application because once the user chooses an exercise, they have to press on play button and the timer will start. The user then does not have to press anything else until they have completed the exercise including any repetition of a set

and intervals. The app also produces a sound, indicating the user to either stop exercising for an interval or start doing an exercise to end the interval period.

4. Videos of workout plan (See appendix A.4)

The app also provides a detailed and short video of tutorial of each exercise. The video shows how to do an exercise properly without any injuries. The app helps users to understand how to perform an exercise in an accurate and efficient manner.

Application Analysis – Nielson's Heuristics (Fitness & Bodybuilding app)

Usability Issue	Effect on task	Severity Rating	Nielsen Heuristic	Possible Solution
When editing a custom workout plan, if the user mistakenly removes an exercise from the list, the app does not ask for confirmation with the user and removes it completely	User can feel very frustrated if they mistakenly miss clicked the remove button. This is because if the user does not know which exercise, they have removed. It can even be worst if the user removes and does not realize that the exercise has been removed	3	Error prevention (See appendix B.1)	The app should ask for a confirmation whenever the user tries to remove an exercise from the plan. This can be done a pop-up dialogue box asking the user if they want to remove that particular named exercise from the plan
The app does not give any type of tutorial or any kind of information on how to operate features in the app such as recording exercises, using the timer for sets and intervals.	As a new user, they would have to spend more time and effort to learn the app. This factor can lead to demotivation and this usability issue fails to achieve the app's aim, which is to motivate users	2	Help and Documentation (See appendix B.2)	When first downloaded, the app can start with a brief tutorial explaining the all the features in the app and how can the user interact with these features
In the list of all the exercise, the size of the exercises' images are relatives smaller than exercise' name. To enlarge the image of any exercise, the user must click on the exercise to	There are chances that there are new users who do not have a lot of knowledge of certain exercises. Therefore, users would be relying more on the images than on the names. As the size of the name is larger than the	2	Recognition rather than recall (See appendix B.3)	Increasing the size of the image and decreasing the font of the exercises' names, making it easier for users to understand a particular exercise

see or they have focus on the image carefully	image, user's attention first goes on the name rather than the image. If this happens, then users may interpret an exercise as another and change their desire outcome.			
The first two tabs, being 'Exercises' and 'Plans' are very clean. They both stick to the same structure, layout and colors. However, the third tab, being 'Nutrition' is very cluttered. It contains 6 different meals for all 7 days of the week, and the images of the meal take up about 70% of the entire screen.	Users may be overwhelmed with all the information on the nutrition page and would most likely not know what to do with it. However, on the other pages, it is very clean and simple which is good.	2	Aesthetics and Minimalist Design (See appendix B.4)	Modify the 'Nutrition' page, declutter it, maybe create a sub-tab on the page for each day, so that the user will go to whichever day they desire, and then it will show the meals.

Part 2: Survey and Design Discussion

Our survey participants include mostly younger peoples, such as teenagers and to early 30's, as well as a few older middle-aged participants, with almost equally distributed males and females. We decided we want to pick participants from a random sample, so that results of the survey will not be biased in any way, and to ensure the results that most represents the population.

Survey Participants

Group 1: Home Fitness	Group 2: Gym Fitness	Group 3: Sports Fitness
<ul style="list-style-type: none">• Ages 5 – 64 years old• Working out at home saves time• Save their expenses• Wear whatever they want• Exercise in confidence• Avoid the waiting time in gym• Motivate family towards fitness• Avoid unwanted interaction at outside• Refuel themselves instantly• To do exercises at home is more flexible and casual.• Could do exercises any duration in any time.	<ul style="list-style-type: none">• Ages 25 – 54 years old• Exercises on a regular basis• Wants to improve their fitness with efficiency• Motivated by friends, gym partners, reminders, challenges, desired outcome• Has a planned work out before starting• Conscious of their diet, drinks a lot of protein shakes• Intermediate or professional at gym	<ul style="list-style-type: none">• Ages 17-40 years old• Exercises on a semi-regular basis• Wants to improve their skills within chosen sport• Motivated by challenges such as better opponents, personal bests, tournaments, team games• Does a lot of 'drills' (repeated sequence of tasks) e.g: shooting a ball 100 times• Conscious of their diet, but not too strict on it, in order to maintain their best performance level• Experienced in their chosen sport• Can sometimes run out of motivation to practice• Practice and try to polish their skills a lot

Methodology

Pre-Survey

We designed our survey questions in such a way that it helps us categorize the users into the three main user groups (Home Fitness, Gym Fitness and Sports Fitness), by determining their lifestyle and exercise life. The survey contains basic questions asking users about their exercise life, whether they use an app alongside, their diet, reasons to exercise. It also includes more advanced questions to bring out more data from users with experience in exercise, such as if they have diet plans and fitness plans. The data that is collected from these survey questions are essential, as not only do they help us categorize users into each user group, but also provides us with additional data on the potential pros and cons of using a fitness app.

Survey

In regard to the survey, our main aim was to reach as fitness geeks as possible. We shared the survey questions to all our friends and family via WhatsApp, Facebook and Instagram and Discord. We also shared our form to some online community on reddit. Moreover, we chose these platforms to share our questionnaire is to minimize any coverage errors because this type of error can make us not include some types of users. The results from the focus groups from reddit can be very valuable and may contain some counterintuitive data which we might not be expecting.

At the start of the survey we asked the participants with two screener questions, if they agree to take the survey and are above 18 years old. Then there are combinations of open and closed ended questions to know our users' opinions on certain app, features, diet plans, workout plans, etc.

See appendix C for survey questions and results

Interview Methods

For our interviews, each member interviewed a participant who has been agreed to interviewed. We sampled our interviews to who are currently working out on a daily to weekly basics. We have predefined some set of questions to be asked which can give us a holistic and descriptive information about their workout routines. The questions we generated also helps us to understand the interactions between a fitness app and its user. Our interviewees are:

A – 19-year-old male university student studying Bachelor of Business Management. He does his fitness routine at home since he currently cannot afford to go gym. (Group Member: Jainam Doshi)

B – 18-year-old university student studying Bachelor of Computer Science. He is currently performing workouts at home, and has only started it during quarantine due to more available free time (Group Member: Clinton Thai)

C– 20-year-old university student studying Bachelor of Finance. He usually exercises in the gym. Because of the epidemic, he can only use the fitness equipment at home and running exercises in the community.

