## "Post-Sure!"

Your Personal Posture Trainer!

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#### I. TEAM RESPONSIBILITIES

Tapesh Nagarwal

Our team consists of Craig Iaboni who is a junior studying Computer Science, Tapesh Nagarwal who is a sophomore studying Business Information Systems, Ranika Rafer who is a sophomore studying Information Systems, and John Siri who is a freshman studying Human Computer Interaction. We delegated the tasks based on personal inclinations of different segments of the project.

During classroom time, we equally divided up the work and gained experience on how to properly design and account for user experience. All the members of our group worked on formulating the root concept table. This part is what really shaped and helped construct a firm product idea to work off of for the rest of the project. Tapesh, John, and Ranika worked on the personas initial draft. Craig, John and Ranika edited and improved upon the information as the critiques from class were given. John and Ranika also constructed the problem scenarios where Tapesh and Craig helped edit it after class time critiques. Selecting our stakeholders was a collective effort. We made an educated decisions based off our solid efforts during the creation of the root concept table. Last but not least, Tapesh and John created an initial outline and wireframe for the key path scenario. Since Ranika was the only one with an Axure license, she utilized the information and powerpoint mockup to construct the final key path scenario.

For the final report, our group collaborated and decided to write up the different sections as assigned. Craig Iaboni was assigned the personas and the three problem scenarios sections.

Tapesh Nagarwal was assigned the root concept table and stakeholder and target demographic sections. Ranika Rafer was assigned the key path scenario section, and John Siri was assigned to

help with the activity scenarios sections and assist elsewhere. The 20 claims analysis was assigned to all members of the group.

Concepts we learned include, but are not limited to, creating a root concept table, selecting the proper stakeholders, creating appropriate personas and problem scenarios to finally devise a application that shows the key path solution to said stakeholder's issues. In addition, we all learned how to utilize the software, Axure, when creating the key path scenario. Axure is a wireframe and prototype building software that allowed us to create a clickable mockup of our product's mobile application, "Post-Sure!"

#### II. ROOT CONCEPT TABLE

#### Tapesh Nagarwal

The root concept table consists of four components: the high-level vision, the basic rationale, the stakeholder group, and the starting assumptions. The High-level vision refers to the goal or purpose of a product or service that solves a high level problem. Forming a educated high level vision requires understanding limitations and being realistic. When creating a high level vision, you must define a clear goal that truly benefits the stakeholder and generates revenue for the company.

Our high-level vision is that people will be able to exercise with correct posture, enabling them to be healthier. We believe this product will allow teams to train at any time without personal coaches, but rather a portable device. In addition, results may be sent to coaches or trainers through asynchronous communication.

The next component of the root concept table is the basic rationale. This is a statement that defines how an idea, product, or service solves a current issue or problem that other solutions can not. Our basic rationale is to focus on proper posture during training to prevent injury and improve fitness results. The device acts as a personal trainer that one can take anywhere and anytime. The "Post-Sure!" is a fitness device that records and sends progress on posture to trainers or other users.

The stakeholder group is the group of people who will comprise the buying audience of our product. Our stakeholder group are athletes, trainers, and fitness enthusiasts who seek to

improve results from training, record development from training, and lower the chance of physical injuries due to improper exercising. Choosing the right stakeholder group gives direction to a company when deciding where to invest money and efforts. We postulated that athletes are prime stakeholders because these individuals desperately seek a edge against their competition. Also, having proper posture in high intensity sports is vital to prevent injuries that can hurt their career. Our second stakeholder are trainers. Trainers are specialized professionals who help their clients gain the most out of their workouts. This includes focusing on posture so that their clients, who can all have different levels of experience with working out, exercise properly and stay safe. Our last stakeholder group we investigated is the fitness enthusiast. These are everyday average joes who care about fitness and health. The "Post-Sure!" would help these individuals to better their workouts and be aware of hazardous posture since they work out without any professional help.

Our starting assumptions are that users will have outstanding access to the computers with basic knowledge on how to use them. They will use their computers to gain feedback from personal trainers and programmers through email, phone, and personal communication.

#### III. STAKEHOLDER AND TARGET DEMOGRAPHIC

Tapesh Nagarwal

"Post-Sure!" is a fitness data analytics device that records and improves its users posture as they are exercising. We expect this device to appeal to individuals with an inclination towards physical activity and health improvements. Our target demographic are students in the age range of 18-26 who partake in high levels of physical activities. These are the type of athletes that work very hard to spend countless hours training, reaching the peak of their physical capabilities. They are often young and seek to have the best overall long term gains and health. With "Post-Sure!", these individuals will be able to adopt a strict regime to ensure proper postule while training. Better their posture earlier in their fitness careers serves to improve long term results and reduce injury.

We have direct and indirect stakeholders. Our direct stakeholders are athletes and personal trainers. Athletes and personal trainers benefit from our products because this is a fitness device that helps record data that personal trainers can better analyze and interpret for their clients. Our indirect stakeholders are chiropractors and insurance companies. These stakeholders benefit from our products because the "Post-Sure!" helps prevent future injuries or issues on their clients.

