FAB FIVE – FITNESS FOR FUN

Design Thinking Project

Spring 2022

California State University, Los Angeles
CIS 5040 - Information Systems

Contents

Team Fab Five

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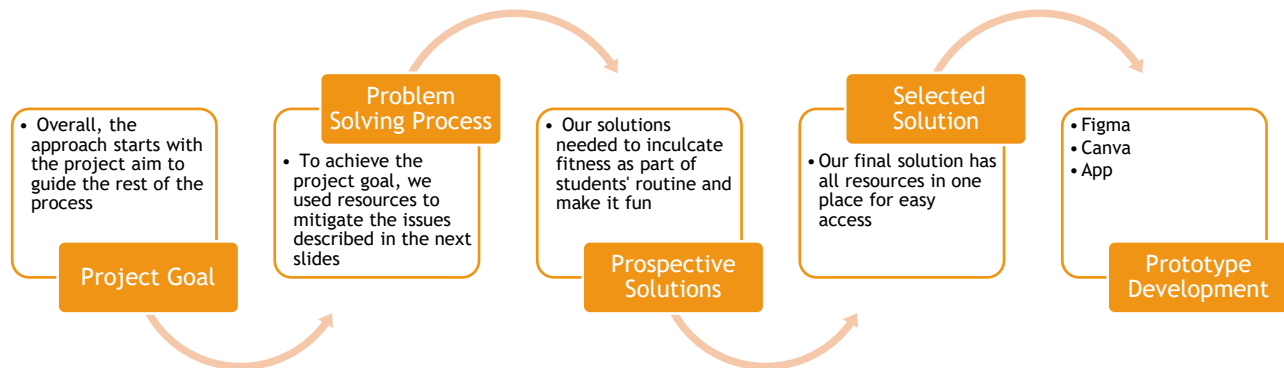- ➢ Phue Thant
- ➢ Pratiksha Yadav

Collaboration Tools

- ➢ Microsoft Team for team deliverables (Google Docs, Sheets, Slides, and Forms),
- ➢ WhatsApp for regular communication,
- ➢ Zoom for weekly team meetings.

Prototype Base

- ➢ Figma for sketches on initial design ideas
- ➢ Canva for designing the basic visualization for prototype
- ➢ CSULA webpages and free online platforms (YouTube, AllTrails, FitOn, local gyms) for all information to share at one place.
- ➢ Xcode for developing the application

Project Overview

- Overall, the approach starts with the project aim to guide the rest of the process

Project Goal

Problem Solving Process

- To achieve the project goal, we used resources to mitigate the issues described in the next slides

- Our solutions needed to inculcate fitness as part of students' routine and make it fun

Prospective Solutions

Selected Solution

- Our final solution has all resources in one place for easy access

- Figma
- Canva
- App

Prototype Development

Problem

How can we improve CSULA students' involvement in physical activities and make fitness a routine and fun to promote a healthy lifestyle?

Solution

Developed a mobile application for CSULA students to access it easily anywhere and anytime they want for their physical activities, including the events and activities happening both in CSULA campus and free online platforms.

Categorized into different activities from home workouts to campus gym, men and women sports, yoga, Pilates, dance, etc.

Designed based on different interest of different students and even included the options for the people who do not have time. Everything is available at one place, Fun, Fit and Healthy.
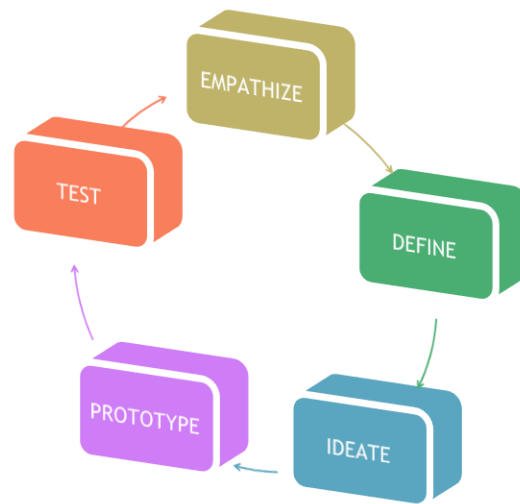
Design Thinking Steps

Figure 1 - Design Thinking Diagram

Empathize

The very first stage of design thinking process that we have implemented in our project was "Empathy" to get a viable solution. Our project goal and target are CSULA students, so we empathize for every student with different difficulties and situations. We went on campus and asked students questions and asked them to take our online surveys to gain the insights into what were the main issues that they were having, what was their needs for their healthy lifestyle, and what was their preference in making fitness a routine. As a result, we used their answers to help look for the solutions of our project.
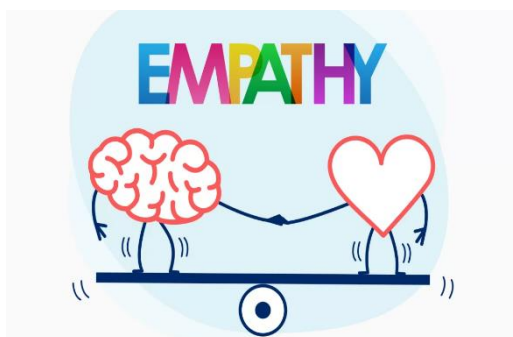

Figure 1 - Empathy

As we have learned from our class and study of design thinking skills, our group always reminded ourselves to have empathy, and to observe and listen to the targeted and potential users open-mindedly by putting away our own biases aside while developing our project.

Define

The define phase is where we combined all our research and observations where the user's problem exists. This is where we designed a problem statement. The problem statement is aimed to define the core issue of students regarding fitness.

We tried to generate concrete and actionable ideas to address the issues and problems that have been identified by our team up to this point. Creating personas with names, faces, backgrounds, and struggles made it easier for us to understand the needs, hopes, and behavior of students.

The major challenge for students were time constraints along with motivation, awareness, and transportation. Through define phase we were able to define our goal as How do we engage CSULA students in physical activities so that they have a healthy lifestyle?

Ideate: Brainstorming

We have reached the third step in the Design Thinking process. We brainstormed to come up with as many solutions as possible to address the problem statement. This stage increased the creative potential of our solution as we went beyond the apparent solutions to discover new areas for innovation.

We ultimately decided to create an app that would be available to all CSULA students, allowing them to easily access and explore all the fitness activities available on and around campus.

Prototype

The fourth stage in the design thinking process is prototyping. Our goal is to identify the best solution for our problem and, after choosing a solution from the list we had in the "Ideate" stage, we designed three inexpensive, small-scale versions of our "Fitness For Fun" app.

