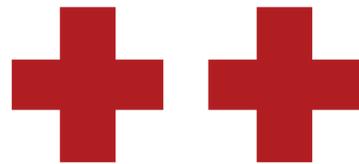


RED



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Executive Summary

The Red++ user may be an athlete, or they may be someone who does some sort of activity or exercises a few times a week. They may be in shape, or they may not. They are likely to already use some sort of fitness app or device, or are looking to get one. They might have a pre-existing condition that makes them more worried about their health while they exercise, or they may be in perfect health, but want to make sure they are safe and can track where problems occurred during past activities (such as cramps due to lack of hydration).

The Red++ user wants a safety net. They want to be able to run, or bike, or walk on their own without worrying about what could happen. They want the peace of mind that if they go running on the Hike and Bike trail and cramp badly after 1 mile, that they can look back at their water intake the next time they hit the trail and determine what they should do to avoid cramping.

It is possible they are just starting out when it comes to exercising. They are out of shape, walking more often than running, and the last time they did their activity, they felt some pain in their chest. Maybe it was because it was the first time exercising in a very long time, but the thought creeps up in the back of their mind that what if they had a heart attack and no one was around? What if they passed out and could not pick up their phone to call 911?

Or what if they are perfectly healthy and in shape, but they trip, hit their head and go unconscious?

Red++ connects to the wearable fitness devices you choose or even already use and pulls in information from those devices to look at your heart rate, sodium intake, and hydration levels to make sure you do not cramp up, become dehydrated, or push yourself too hard while you are participating in your activity. If you do, it will offer suggestions so these conditions do not occur the next time you are running. If all else fails, the Red++ app will call your emergency contacts or 911, so that if the worst case scenario does happen, you receive help as soon as possible.

Mission & Vision

The mission of Red++ is to provide health metrics and emergency alert systems to users. The app teaches users about their specific body's needs and allows them to feel safe when performing physical activities.

Audience

The Red++ audience is individuals who participate in various types of physical activities. They are interested in monitoring their hydration, electrolytes, and heart rate during an activity to ensure optimum health and have the peace of mind that in case of an emergency, help is on the way.

Initial Concepting

The Red++ team wanted to provide emergency solutions for those performing physical activities. If an unfortunate event were to occur during a run, race, hike, or other activity, the app would recognize users' loss-of-conscious or immobility and reach out to their emergency contact or 911. In an ideal world, the app would be paired with one sensor that can measure a wide array of vitals, but there is no such tool available currently. The team thought it best if the app used various sensors relevant to the user to measure heart rate, perspiration, hydration, etc. This solution allows users to pair sensors they already own with Red++ to get effective emergency feedback. After initial discussions, the group decided to expand beyond the current scope of the app and enable users to track and maintain a database of their health and activity. This creates a more engaged experience with the app and allows for it to provide continuous feedback to users.

User & Stakeholder Research

Competitive Analysis

In order to understand the current landscape of tracking and emergency apps the team researched apps and devices that used similar technology and served similar functions as to Red++ (See **Appendix Page II**).

Behavior Tracking/Learning

Behavior tracking and learning apps/devices keep a history of your activity and preferences to learn your habits, so as to simplify your life.

One of the most notable devices in this genre is the Nest. It is a hub that can be connected to your AC system and with time it learns your ideal room temperature, when you will be in and out of the house and adjusts to your heating and cooling needs. This app not only learns your behavior, but it helps you save on your energy bills by adjusting your home temperature by just one degree.

An app that functions slightly differently is called Sleep Cycle. It uses the accelerometer in your phone to measure your sleeping patterns and can wake you up when you are in the lightest stage of sleep. Sleep Cycle prevents grogginess in the morning because you aren't waking up to a blaring alarm when you might be in a very restful stage of your cycle.

Emergency

There are many emergency response apps in the market currently. Many of them call out for help when a user clicks to alert an emergency contact. Apps such as ICE, ICE4Family, 5Star Urgent Response hold users medical and allergy history, and other pertinent medical information. The only problem is that users must actively engage with the app for emergency contacts to be reached.

This poses a problem when a user is unconscious or unable to reach out for help.

Biometric

Biometric apps use sensors that take in variables about your body metrics. They are able to determine heart rate, hydration, perspiration, etc. These sensors can come as external attachments to helmets, implanted into fabrics, or as stickers that can be placed on your body.

The Reebok Checklight is an impact sensor technology used by professional athletes that measures the severity of impact to the skull during an activity. This technology provides athletes awareness to potential head trauma and can provide a benchmark to prevent future risk to the athlete. This data is useful not only for athletes who play contact sports, but also for those who need precautionary measures during non-contact activities (i.e. rock climbing, mountain biking, skiing, etc.).

Another biometric sensor is the mc10 Biostamp. This sticker is placed on the body and generally lasts two weeks. It can be used to monitor baby activity, athlete hydration, and the condition of your skin. A sticker such as this is non-invasive and unnoticeable on the body, thus allowing for constant monitoring without having to add or remove sensors once an activity is complete.

Wearable Devices/Fitness Tracking

Wearable devices have now reached mass audiences with the Nike Fuelband, heart monitors, and a variety of similar gadgets. The Garmin Forerunner monitors heart rate, calories, distance, and allows users to review their activity histories. This device functions similar to many other fitness tracking technologies on the market. They give users the ability to view their activity history along with heart rate metrics allows users to be more aware of their activity levels and use the device as a motivator for continued exercise and use.

Location Based Services/Tracking Devices

Location and tracking devices are standard in many fitness tracking apps. Location based services take in information about the current location of the user. This data can be used within tracking devices to maintain a record of users' distance traveled and route. The largest hurdle with location based services is balancing battery life with update speeds; the quicker a program updates location the faster the battery is drained from a device. There are many devices that try to find a balance between battery and update speeds

Positioning of the App

The Red++ team integrated the existing technology from these devices when concepting our own emergency response and fitness tracking app. The Red++ app links with biometric sensors to monitor heart rate, perspiration, and hydration levels. It also tracks distance and route through other sensors that are paired with the app. A key difference between Red++ and other fitness apps is that it is not just a fitness tracking app, but it is a health tracking app. It monitors vitals throughout an activity to help users learn when they may need to slow down or require more hydration because of their body's unique requirements.

Initial User Research Survey

Red ++ sent out a survey to potential future users of a new health related app to determine what features may be useful in a health related app. The survey was conducted online through Google docs and was shared via social media and email.

Results

37 participants completed the survey. Respondents were 69% female and 31% male ranging in age from 18 to over 55, with over half of respondents (69%) between the ages of 18 and 35.

Respondents were asked to estimate the number of hours per week spent doing physical activity, and perceived level of exertion (low, medium or high intensity). All respondents reported participating in some sort of physical activity. Medium intensity activity, 1-4 hours a week, and high intensity activity, 1-4 hours a week, stood out as the most common types of activity for respondents (41% of respondents and 51% of respondents respectively).

From these responses we have determined our audience will include both those that enjoy exercising and staying fit and more serious athletes that may train for intense events like marathons.

Respondents were asked several open ended questions, including current health concerns, fitness related vitals currently monitored or hoped to be monitored, current use of health or fitness related

apps or devices, use of medical fitness device, and how they would prefer to wear a device in the future.

Summary of Open Ended Questions:

Do you have any health concerns you monitor or would like to be able to monitor?

The majority of the responses were no, with 13 respondents stating they either already monitored their heart rate/pulse or would like to monitor their heart rate/pulse and a few respondents mentioned fitness type monitors.

Do you currently use any health or fitness Do you have any health concerns you monitor or would like to be able to monitor?

The majority of the responses were no, with 13 respondents stating they either already monitored their heart rate/pulse or would like to monitor their heart rate/pulse and a few respondents mentioned fitness type monitors.

Do you currently use any health or fitness related apps or devices?

This question resulted in a variety of responses (many repeated), including, Nike + , Garmin GPS Cycling Computer, MyFitnessPal, MapMyRun/MapMyRide, Fitbit, Garmin Edge, Couch 2 5K, Garmin Connect, MapMyFitness.

If you wear a medical or fitness device, how do you wear it?

Responses included iPod/iPhone on arm, sports watch/on wrist, HR Strap, in shoe, clipped to pants, strap around chest or middle.

In an ideal world, would you want to take it off/put it on before/after activities? Wear it once, take it off? Leave it on for an extended period of time?

This question also resulted in a variety of responses including leave it on, wear during workout or specified activity, and wear all the time if it could adjust based on activity.

From these opened ended questions we determined two main things: integrating with existing wearable devices is a must and heart rate/pulse is an important element to monitor.

The next set of questions focused on the actual types of data that would be important for users to have. We asked users if they analyzed data from their activities upon completion and how important real-time data was to their overall experience.

69% of respondents said that they analyze data from activities either sometimes or always and 56% said that real-time data had high importance to their overall experience.

When asked what type of indicators or data was important and when, respondents overwhelmingly stated hydration/water intake levels, sodium/electrolyte levels, and heart rate were important during or after an activity (74%, 63%, and 88% respectively). Respondents were also asked if glucose level data was important, but 57% responded it was not. In addition, respondents stated that notification of dangerously low/high levels and notification to replenish any of the above levels were also overwhelmingly considered important during or after an activity (74% and 68% respectively).

Respondents were also asked how often they have their cell phone on them during physical activity and 87% states sometimes or always.

This information gave us the initial idea. Use existing sensors (or new one if needed) to monitor hydration/water levels, sodium/electrolyte levels, and heart rate during and after activities that is connected to a phone app.

Because our initial idea involved emergency notifications if certain indicators were out of normal range, we asked respondents who they would want notified in the event of a medical emergency. 72% of respondents said they would want EMS to be automatically notified and 67% also said they would want friends or family to be automatically notified.

This information tells us that having the option to notify certain people if a medical emergency occurred would be an asset to this app.

Because this app will hold medical information, we know privacy will be a concern and when asked about entering personal medical data into a web app (where data is stored on a secure web environment) or mobile app (where data is stored in your mobile device), 54% were comfortable with entering personal medical data into a web app, and 68% were comfortable with putting it into a mobile app.

Based on this initial set of question, Red ++ was able to move forward with an initial idea: a mobile app with capability to create an account that connects with existing wearable fitness devices to track heart rate, sodium/electrolyte levels, and water/hydration intake to alert users when their normal ranges go out of range. Users can either choose an average normal range when they sign up, or can track their ranges to figure out their norm. In addition, an option to choose who will be alerted in a case of medical emergency (i.e. heart rate drops significantly) will be available.

Please see **Appendix Page III** for survey questions and responses.

Design & Prototyping

User Personas & Use Cases

Based on the demographic results of our “Initial User Research Survey”, we developed four different user journeys to capture the breadth of our potential market, detailing out personas, scenarios, stories, and cases for each user.

1. Novice
2. Intermediate
3. Advanced
4. SOS (Significantly Out of Shape) User

Novice

The novice user is just starting to actively monitor her health when performing activities. They may not be ready to jump headfirst into regular monitoring, but are interested in trying to maintain a record. This user may not know what is important to monitor or when her body is reaching its limits. This app will help them learn not only their own limitations, but also how their body is adjusting with regular activity.

1. The use case begins when the user opens the application.

2. The novice user creates an account and uses the preset feature to begin measuring activity. They have the option of doing a health assessment, but opt not to.
3. The following menu will ask what devices they would like to pair with the app to keep track of their health needs.
4. The user can then go into the emergency contacts and begin adding his contact list.
5. Next, the user starts a new activity to begin monitoring vital levels.
6. When the user begins his activity the system learns his route, so the next time he logs in he can select from a previous route or start a new one. The user can always keep track of his route and times through the app.
7. If the system detects a sudden change in vitals it will begin to sound an alarm that the user can turn off to prevent calling an emergency contact or 911.
8. Once the activity is complete, the user can end the activity to end user tracking. This will also prevent a sudden alarm due to loss of activity and sensory information.

Intermediate

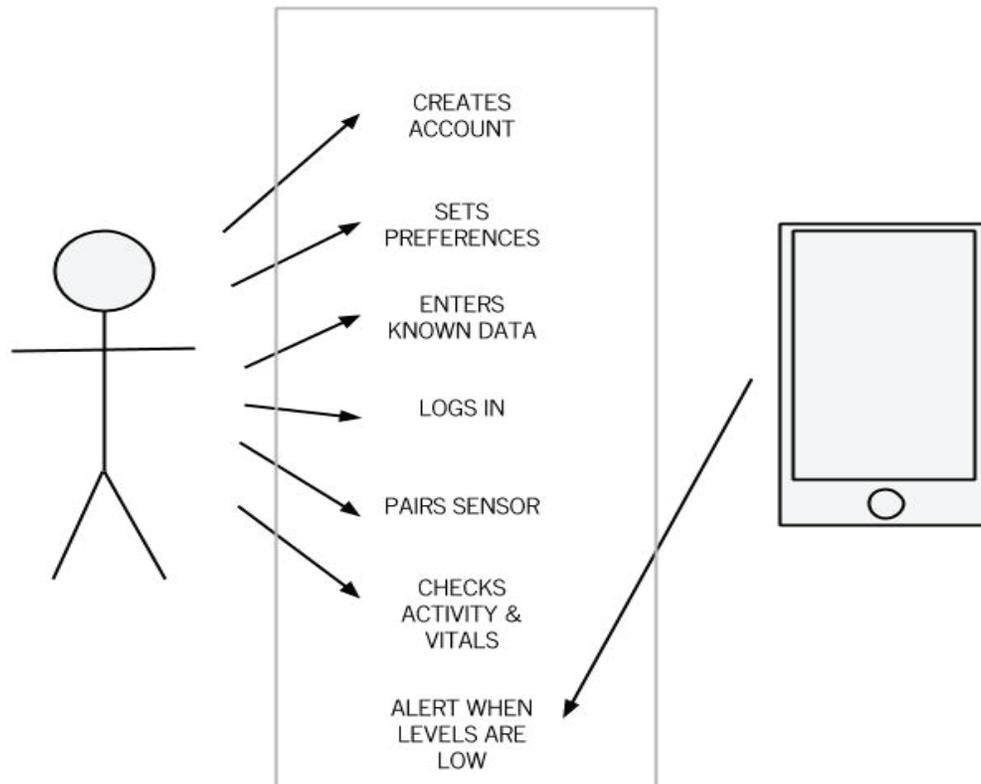
The intermediate user spans from the progressing beginner and the early advanced, utilizing features across both spectrums. Intermediate users for this product have generally mastered the basic features, and are generally interested in exploring more advanced features.