D- 19-year-old male university student studying a Bachelor of Business Marketing. He regularly workouts at home and attended the gym 1-2 times a week before quarantine.

See appendix D for interview responses

Analysis of the survey results

The survey results we obtained was very crucial in helping us understand the general population of people using fitness apps when exercising.

Out of 65 individual survey feedbacks, 76.92% (50) of the users have used a fitness app before, whereas 23.08% (15) have never used a fitness app. This shows us that due to the advancement of technology, more and more people are being exposed to these fitness apps and are more tempted to use them.

We enquired if when using the fitness app for the first time, if the functions were easy to learn and why. A large majority of the survey participants answered back stating that generally the fitness apps they used were very easy to learn. That result is expected, as we shared the survey mostly on our social medias, most of the participants are of the younger to middle-aged generations, so that would mean that most participants would be quite experienced and tech-savvy, which makes the apps quite easily learnable.

Out of the 50 individuals who have previously or are still using a fitness app, 56% (28) of them have used MyFitnessPal, whereas a small minority have used 30 Day Fitness Challenge (4 -> 8%) and Fitness and Bodybuilding (3 -> 6%). The rest of who have not used either of these 3 apps, have used these:

Strong, MyFitnessPal	Lifesum
C25K	HeavySet
GoWod, SugarWod, Freeletics, Wodify	MapMyRun, Wodlog, Gravitus
MyFitnessPal, Fitness Culture and Stronglifts	Strava

For the 15 individuals who has not used a fitness app, we asked them if they would ever consider using a fitness app. The responses were split evenly, with 7 people saying yes, and 8 people saying no.

We were interested in what the motivations are for people to exercise. Most of the responses can be summarized to “keeping fit” and “looking better”. Interestingly, some responses include improving mental health, and exercising makes them feel better. So fitness is a way for some people to improve not only their physical state, but also just as importantly their mental health as well.

Looks and work	To loose some weight
To not feel gross about my body	It feels good
Keep a healthy weight, keep active.	Work and studies
To be healthy and improve my mood. Not currently exercising regurlarly because of corona. Otherwise once a week (dance class)	I want to loose weight and get ripped physique
I want to be an IFBB pro	
Get better at crossft	
Aesthetics	
Stay healthy and look good naked!	What is the motivation to or not to exercise?
Becoming healthier	Building muscle
Above all mental health (Reduces stress), other is developing better a physique/lifting more weight.	I'm lazy
It's boring	I'm lazy
For sport (powerlifting)	Maintain muscle and fitness
Jacked, tanned, and strong	I want to be fit but i get lazy when it comes to exercising
Taking exercise make me feel better	To: I need to lose weight lol Not to: Too much study/work
To get big	get big and buff

For the people who exercise/do fitness, a majority of them tend to exercise by themselves. Some of them exercise with their friends or family members, and then a very small minority exercise with a training expert. This shows that most people exercise leisurely, and only a very small amount do it professionally.

For most people who exercise, they have a strict plan that they follow, such as a fitness routine, with around 39 people saying yes, they do have an exercise plan, and around 10 people saying no. Around 36 people also track and record their exercises done, whereas 6 people do not track or record at all. This shows that people who exercise tend to follow a routine as well as record their progress, which would be a required functionality of a fitness app.

On the diet side of things, once again most people have a diet plan that they follow, with 33 people out of the total 56 responses. When asked if they also track their diets, 8 responded with ‘always’, 13 with ‘most of the time’, 16 for ‘sometimes’ and 13 people with ‘never’.

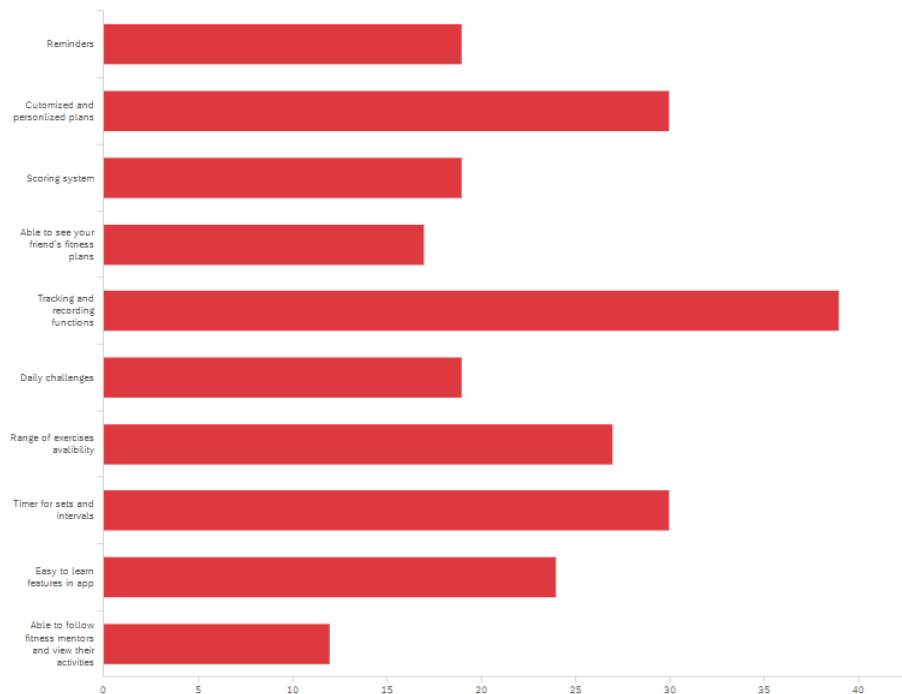
Design Directions

From the survey results, the target audience of our fitness app would be of the younger generations, therefore the app would need to have nice and refreshing colors. However, the color scheme shouldn't be one that would be too bright on the eyes, so it should be on the darker shades.

Possible color schemes include: Purple shades, blue shades, green shades

From our survey, most participants stated that the fitness apps were easy to use as they were 'simple' and 'straightforward'. This shows us that the app needs to be as minimalistic as people, and the pages on the app shouldn't be cluttered with unnecessary things. In order to have a minimalist design, whilst keeping the app as relevant and useful as possible, only the absolute necessary functions will need to be implemented, which we also have gotten an insight of from the survey.

When asked what features of a fitness app would potentially motivate users to exercise, the responses are as shown:



It would seem that what people want the most in a fitness app, is a tracking and recording function. This is as expected, as from the other survey questions, it is clear that when people workout, most of them also tend to track and record their progress, so a track and record function is necessary. The second most wanted feature are as followed: Customized and personalized plans, and timer for sets and intervals. These two features could work in

tandem, as users can pick what plan they would like to perform, and then within the plan each exercise would include a timer for the sets.