As mentioned in class, we built a sketch, a realistic prototype, and a functional prototype. We brought our ideas to life by sketching out our design and creating a picture using Figma. For our realistic prototype, we used Canva and designed a prototype that felt realistic while also considering the flow of how a user will interact with it. While this prototype is not functional, this prototype helps give us an idea of how we want our app to look like. Our functional prototype was done by coding in XCode, and this prototype feels like a fully functional product and considers the entire user experience.

Testing

We completed the prototype and gave a demo of our product to other teams in the class. They listened to our demo as a user and gave us feedback about the product and suggested a few add-ons. We have improved our product based on the feedback and made slight changes to the existing design.

We finally decided to develop the product for iPhone, and we used XCode tool and swift language to develop that product, and to designing the UI we used the Storyboard in XCode.

After developing the product, we tested different scenarios and workflows in the app. Some of the scenarios are mentioned below:
- Mobile app is launching properly without any issues
- Tested the UI alignment for all iPhone devices

- Tested the navigation flow and functionality for launch screen, Login and Signup pages
- Tested the navigation flow and functionality for home screen
- Tested the navigation flow and functionality for Sports flow
- Tested the navigation flow and functionality for Outdoorsy flow
- Tested the navigation flow and functionality for Gym buff flow
- Tested the navigation flow and functionality for Homebody flow
- Tested the navigation flow and functionality for Busy bee flow
- Tested new functional enhancement's ability and Scalability in the app
- Tested navigations for third party apps like Instagram, CSULA website and other websites

Research & Focus Group Interview

Research

Our team performed both qualitative and quantitative research by conducting a focus group interview and a Qualtrics survey.

Focus Group Interview

We conducted a focus group interview with another team in our class with a total of 5 other students. The experience was insightful since we were able to discuss in depth about their problems and great ideas shared by the group regarding fitness activities and lifestyle.

Below are some insights that we came up with. Not everything we asked is shown in the below notes, but rather we have added few questions with their responses by the focus group. This gave us plenty of opportunities to know what specific issue each student in the group is having.

Do you like to do fitness activities? If <u>YES</u> why? If <u>NO</u> why? IF YES: What is your current level of fitness? (Perfect, good, average, poor) and have you compiled an exercise plan?

- Yes / Poor bc he tried to walk up the stairs and he was tired - doesn't have time bc FT work and FT school
- Yes / average, no exercise plan yet bc no time (getting time throughout the day is quite difficult)
- <u>Yes</u> if outdoor / no bc she doesn't like being in a room when she does fitness stuff level is poor bc her sports team is on hiatus
- F, indoor/outdoor, has a lack of time
- Yes

Have you attended any fitness activities or events hosted by CSULA? And how was your experience?

A) IF YES: How did you get to know about the fitness events happening on campus?

B) IF NO: Do you have any medical limitations preventing you from exercising? Or what is the prime reason you never participated?

C) OR: Did you have any discomfort during your participation in the event? If yes, please elaborate on it.

- No
- Not sure if there are any posted but would like to attend, the activities are throughout the day and no one's on campus to do them
- No, but bc he's only on campus for class but if there was something and knew about it <u>ahead</u> he would attend
  - If covid wasn't here, we would be more active
- No, haven't seen any postings, no medical limitations, she doesn't know about them
- No, no medical limitations, not available on campus for events

How do you spend typical weekend?

- Go out for movies
- Hangout with friends
- Play games or watch movies
- Go for hike once a month
- Play games like tennis. Go to swim

If you have an online platform to engage with people to work out together, would you make use of the platform?

- Yes,
- Yes
- Yes
- Yes
- Yes, would be useful especially if it can help him connect with people
  - Convenient and would help facilitate some exercise
  - Thinks there should have a scheduling feature in the app

Do you actively and regularly participate in your favorite physical fitness activity? Explain!

- Yes, regularly play tennis 3-4 times during the week, weekends play other sports
- No, because her team has practices during <u>weekdays</u> and she can only make the weekend practices bc school and work
- No, because he fell off his routine (ex: last summer he biked every day and now he is <u>not</u> so he needs to get a better schedule) (maybe build better habits?)
- No, bc scheduling problems if she has a better track of <u>time</u> she could be more active
- No, he doesn't have any time to do

What influences your exercise choices? (Age, Personal motivation, time constraints)

- Personal motivation
- Motivation to stay fit and relaxation
- Motivation and fun
- Healthy and motivation
- Time constraints and needs more personal motivation to do it

The focus group interview was a turning point for us because we were able to gather information from the students, and we can clearly see that students were not aware of the fitness events held at CSULA.

One great takeaway we received from the focus group interview was the students like working out. However, they don't know what to do, have no time, and are less motivated to get it started.

Survey

The demographics of our survey participants consisted mostly of CSULA students.
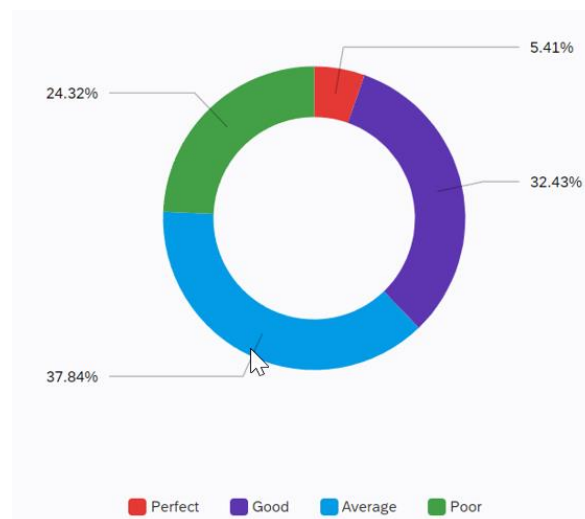
What is your current level of fitness?

Figure 3- survey 1

The above visualization tells us 5.41% of the people are perfect whereas 24.32% people are poor. The percentage is too low for the perfect category. We are targeting on each category to be higher.

How well are you aware of the fitness activities hosted by CSULA students?

Figure 4 – survey 2

The above analysis shows that 65% of the people are not aware about the activities hosted by CSULA students. This might be the other reason for students to not participate in any of the CSULA fitness activities.