1. The user opens app to begin a new activity.
2. An option to review a previous activity is presented. The user then selects an option to plan a new activity based on the old one.
3. The platform retrieves data from a previous springtime ride – the data includes a hydration metric based on the amount of water consumed, captured from a flow-meter on the water bottle.
4. Based on historical data and planned route the app makes predictions:
 - An increased amount of water intake is recommended, and specific refill points are noted on the mobile app GPS/Mapping component, and proximity alerts are activated on the mobile platform and sent to users mobile device
5. The user attaches the sensor dongle to their mobile device and takes off on their ride.
6. The user manages not to die on said ride, and in fact kills it, finishing ahead of schedule. In celebration they stop for a beer at a downtown pub. The app notices the aberration (based on previous data) in schedule (early finish) and biometric data (decreased heart rate), and sends an alarm to the mobile platform. The user, notices the obnoxious alert and cancels the request to call 911, and when further prompted, selects 'Planned Stop' from the following options:
 - Sensor Error
 - Planned Stop
 - Unplanned Stop
 - Other
7. The platform notes the GPS location for future reference.
8. The user closes out the app, ending the activity and their enjoys beer in silence, with the knowledge that their next ride will be safer thanks to Red++.

Advanced User

This user is very active and healthy. He or she could be a cyclist who has used several fitness apps and devices. Convenient access to real time data is important to him/her along with a history of activity.

As a cyclist, this user wants to monitor his/her hydration levels so that he/she knows when to drink more water to improve overall cycling endurance.



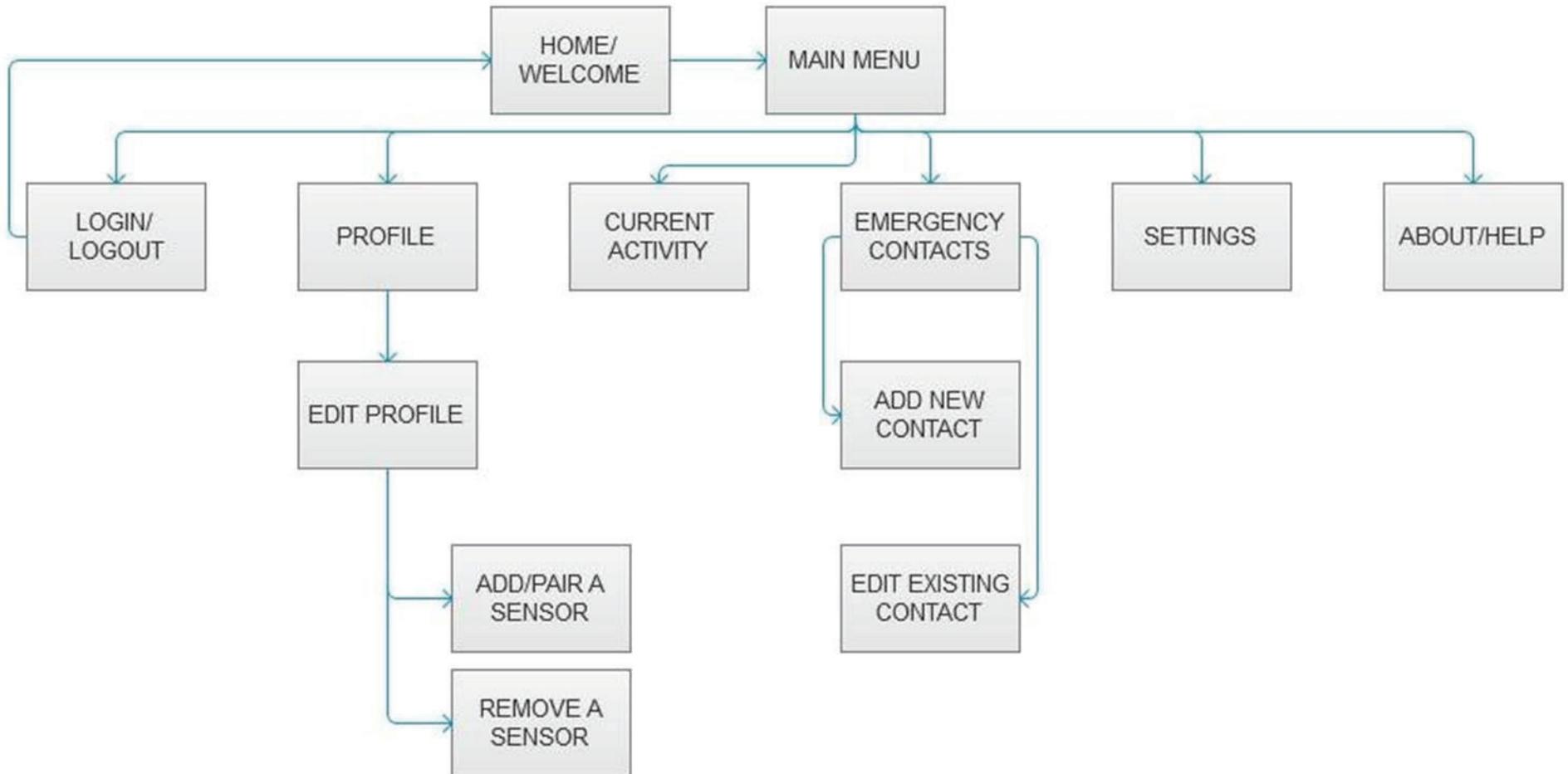
SOS (Significantly Out-of-Shape) User

The significantly out-of-shape user is similar to the novice in his/her inexperience with health-monitoring fitness devices. Unlike the novice user who is attempting to use the app regularly, the sos user has purchased the app as a preventative measure to dangerous overexertion. The sos user will select the presets based on their BMI that will let the app trigger warnings if vitals go out of the normal range.

Easy set up is important to the sos user. Given that beginning a new routine will challenge the sos's behavior norms, the app will make entry-to-use as easy as possible and feedback as encouraging as possible through aggregated progress statistics.

1. The use case begins when the user opens the application.
2. The SOS user uses the preset settings based on BMI.
3. The following menu will ask what devices they would like to pair with the app to keep track of their health needs.
4. On the next screen, they are sure to add Emergency contacts in case something goes wrong during their activity.
5. Next, the user starts a new activity to begin monitoring vital levels.
6. When the user begins his activity the user is very aware of their vitals. In case anything goes wrong, they want to be ready to pause the activity to rest, drink more water, or perform an activity that allows their vitals to go back to a normal level.
7. If the system detects a sudden change in vitals it will begin to sound an alarm that the user can turn off to prevent calling an emergency contact or 911.
8. Once the activity is complete, the user can end the activity and check if their vitals maintained stable throughout. This can then inform how much more/less they want to exert themselves in the future.

Initial Site Map



Paper Prototyping

In the initial stages of the project, each team member was asked to create a basic sketch of elements they thought would be found in the proposed app, including multiple screens with different interactive elements. Additionally, each screen detailed specific, persistent application elements (such as icons), representations of captured user data, and an overall encompassing of the user experience. Each team member submitted three-to-ten sketches of the proposed app (**Appendix Page XII**). These sketches were also later used to guide the creation of the low-fidelity prototype.

In reviewing the five purposed paper prototype versions, the team worked to identify common elements, focusing on specific paths that user would take through the app. In concert with the creation of the sitemap these rough sketches were used to inform the design of the initial wireframes and low fidelity prototypes.

USER TESTING PHASE I

Card Sorting

Objective

The team decided to do a card sort to help inform the navigation and information architecture of our app. In particular, the team sought to uncover where some of the more ambiguous activities should be grouped, such as pairing a sensor and entering in system preferences.

Participants

The team conducted the card sort with 13 participants and 26 cards, relating to content and activities that might be included on the Red++ mobile app, over the course of one week. Of the 13 who started, 9 completed the entire sort. 4 abandoned after a short period of time. The results of those who abandoned are not reflected in our results.

Methodology

The team conducted the card sort remotely using the online software OptimalSort. Participants sorted phrases and representative tasks into categories they would expect to find them in. The cards

were randomized to decrease influence. Participants were not required to sort all of the cards.

The full list of cards and findings can be found in the Appendix.

Results

The cards were sorted into an average of 6 groups. 55% of participants sorted the cards into 7 similar groupings. While the names for these groupings varied, the groupings conveyed similar results. Please see Card Sort Results in **Appendix Page XVII**

Action Taken

Based on the PCA and similarity matrix results, the team relabeled our primary navigation and reorganized the initial site map to better reflect how the user would understand the app to operate. The team added a “History/Previous Workouts” section and separated the user settings, to be called “Profile/Personal Info”, and the system settings.

Wireframes/Low-fidelity prototype

Objective

The team chose to create a low-fidelity prototype using a web-based product called Cacao. The tool allowed for the creation of quick mockups in an iOS environment, as well as basic web-collaboration between the team. The team modeled the creation of the prototype based on the preliminary site map. The ultimate goal was a paper prototype, exported from the web platform, which each team member would use to produce a paper-based prototype.

Participants and Methodology

Using a printed version of the Cacao prototype (**Appendix Page XIX**), each team member was tasked with testing at least two users. The team crafted specific user tasks and questions (**Appendix Page XVIII**). Users were presented with oversized printouts of the prototypes and asked to touch the paper 'screen' to simulate navigation through the app environment. Upon tapping an area, the team member would present the printout corresponding to the next screen. Team members wrote extensive notes during testing, documenting users successes and confusion regarding the tasks presented.

Results

The low-fidelity prototyping through Cacao allowed the team to present users with a highly-detailed prototype in paper form. Key findings of this process (detailed below) guided the team in making changes to the sitemap (which were also supported through further testing).

- Users were generally confused by the overly complex user login functions. As a result these were later simplified.
- The task of attaching sensors to specific activities was difficult for users to execute. This finding resulted in further testing through a tree-sort exercise (**Appendix Page XXII**), and a change in the sitemap structure (**Appendix Page XXIII**).
- As a result of testing and user comments, several functions in the sitemap were condensed into one of two persistent menus, accessible from the header region of the app.

Tree Sort

Objective

The team conducted a tree sort to determine where users would be most likely to go to perform certain tasks. Specifically, the team wanted to determine the path users would take to get to their “Emergency Contact” and “Heart Rate Pairing” screens.

Participants

The team distributed the tree sort to 10 participants, selected as potential representative users of the app, and gave them three tasks to complete. All participants completed the tree sort.

Methodology

The team conducted the tree sort remotely using the online software TreeJack. Participants completed a series of three tasks. The tasks were randomized to decrease influence. Participants were required to complete all tasks.

- Task #1: Turn off notifying your emergency contacts when you go for a workout.
- Task #2: Pair your heart rate monitor to the app.
- Task #3: Start a workout then view your workout summary.

Results

Participants had an overall success rate of 80-90%, taking approximately 10 seconds to complete each task. The team deliberately assigned several correct paths for the users to take to complete the tasks, in order to see which one the majority of users were likely to take.

5 out of 10 participants completed task #1 by going through “Emergency Contacts”, while 2 out of 10 looked under “System Settings”.

7 out of 10 participants completed task #2 by going through “System Settings”, while 2 out of 10 looked under “Personal Profile”.

9 out of 10 participants completed task #3 by going to “Current Workout”.

Action Taken

Based on participants responses, the team decided to place the app’s emergency notification feature under “Emergency Contacts”, where users will be able to easily opt-in and opt-out of the notifications when they update their contact information. Although 7 out of 10 users sought to pair their sensors under “System Settings”, the team ultimately chose to place it under the “Profile” workflow, due to a lack of communication about the purpose of profile assignment to the participants.

User Testing Phase II

Implementation & Testing

Objective

The team created a high-fidelity prototype using a web-based product called Flinto. The site allowed the group to load screens of the Red++ app and generate links to navigate users through the app interface. The prototype screens were optimized based on the feedback from the initial low-fidelity user testing. The ultimate goal of the prototype was to test the app against a set of user tasks in order to determine final iterations of the Red++ app.

Participants and Methodology

Using a link created from the Flinto prototype, each team member was tasked to conduct two user tests. The link works as an app on mobile devices, but can also be used on a web browser on a computer. Red++ was tested with three different tasks in order to determine app usability (**Appendix Page XXVIII**). Along with the tasks there was a follow-up list of questions and a final WAI post-test survey (**Appendix Page XXIX**). The team moderated each of these interviews and documented notes of any user errors or confusion throughout the tasks.

Results

The results of the final test showed that the app is very easy to navigate, but one interaction remains unclear.

Users were able to navigate to the profile page to change personal information without any problems.

The tasks of starting a new activity, clearing an alarm, and ending the activity was quite simple for all users.

Users were asked what the red icons meant in the sensor menu when starting a new activity. This was confusing for many of our respondents. Some thought it meant the sensor was not paired, while others realized it was actually intended to remove a sensor (unpair) from the current activity. The icons were then changed to slide to turn off and on switch which we believe is more intuitive to the user.

A final question icon preferences showed that the majority of users liked the flat grey icons the best.

The post test survey questions averaged a score of over 4 in all areas with questions ranging from app ease of use to attractiveness (**Appendix Page XXIX**).

Final Design Commentary & Critique

Lessons Learned

A lack of consensus early on led us to need a broader variety of user tests. The team could have better defined the features and purpose of the app from its initial conception. Having a few different ideas of what the app could do and who the audience was caused the team to reassess the site map multiple times and do some additional testing after initial prototype testing. Narrowing the focus of the app early on would have produced a stronger initial sitemap from the beginning and potentially allowed for greater iteration throughout the prototyping process. All in all, the final high fidelity prototype produced a much clearer vision of the app and tested very well with users.

Future Iterations

For future additions to this app, the team hopes to add a feature that allows users to take a health assessment when they first begin using the app. This learning tool would allow users to get a gauge of their current health status and give the app a much clearer depiction of the users health versus the traditional preset information calculated by BMI.

The team would also like to expand the emergency alert system by sending relevant information such as medical history, allergy data, and insurance information to EMS and emergency contacts when help is needed. This feature would enable Red++ to be an information resource when an accident does arise during an activity.

Conclusion

Red++ was created from the simple concept of allowing users to reach for help even when unconscious. It was then expanded into a fitness/health tracking app that enables users to maintain an understanding of their activities and vitals. The Red++ team conducted user testing that confirmed interest in the app and informed the creation of low and high fidelity prototypes. The research also assisted in the creation of an overall interaction that was pleasing to the audience, easy to use, attractive, and intuitive.