These features are already quite common in most fitness apps. However, people still tend to have trouble finding motivation to workout, even with these most wanted features included in the currently available apps. Clearly, there needs to be some sort of feature added that would help motivate users to workout more. For this, we think a game feature can be implemented, such as some sort of scoring system. This is clear to us, as around 18 people have voted for this option in the above question.

How this scoring system could potentially work is for every set of exercises done, users will be rewarded with some sort of in-game currency and experience. Users could accumulate experience to level up, and unlock 'achievements', making working out a game, and users could become motivated to 'grind' for level ups and achievements. With the currency system, users could potentially use it to unlock new exercises, or buy in-game cosmetics such as new icons for each workout. Along with the currency system, another option participant picked was to have 'daily challenges'. That could also be implemented as part of the game system, such as on one day users will have a challenge that states 'perform 30 pushups' and once that is completed users will be rewarded with an achievement or some in-game currency.

According to the final question of the survey, 62.50% of participants prefer gym workouts, 30.36% prefer home workouts and a mere 7.14% prefer outdoor workouts. As such, we will be focusing the apps given workouts to gym and home styled workouts. Meaning different sets and exercises that could either be done at the gym or at home. By doing this, it will help with decluttering and minimalizing the application.

Design Directions Summary

From the information gathered through the survey, we have come to a conclusion that the app would need to be as minimalistic and user-friendly as possible, all the while being a relevant and useful fitness app that helps users with motivation in working out. In order to accomplish this, the main functions that would need to be implemented are as follows: Track and Record, Customized Personalized Plans & Timing Function, Gaming System (Missions, achievements, in-game currency, in-game cosmetics). A track and record function will do as the name implies. Allow users to record all their workout progress, save it all, which allows users to come back and compare their progress in the future. This was the most voted for wanted feature of a fitness app in the survey. Secondly, a Customized Personalized Plans function was the second most voted for feature, which is also necessary as different users have different levels of workout expertise, so the workout plans provided would need to be personalized for each user. Additionally, each workout would need to have a timing function, so that the user would know how long they are given for each workout, and the elapsed time of workout. To make workout out more fun, as well as to

provide motivation, the app will be made into pretty much a game. The app would include each workout as a mission, where if users complete the mission they will be rewarded with some sort of in-game currency. The in-game currency can be used to purchase in-game cosmetics or to unlock new workouts. There would also be an experience system which would work as a progress tracker. The ultimate goal here is to make working out a fun time, not something to be dreaded.

Appendices

Appendix A: Main Tasks

1. Recording exercises weight and repetitions

Date	Weight (kg)	Repetitions
07/04/2020	10	3
09/04/2020	10	3
09/04/2020	15	3
08/04/2020	10	2
08/04/2020	10	4
07/04/2020	10	3