What is your commute time?   **How do you commute to campus?**

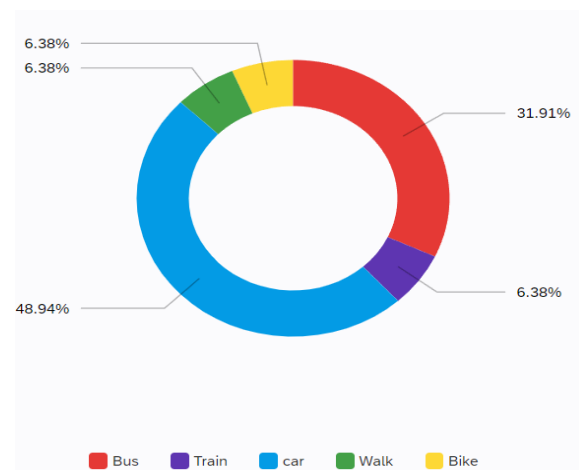*Figure 5 – survey 3*   *Figure 6 – survey 4*

The above questions particularly focus on transportation issue. As we can see from the visual representation that students commute to school starting from 10 minutes up to 2 hours. As the mode of transportation is different for everyone. As 31.91% people commute by Bus and 6.38% by train. Hence, we are considering these things as well because not everyone can commute to campus regularly for fitness activity if they don't have class.

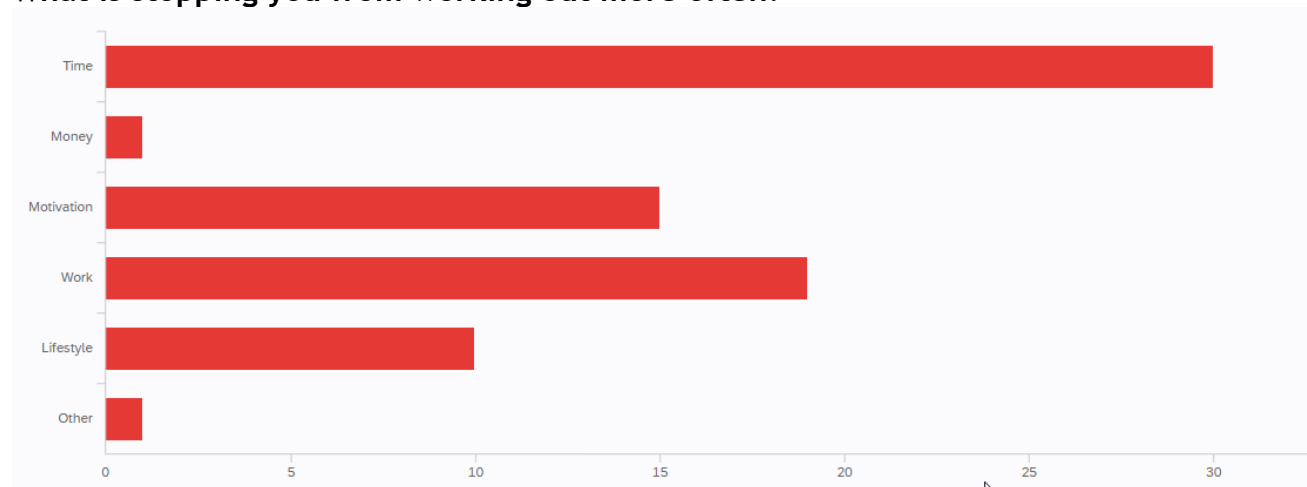**What is stopping you from working out more often?**

Figure 4 – survey 5

The above bar graph represents the time as the major constraint for students followed by work and motivation.
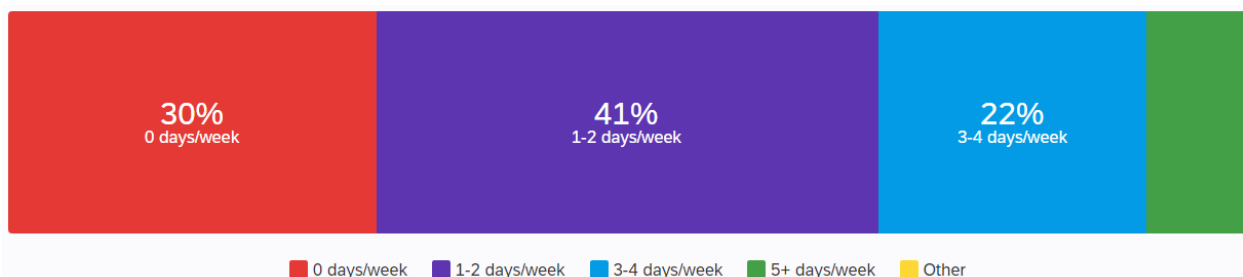
How often do you work out/play sports?

Figure 5 – survey 6

As we can observe from the bar graph above, 41% of students do workout 1-2 days per week. However, 30% of students do not do any work out.

What is your biggest challenge when it comes to achieve your fitness and wellness goals?

Figure 6 – survey 7

Key Findings

Based on the written responses in the survey along with other qualitative research, we were able to infer that there were 4 main major problems of students to incorporate fitness into their routine.

➢ Time constraint

➢ Awareness

➢ Motivation

➢ Transportation

Personas

Personas are fictional characters, which are created based upon the research to represent the different user types that might use our services or apps. By creating personas in our design thinking project, it helps us to sort our different needs and expectations, and we can easily achieve our goal by identifying with the user we are designing for. Having personas is very useful for our design thinking steps and it is a guide for our ideation process and our design development.