High-Fi Prototype Guide

The final, high-fi prototype, can be found at:

<https://www.flinto.com/p/0499f2ee>

To start a preset activity, trigger an alarm, resume activity, and review activity summary

step 1: From Welcome screen click center screen (or hamburger in header)

step 2: click "Start New Activity"

step 3: click "Road Biking" (to select road bike sensor presets)

step 4: click "Start"

step 5: to trigger alarm- tap center graph

step 6: tap "slide to clear alarm" to clear alarm

step 7: click "Planned Stop"

step 8: click "Resume" to resume activity (or "End" to end)

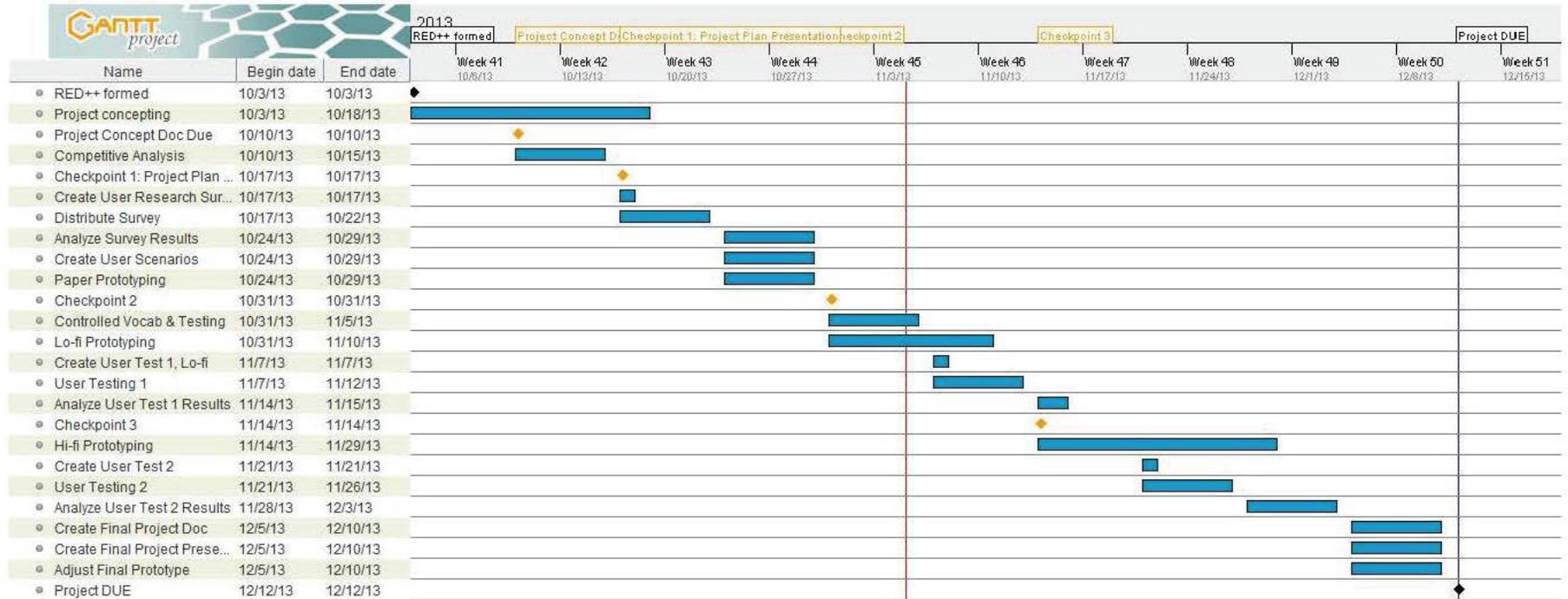
step 9: click "End" to end

step 10: scroll down and click "Heart Rate- Low" on the Activity Summary Screen

step 11: tap anywhere on the screen below the header to go back to activity summary

step 12: click the hamburger to return to "Main Menu" or "RED++" to return to welcome screen

SCHEDULE



APPENDIX

Competitive Analysis

Red ++ Competitive Analysis

Name	Type	Format	Description	Target Audience
Sleep Cycle	Behaviour Learning/Tracking	Mobile App	Analyzes sleep patterns using phone's accelerometer. Tracks sleep, gives time management tips, tracks exercise through accelerometer. Communicates through bluetooth.	Everyone
Lark	Behaviour Learning/Tracking	Wearable, Mobile App	Home thermostat that learns your temperature preferences.	Everyone
Nest	Behaviour Learning/Tracking	Mobile App		Home Owners
Basic	Behaviour Learning/Tracking	Wearable, Mobile App	Heart and health monitor uses perspiration, heart rate, and accelerometers to track health. Crash sensor technology that triggers an alarm via mobile app in the event of critical forces. Uses GPS, Bluetooth, notifies emergency contacts if alarm isn't shut down.	Everyone
ICEdot	Biometric	Wearable, Mobile App	Crash sensor technology attached to the back of a headband	Athletes
Reebok CHECKLIGHT	Biometric	Wearable		Athletes
mc10 Biostamp	Biometric	Wearable	Band-aid like structure with embedded sensors that automatically biodegrades after 2 weeks	Athletes/Everyone
mc10 Baby Temperature	Biometric	Wearable	Similar to mc10 Biostamp Sensors are embedded in the waist band of underwear	Parents
Biosensing Underwear	Biometric	Wearable		Everyone
Biosensor-integrated Sports Bra	Biometric	Wearable	Sensors are embedded in band of the sports bra, similar to integrated heart rate monitor	Athletes/Everyone
smart-ICE4family	Emergency	Mobile App	Allows user to call designated emergency contacts	Everyone
5star Urgent Response	Emergency	Mobile App	Allows user to call designated emergency contacts	Everyone
ICE	Emergency	Mobile App	Allows user to call designated emergency contacts	Everyone
iEmergency	Emergency	Mobile App	Allows user to call designated emergency contacts	Everyone
Garmin Forerunner	Fitness Monitoring	Wearable, Self-contained device	Wristband GPS tracking aimed at tracking fitness with the purpose of improving	Athletes/Adventurers
Fitbit	Fitness Monitoring	Wearable	High end pedometer Wristband GPS tracking aimed at tracking fitness with the purpose of improving	Athletes/Everyone
Nike Fuel	Fitness Monitoring	Wearable	Wristband GPS tracking aimed at tracking fitness with the purpose of improving	Athletes/Everyone
Runkeeper	Fitness Monitoring	Mobile App	Tracks outdoor fitness activities	Athletes
SPOT	Location Services	Self-contained device	GPS location device Athletes can attach the device onto themselves while they race. Friends and family can track their progress.	Adventurers
My Athlete Live	Location Services	Self-contained device, mobile app		Athletes
Garmin Dog Tracking	Location Services	Wearable, Self-contained device	GPS location device owners can place on their dogs. Allows wearer to be located in the event of a "man overboard" instance	Dog Owners
Garmin Quatrix	Location Services	self-contained device		Boating community



Initial Survey Research & Results

[Edit this form](#)

Red++ Initial User Research Survey

Our Interaction Design group, Red++, is currently conducting user research on health and fitness monitoring systems. Any and all responses will be useful.

Health & Fitness

Gender

Male
 Female
 Prefer Not to Respond

Age

under 18
 18-25
 26-35
 36-45
 45-55
 55+
 Prefer Not to Respond

Activity Level
Please estimate the number of hours/week you spend doing physical activity and your perceived level of exertion.

	0-1 hr/wk	1-4 hr/wk	5-10 hr/wk	11-15 hr/wk	15+ hr/wk
Low Intensity	<input type="radio"/>				
Medium Intensity	<input type="radio"/>				
High Intensity	<input type="radio"/>				

Do you have any health concerns you monitor or would like to be able to monitor?
If yes, what are they? How do you currently monitor them?

Do you have any fitness related vitals you monitor or would like to be able to monitor?
If yes, what are they? How do you currently monitor them.

Do you currently use any health or fitness related apps or devices?
If yes, please list.

If you wear a medical or fitness device, how do you wear it?

In an ideal world, would you want to take it off/put it on before/after activities? Wear it once, take it off? Leave it on for an extended period of time?

Do you analyze data collected from activities upon completion?

Yes

- No
- Sometimes

On a scale of 1 to 5, when engaging in activities, how important is real time data to your overall experience?

1 2 3 4 5

Very Important Not Important at All

Please select which indicators or data is important to you and when.

	Important DURING an activity	Important AFTER an activity	Not important
Hydration/water intake levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sodium/electrolyte levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Glucose levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notification of dangerously low/high levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notification to replenish any of the above levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you responded "Other" to the above, please list.

Privacy

On a scale of 1 to 5, how comfortable are you with entering personal medical data into a web app (where data is stored on secure web environment)?

1 2 3 4 5

Very Comfortable Not Comfortable at All

On a scale of 1 to 5, how comfortable are you with entering personal medical data into a mobile app (where data is stored on your mobile device)?

1 2 3 4 5

Very Comfortable Not Comfortable at All

Emergency Notification

In the event of a medical emergency, would you want EMS to be automatically notified?

- Yes
- No

If no to the above, why?

If yes to the above, what information would you want sent to them?

In the event of a medical emergency, would you want friends/family to be automatically notified?

- Yes
- No

If no to the above, why?



If yes to the above, what information would you want sent to them?

What would the ideal number of people who received the notification be?

- 1
- 2
- 3
- 4+

How often do you have a cell phone on you during physical activity?

- Always
- Sometimes
- Never

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lashleyhiatt@gmail.com

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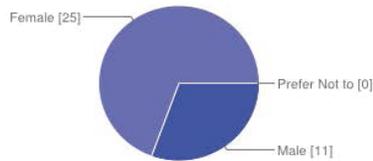
37 responses

[View all responses](#) [Publish analytics](#)

Summary

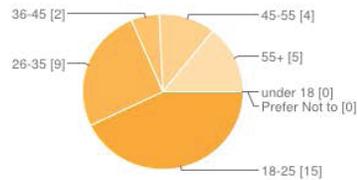
Health & Fitness

Gender



Male	11	31%
Female	25	69%
Prefer Not to Respond	0	0%

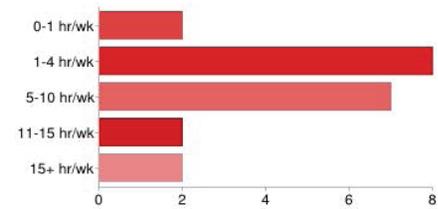
Age



under 18	0	0%
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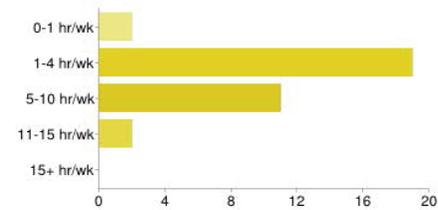
18-25	15	43%
26-35	9	26%
36-45	2	6%
45-55	4	11%
55+	5	14%
Prefer Not to Respond	0	0%

Low Intensity [Activity Level]



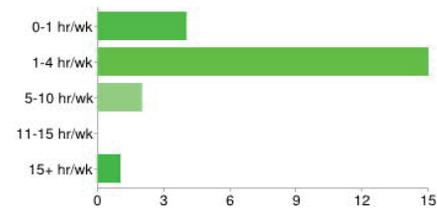
0-1 hr/wk	2	10%
1-4 hr/wk	8	38%
5-10 hr/wk	7	33%
11-15 hr/wk	2	10%
15+ hr/wk	2	10%

Medium Intensity [Activity Level]



0-1 hr/wk	2	6%
1-4 hr/wk	19	56%
5-10 hr/wk	11	32%
11-15 hr/wk	2	6%
15+ hr/wk	0	0%

High Intensity [Activity Level]



0-1 hr/wk	4	18%
1-4 hr/wk	15	68%
5-10 hr/wk	2	9%
11-15 hr/wk	0	0%
15+ hr/wk	1	5%

Do you have any health concerns you monitor or would like to be able to monitor?

no Itching issues after excessive exertion. I Dont monitor. No. Yes. I monitor my weight about every two weeks. I am anemic and I'd like to able to monitor my iron but I don't know how. I had a stroke. I'm on medication and don't smoke. BMI None Weird heart murmur. Its random so I can't really track it. High blood pressure No n/a thyroid condition. I can only monitor this via blood test every six months. Chronic pain. Mobile app for pain tracking called Symple. None at this time n/a. No. Yes, mid-back pain. I currently only act after the pain has occurred, but I would like to be able to have some sort of prevention device. Blood pressure. Pressure cuff.

Do you have any fitness related vitals you monitor or would like to be

able to monitor?

no not sure. Heart rate, tracked using a heart rate monitor and bike computer. Pulse/heart rate -- using a heart monitor sports watch Respiration -- no current method Yes - I like to monitor my calorie intake and fat burn. Pulse No. power power cadence Calories burnt and expended; heart rate. Fitbit Flex. No Yes, I wear a heart rate monitor. Heart rate Heart rate Power output while cycling Calories burned I would like a better way to measure my body fat percentage n/a. Heart rate. Distance traveled. Reps. Sleeping cycles. I Dont currently monitor. Sometimes Heart Rate using an iphone app. I would like to monitor my heart rate when I exercise. I currently monitor it by how I feel when I exercise. Hours worked out per week. I don't monitor it currently. No. Heartrate I monitor my heart rate Would like to monitor heart rate Power (powertap hub in rear bicycle wheel) and heart rate (strap, Garmin). I would like to be able to monitor electrolyte levels.

Do you currently use any health or fitness related apps or devices?

no Map my Run Nike + None Garmin GPS cycling computer, and watch for running MyFitnessPal MapMyRun/MapMyRide heart monitor sports watch Wii Fit+ No. MapMyFitness Fitbit Flex Garmin Edge 500 GPS bike computer yes, couch 2 5k no. No Use polar watch for heart rate Apps- Nike run, running for weight loss, my fitness pal Garmin Edge 500 & associated site. Yes, move. & nike fit. garmin srm Diet & Weight Loss Tracker by Calorie Count, Nike + Running app, Nike Training Club app. Map my run My Fitness Pal Yes, Instant Fitness, Argus, Heart Rate, and Stress Check I use the FitBit, RunDouble Couch to 5K, and MyFitnessPal apps. I also use a Zip tracking device for the FitBit app. Nike + Online tracking system for exercise activities (Garmin Connect; have used Strava in the past). mapmyfitness

If you wear a medical or fitness device, how do you wear it?

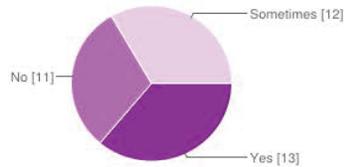
fitness device-ipod-on arm N/A heart monitor sports watch NA no. n/a hr strap The running app tracks your speed/distance and compares it to past runs. na in my shoe Every time I exercise clipped to my pants arm band as phone on wrist strap around my middle HR monitor strap Strap around the chest. iphone on my arm when running I have a knee brace.

In an ideal world, would you want to take it off/put it on before/after activities? Wear it once, take it off? Leave it on for an extended

period of time?

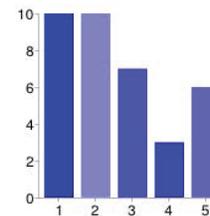
Leave it on without removing If unobtrusive, I would not mind wearing all/most of the time. It is fine the way it is; put it on before I work out and take it off when finished. N/A I don't understand this question. NA It could be cool to have something always monitoring, but I would like to specify whether I'm doing anything physical or not to adjust how the device was working/what it was tracking. I only use it for running, so it is fine just having it during activity n/a Leave it on for an extended period Wear for specific activities I would want to put it on and take it off before/after activities. Don't think I would care, but I guess leave it on for longer period of time. It's really to be used for the entire running period. Wear it while exercising - take it off when done I would like something I wear once and take off before and/or after my workout to monitor progress Leave it on for an extended period of time. on and off for work out Leave it on, so you wouldn't have to worry about remembering or not. I would refer for wear or use a device only when I'm exercising. For fitness, take it on/off before and after activities.

Do you analyze data collected from activities upon completion?