2. Unlimited personalized workout plans

Custom

My Workout 1

My Workout 2

To create new workout press +

My Workout 2

Day 1

- Dumbbell Side Bends
- Crunches
- Sit-Ups
- Leg Raises

Day 2

- Wrist Curls
- Wrist Curls
- Dumbbell Wrist Twist
- Standing Wrist Curl

3. Timer for doing sets and intervals

INTERVALS

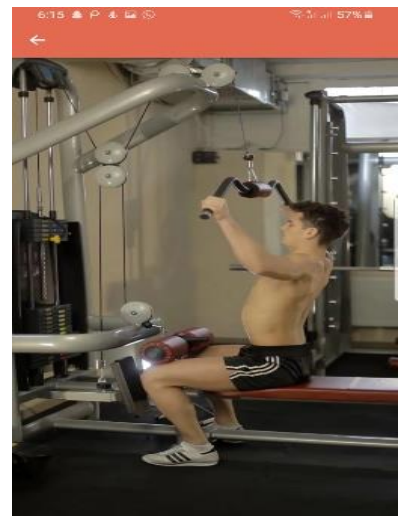
00:30.00 00:15.00

RESET

02:03.00

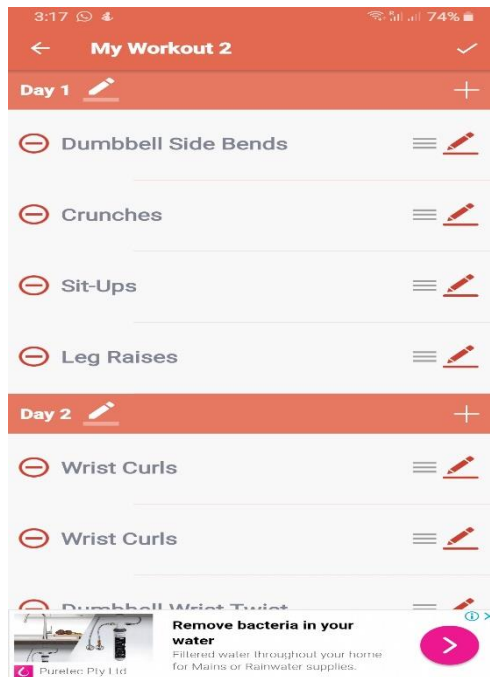
START

4. Videos of workout plan

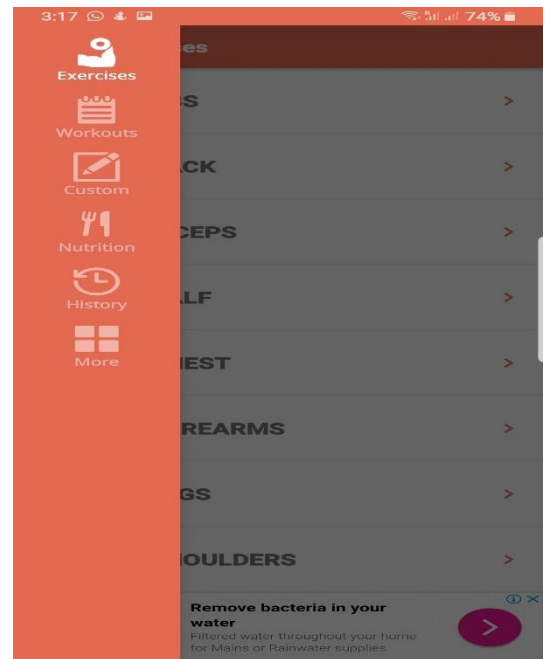


Appendix B: Application Analysis – Nielson's Heuristics

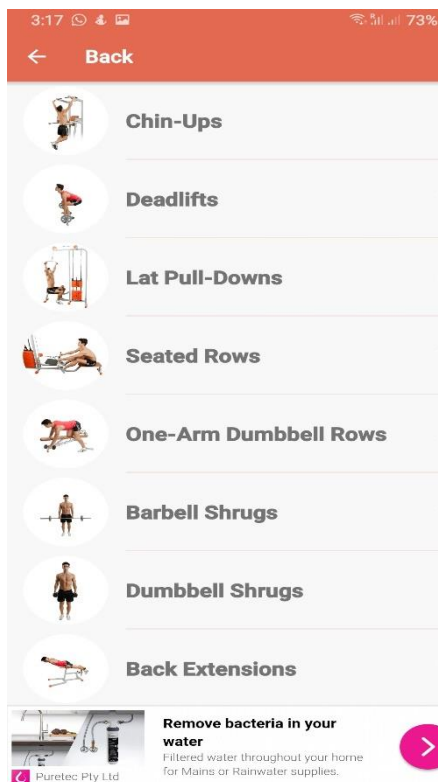
1. Error prevention



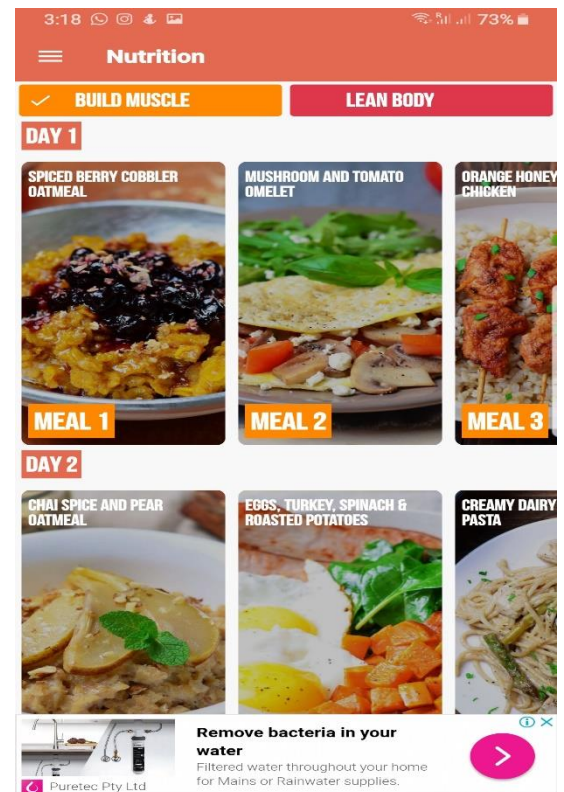
2. Help and Documentation



3. Recognition rather than recall

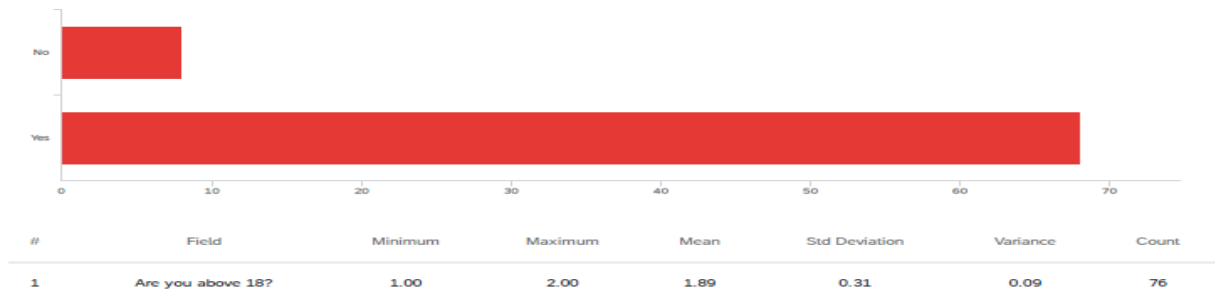


4. Aesthetics and Minimalist Design

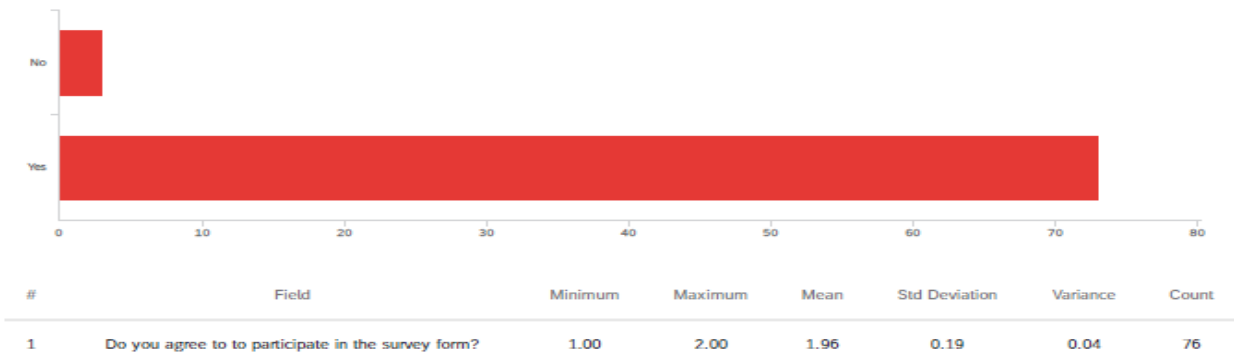


Appendix C: Survey questions and results

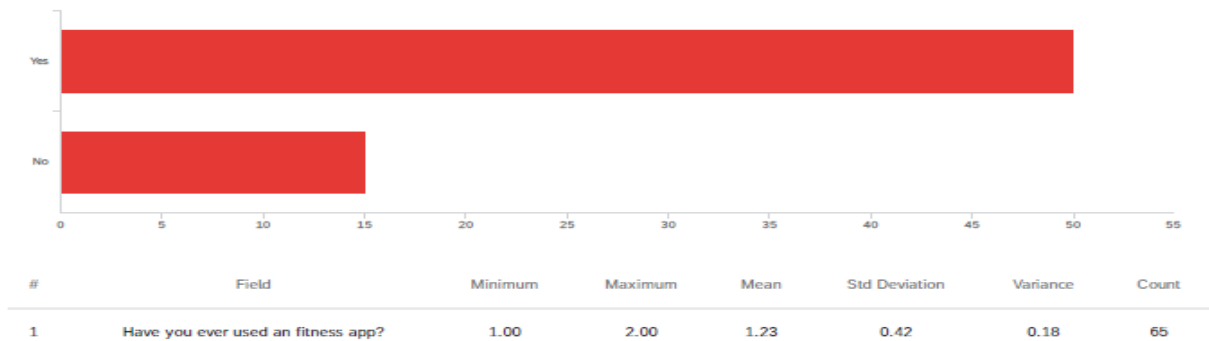
Q1 - Are you above 18?