We have created three personas in our project, and they are all represented as CSULA students with different goals, hobbies, and backgrounds.
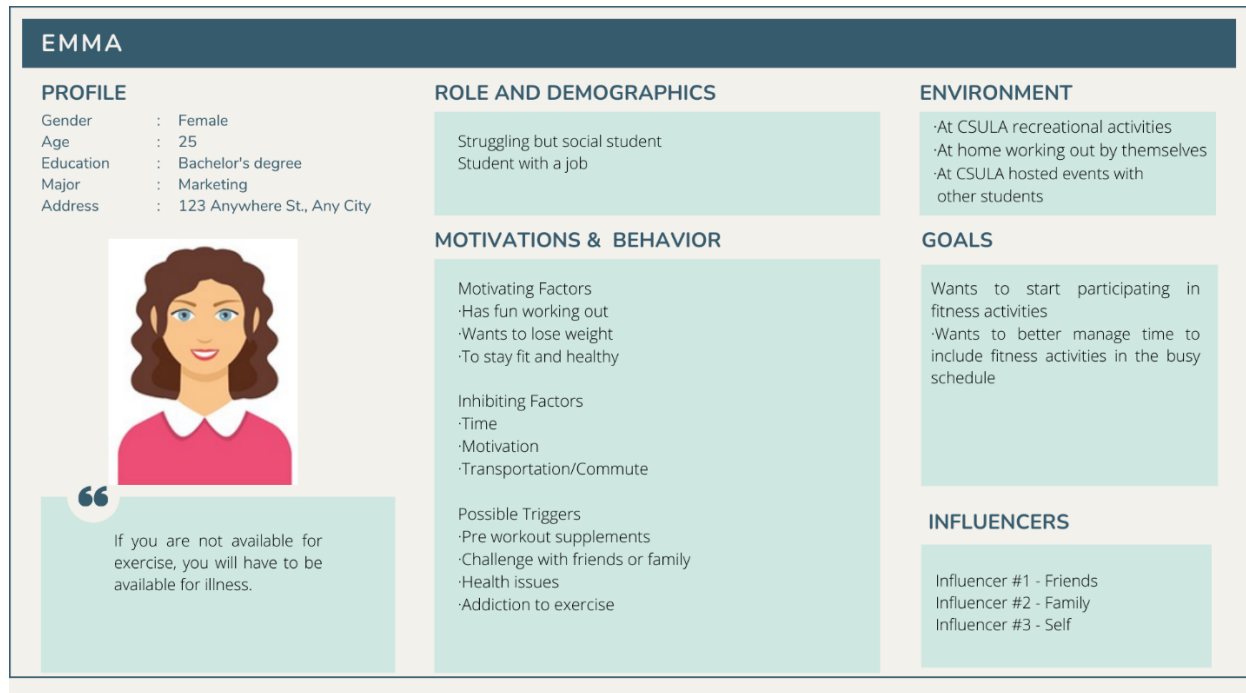
EMMA

PROFILE

Gender   :   Female
Age   :   25
Education   :   Bachelor's degree
Major   :   Marketing
Address   :   123 Anywhere St., Any City

"If you are not available for exercise, you will have to be available for illness."

ROLE AND DEMOGRAPHICS

Struggling but social student
Student with a job

MOTIVATIONS & BEHAVIOR

Motivating Factors
·Has fun working out
·Wants to lose weight
·To stay fit and healthy

Inhibiting Factors
·Time
·Motivation
·Transportation/Commute

Possible Triggers
·Pre workout supplements
·Challenge with friends or family
·Health issues
·Addiction to exercise

ENVIRONMENT

·At CSULA recreational activities
·At home working out by themselves
·At CSULA hosted events with other students

GOALS

Wants to start participating in fitness activities
·Wants to better manage time to include fitness activities in the busy schedule

INFLUENCERS

Influencer #1 - Friends
Influencer #2 - Family
Influencer #3 - Self

Figure 10 - Personas 1

Liam

profile

Gender   :   Male
Age   :   28
Education   :   Master's degree
Major   :   Computer Science
Address   :   456 Anywhere St., Any City

Role and demographics

- Graduate Student
- Student with a job

Environment

·At CSULA recreational activities
·At home working out by themselves
·At CSULA hosted events with
  other students

motivations & behavior

Motivating Factors
·Enjoy working out
·Wants to lose weight
·Wants to stay fit more and get better

Inhibiting Factors
·Choose a reason to become more active
·Give yourself rewards

Possible Triggers
·Motivation
·Setting specific goals
·Good workout buddies

Goals

·User   wants   to   continue
participating   in   fitness
activities, has no constraints
_want to know more about
CSULA activities darily,

Influencers

Influencer #1 – Friends
Influencer #2– Self

Go the extra mile. It is
never crowded.

Figure 11 - Personas 2

Liam

profile

Gender   :   Male
Age   :   29
Education   :   Master's Degree
Major   :   Civil Engineering
Address   :   987 Anywhere St., Any City

Role and demographics

- Graduate Student
- Student with job, unmarried, limited income, predominantly male

Environment

At home working out by themselves

motivations & behavior

Motivating Factors –

.Enjoys working out to release stress
.Wants to lose weight
.Want to stay fit
.Good workout buddies
.Goal Oriented

Inhibiting Factors –
.N/A

Possible Triggers –
.Try to do some activity on most weekends
.Set goals and charts for progress

Goals

.User wants to continue participating
in fitness activities, but do not have
time and motivation.

Influencers

Influencer #1– Friends
Influencer #2– Self

"It always seems impossible
until it is done"

Figure 12 - Personas 3

Prototype

For our product, we built a sketch, a realistic prototype, and a functional prototype.

We used Figma to brainstorm our design and convey our ideas into a rough sketch.