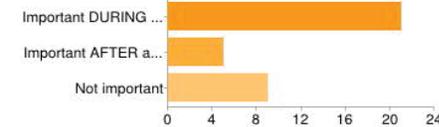
Yes	13	36%
No	11	31%
Sometimes	12	33%

On a scale of 1 to 5 , when engaging in activities, how important is real time data to your overall experience?



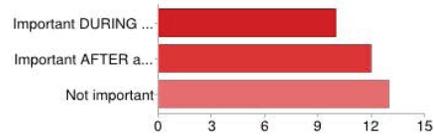
1	10	28%
2	10	28%
3	7	19%
4	3	8%
5	6	17%

Hydration/water intake levels [Please select which indicators or data is important to you and when.]



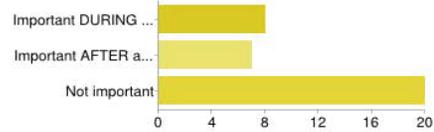
Important DURING an activity	21	60%
Important AFTER an activity	5	14%
Not important	9	26%

Sodium/electrolyte levels [Please select which indicators or data is important to you and when.]



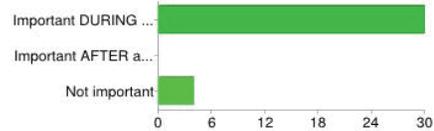
Important DURING an activity **10** 29%
 Important AFTER an activity **12** 34%
 Not important **13** 37%

Glucose levels [Please select which indicators or data is important to you and when.]



Important DURING an activity **8** 23%
 Important AFTER an activity **7** 20%
 Not important **20** 57%

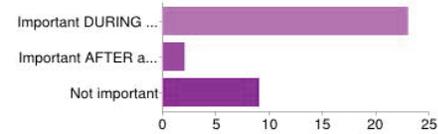
Heart rate [Please select which indicators or data is important to you and when.]



Important DURING an activity **30** 88%
 Important AFTER an activity **0** 0%

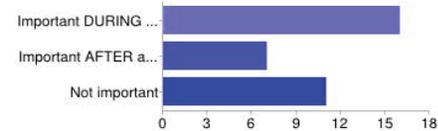
Not important **4** 12%

Notification of dangerously low/high levels [Please select which indicators or data is important to you and when.]



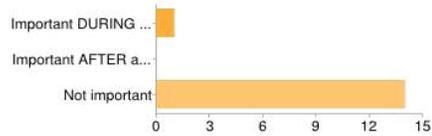
Important DURING an activity **23** 68%
 Important AFTER an activity **2** 6%
 Not important **9** 26%

Notification to replenish any of the above levels [Please select which indicators or data is important to you and when.]



Important DURING an activity **16** 47%
 Important AFTER an activity **7** 21%
 Not important **11** 32%

Other [Please select which indicators or data is important to you and when.]



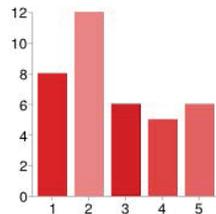
Important DURING an activity	1	7%
Important AFTER an activity	0	0%
Not important	14	93%

If you responded "Other" to the above, please list.

n/a. speed calories burnt

Privacy

On a scale of 1 to 5, how comfortable are you with entering personal medical data into a web app (where data is stored on secure web environment)?



1	8	22%
2	12	32%
3	6	16%
4	5	14%
5	6	16%

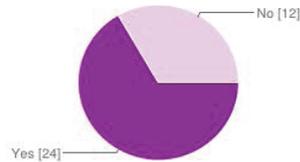
If no to the above, why?

Meddling. Unwanted costs I don't think I would need it and I wouldn't want to set it off by accident. depends on the level of emergency...some emergencies can be taken care of individually safety may not be necessary Could be a false alarm. n/a. Seems like an invasion of privacy. What if the app malfunctioned? I want to initiate notification Sell my data once, or send me an advertisement just once and I'll delete the app. I could see it malfunctioning and EMS showing up for no reason. I Dont trust the apps ability to decide. Only automatic notification of LIFE threatening medical emergencies would be important to me. Not all medical emergencies are life threatening, so I would not necessarily want those automatically responded to.

If yes to the above, what information would you want sent to them?

Assuming unconsciousness, location and status (breathing, conscious, heart beat). Age Gender Brief Medical History Emergency Contacts Location Severity of injury N/a My location and medical issue. Location, any medical details What's going on, and why their needed. Whatever EMS would think is important; they are a better judge of that than I am Location. Critical vital signs. location, general symptoms My location and situation Vital signs and measurable abnormal symptoms. Name, age, Date of birth, reason for call location It would be beneficial for them to be informed of what the emergency is so they can be prepared. Another vital piece of information would probably be data from your past week of working out. Top level critical info to evaluate initial treatment plan Vitals Medications Allergies Medical history. Vitals Name, age, personal emergency contact information, prescription medication My vitals, blood pressure and approximate time the incident (injury, heart attack, etc..) happened so they'd be more prepared to treat Location Vitals, allergies, any pre-existing medical condition. Date Of Birth, list of medications, and list of surgeries. medication I am taking. existing medical conditions. drug allergies.

In the event of a medical emergency, would you want friends/family to be automatically notified?



Yes **24** 67%
 No **12** 33%

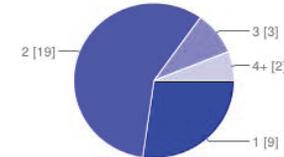
If no to the above, why?

I only would want people I specify to be notified. Family yes. Don't want to worry them it would depend on lots of factors like availability, nature of emergency May not be a serious condition and therefore would rather not freak everyone out. may not be necessary Could be a false alarm. n/a. Not interested in alarming them unnecessarily Only certain people need to know that right away. Probably only my emergency contacts actually. I wouldn't need that as a facebook status for all of my friends or family. Not sure, just seems weird. I Dont trust the apps ability to decide. same as above

If yes to the above, what information would you want sent to them?

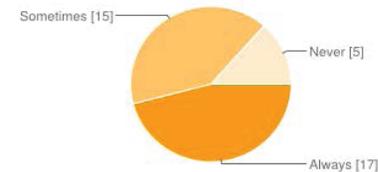
to contact hospital and my location and status Where I'm going(hospital) My location Location of treatment center location, general symptoms, if EMS has been notified location of said person with emergency n/a location, problem EMS called Time of emergency, location of call-in, hospital, patient status, type of medical emergency Same as for EMS Same as EMS What happened, what time and how I'm doing Location/diagnosis Phone # to call for information My condition and where I am located Assuming unconsciousness, location, hospital, status, why EMS was called. text What happened and the level of seriousness where I was being taken What location to find me. Location and Situation Location, type of injury My location would be the most important.

What would the ideal number of people who received the notification be?



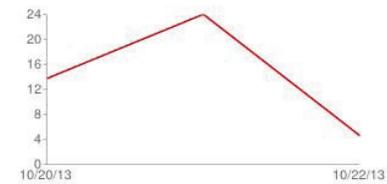
1 **9** 27%
 2 **19** 58%
 3 **3** 9%
 4+ **2** 6%

How often do you have a cell phone on you during physical activity?

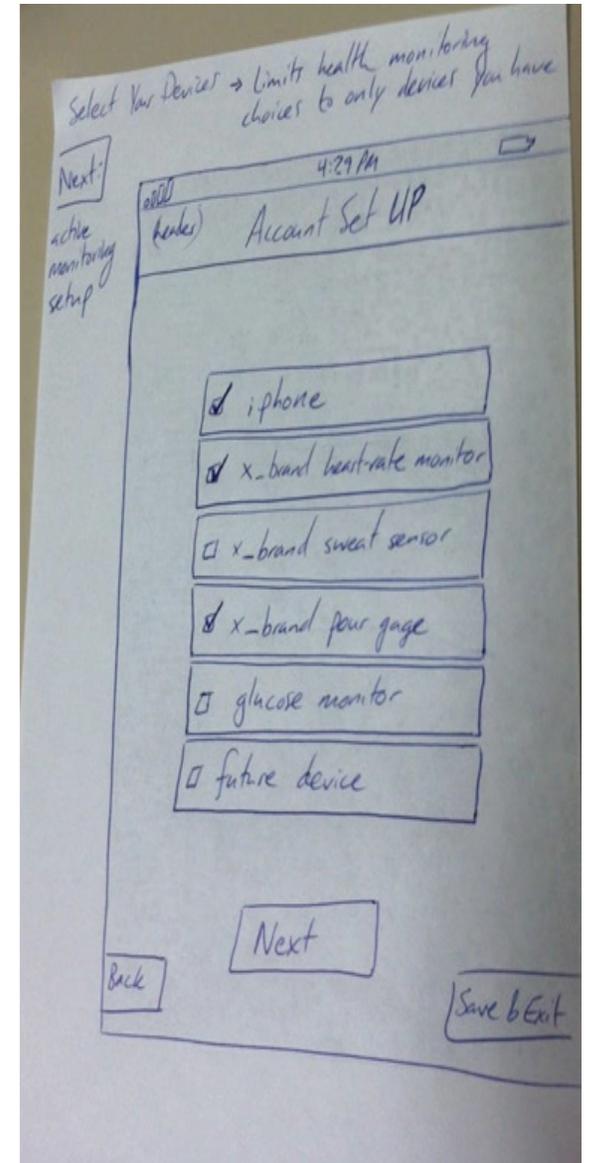
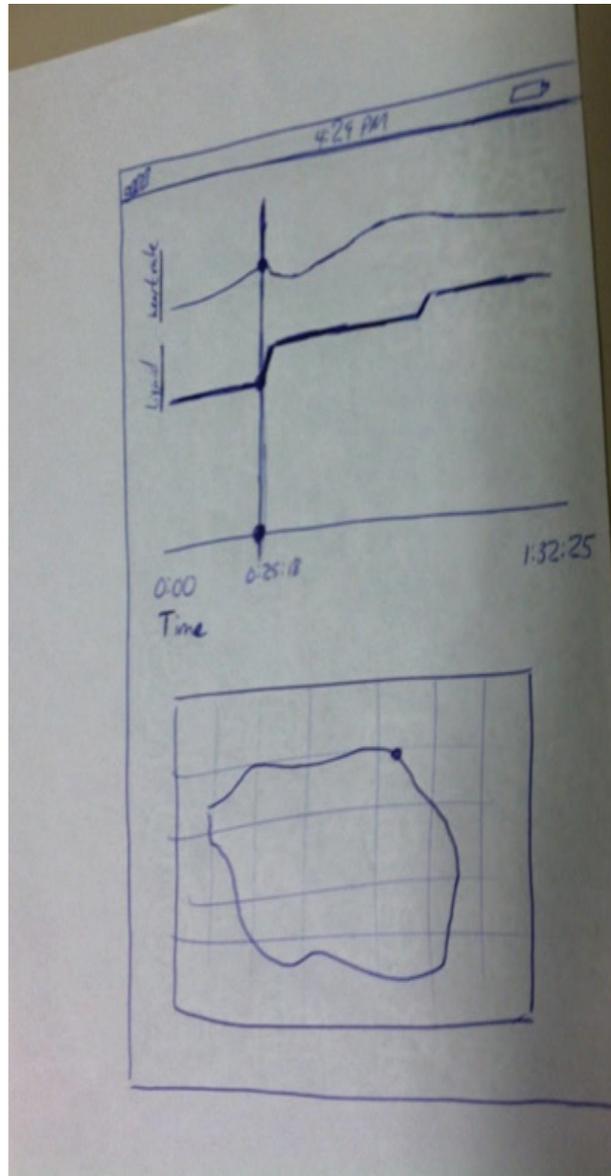
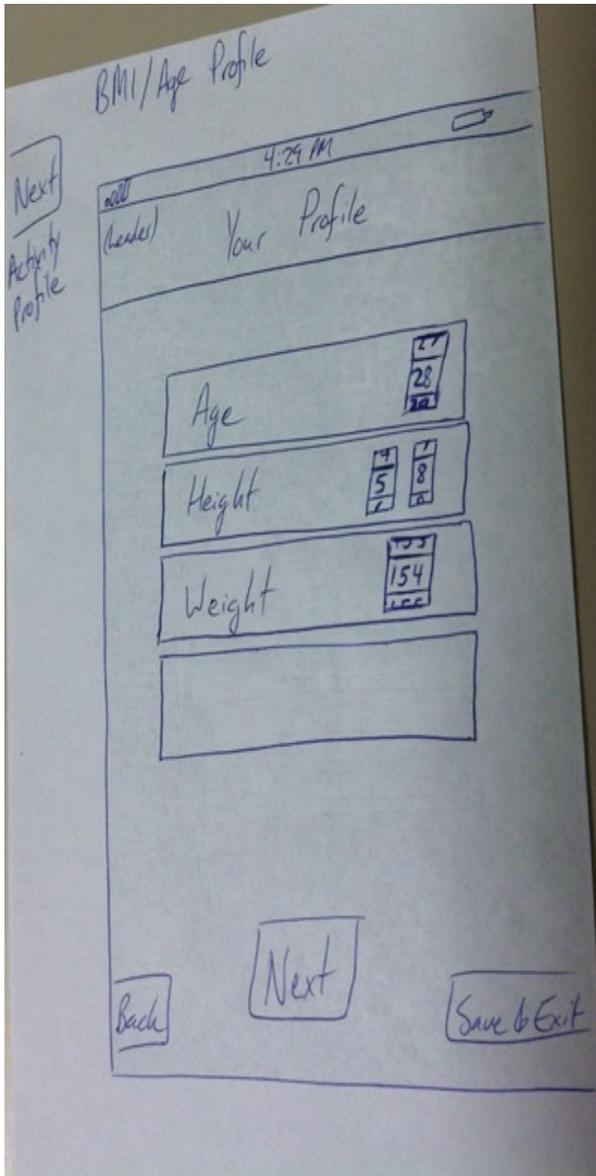