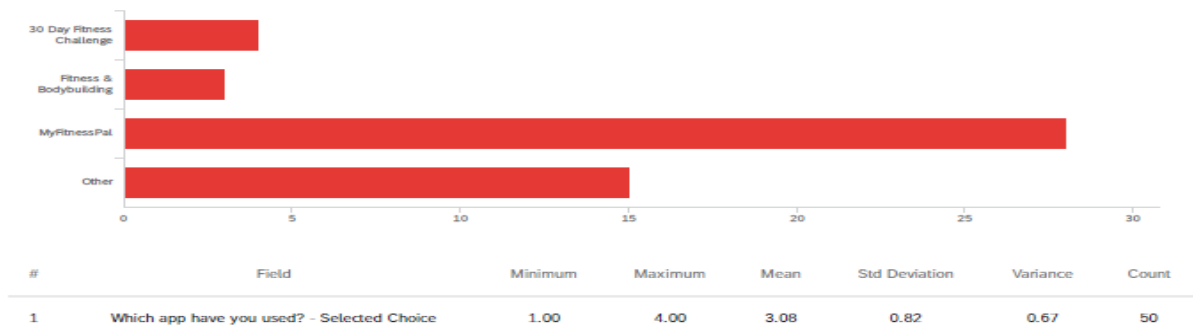
Q2 - Do you agree to to participate in the survey form?



Q4 - Have you ever used an fitness app?



Q5 - Which app have you used?



Other

your mom

Strong, MyFitnessPal

C25K

GoWod,SugarWod,Freeletics,Wodify

MyFitnessPal, Fitness Culture and Stronglifts

Other

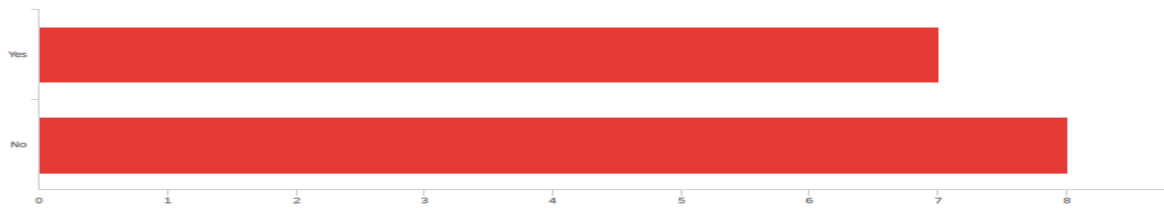
Lifesum

HeavySet

MapMyRun, Wodlog, Gravitus

Strava

Q6 - Have you consider to use a fitness app?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you consider to use a fitness app?	1.00	2.00	1.53	0.50	0.25	15

Q7 - How often do you exercise per week?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Days per week	0.00	7.00	4.49	1.99	3.95	53

Q9 - What is the motivation to or not to exercise?

What is the motivation to or not to exercise?

Mentally refreshing, let's me put use to the junk food I eat, want to improve my body for myself (hobby)

Health

Strength

Addiction to lifting at this point

This sentence makes 0 sense

To see myself improve and have a "runners high" after my weightlifting workout

Asthma

Keep myself fit & healthy for the long term, look jacked, and live to 150 to spend as much time with my kid as possible.

Motivation: feel better, look better. Demotivation: lack of energy to start due to long work hours (I work 12 hour shifts).

I feel better afterwards

Physical & mental health benefits

Not motivation, discipline. And not fitting through doorposts

to be ripped

Stay fit, get jacked.

To eat and get stronger

Staying healthy and looking good

Time

Vanity

Discipline and I want to compete in bodybuilding

Maintaining sanity and physical preparedness for life

Health

Fear of gaining 40lbs again

Looks and work

To not feel gross about my body

Keep a healthy weight, keep active.

To be healthy and improve my mood. Not currently exercising regularly because of corona. Otherwise once a week (dance class)

I want to be an IFBB pro

Get better at crossfit

Aesthetics

Stay healthy and look good naked!

Becoming healthier

Above all mental health (Reduces stress), other is developing better a physique/lifting more weight.

It's boring

For sport (powerlifting)

Jacked, tanned, and strong

Taking exercise make me feel better

To get big

Get stronk

Don't have a car, so I have to walk to work

Motivation to: Is because I enjoy it and I have a fitness goal Motivation to not: Just to tired to.

Improvement of health and stress relief

Maintain health as I age.

To loose some weight

It feels good

Work and studies

I want to loose weight and get ripped physique

Building muscle

I'm lazy

I'm lazy

Maintain muscle and fitness

I want to be fit but i get lazy when it comes to exercising

To: I need to lose weight lol Not to: Too much study/work

get big and buff

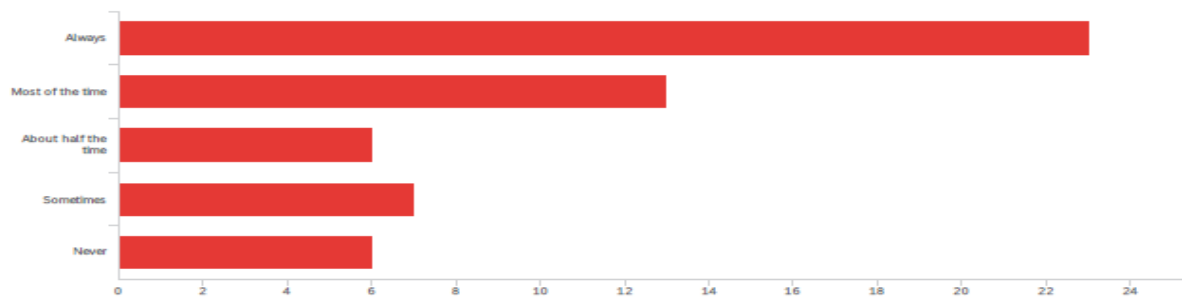
lack of motivation

I play video games

Q13 - What percentage of exercise and diet will affect your fitness level

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Exercise/workout	0.00	100.00	57.22	24.96	622.84	54
2	Diet	0.00	100.00	66.00	26.52	703.09	55