Figure 13 – Prototype 1

We started our sketch with a rough idea of the contents of our app, such as what categories and what information we wanted to include. We came up with five sections, Sports Lover, Outdoorsy, Gym Buff, Homebody, and Busy Bee, and broke down each section into different colors so it would be easier to keep track of how we want to navigate the app.
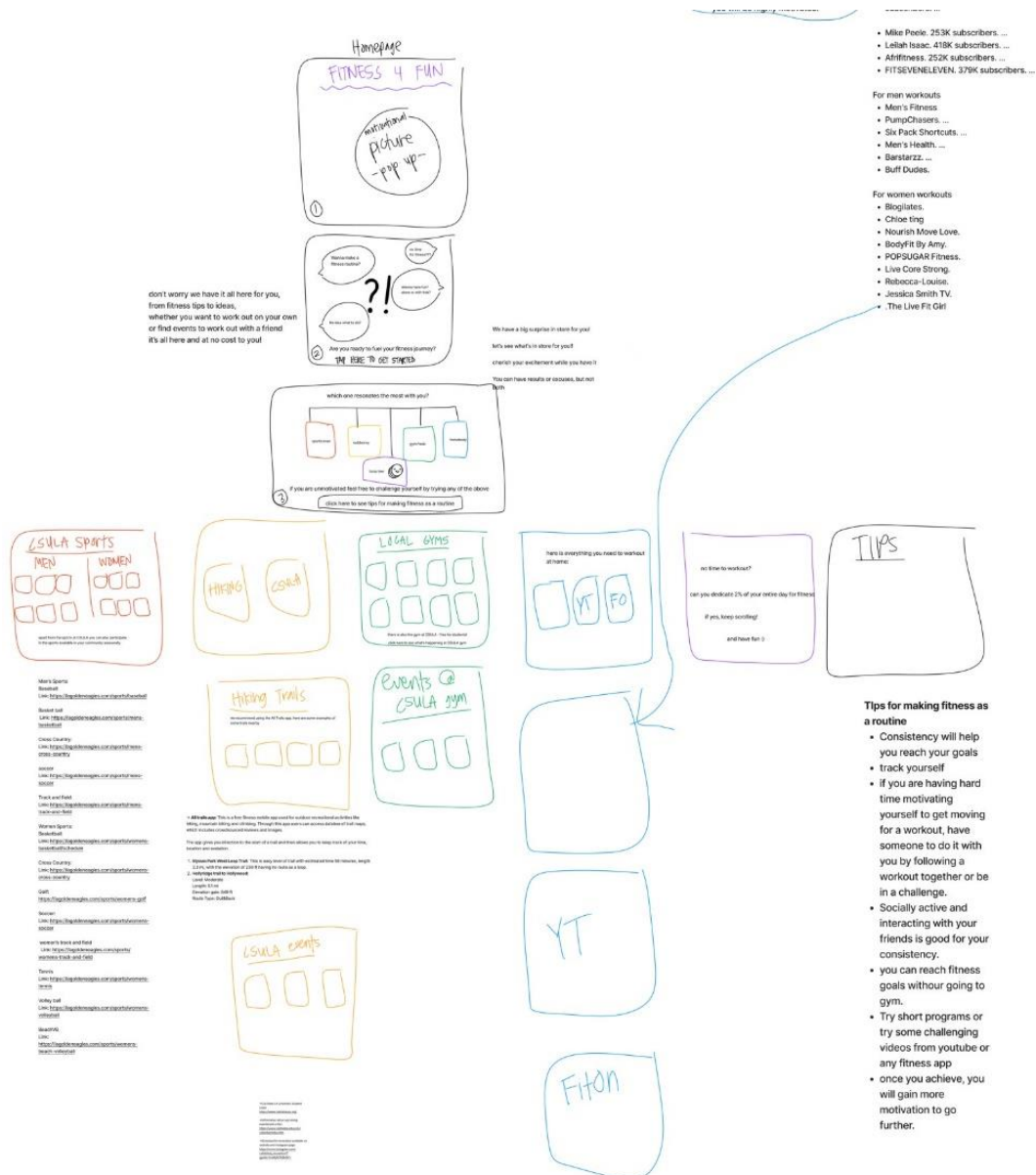
Figure 14 – Prototype 2

After deciding on the contents of our app, we continued using Figma to now sketch the design and how we wanted it to look. Again, we separated each topic into different colors to easily organize our thoughts and navigate our options. In this sketch, we included a home page and a motivational page.

For our realistic prototype, we used Canva, a free graphic design tool used to create visual content. Using this tool gave us the opportunity to create a smoother design while

considering user experience. We were able to let our creativity flow by creating a design that appealed to users while also being easy to navigate so the user does not feel overwhelmed or lost. Even though this prototype is not functional, it helped us visualize which ideas of ours worked and what did not.

We used XCode to develop our functional prototype, which brought our ideas to life. This prototype feels exactly like an app and considers the entire user experience because we designed everything in our realistic prototype before coding the finished product.

Product Development

Product developed for **iPhone**

- Tool: XCode
- Mac OS: Monterey
- UI Design: Storyboard
- Debugger: Simulator
- Language: Swift
- Apple developer account price: 99$
- Designed app icons using app icon generator
- Purchased apple developer account
- To submitting app into app store, have the apple developer account
- Created developer and distribution certificates
- Exported Provisioning files into P12 files
- Generated ipa to submit the app into Appstore connect

Launch Screen, Login & Signup Screens

Launch Screen

When the user clicks on the app it directly navigates to the launch screen, which is also called the welcome screen. It has login and signup buttons to login to the FFF app.

Sign Up Screen

If the user is a new member for the FFF app, click on the sign-up button and enter the details like Name, Email ID, Password, Date of Birth. Afterwards, click on the sign-up button to enjoy the FFF activities.

Login Screen

If the user is already registered for the FFF app, just click on the login button, and enter email id and password to login into the app.

Home Screen

As per the survey results, we decided to place all the activities in one place so CSULA students can easily be accessible for the CSULA Students to easily access whatever they need.
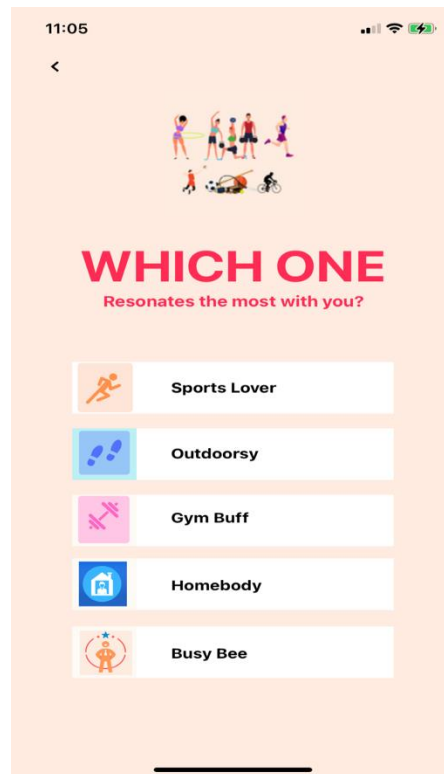
The home screen consists of Sports Lover, Outdoorsy, Home Body, Gym buff, Busy bee categories. Based upon the user's interest, he/she can click on that category and enjoy all the free stuff to be fit and fun.

Sports Lover Flow

When the user clicks on sports lover, he/she is directly navigated to the Sports Screen.

When the user clicks on the Men, he/she can find the sports available at CSULA, such as Baseball, Basketball, Cross Country, Soccer, and Track & Field.