#### IV. CLAIMS ANALYSIS OF A LIST OF 20 APPS

Claims 1-8 Ranika Rafer , Claims 9-12 John Siri, Claims 13-17 Craig Iaboni, Claims 18-20 Tapesh Nagarwal

#### Claims Analysis Relevant List

- 1. Lumo Run
- 2. Lumo Lift
- 3. FitBit
- 4. Trainerize
- 5. Fitocracy
- 6. Siri
- 7. Fitstar
- 8. Samsung Health
- 9. Posture Wedge
- 10. Back Brace
- 11. Body-Aline
- 12. Cortana
- 13. Google Voice
- 14. Misfit
- 15. Facebook
- 16. Upright Pro
- 17. Map My Hike
- 18. MyFitnessPal
- 19. Cron-o-meter
- 20 Nintendo Switch

A claims analysis examines the positive and negative aspects of a product's design feature or technology solution. In most cases, these features already exist in other products. A claims analysis is used to evaluate the feature, compare it with existing apps, and justify the need to have it in the product.

## 1. Audio Coaching

Users want to use products that gives them real-time feedback through audio during their exercises so that the user can correct their form or posture immediately.

## **Relevant Apps/Websites:**

- Lumo Run
- Lumo Lift

This man is going for a run, and he is wearing headphones that allows the app to suggest



ways to correct his running posture.

## Feature 1: Real-time coaching

Audio coaching allows for users to use headphones or speakers, and let the app "speak" to them as they exercise. The app would give encouragement, or inform the user of an error in how they're exercising, then be able to give the user instructions on how to correct the issue.

## **Claims for the Approach**

#### Pros:

- Live feedback lets the user correct the issues instantly.
- While exercising, it may be hard for the user to read a screen that has instructions because they are moving around. Audio coaching is less disruptive to the exercise because the user can move and listen at the same time, without having to pause in their routine to read from their device's screen.

#### Cons:

- The feature may become disruptive to others if the user has the audio played from speakers rather than headphones. Others who are using the app may be confused and follow instructions not meant for them.
- This feature is inconsiderate of deaf/hard of hearing users.

### 2. Sensors

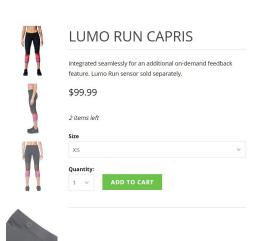
Sensors in bodytech or recording devices are able to track motion and analyze form while the user is exercising.

#### **Relevant Apps/Websites:**

• LumoRun's sensor and bodytech

Text on the picture reads: "integrated seamlessly for an additional on-demand feedback feature."





U

#### Feature 1: Analyze user's form

The sensors are able to analyze the user's form and see if they are using correct posture when exercising.

#### Claims for the Approach

Pros:

• Sensors are able to give the user their own personal and customized exercise advice based on what the sensor picked up from the user's posture and movements.

#### Cons:

• This technology is still fairly expensive, and *average* athletes may not want to spend so much on this kind of technology. Professional athletes might be willing to, but that is because they are more serious about their performance and have the necessary funds to purchase this type of technology.

## 3. Mobile App - Tracking Progress

Product comes with a mobile app where users can view their data and charts, communicate with contacts like coaches and team members, and to track progress.

## **Relevant Apps/Websites:**

- FitBit
- Misfit

App records steps taken by user and organizes it in a weekly chart.

#### **Feature 1: Data Tracking through Charts**

Data collected by the product is able to be stored on the app and organized in a chart to show the user's progress or activity over a period of time.

#### Claims for the Approach

Pros:

• Has psychological effect on the user to do better than previous performances



#### Cons:

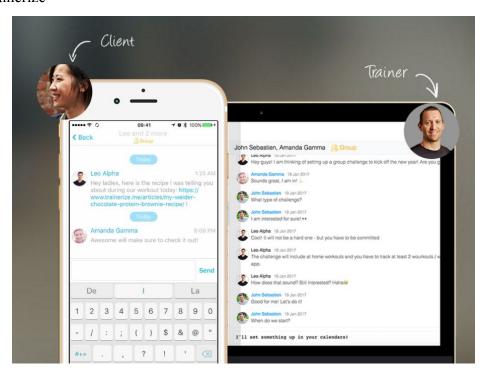
• Average users may not be able to understand some of the more advanced charts that would need interpretation from a coach or trainer.

## 4. Messaging

The mobile app features a built-in messaging system that allows users to correspond with each other for advice, or to set up scheduled times to meet.

## **Relevant Apps/Websites:**

Trainerize



The Trainerize fitness solution allows for clients and trainers to message each other. Option of creating group chats as well.

#### **Feature 1: Remote communication**

Clients and trainers are able to communicate with each other without having to be face-to-face. The built-in messaging feature has the user's contacts, where they can add trainers, coaches, team members, friends, etc.

#### Claims for the Approach

#### Pros:

• Users are able to get training tips from their mobile device, without having to travel to their trainer's location

#### Cons:

- Users will have to wait for the trainer's response, and the reply isn't guaranteed to come immediately.
- Trainers may become bombarded with messages from their clients and take a long time replying to them, or completely forget to respond to conversations all together.
- Takes time out of the trainer's schedule to respond to the messages when they are working with clients face-to-face.

## 5. Sharing Results

Users are able to share their results via the messaging feature with their contacts. Contacts would be able to view the user's charts, data, and statistics from their exercise.