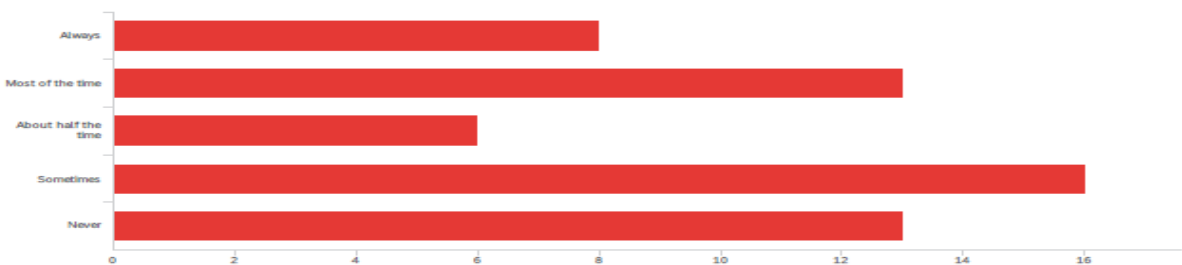
Q14 - Do you track and record any exercises done?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you track and record any exercises done?	1.00	5.00	2.27	1.39	1.94	55



Q15 - Do you track and record any diet plans



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you track and record any diet plans	1.00	5.00	3.23	1.40	1.96	56

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
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1	Do you have a diet plan?	1.00	5.00	2.57	1.45	2.10	56
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Q16 - If you have used a fitness app, are they easy to understand and learn its functions? Why?

If you have used a fitness app, are they easy to understand and learn its f...

Yes, but only because I'm aware of all the words and concepts already

Basics are usually easy, more advanced things like building workout plans is usually harder or more limited.

Only use a weight tracking app, so pretty straight forward

Ya

Yes. Pretty intuitive and others did all the hard work for us in making it easy to understand

Yes MyFitnessPal you just search the food and put in your servings

Gravitus is a fantastic app for workout logging, my fitnesspal/eatthismuch while cutting for accurately tracking calories.

Yes, MyFitnessPal is pretty straight forward. The only problem is knowing portion size and if a food isn't in the MyFitnessPal database.

Mostly yes, the tabs and texts are clear

I use strava, straightforward and user friendly, paired heart rate monitor to it easy enough

Yes, because I use the big ones

Yeah, just put in what you eat.

The one I used was easy.

most of them suck

Yes. They aren't difficult at all

Yes, because they're pretty basic in layout and function

Yes, being a tech savvy person I find them usually somewhat easy to navigate

Yes. Straightforward and simple

Very intuitive

Easy to track macros

My fitness pal was fairly intuitive to use

yes, I am familiar with mobile apps

I track calories and scan items I eat and enter quantities

Yes, most of them time due to a FAQ section on the App's website.

Yes

yes, myfitness pal is easy to use

Nope it's Messy and take time

Yes, I understand basic principles of fitness programming

Mostly - the why is an open ended question that's too broad

Not at all, some functions are not really useful

No, they don't allow enough customization

Yes, as most give you a set plan or make you input own exercises and weightbthen tell you what to do

yes they help me track and visually see my improvements and/or decrease in fitness

Myfitness pal is pretty straightforward for tracking calories which it what I use it for.

Yes

Some are easy. MyFitnessPal is easy to use. It has an intuitive UI and looks very professional

They clearly show aproximate calories burnt

Yes they are quite easy.

Yes, because there are videos of the exercises being performed as well as clear instruction for the amount of reps as well

Yes they're quite self explanatory

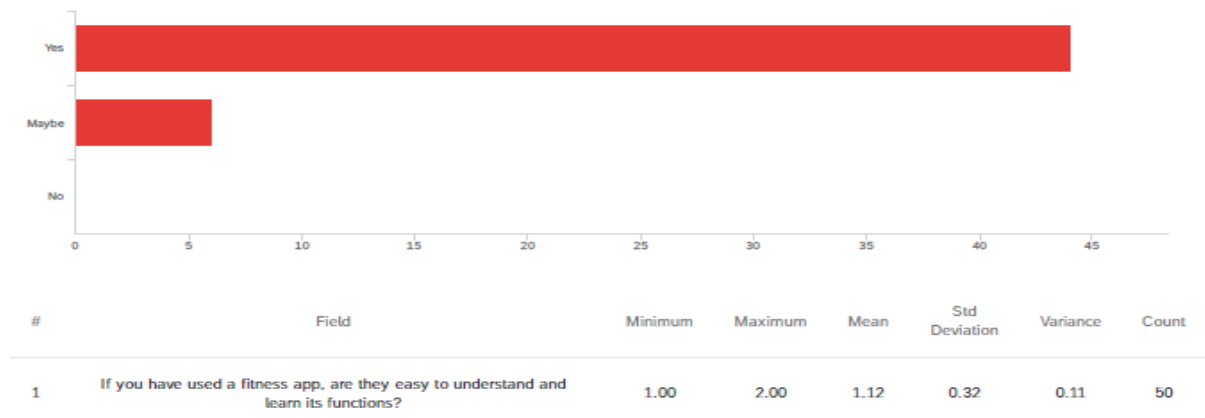
Yes, they have instructions on how to do movements as well as calorie trackers to keep it easy to remain within the caloric intake