When the user clicks on the Women, he/she can find the sports available at CSULA, such as Basketball, Cross Country, Golf, Soccer, track & Field, Tennis, Volleyball, and BeachVB.
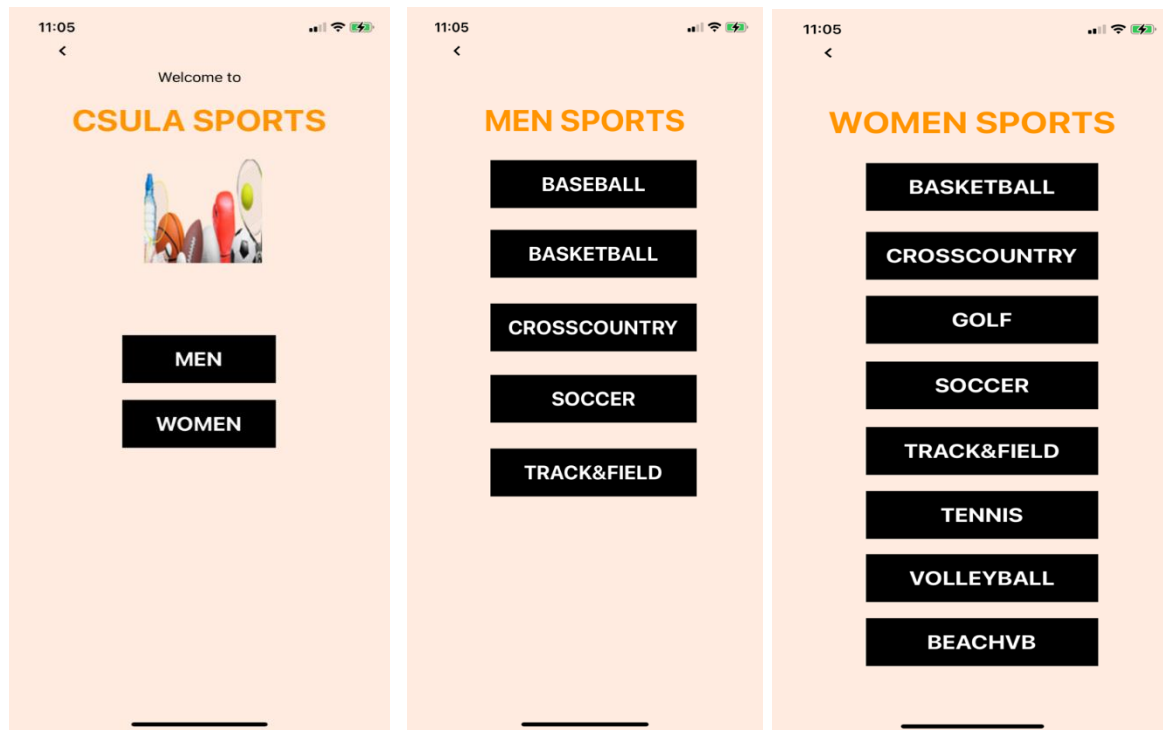
When the user clicks on the sport, he/she is directly navigated to that sport on the
CSULA website.
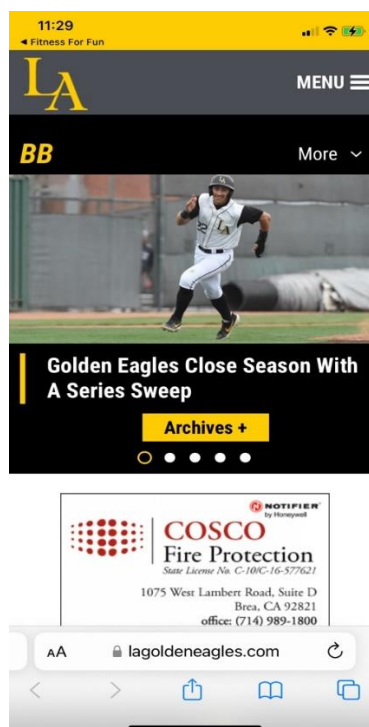
Outdoorsy

Outdoorsy flow contains information about all the trails in and around CSULA and upcoming recreation events at CSULA. When the user clicks on the All-Trails screen, he/she can find the App Store and Play Store links for the AllTrails app.
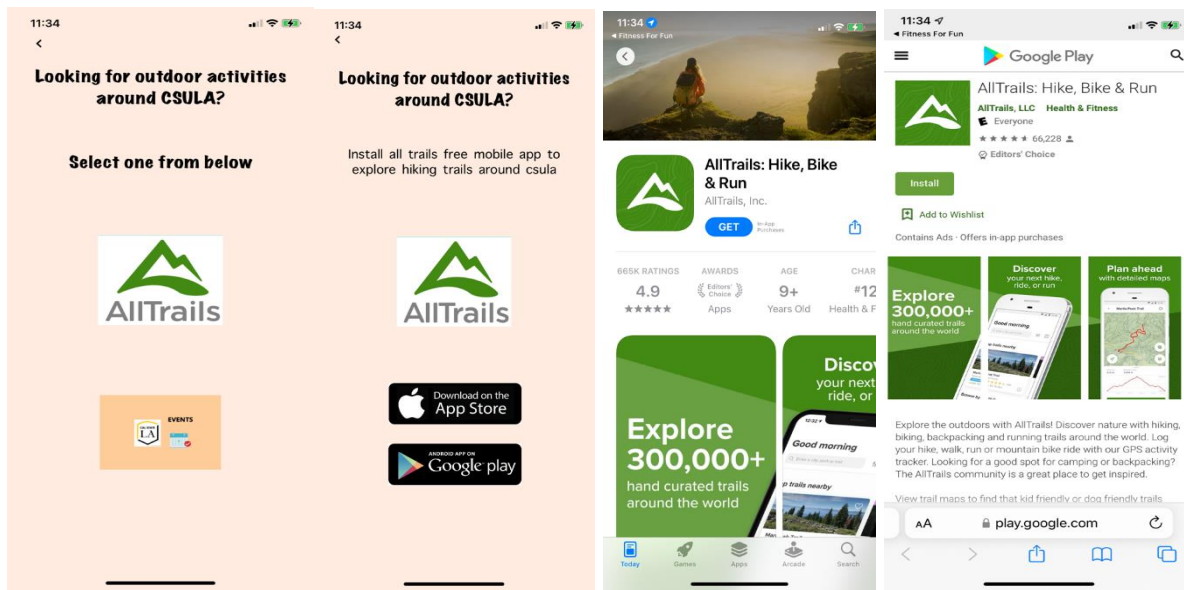

When clicking on the CSULA events the user is directly navigated to the below screen which contains Information about upcoming events, CSULA Student Union, Recreation Activities, and the Center for Student Involvement.

Information about upcoming events takes the user to the Instagram page there he/she can find all the information about upcoming events provided by CSULA.

CSULA Student union takes the user to the CSULA Student Union web page where the user can find all the information about the Recreation Center. Additionally, the user can also find information about student elections, u-su employment, and board of directors. Those who are interested in being a student leader can directly apply from there.

Recreation events navigates the user to the CSULA Recreation Instagram page, and from there he/she can know all the updates about recreation events.