TODAY Sept

## Relevant Apps/Websites:

• FitBit, Fitocracy

# Feature 1: Making charts accessible to trainers/coaches

Users can send their fitness charts/exercise summaries to trainers and coaches to interpret and analyze.

#### Claims for the Approach

#### Pros:

 Trainers can have more detail about their client's exercise routine | Steps | Calories | C

and what he/she is doing wrong.

• Average users who do not understand the charts can send it to someone more

knowledgeable about the content for interpretation.

## Cons:

• Trainers/coaches may become bombarded with charts, adding more to their work.

#### 6. Voice Commands

Voice commands let users interact with the device without pressing any buttons or icons. There are a pre-set list of commands that the app can understand then follow.

## **Relevant Apps/Websites:**

- Cortana
- Siri
- Google Voice



**Feature 1: Hands-free interaction** 

By saying a phrase, users can activate the voice commands and be able to give the mobile app commands such as stop/start recording, or switching to different pages of the app.

#### Claims for the Approach

#### Pros:

• Users that require using their hands while exercise (Ex. lifting), are still able to interact with the device without having to pause their routine to press a button.

#### Cons:

• App may not be able to understand the user's voice commands, which would frustrate the user.

#### 7. Visual Instructions

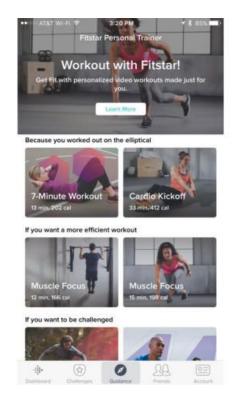
The app displays a visual aide to help users correct their form, in addition to having the written/spoken instructions.

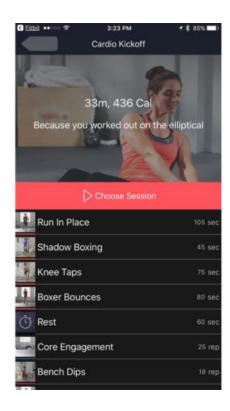
## Relevant Apps/Websites:

• Fitstar

## Feature 1: Videos/Diagrams to demonstrate proper form

On the correction screen, a video or diagram will be shown to instruct the user on how to correct their posture. User will follow the video/diagram to make the proper adjustments.





#### Claims for the Approach

#### Pros:

• Visual aid more helpful than text-only instructions. Having both will make instructions clearer and easier to follow.

#### Cons:

• Users with devices that have smaller screens may have trouble seeing the visual aid while exercising

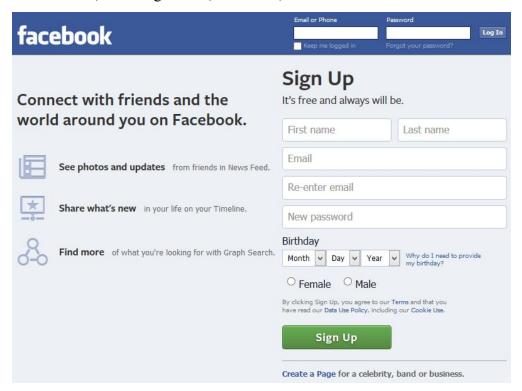
## 8. Register as User

Registering for an account creates a unique profile for the user that includes his/her personal

information that they want to share.

#### **Relevant Apps/Websites:**

• FitBit, Samsung Health, Facebook, etc.



#### Feature 1: Having a User Profile

Registered users have their each profile which allows other users to add them as contacts, message each other, and share charts.

#### Claims for the Approach

#### Pros:

- Makes the app have social media qualities, which encourages user participation.
- Makes it possible for the user to log onto other devices or to log in to their account on a new phone.

#### Cons:

• There's no prevention method that stops users from creating spam accounts.

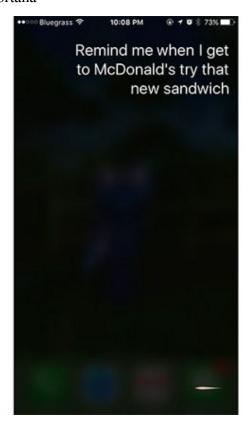
## 9. Location Tracking

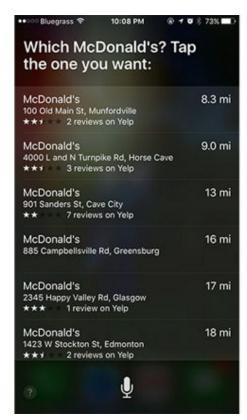
Utilizing technology in phones, users will be able to track their locations to identify where

people are and identify where things are relative to them.

## **Relevant Apps/Websites:**

- Map My Hike
- Siri
- Cortana





**Feature 1: Finding Nearby Locations** 

You can use satellite tracking to find different locations close to the user.

## **Claims for the Approach**

Pros:

- Can efficiently finds possible nearby locations useful to the user.
- Can help locate and identify where the user is

#### Cons:

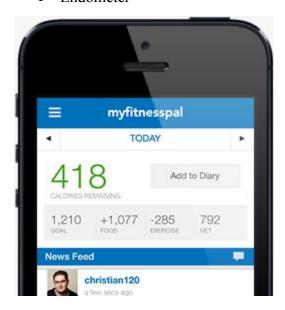
• Some people are uncomfortable with this

## 10. Calorie Tracker

Allows users to have apps that can track how many calories they have burnt throughout their day.