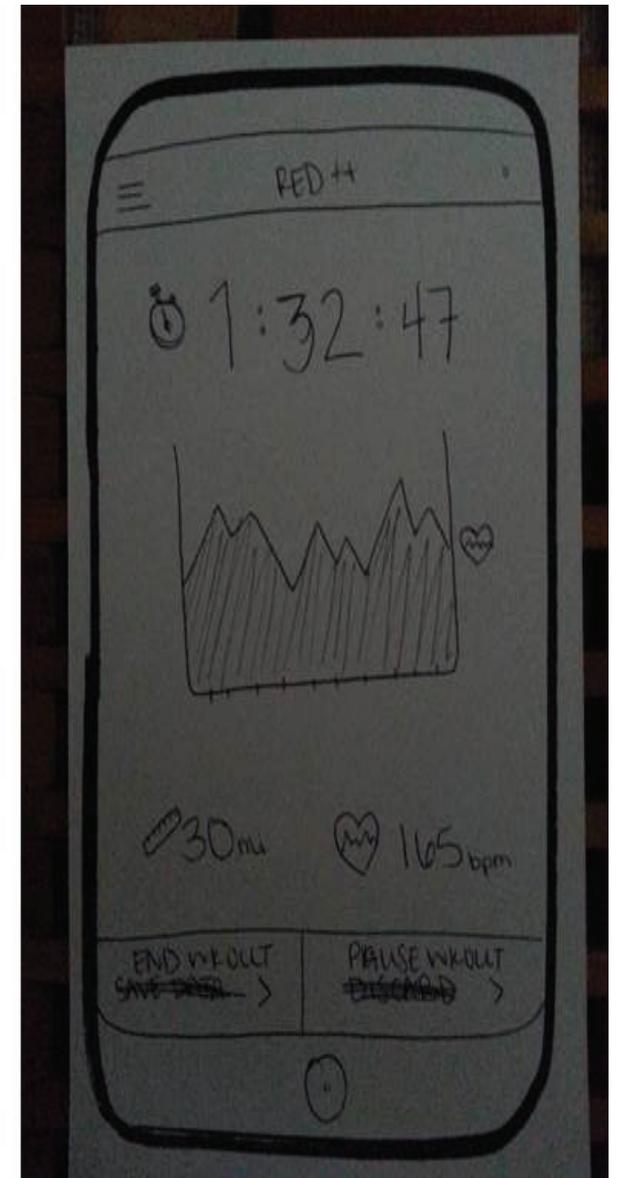
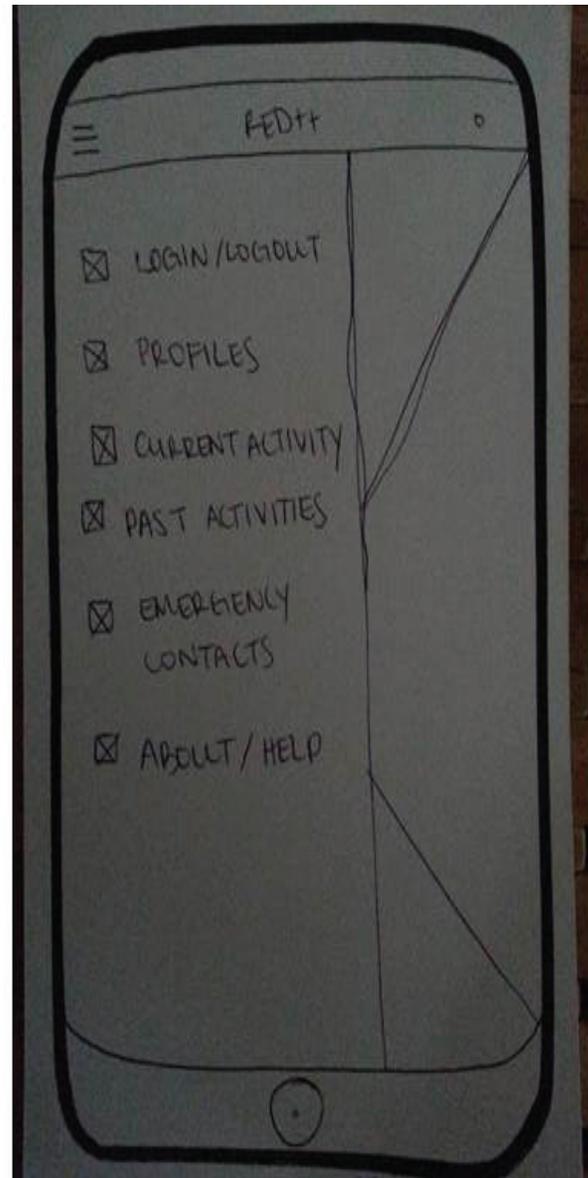
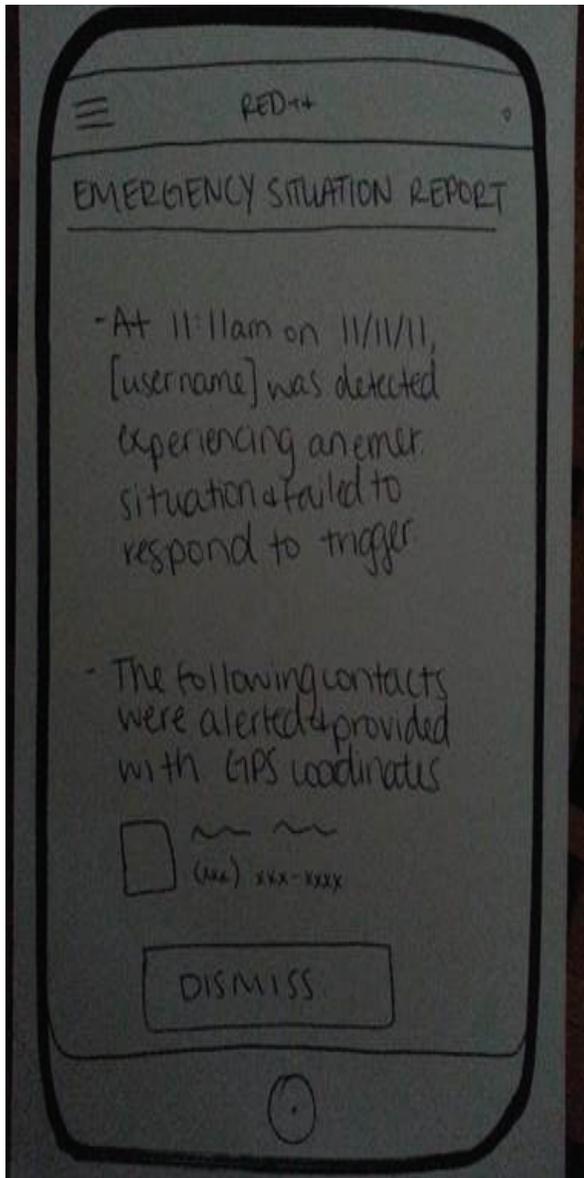
Always **17** 46%
 Sometimes **15** 41%
 Never **5** 14%

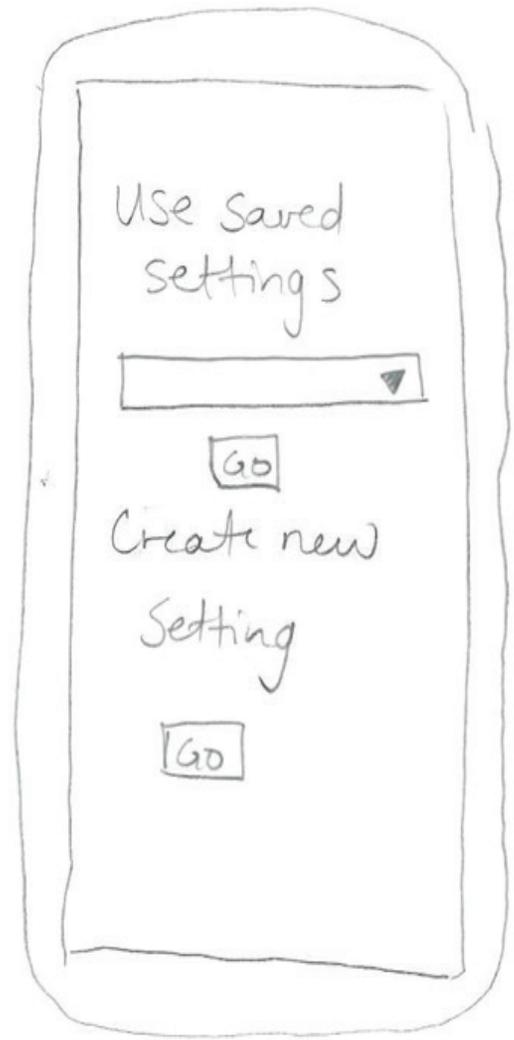
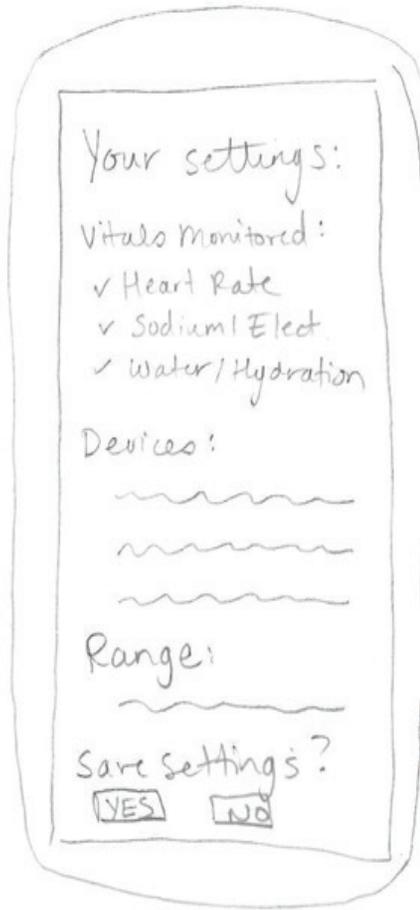
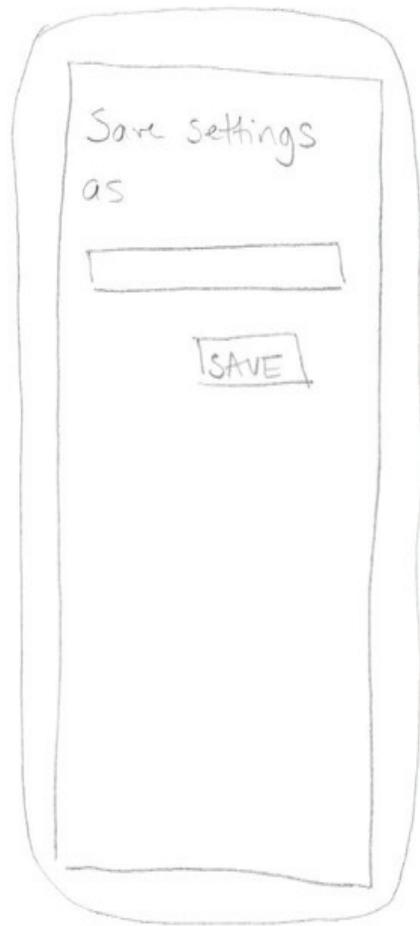
Number of daily responses

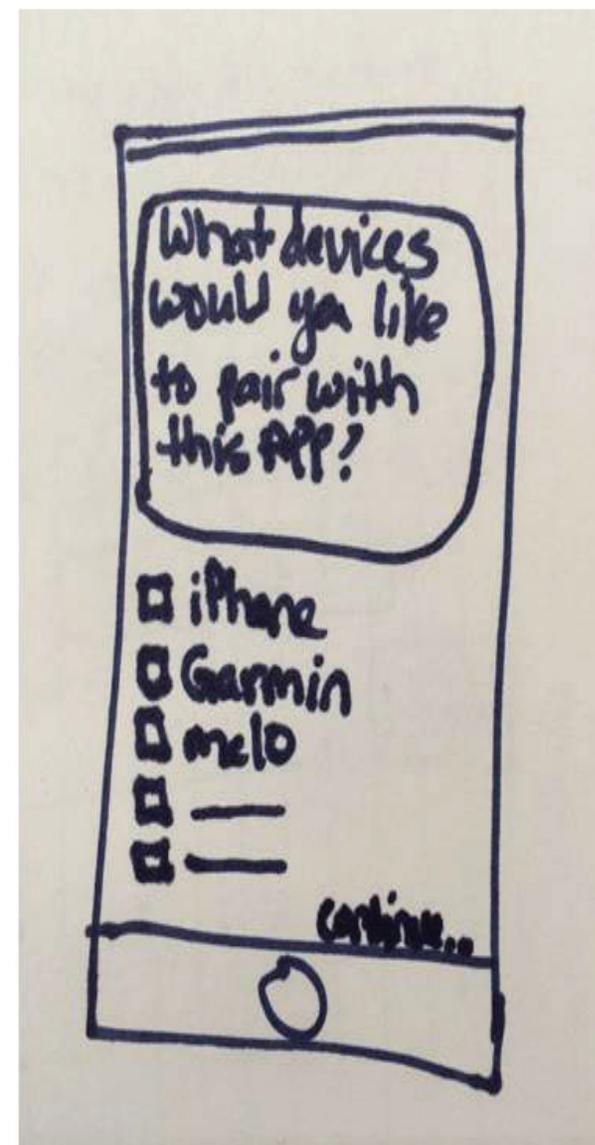
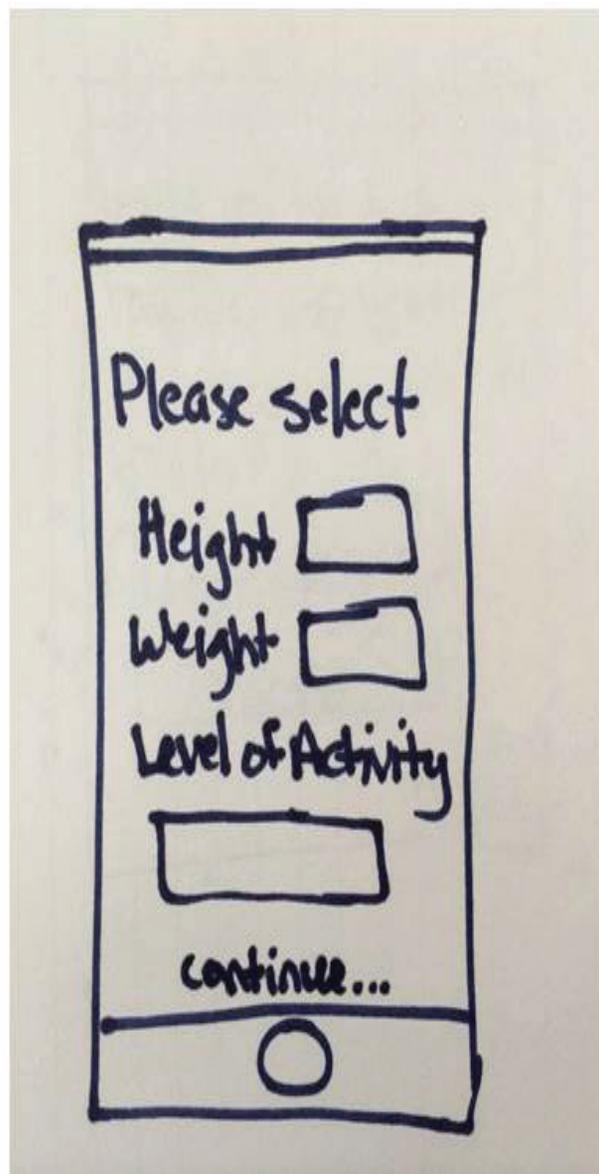
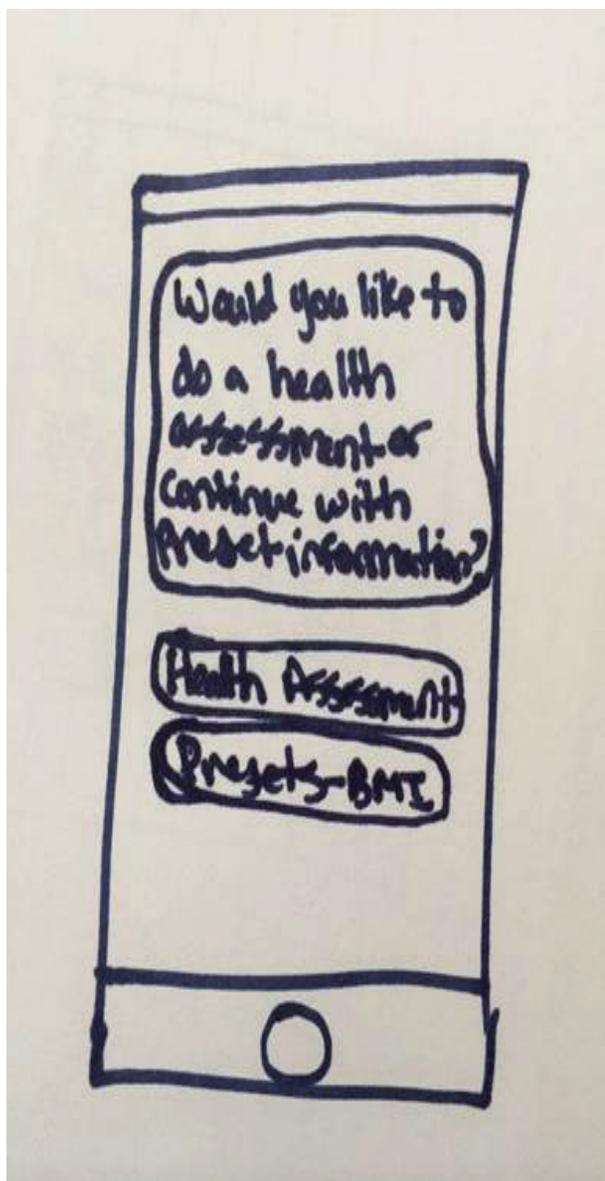