The Center of Student Involvement takes the user to the CSULA Student Involvement web page. There the user can find student organizations, university programming, leadership development, and educational programs.
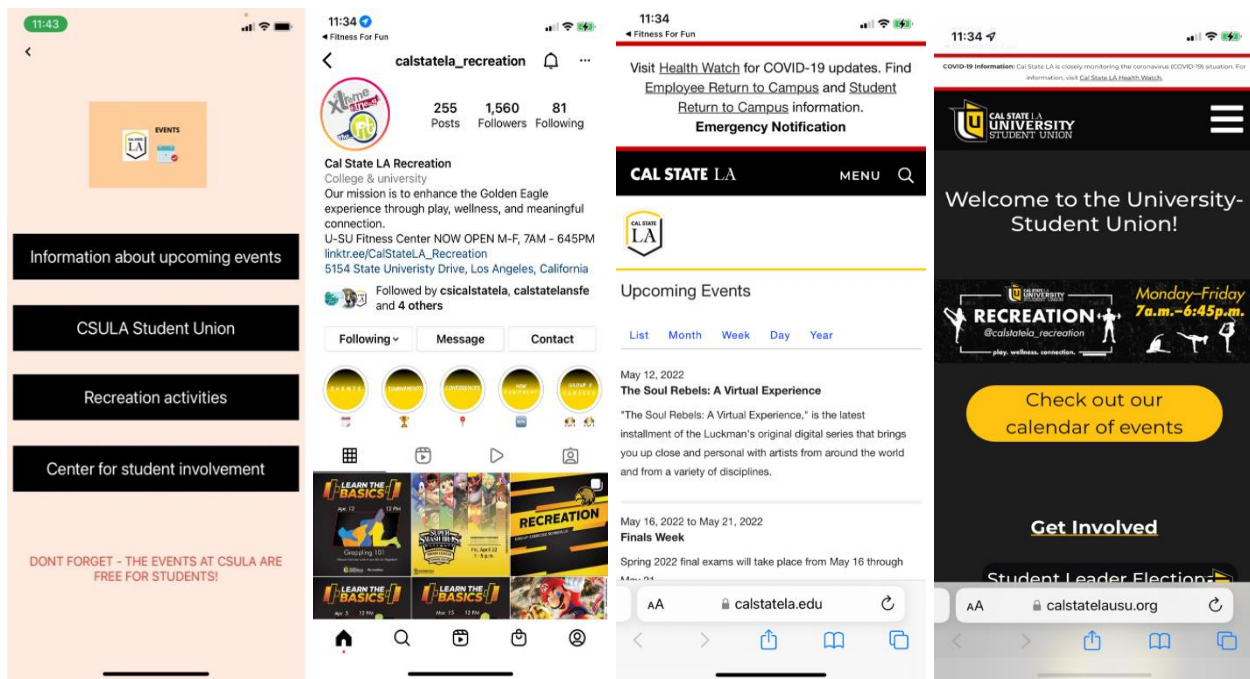

Gym Buff

When the user clicks on Gym Buff, he/she is directly navigated to the "Local Gyms" screen. Here is all the information regarding gyms local to CSULA, as well as the CSULA gym.

If the user wants to know more about the CSULA gym, just click on "click here to see what's happening at CSULA gym", to see the upcoming recreation events, recreation exercise schedule, and the Xtreme Fitness schedule.

When the user clicks on "Upcoming Recreation Events" he/she is navigated to the CSULA Recreation Instagram page.

If the user clicks on the recreation exercise schedule, Xtreme fitness and schedule links he/she is navigated to those web pages.
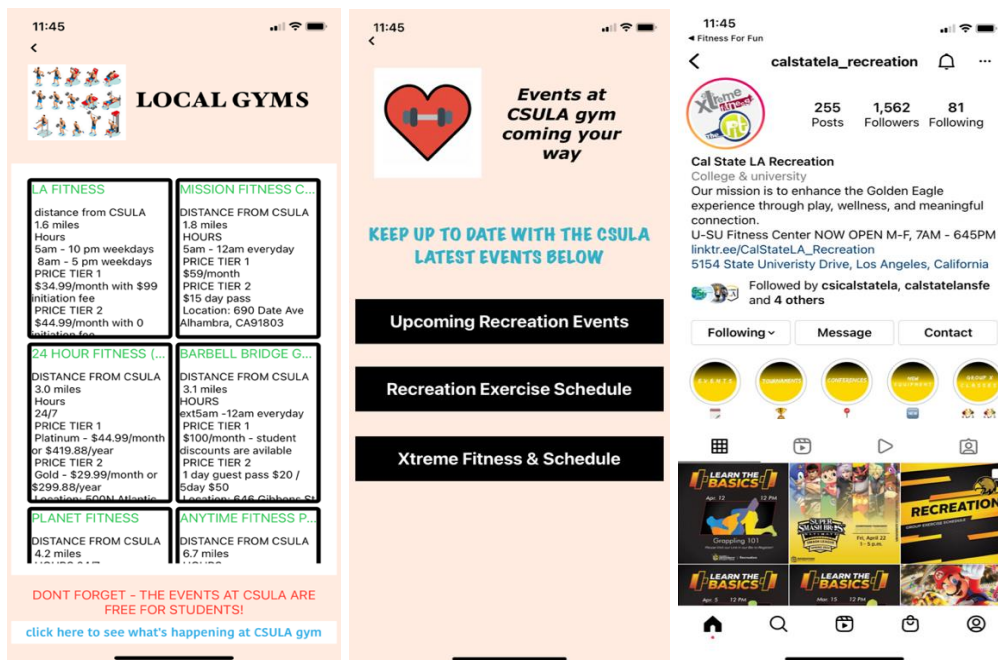

Homebody

To do workouts at home all a user needs is a kettlebell, dumbbell, water bottles, yoga mat, and resistance brands, all of which are under $50.

Those who are not interested in purchasing equipment can also find fitness activities without using these items. Just click on "Let's Get Started" to start and enjoy Yoga, Pilates, Zumba, Men workouts, Dance, or Women Workouts.