Yes they are simple and straightforward. Because the interface is user friendly

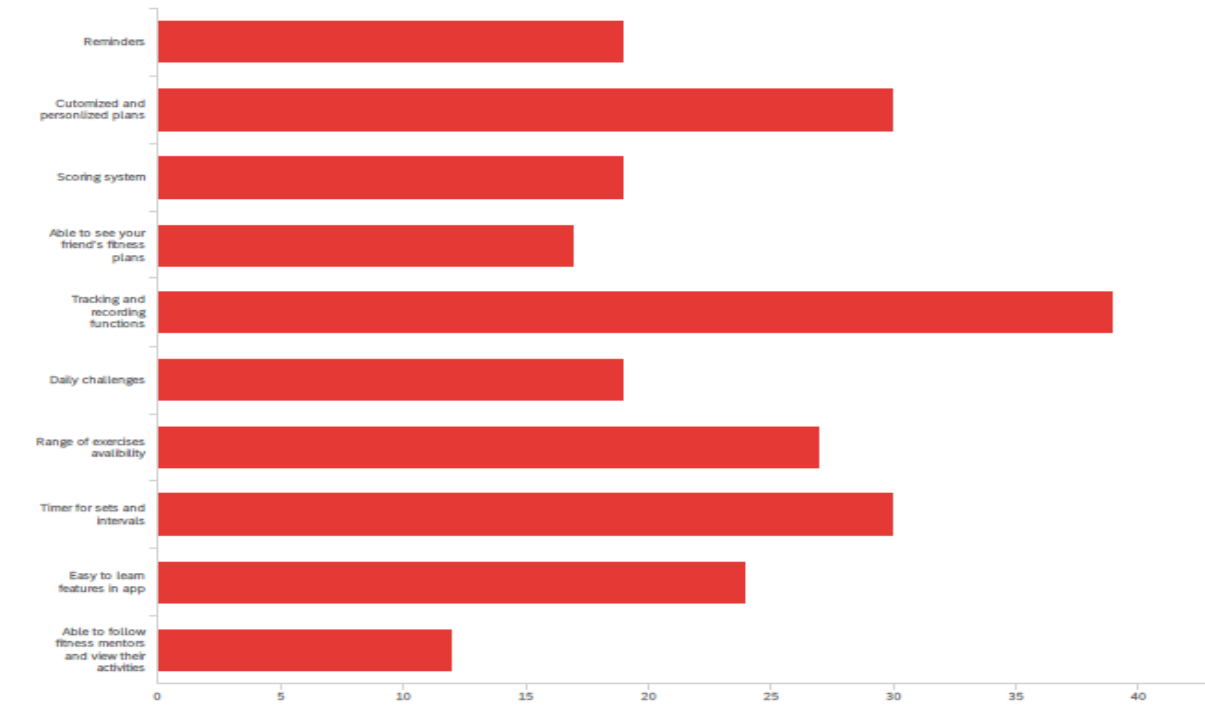
Because they are organised, easy to use, doesn't cost money

Yes very easy to understand

Q17 - If you have used a fitness app, are they easy to understand and learn its functions?



Q18 - What feature of a fitness app would potentially motivate you to exercise? (select one or more)



Q19 - What is your main reason to use a fitness app?

What is your main reason to use a fitness app?

To manage myself better

Stay fit and healthy.

Recording stuff (Weight lifted, weight, calories consumed)

Log my training for analysis and comparison in the future

Data visualization yo

Track my calories

Track calories

Logging progress over time.

Track progress, time between sets, and to list the exercises I will complete that session.

To simply keep record on when I have exercised

Track mileage on road bike

Tracking data

have a database

Easy tracking and preprogrammed workouts.

To track every exercises and workout

To keep track of my progress

tracking

Track diet

Keep track of my diet

To keep track of what I'm doing

I'm not currently using one, but I've considered starting to use a fitness app to increase my chances of getting a healthy pregnancy in the future (not currently pregnant).

Track food intake

Tracking and getting access to wods

Consistency in my training

Wanting a structured workout plan that I don't have to figure out myself.

Tracking stuff

Total's calories and macros in a more efficient manner than filling out an excel

To be fit and active alongside measuring progress

Organization

Log workouts

Record workout experience

Track progress

Track progress and stop from switching programs

Keep track of progress

To log WODs and maintain track of calories

To ensure I stay on track with respect to diet, or if I go off plan, just how far I'm off plan.

Keeping track

To record my meals and be a database for nutritional information.

To see if i reach my daily limit

Weight loss

For building muscle and fat loss

Getting fit

To keep in check with exercise and progress

Too become fitter and healthier

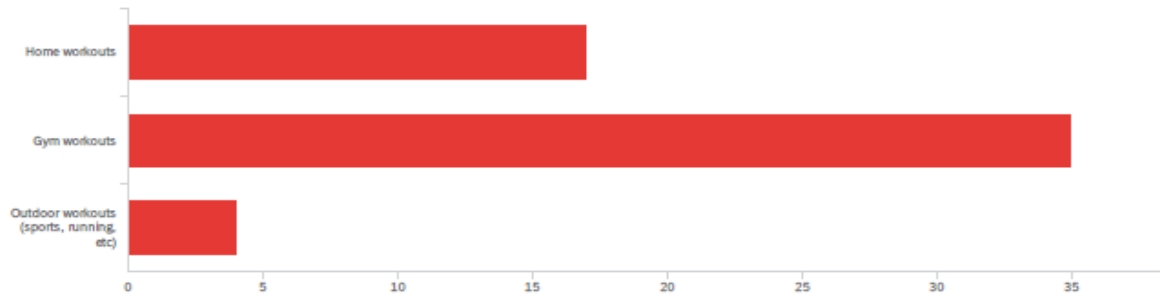
Have a sense of goals/accomplishment that i'm really going to try

to stay motivated

become healthier

To track progress

Q20 - What type of fitness would you prefer?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What type of fitness would you prefer?	1.00	3.00	1.77	0.57	0.32	56

Appendix D: Interview Response

A – 19-year-old male university student studying Bachelor of Business Management. He does his fitness routine at home since he currently cannot afford to go gym.

B – 18-year-old university student studying Bachelor of Computer Science. He is currently performing workouts at home and has only started it during quarantine due to more available free time.

C– 20-year-old university student studying Bachelor of Finance. He usually exercises in the gym. Because of the epidemic, he can only use the fitness equipment at home and running exercises in the community.

D- 19-year-old male university student studying a Bachelor of Business Marketing. He regularly workouts at home and attended the gym 1-2 times a week before quarantine.

Part 1 General Questions

1. Do you exercise? what are the reasons?

A – Yes, want to stay in shape. I gained weight when in high school and now want to reduce that weight and stay fit lifelong.

B - Yes, every day after I wake up before showering.

C - Yes, I exercise almost every day.

D- Yes, I want to maintain my current physique and make sure I do not gain too much weight during quarantine.

2. What is your favorite exercise?

A – Since my workout routine is in my home, I love to do a lot of push-ups and pull-ups. I do all kinds of push-ups: normal push-ups, star push-ups, one hand push-ups and incline push-ups. If I am able to go the gym, I think my favorite exercise would be to run on the treadmills.

B - Pushups or running around playing basketball.