PAPER PROTOTYPING









New Activity

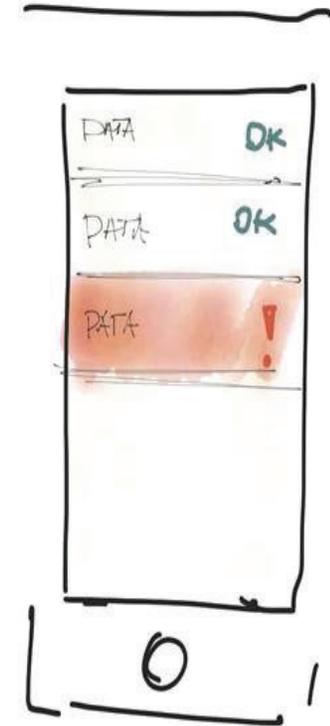
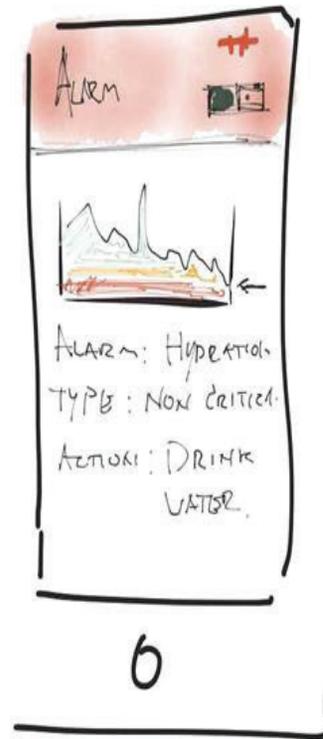
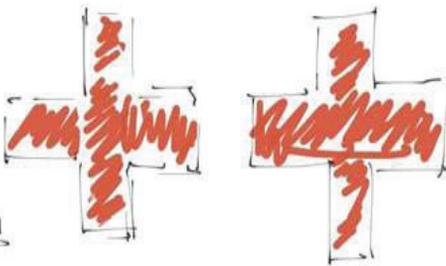


SENSORS

-
-
-

DIST
TYPE
TIME

Activity
RATING



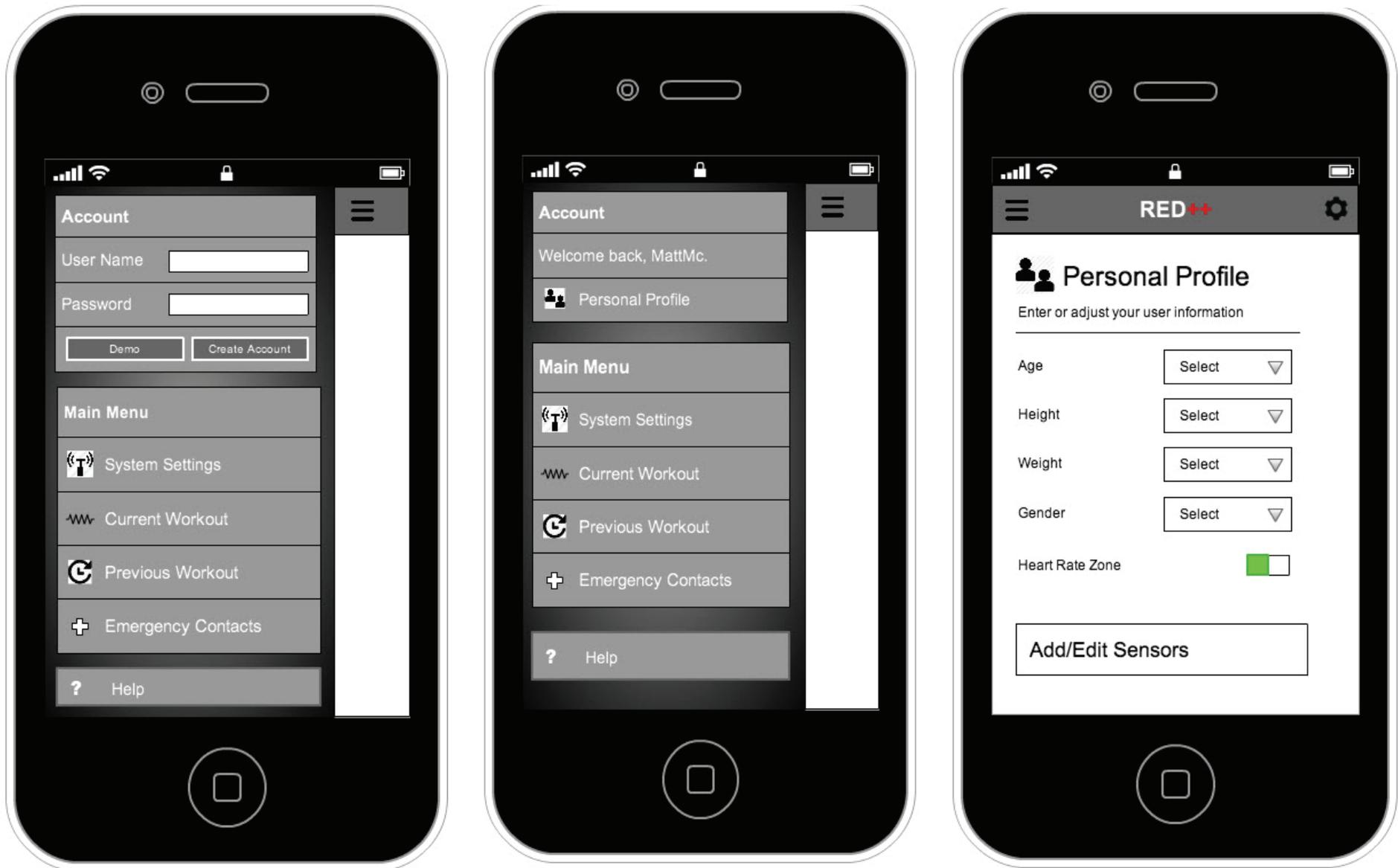
Card Sort

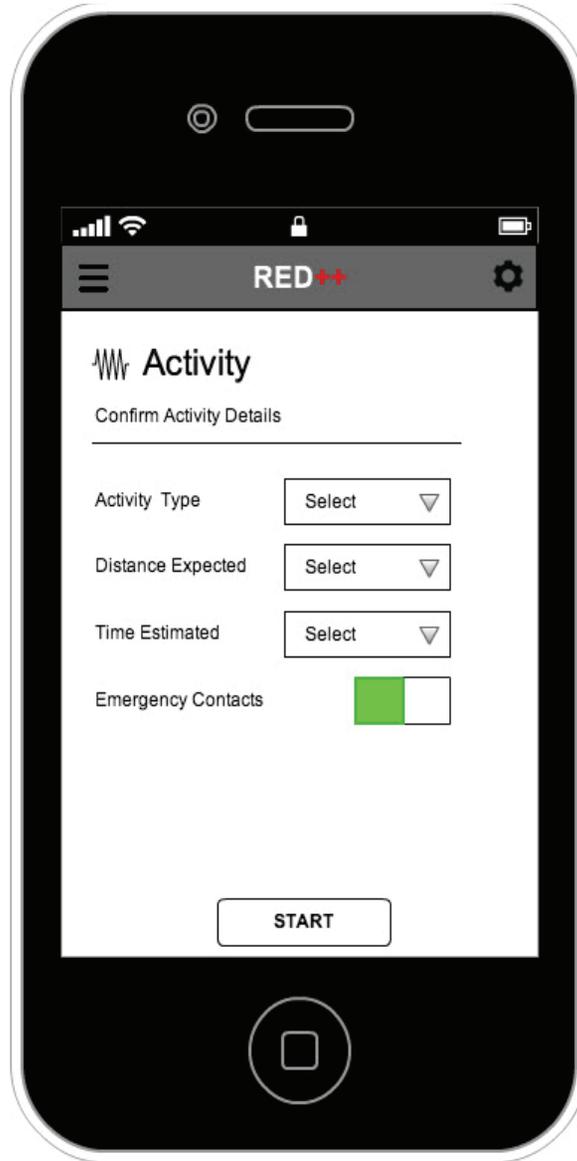
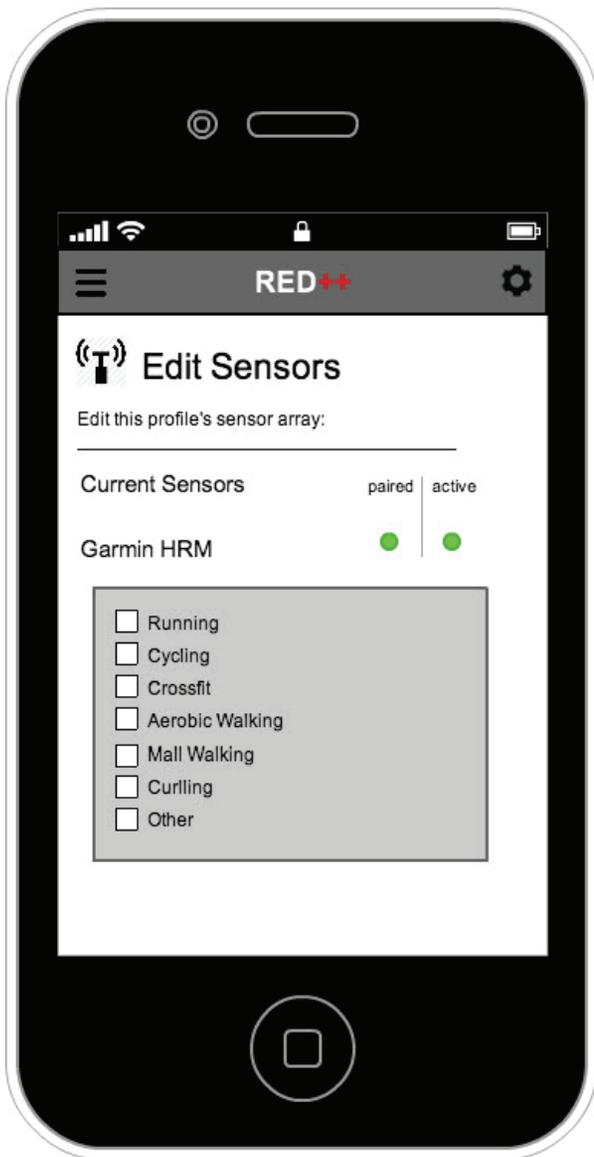
Distance of current workout (if applicable)	
100	Amount of time spent doing current workout
88 88	Graph showing real time data
88 88 77	Heart rate display
66 66 55 66	Save or discard data from current workout
66 66 55 55 77	Summary of current workout
33 33 22 33 44 44	Give a workout an intensity rating
11 11 0 11 44 33 55	Previous workout information
33 33 22 33 33 22 44 55	Add an exercise activity (running, cycling, hiking)
22 22 33 33 0 0 22 33 44	Display of height/weight/age
22 22 33 33 11 11 0 11 22 66	List of currently paired fitness sensors
0 0 11 11 0 0 11 11 33 55 44	Enter in your height/weight/age
0 0 11 11 0 0 11 11 33 55 44 100	Enter in your heart rate zone information
0 0 0 0 0 0 0 0 11 22 33 33	Emergency contact information
11 11 11 11 11 11 0 0 0 0 11 11 11 66	Countdown sequence to call emergency contacts
0 0 0 0 0 0 0 0 0 0 11 22 22 55 44	Opt in/opt out of notifying emergency contacts if you are non-responsive
0 0 0 0 0 0 0 0 0 0 11 22 22 44 33 88	Opt in/opt out of automatic GPS location retrieval
0 0 0 0 0 0 0 0 0 0 11 22 22 33 22 77 88	Opt in/opt out of receiving alerts when currently monitored levels are out of range
0 0 0 0 0 0 0 0 0 0 11 22 22 33 22 77 88 88	Opt in/opt out of auto-updates to the app
0 0 0 0 0 0 0 0 0 0 22 22 22 33 22 55 66 66 77	Clock options
0 0 0 0 0 0 0 0 11 0 11 33 11 11 22 11 44 55 66 55 77	Adjust an alert volume
11 11 22 11 0 0 0 0 22 22 33 33 33 22 22 44 55 55 66 66 44	Measurement and temperature units
0 0 0 0 0 0 0 0 0 0 0 22 22 22 11 22 22 22 33 44 22 22	Login/logout
0 0 0 0 0 0 0 0 0 0 0 22 22 22 11 33 33 33 44 44 22 22 88	Sign up for an account
55 55 55 55 33 22 11 22 22 44 33 0 0 0 11 0 0 11 0 0 22 11 0 0	Warning alerts/notifications about your current physical condition
22 22 22 11 0 22 33 33 22 33 33 11 11 0 0 0 0 0 0 11 22 11 0 0 33	Advice about how to "fix" levels that are outside of normal ranges