If the user wants other activities, just click on "All-in-one place" which directs the user to the FIT ON app. From there, the user selects the workout from the search bar. The user can also challenge friends with this app to motivate them to do fitness activities. The app allows the user to post workout photos on Instagram, Facebook social platforms.
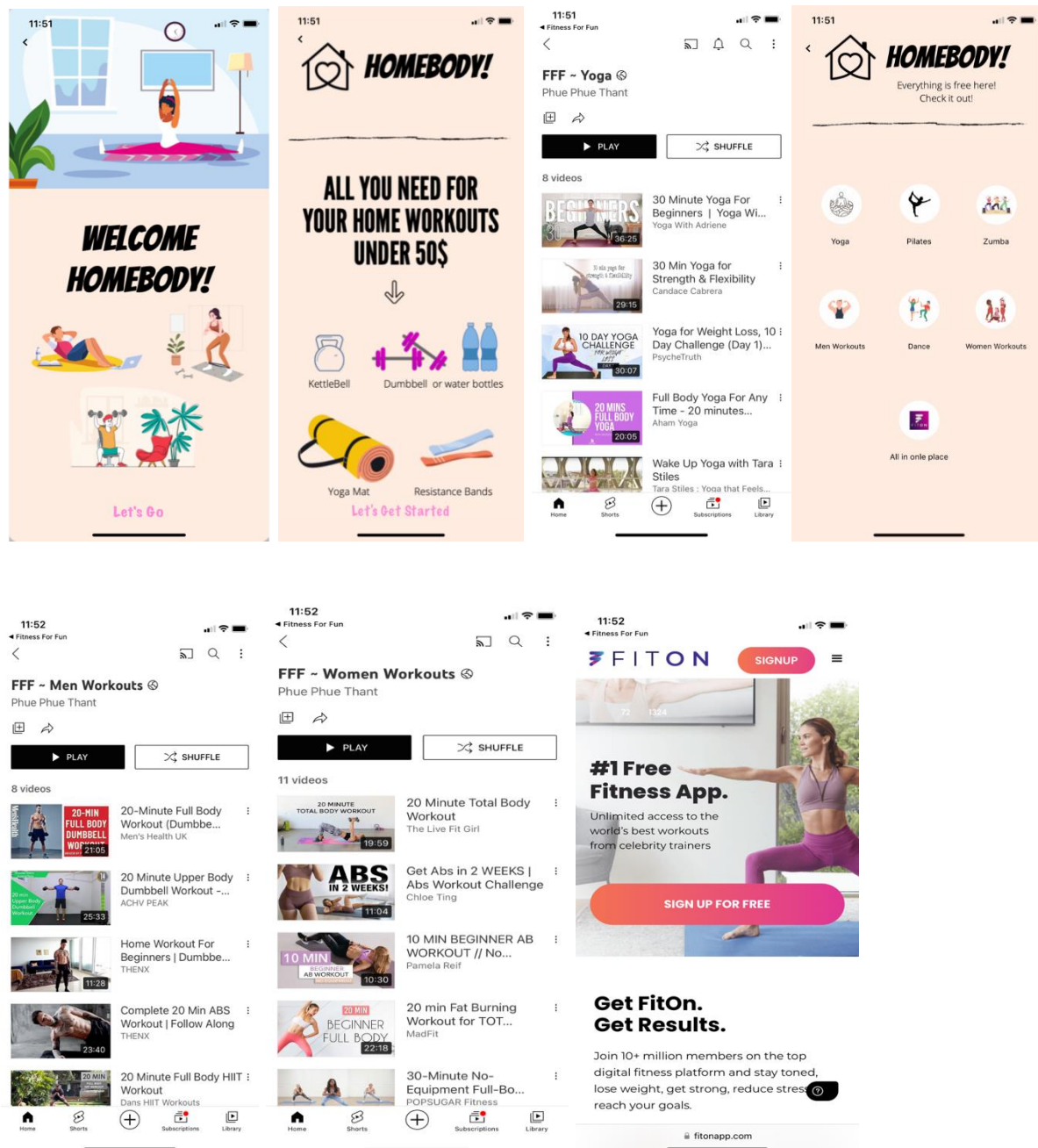
Busy Bee

If the user is not interested in doing any workout, this is the flow where he/she can get motivation while reading the inspirational quotes. If the user is not interested in doing any activity just start with a small walk to achieve a bigger goal.
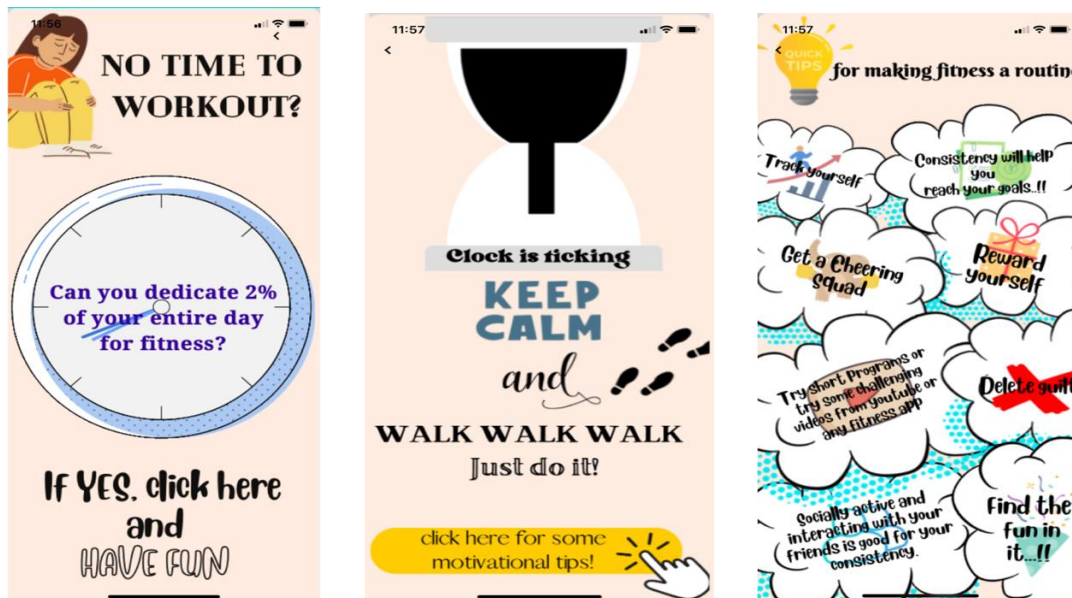
Implementation Plan

We intend to collaborate with the CSULA Student Union and Recreational Center to publicize the app and make it available to all CSULA students.

We also want to connect with the New Student Family Engagement Department to promote the app in the Orientation of different Departments at the beginning of each semester so that all the freshman and transfer students are aware of it too.
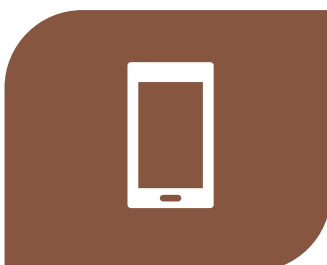
We are planning to release the "Fitness For Fun" App on App Store in two weeks so that all CSULA Students can benefit from it.

A little progress each day adds up to BIG results.