## **Relevant Apps/Websites:**

- Fitbit
- Map My Hike
- Myfitnesspal
- Endometer



**Feature 1: Calorie Burn Estimation** 

Allows users to have an estimation of how many calories have been burned throughout the day due to their workouts.

#### Claims for the Approach

#### Pros:

- Gives users an understanding of how well they've done.
- Helps users figure out how many calories they can still eat after their workouts.

## Cons:

• This method is only somewhat accurate due to the difference in people's metabolisms.

## 11. Offline Mode

Users are able to store data until they can access a location connected to the internet.

## **Relevant Apps/Websites:**

• Fitbit, Misfit

## Fitocracy



**Feature 1: Allowing Offline Use** 

Can allow products that need the internet to be used offline to a limited extent.

## Claims for the Approach

#### Pros:

- This dramatically increases the usability of the product.
- This extends the user base to people in rural areas with lesser access to the internet.

#### Cons:

• Having an offline mode means that unsaved data has the potential to get lost.

## 12. Additional Portable Device

There is an additional device to be used to help things work properly or to a greater efficiency.

This is sometimes used in conjunction with an app (or sometimes another device).

## **Relevant Apps/Websites:**

- Fitbit, Mistfit, etc.
- Back Brace
- Nintendo Switch



**Feature 1: Additional Uses** 

Portable Devices have additional uses that allow things to either be more accurate or actually possible. This might include a separate camera or a wrist device for monitoring vitals.

## **Claims for the Approach**

#### Pros:

- There is a much greater potential for accuracy.
- This allows some tasks to be done that are otherwise impossible.

- This limits (or possibly negates) the function of things that this is paired with without it.
- There is a greater chance of destruction or damage.

#### 13. Notifications

Alerts to remind the user of certain events during a workout.

## **Relevant Apps/Websites:**

- MyFitnessPal
- Map My Hike

## Feature 1: Alerts in your phone's Notifications Menu

This would display a scheduled workout, or even simply allow the exercise app to run in the background temporarily while setting music or sending a message.



#### Claims for the Approach

#### Pros:

- Increase efficiency.
- Adds the ability to multitask.

#### Cons:

- Can distract a user during workout.
- Apps that run in background can decrease battery life.

#### 14. Pedometer

Tracks your steps throughout the day.

#### **Relevant Apps/Websites:**

- Samsung Health
- FitBit

#### **Feature 1: Step Counter**

This feature will keep track of your daily walking habits, nudging you to get more physical activity if you are exceedingly sedentary.



#### Claims for the Approach

Pros:

- Offers interesting feedback about your walking trends over time.
- Can help build good habits.

Cons:

- Some may find it an annoyance.
- Not as accurate as dedicated pedometers.

#### 15. Heartrate Montior

Tracks your BPM during physical activity.

## **Relevant Apps/Websites:**

- FitBit
- Samsung Health

## Feature 1: Heart BPM during exercise

Tracks your Heart Rate in Beats Per Minute during exercise sessions.

## Claims for the Approach

Pros:

- Can help keep athletes in optimal HR ranges.
- Promotes health and safety.

Cons:

• Must take time out of workout to check BPM.

## 16. Music Integration

Allows app sounds and device sounds to transfer priorities to work together.

## **Relevant Apps/Websites:**

- Google Voice
- Siri



#### **Feature 1: Priority Sounds**

When 'Post-Sure' has something to announce, it will temporarily lower the volume of other

audio apps to ensure clarity. After the

alert, normal volume levels will resume.

#### Claims for the Approach

#### Pros:

- Increased clarity of instructions.
- Less interruption of user's focus.

#### Cons:

- Will interrupt music.
- Lowers sound without pausing, so some sounds will be lost.



## 17. Battery Saver Mode

A toggle for for conservative battery use.

## **Relevant Apps/Websites:**

- Map My Hike
- Nintendo Switch

#### **Feature 1: Power Conservation Mode**

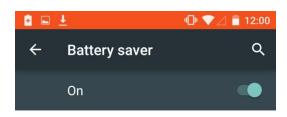
A toggle for situations where battery life is more precious than advanced features.

## **Claims for the Approach**

## Pros:

- Can significantly extend device duration.
- Useful in situations where you cannot charge the device for long periods.

- Limits features greatly when enabled.
- Users may forget to toggle off.



Turn on automatically Never

#### 18. Timer

A timer to track various workout intervals.

## **Relevant Apps/Websites:**

- FitBit
- MyFitnessPal

## **Feature 1: Stopwatch**

Used to track running or lifting weights.

## **Claims for the Approach**

Pros:

- Allows accurate timing of exercise intervals.
- Can be used to time active or rest periods.

#### Cons:

- Potential redundancy if users already have a watch or timing device.
- Can drain battery if left running.

## 19. Challenges

Fitness games that pit you against friends to beat a goal or time.

#### **Relevant Apps/Websites:**

- FitBit
- Samsung Health

#### **Feature 1: Group Challenge**

Friendly workout goals to inspire athletes to perform their best.

## Claims for the Approach

Pros:

- Competition can push athletes to perform harder.
- Gamify exercise to make it feel less like work and more like play.





- May distract athletes from the real goal of their workout.
- Anti-competitive individuals may not enjoy this feature.

## 20. High Score Tracker

Keeps track of your best times and lifts.