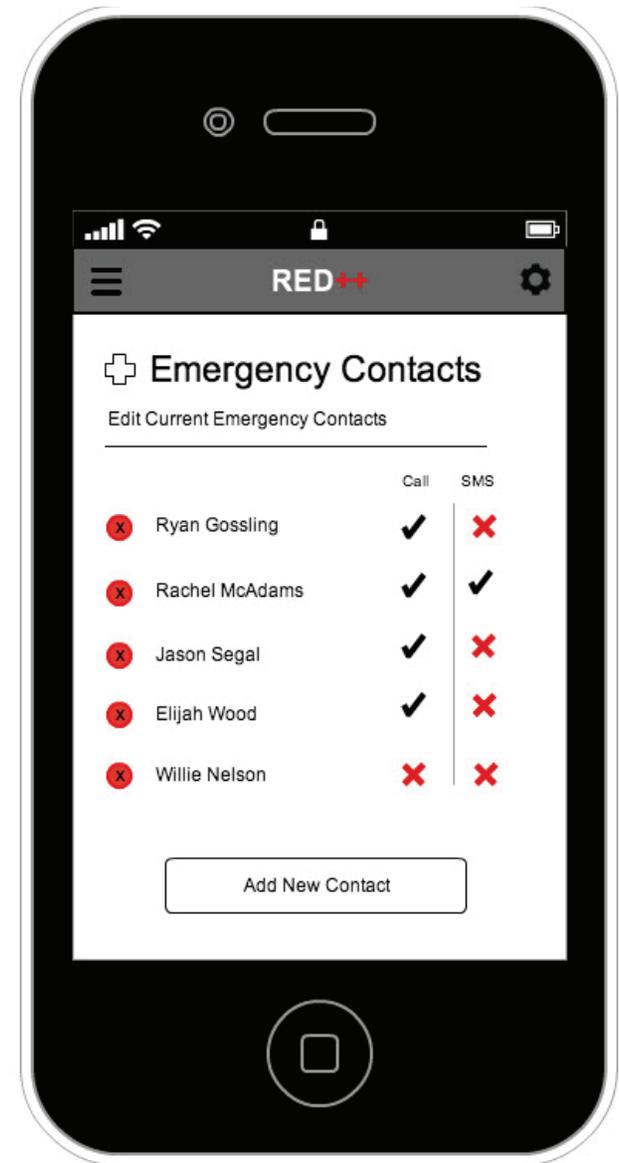
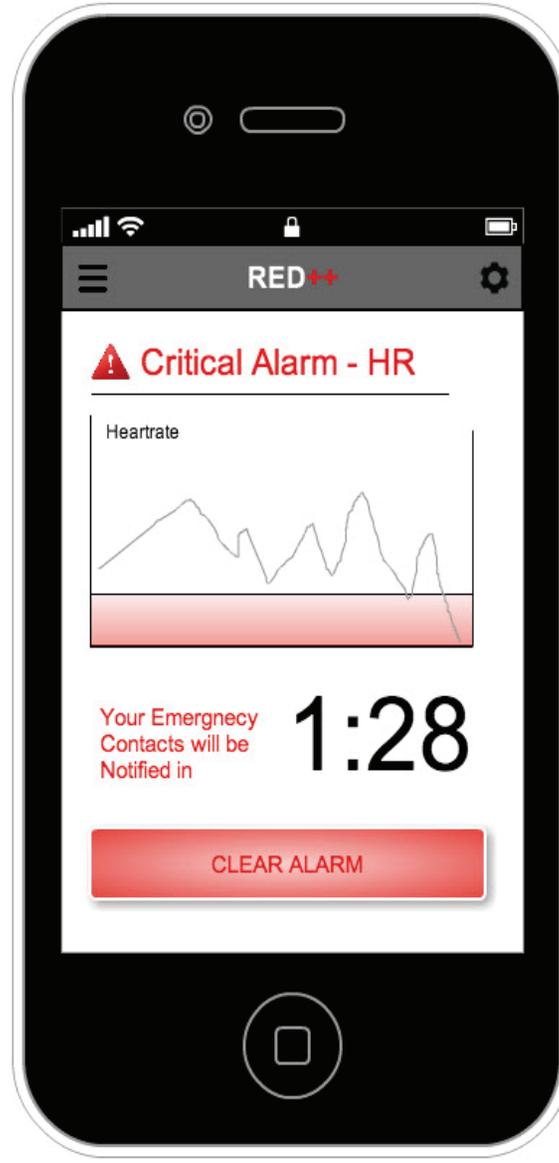
Low-Fi Prototype User Test

- You just purchased the Red ++ App and are ready to get started. You login and setup your personal profile.
- Typically you go running with a group of friends, but today you are waking up extra early and going by yourself. Your mom is typically your emergency contact, but she is out of the country on a trip so you go in and add your friend Andrew, just in case something happens.
- You're about to begin your run on the trail and you enter in your activity, making sure your FitBit is connected for tracking and that your call emergency contact is turned on.
- Yesterday you went and got a new Garmin watch. You are really excited about using it on your run this afternoon so you login to your Red ++ App to connect to the new sensor.
- During last week's run on the trail you started cramping near the end, but you can't remember exactly where. You are going to do the same run today, so you go to review your past activity to help you figure out how much more water you might want to drink before your run today.

Cacoo Prototypes







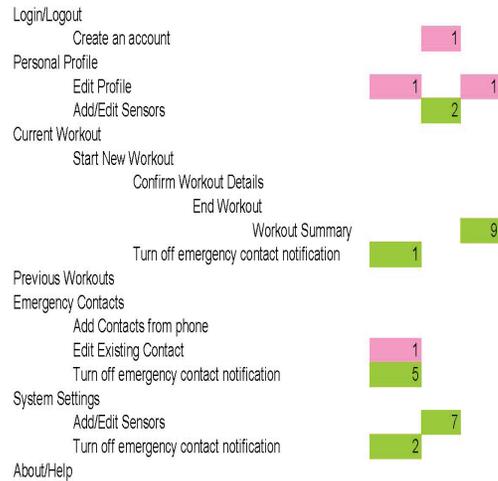
Tree Sort

Red++
 Surveys started 11
 Surveys completed 10 (90%)

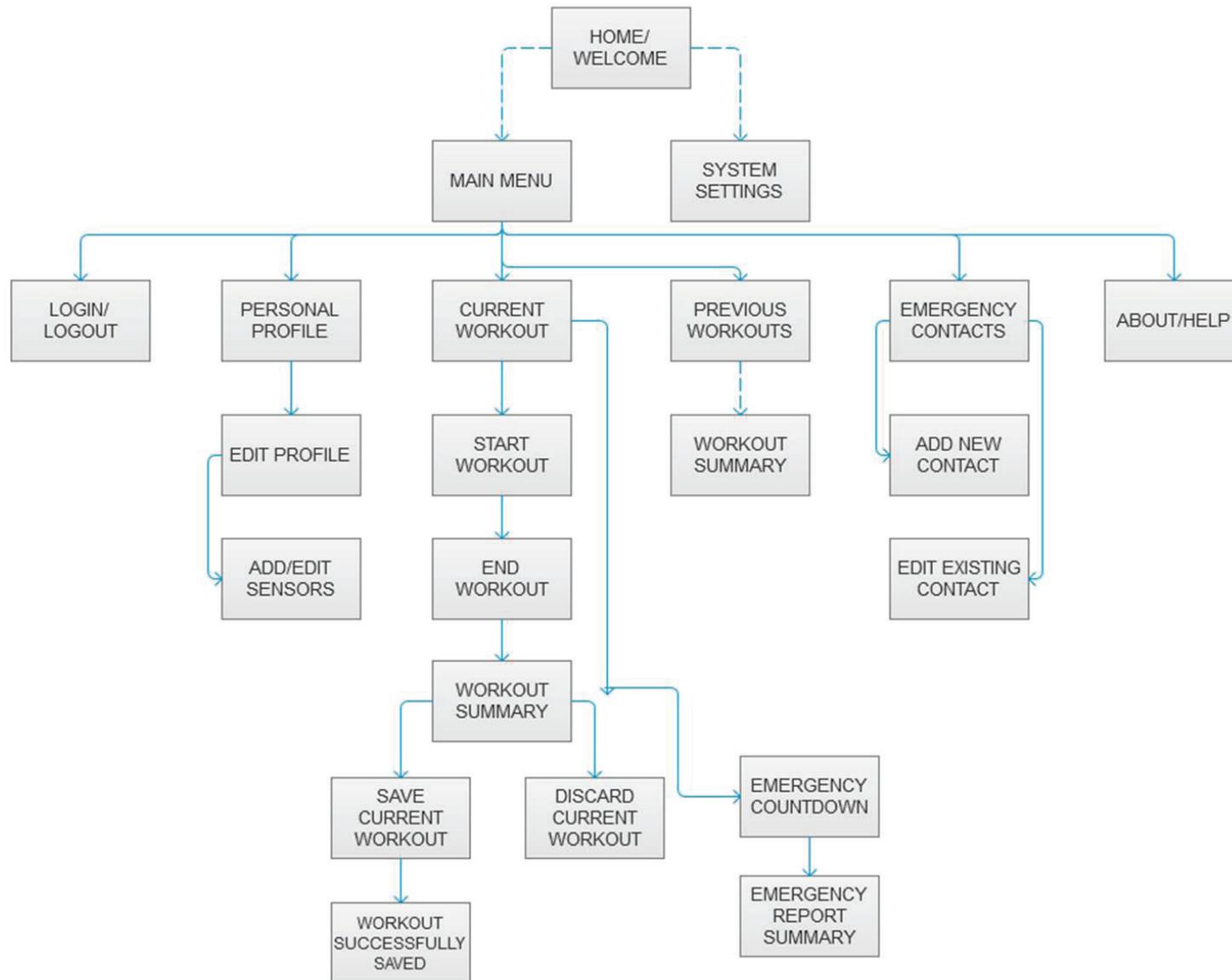
Turn off notifying your emergency contacts when you go for a workout.
 Pair your heart rate monitor to the app.
 Start a workout then view your workout summary.

Encountered TreejackTask	10	10	10	10
Attempted TreejackTask	10	10	10	10
Overall Successes	8	9	9	Overall Success average
Overall Success %	80%	90%	90%	87%
Direct Successes	8	7	4	Direct Success average
Direct Success %	80%	70%	40%	63%
Indirect Successes	0	2	5	Indirect Success average
Indirect Successes %	0%	20%	50%	23%
Failures	2	1	1	Failures average
Failures %	20%	10%	10%	13%
Skips	0	0	0	Skips average
Skip %	0%	0%	0%	0%

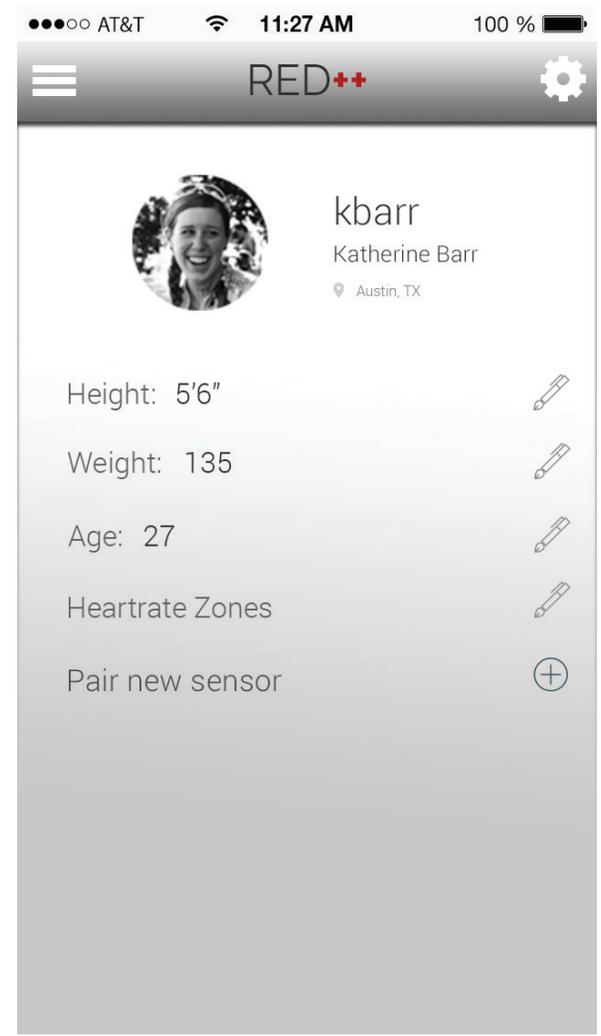
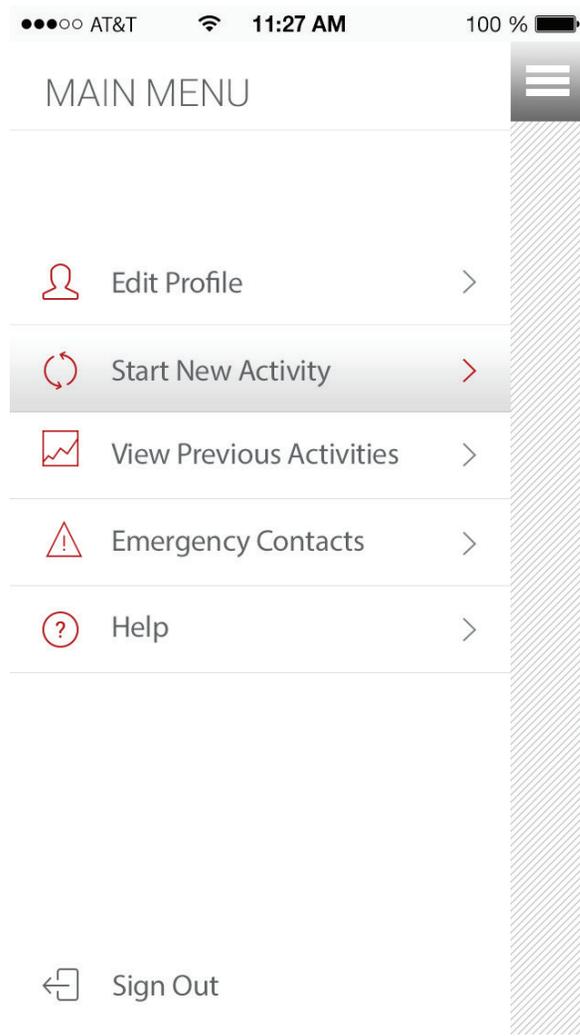
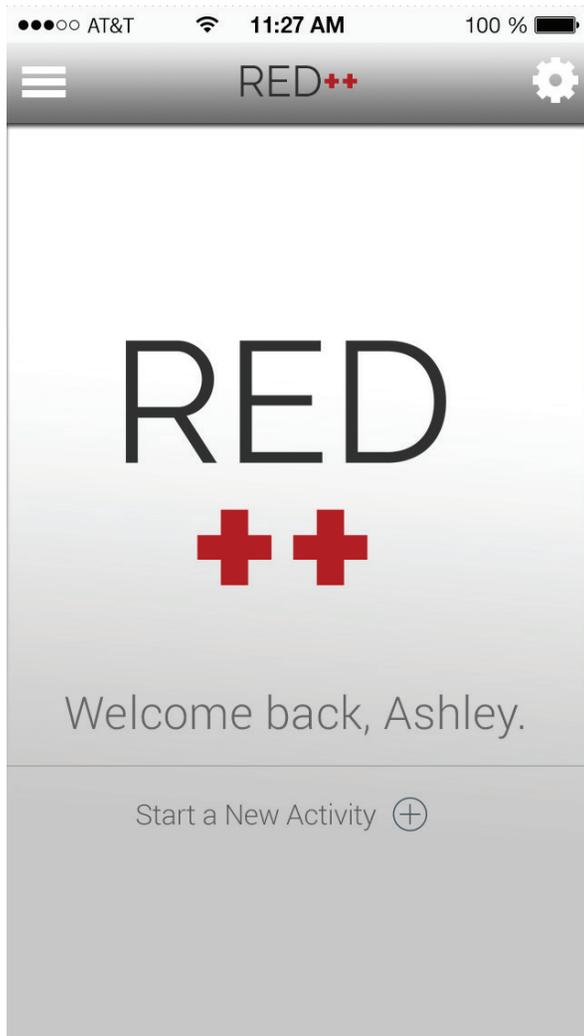
Overall Successes
Overall Success %
 Main Menu