C –Morning run and practicing basketball. Also, I like to spend half an hour to sit in meditation though I don't know this is exercise or not.

D- My favorite home workouts, are calisthenics. I generally do push-ups, sit ups, dips and leg raises.

3. How many times do you exercise per week?

A – I try to work out every day, but somedays because of school I get tired and I don't do anything that day. So, on average I do 5 days a week.

B - Most of the time I exercise 7 days a week, but each day the exercises are quite short in length.

C - Six to eight times a week, on the morning and before dinner usually.

D- Usually I work out 3-4 times a week

4. How long do you exercise each time?

A – I have never actually timed myself, but I would say around 45 minutes to 1 hour

B - About 5-10 minutes of exercise when doing pushups, but basketball sessions range from 10 minutes to 1 hour.

C - Around 40 to 60 minutes. Taking a long-time running or a fitness combination.

D - Each session of exercise usually last about 40 – 60 minutes

5. Where do you usually exercise, such as at home, gym or outdoor?

A – Most of time at home, but sometimes in a park.

B - At home and outdoor at the local park.

C - At gym or outside normally.

D - At the gym and home.

6. Do you exercise alone or with others?

A – Most of the time I exercise alone, but sometime my friend and I go to the park and do some fitness challenges like who can do more push-ups, planks, skipping, etc.

B - Most of the time alone, sometimes I play basketball with friends.

C - I do fitness by myself, and sometimes with friends to swim or play some team sports.

D- When I gym I'm usually with other people but when I am at home, I exercise alone

Part 2 Questions of Fitness APP

7. Have you ever used a fitness app before?

A – Yes, I have used the home workout app. I just use that app to know what types of exercises I can do at home.

B - Yes, I have used a few fitness apps for a short amount of time.

C - Of course, I have used 4 to 5 applications, and I still using a fitness app now.

D - Yes, I have used one fitness app in the past.

8. What features stood out about the fitness app?

A – I have never used any feature of the app, but I really like where I could time myself doing an exercise and record it.

B - The different sets of exercises provided, and the ability to customize them based on my height and weight.

C - Pre-set Exercise Routines, because I can achieve it in most time.

D - The ability to keep track by recording the time and what kind of exercise it was, also it was helpful to learn different variations of exercises with set and rep numbers.

9. Do you think a fitness app would motivate you to exercise?

A – Yes, it does. I always want to learn different exercise all the times.

B - Maybe it can, but so far, the apps I have used have failed to motivate me because most of them required a paid premium version to unlock its full potential.

C - I think this is depending on different people and app. Most good fitness app could motivate me of course, but they may not inspire others.

D - Somewhat, I think a fitness app would help initially with creating motivation however, I found that I ended enjoying my own routines over what an app could provide me with.

10. What features of a fitness app do you think will boost your motivation to exercise?

A – If the app had videos showing how to perform an exercise will motivate me more because it would become easier to learn certain types of exercises.

B - If it was completely free, and if there was some sort of reward system for doing each workout.

C - Fitness experience sharing section will really boost me. Also, if the fitness apps can do ‘Steps to redeem rewards’, I think most people will be motivated by this.

D - Integration with other devices such as the Apple watch or Fitbit.

11. What features of a fitness app are weakness do you think?

A – I get a lot of add and some of them are pop-up add which I can’t skip for 15 seconds and it really demotivates to use the app.

B - Paid services for sure.

C - Pop-up ads in some apps if you are not member.

D- The use of locked features behind pay walls.

12. Do you keep track of your exercise progress? If you do, how often?

A – No don't do that yet, but I really want to start doing it.

B - I do, I keep track of the exercises I do in my head (e.g. 15 pushups, 15 squats) as well as regularly checking my weight.

C - I am tracking my progress to goals such as check my weight and body fat percentage, but I won't track it every day, because of fitness is a long-term job.

D- I do keep track but I don't write anything down, I just keep track in my head as I'm doing the workouts and I check my weight every day.

13. Are you connecting to friends on a fitness app How do you feel about it?

A – Not really, but I would like to see their fitness progress.

B - No I am not. I think that would be a cool feature in this quarantine.

C - I don't connect to friends on fitness app. I think fitness is a personal habit, contact with friends will lost my time, but I would like to subscribe some work-out fanatics.

D - No I am not, but I would like for that to be a feature.

Part 3 Further Questions

14. Do you have a goal to exercise? If so, what is the goal?

A – My goal is to reduce around 10 kgs of weight and gain some muscles within the next year.

B - My goal is to look better by working out, through very slow progress.

C - Yes, my goal is to reduce and keep my BMI between 8% to 10%.

D – My goal is to build my muscle mass and hover at a weight of 75kg, and reduce my body fat percentage to 8%.

15. How is your exercise progress?

A – I about 6 to 7 months in exercising. I've already lost 2 kgs of weight. I have notices that I have reduced a lot of belly fat and I have gained some biceps and chest muscles.

B - I've only started 2 weeks ago, so it is going quite slow, however I plan to increase the length and difficulty of my workouts as it becomes easier.

C - I have finished weight loss phase and I am currently in muscle gain phase. So I have to eat a few eggs and chicken every day to help me complete muscle training.

D- I've been exercising for over 5 months. I've been able to maintain a weight of 70-75kg losing about 5-6kg since I've started. I've gained more muscle mass in my chest, biceps and quads.

16. How does a fitness app help you to reach your goal?

A – The app gives a lot of options of exercises to do which I never could think of that I can do it at home. So, it really helps to more exercises than I would have done if I had not use the app.

B - Fitness may help me in reaching my goal by helping me keep track of my progress and workouts, as well as somehow providing additional motivation to keep going.

C - It helps me record my fitness data, makes me to adjust the exercise time and diet in time according to the data changes, so as to reduce the time and risk of reaching the goal.

D- A fitness app could be really helpful in layout what needs to be done and in keeping track of progress in reaching fitness goals.

17. What did you find most challenging during exercising?

A – Find motivation is most challenging for me. If I have the motivation, I find it very easy to workout. Some days, it is really hard to find motivation and I don't prioritize my fitness and become a lot lazier.

B - Motivation, however I think if there is some motivation at the start, you could use that motivation to make working out a habit, and when it is a habit you won't need motivation as much anymore.

C - Persistence. Every now and then, physical discomfort and mental laziness made it difficult for me to persevere.

D - When I first began, it was keeping up the habit of exercising which was a challenge. Somedays I felt like not working out and so I missed gym sessions and would stay home.