## **Relevant Apps/Websites:**

- Nintendo Switch
- Map My Hike

### **Feature 1: Highest Weight Lifted**

Saves your heaviest achievements, so that you can attempt to beat your best during a later workout



## **Claims for the Approach**

#### Pros:

- Encourages constant improvement
- Gamify exercise, making it fun and appealing to non-athletes.

- Daily fluctuations in energy levels will make beating certain high scores unrealistic.
- May cause unhappiness or decreased mood if the athlete feels they are not improving according to the scores.

#### V. THREE PERSONAS

We created three personas named Daniel Murphy, Jacob Smith, and Anna Williams. Since "Post-Sure!" is a fitness analytic device, we designed our three personas to fit three different levels of dedication for fitness: athlete, trainer, and professional athlete.

## **Daniel Murphey**

Our first persona that would use "Post-Sure!" is Daniel Murphy. Daniel, a senior at Rutgers University, studies Business. When Daniel was younger, he had issues with his weight. In order to keep his health in check, he took up sprinting during Junior year of highschool and found a passion for pushing his physical limits. Now, he is a bonafide fitness enthusiast and has become interested in a more wholesome physical improvement, to the point where he's hired a physical trainer.

However, Daniel has an incredibly busy schedule, and it keeps him very active on campus. A typical day for Daniel looks like: Waking up, making his breakfast, commuting, classes, lunch with friends, then extracurriculars. He is vice-president of the business club, but enjoys participating in events with his friends in other clubs.

Daniel has since started scheduling his workouts for 4 days a week. He plans two workouts a week with his personal trainer, but sometimes has to pass up a scheduled workout in favor of academic or extracurricular activities. After a workout, he showers, does his homework, and may have some downtime to play video games before going to sleep. Being fit has helped him gain confidence in himself. He is very social, a good public speaker, charismatic, and ambitious. On the weekends, he interns for Johnson & Johnson.

Daniels long term goals are centered around staying fit and becoming a respectable entity in the fitness community. In the future, Daniel aims to rise through the corporate ranks and become the CEO of a fitness company. One of his personal goals is to travel the world while advocating the importance of physical activity in one's daily life.

#### **Jacob Smith**

Our second persona that would use "Post-Sure!" is Jacob Smith. Jacob is a personal trainer, aged 30, and a graduate from the University of Virginia with a degree in Kinesiology. Despite his busy schedule, Jacob manages to maintain peak physical condition. His interest in fitness was sparked at a young age after witnessing his parents compete in and complete a marathon.

Today, Jacob works as a freelance personal trainer out of his home office in New Jersey. He lives with his parents currently, but is actively looking to move into his own residence with his girlfriend. He spends a significant portion of his day in the gym and meeting with clients. Other daily activities include cooking protein-rich meals, planning personal and client workouts, and relaxing at the end of the day with his family. On sundays, he is active in his church community, playing drums for the worship band. During sports seasons, he coaches recreational children's soccer with his father.

Jacob's long term goals include obtaining employment as a high school gym teacher (physical education). Growing up, he respected and looked up to his physical education teachers the most. They shaped his positive attitude towards fitness and sports, and he hopes to give back

to his community in a similar way. He wants to be seen as an approachable, "cool" gym teacher that young students can look up to.

#### Anna Williams

Our third persona for this product is Anna Williams. Anna is a 22 year old Nursing undergrad student at The College of New Jersey and a professional athlete. From a young age, she had a great passion for running. In high school, At just age 9, she was first introduced to running. Anna was a member of the varsity track team, which landed her a full scholarship for Track at TCNJ. She is also being scouted for the upcoming Olympic Games. Unfortunately, Anna sustained a shin injury two years ago that has left her struggling to recover and resume her fitness career.

Anna enjoys socializing and considers herself a "people person". Her hobbies include hiking, cooking, watching comedy, and taking long walks. Her daily schedule begins by waking up with the sun and having a practice session at the local track. Then she showers and eats breakfast before attending classes at TCNJ. After classes and lunch, homework follows at her dorm. On certain scheduled days, she attends her clinical site: an opportunity to learn while working with and helping real patients. On weekends, she occasionally meets with her personal trainer, or spends some time with her family at home in Mt. Holly, NJ. At home, she has two younger siblings that she loves very much. They enjoy playing outside often, and they frequently get scrapes and sprains. Her knowledge of first aid helps keep her family safe and infection-free.

Anna's long term goals are to become the most efficient athlete that she can be, and to eliminate issues from past injuries. Her career goals are to become a nurse at St. Barnabus Health in Livingston, NJ. She wants to be working in a position that allows her to help and positively impact as many lives as possible. After graduation but before settling down for her career, Anna wants to embark on a cross country road trip with her friends. She thinks this trip will be a great opportunity for sightseeing and soul-searching.

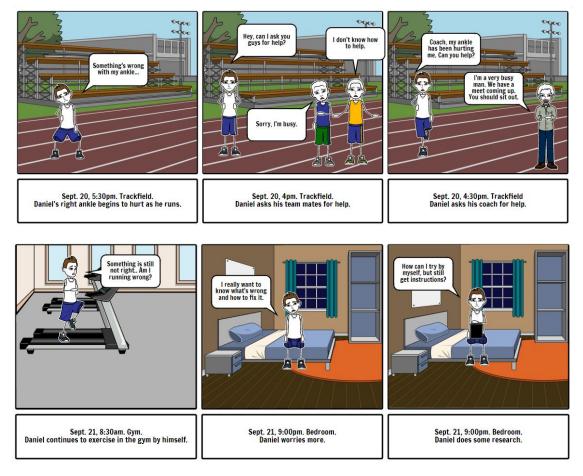
#### VI. THREE PROBLEM SCENARIOS

Daniel Murphey

In his problem scenario, Daniel Murphey is featured having a busy schedule that prevents him from going and planning to meet with his personal trainer. It's not only his classes that get in

the way of his fitness time, but Daniel's full schedule including extracurriculars and social responsibilities. This has caused Daniel to exercise when he can fit it rather than at the planned times he is used to. Daniel has a meet coming up and thinks he is positioning his foot awkwardly while running. This has continued for a few weeks and his foot is really starting to bother him after running. He has asked for help from his friends and coach, but due to the inconsistency in times that he is available he has had little progress. His coach would like to be able to help Daniel, but simply can't dedicate the face-to-face time required in order to really work through the intricacies of Daniel's issue.

With a meet approaching fast, Daniel has been training hard. He is worried that his painful foot will complicate or prevent him from competing. Still, he pushes through his training on the track and in the gym. In general, he can get through half a workout without complication. The other half is highly uncomfortable and leaves Daniel wondering if he should rest his foot and resume his workouts at another time. Daniel feels that if he could record and quantify his issue with some data that could be shared and studied by his coach and friends, he would be closer to unravelling the issue plaguing and running ability.



Jacob Smith

In Jacob Smith's problem scenario, he is a freelance personal trainer. Jacob obtains most of his clientele by word of mouth, which means his reputation among trainees is what brings in more business. Needless to say, helping his clients is the most important part of the job to Jacob.

He really loves seeing concepts 'click' with his trainees.

So when Jacob encounters a situation where he cannot explain to the client what they are doing wrong, it really breaks his heart. With one of his recent clients, he is having trouble deducing and explaining to them how they are exercising improperly. He can't help them fix what is broken if he can't tell them what's wrong. This new client has expressed dissatisfaction with Jacob and his training methods. Jacob disagrees because he has seen his methodology work for countless other clients, but is having a hard time convincing this individual of his proclivity for success without any proof or evidence to show for this client's hard work. This new client has hinted at an ultimatum: either they can see some improvement under Jacob's training, or they will find a new trainer.

Jacob is active on fitness forums and internet discussion communities. He often shares his client experiences with others on the internet, and responds to others who share their experiences. Here, he explains his situation and asks for suggestions on how to resolve this issue and show his disgruntled client some results. Jacob wonders if he should give up on this client and focus on the individuals with more clear-cut issues. However, his upbringing taught him not to just give up upon encountering hard situations; the most difficult problems reap the most satisfying rewards.

#### Anna Williams

For Anna Williams' problem scenario, her schedule is incredibly packed. Every day she must juggle work, school, athletics, and family. Each one of these activities demands her full effort and attention, and so Anna quickly feels overwhelmed by her daily responsibilities. She is also being scouted for the upcoming Olympic Games, and it is very important to her that she succeeds in this endeavor.

So, Anna has hired a personal trainer. Yet, between all of her preexisting responsibilities, she finds is rather difficult to dedicate hours to spend with her trainer. Because her days are so busy, she occasionally fits her workouts in late in the evening, after the hours that her trainer is available. Her trainer encourages her to practice alone, while mentally bookmarking any issues to be discussed and addressed during their time together. However, Anna feels that she is falling behind her competition due to this awkward and unusual training habit. She wishes she could spend more time with her trainer addressing the issues that really prevent her from progressing.

Anna's shin injury is a major concern when it comes to her training. She wants to do everything in her power to prevent a repeat injury that would stop her Olympic career before it even begins. If she is training by herself, she feels that she needs some way to collect data for her trainer, who can analyze it on their own time. Then, Anna and her trainer can collaborate and create a custom exercise plan. Anna asks her teammates and does some research on her own to find a solution

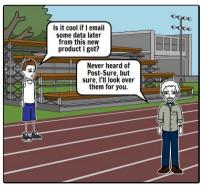
#### VII. REALISTIC ACTIVITY SCENARIO

In his activity scenario, Daniel has a foot that has been troubling him through his workouts. Due to the fact his foot only hurts during his sprints and immediately following, he doesn't think he needs medical attention and recognizes that his issue is probably his method. He has been pretty busy from his classes and extracurricular activities, so his schedule has been too erratic to meet with his coach or trainer with any frequency. While at his Business Club Daniel's friend recommends that he looks into trying out the 'Post-Sure!'. Having heard it from his trusted companion, Daniel decides to do some basic research to see if it has the potential to help him out (he doesn't want to make a blind purchase). Daniel purchases it online (as doing that is most convenient and will ship directly to him). Until the product is shipped, Daniel takes exercising a bit easier because he doesn't want to make his foot worse by exercising poorly and it only hurts badly after exercising. Daniel understands that working improperly will only make his condition worse and any possible gain from this is not worth the pain and potential for injury he would be inflicting on himself.

After receiving the product, Daniel opens it up and checks it out. He skims some of the pictures of the instructions (because few people actually read them) and when combined with the knowledge of what he learned online to figure out how it worked. He booted the device and downloaded the app to sync up the app to the device. Daniel then headed over to tell the coach that he has a way for the coach to be able to consistently track his progress with 'Post-Sure!'; the coach, having not known about the 'Post-Sure!' before, asks some basic questions about it. Daniel explains that his end is free of charge and will help him analyze what Daniel is doing. The coach, after getting a general understanding of what he will do and what happens, agrees to try it. Daniel then goes and works out using the 'Post-Sure!'. During the workout he looks at his phone when he is alerted of problems (which he checks anxiously to see if it's working). When alerted, Daniel attempts to correct his stance improve. He fixes a few of the basic problems, but he is in the habit of some of them and has to attempt to fix it multiple times. By the end of his workout, he is feeling generally better after his workout than before. This encourages him to continue to use the 'Post-Sure!'. After going back to his room, showering, and changing clothes (as is normal after a workout), Daniel takes some time to upload his workout and send it to his coach. After sending the information, Daniel skims over a few of the charts (out of curiosity).







Daniel has trouble with his foot while exercising.

After his Business Club Meeting, he talks with a friend who recommends the Post-Sure! product.

Daniel asks his coach if he could send his coach the recordings from his runs.







Daniel purchases the product and goes to the gym early.

The device picks up Daniel's mistakes, so he adjusts accordingly.

Later that day, Daniel e-mails his coach.

#### VIII. KEY PATH SCENARIO

Ranika Rafer

Link: http://mfcfhy.axshare.com Password: is247

The key path scenario is a mockup of the app that explains how the user interacts with the app during an activity scenario. It is not a finished product, but rather, a visual that helps explain the essence and features of the app. For the mock-up we created, we used the activity scenario for Daniel Murphy, an average student athlete. In his scenario, Daniel is looking for a way to improve his running, when a friend introduces him to the product, "Post-Sure!" The key path scenario follows how Daniel interacts with the product's app.



Fig 8.1 When Daniel first opens the app, he is prompted to log in, or to create an account. After he creates an account and logs in, he has the option for the app to remember his username and password, and skip the login screen.

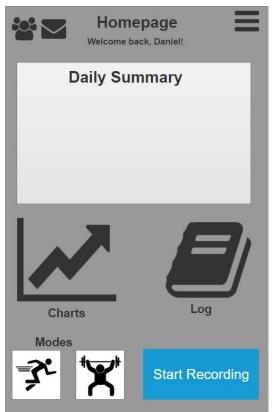


Fig 8.2 After Daniel logs in, he is taken to the Homepage. The Homepage shows a variety of icons such as: contacts, messages, charts, settings, and activity log. On the bottom are two modes, running and lifting. Daniel can select what type of exercise he will do, and then press "Start Recording" for the "Post-Sure!" device to begin recording his exercise and make corrections. The device is placed where it can record Daniel's running, and then his phone is placed on the machine so Daniel can see the suggested corrections.

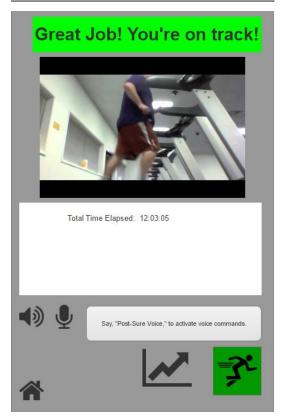


Fig 8.3 In this scenario, Daniel is having trouble with his running, so he chooses the running mode and starts recording. This is the screen that would show if there is no issues with Daniel's posture. On the white space underneath the video, it shows information like how much time has elapsed since his run. The speaker icon allows Daniel the option of having instructions read aloud to him. The mic icon, when toggled, lets Daniel speak to the app and use voice commands. This is convenient when the user is exercising and is not able to tap icons on their phone for the desire functions. Having a voice-command feature lets users interact with the app hands-free. When the user first uses the app, there are tutorial instructions explaining the icons. They can be toggled on and off in the settings screen.



Fig 8.4 This would be the screen that would inform Daniel there is issues with his posture. The video will then be replaced by an image and the white space will have instructions telling Daniel how to correct his posture.

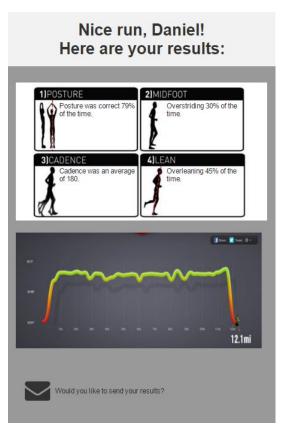


Fig 8.5 After his run, the app creates a graph and a chart of statistics based on Daniel's run. Daniel then has the option of sending his results to his contacts. In this case, he would want to send the results to his coach, someone whom he trusts and would already have a good reputation as seen by Daniel. Daniel thinks the app and product is a good supplementary training tool, but it still does not replace a professional coach's advice.



Fig 8.6 In these 3 screenshots, found in the mockup under the page "Charts," is the process on how Daniel can send his charts. There are two sections for the charts: Daniel's personal charts, and charts shared with Daniel. Charts by default are organized by date from most recent to oldest. Types of charts include cardio, lifting, and summary charts. To share a chart, Daniel would tap the envelope on the bottom, which changes the screen so that checkboxes appear on line with the charts. Daniel selects the ones he wants, then taps next, which brings him to his contacts. Contacts are sorted by most recently contacted, and each contact is part of a group. Daniel would select the contacts he wants to send the charts, then tap send to finish the process.

Fig 8.7 The recipient of the charts is able to correspond with Daniel via the app's built-in messaging system. Here, coaches and trainers have a chance to give advice to their team members/clients without having to meet face-to-face, or schedule appointments to meet with each other for extra training. Daniel sends his running report to his coach, who views it, pinpoints a problem, then schedules to meet up with Daniel to help him train.

## **Supplementary Report**

The Supplementary Report compares slides from different weeks to track the changes and progress made to the presentation throughout the semester.

## Root Concept Table, Week 2

## Root Concept and Basic Rationale Table

Component	Contributions to the root concept
High-Level Vision	Social media compatible Share with personal trainers, teammates, friends Bluetooth connection to tablet/phone Export results for analysis
Basic Rationale	Correct posture Prevent injuries Athletes want to get stronger

The project is a fitness device that records and gives live-feedback on posture when exercising.

## Root Concept Table, Week 15

## Table

Table		
Component	Contributions to the root concept	
High-Level Vision	People will be able to exercise with correct posture, enabling them to be healthier. Teams may train at any time without personal coaches, but rather a portable device. Results may be sent to coaches or trainers	
Basic Rationale	Proper posture during training will prevent injury and improve results. Device acts as a personal trainer that one can take anywhere, anytime. Fitness device that records and sends progress on posture to trainers when exercising.	
Stakeholder group: -Athletes -Personal Trainers -Fitness Enthusiasts	Improved results from training Recording developments from training Lowering chance of physical issues due to improper exercising	
Starting Assumptions	Outstanding access to the computers (with basic ability to use them) Input from personal trainers and programmers through email, phone, and personal communication	

## PERSONA 1: DANIEL MURPHEY

Age: 23
Role: Athlete
Education: Undergra duate at
Rutgers If ew Brunswick
Major Kinesiologu
Lives in: New Brunswick,
Apartment Complex Outside
Rutgers

Mobile device: iPhone 5. iPa d.

Details: -Likes to exercise. -Has a personal trainer. -Wants to remain healthy



Goals:

-Attain a higher level of fitness -Remain healthy

Frustrations
-Unequal Gains
-I sales in posture while exercising

For the past four years, Daniel has been a sprinter. While he was overweight as a child, he found his passion Junior Year in High School. He has been sprinting ever since. He love sit. That said, Daniel has been easing towards a more wholesome physical improvement. He has hired a physical trainer to help him with his physique.

Outside the gym, Daniel enjoys watching professional wrestling and going and watching the latest movies on netflix.

#### Persona: Daniel Murphey, Week 15



## Daniel Murphey

Age: 23 Role: Athlete Education: Rutgers New Brunswick, Undergrad. Studying Business. Lives in: Apartment outside of university Mobile Devices: Samsung Galaxy, iPad

#### Goals:

- Attain a higher level of fitness
- -Remain healthy
- Become CEO of a fitness company
- Travel the world and advocate importance of fitness

#### Frustrations:

- -Unequal gains
- -Issues in posture while exercising

#### Details:

- -Likes to exercise
- -Has a personal trainer
- -Active on campus

When Daniel was overweight, he found his passion in sprinting during Junior year of highschool and used that as a way to keep fit. Now, he is an enthusiast and has become interested in a more wholesome physical improvement, to the point where he's hired a physical trainer. Daniel is also majoring in business and is very active on campus. A usual day for Daniel looks like: Waking up, making his breakfast, commuting to school, classes, lunch with friends, then extracurriculars. He is vice-president of the business club, but likes to help his friends in other clubs. If Daniel has time that day, he goes to the gym to train with his personal trainer. Afterwards, he showers, does his homework, and may have some downtime to play video games before going to sleep. Being fit has helped him gain confidence in himself. He is very social, a good public speaker, charismatic, and ambitious. On the weekends, he interns for Johnson & Johnson.

#### Claims Analysis, Week 5

## Claim Analysis

There really is no product out that competes with our product. Instead we focused on products that are designed to only improve posture.

This first product to the right is by Body-Align and is a chair for posture correction and alignment

#### (NO REAL COMPETITION)

Our focus would be on other competitor's success and their focus audience so we can start marketing to the right people



#### Claims Analysis, Week 15

## Claims Analysis- Lumo Lift

Lumo Lift is a wearable device that helps to gain better posture. Uses vibrations to remind you to sit up straight. Comes with an app that tracks posture and activity (good posture hours, steps, distance traveled, calories burned)

#### Pros:

- + Lightweight and discreet
- + Tracks information with an app that can be accessed through mobile device
- + Users can immediately know their posture is incorrect through vibration alert

#### Cons:

+ Limited in benefits-does not really help with exercising





## Claim Analysis- "Body-Aline"

The Body-Aline helps exercise back muscles and reinforce good posture through a preset set of exercises (displayed in picture).

#### Pros

- + The exercise will strengthen back muscles.
- + The Body-Aline will train posture and help align it through exercise.
- + Definitive ways to work it.

#### Cons

- The Body-Aline has limited use in terms of types of exercise.
- + Does nothing for any muscles other than back muscles