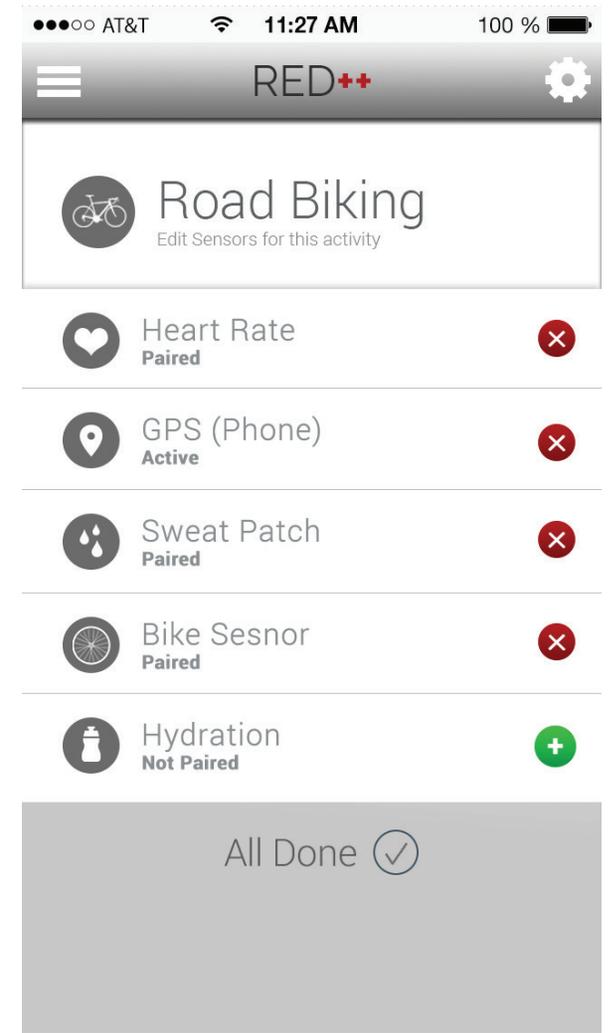
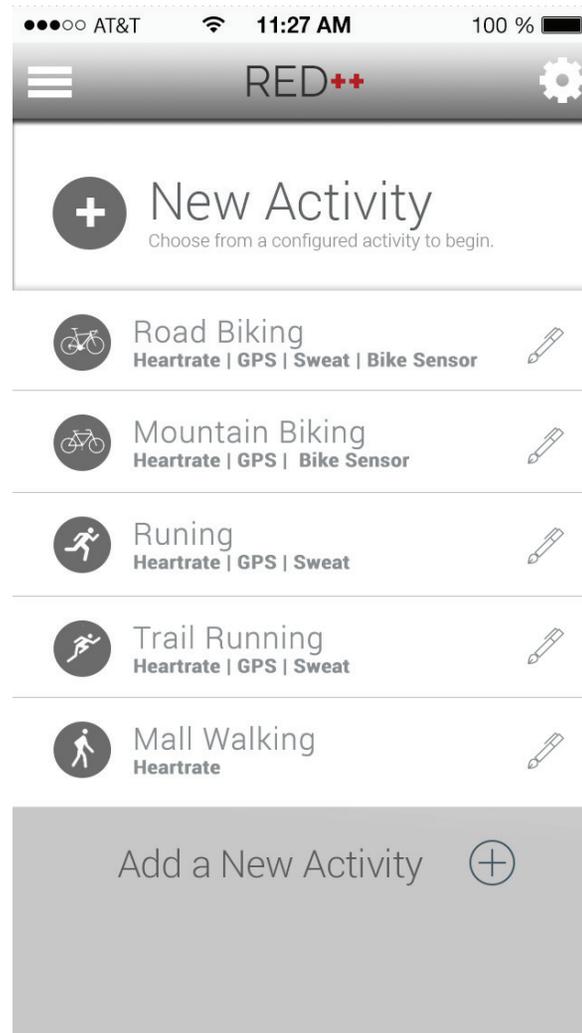
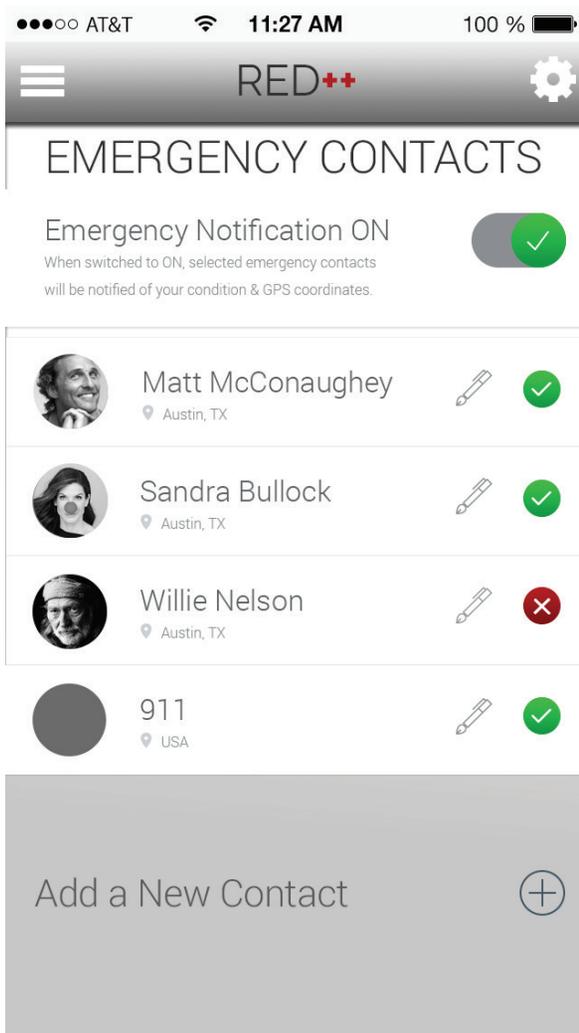


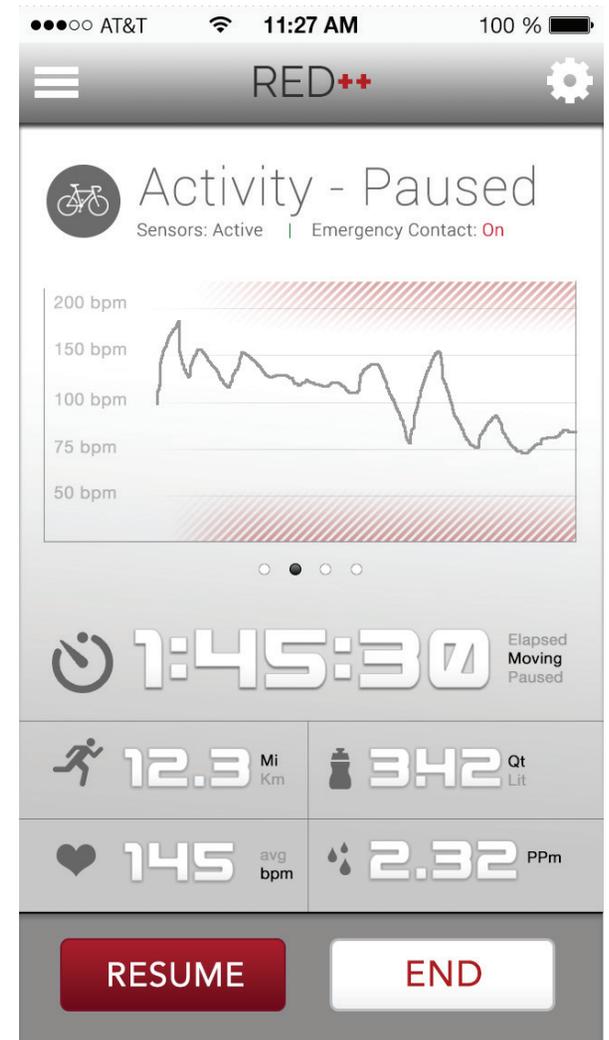
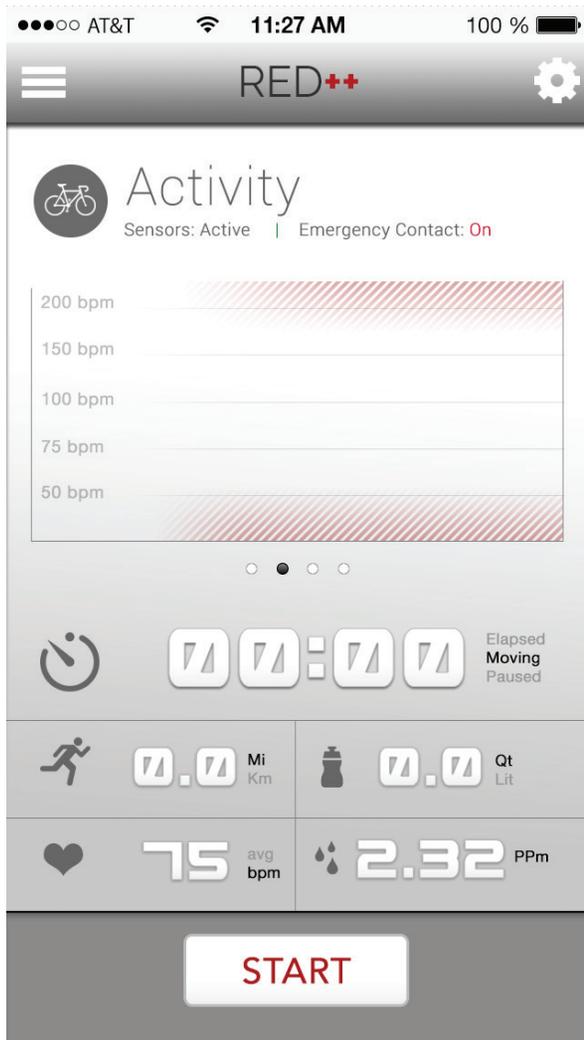
Updated Site Map

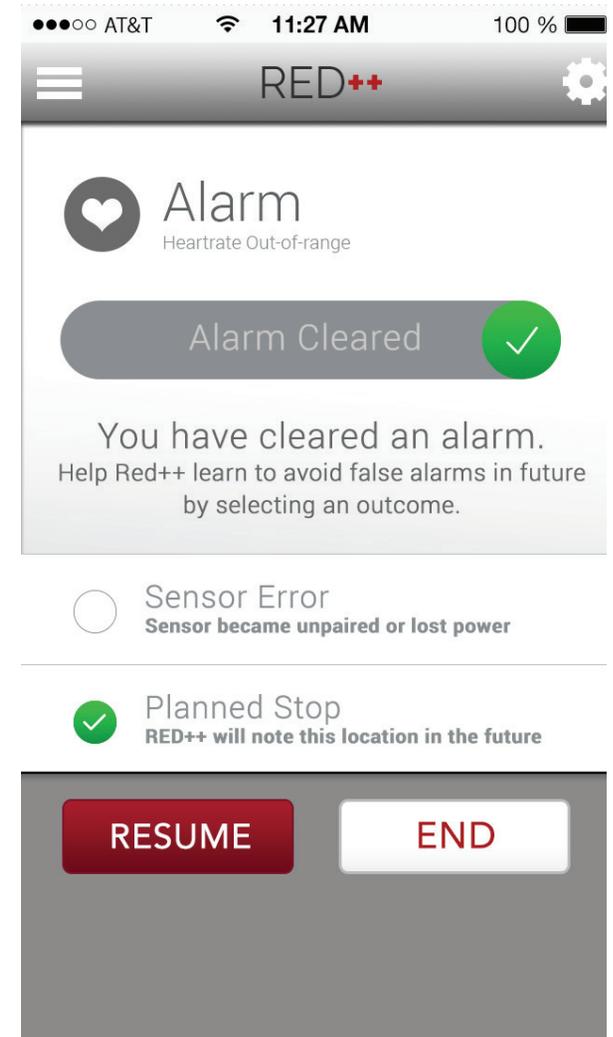
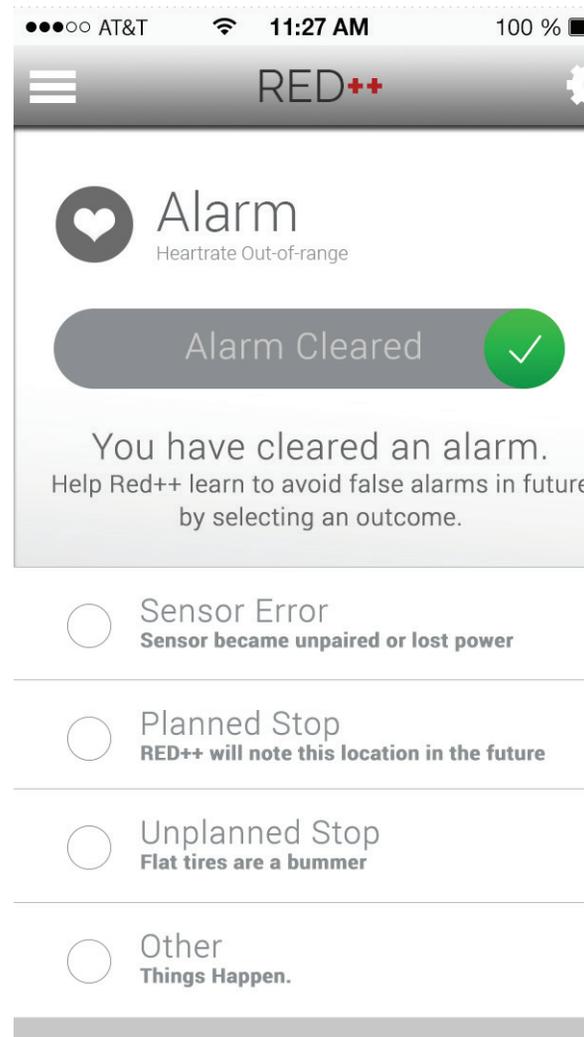
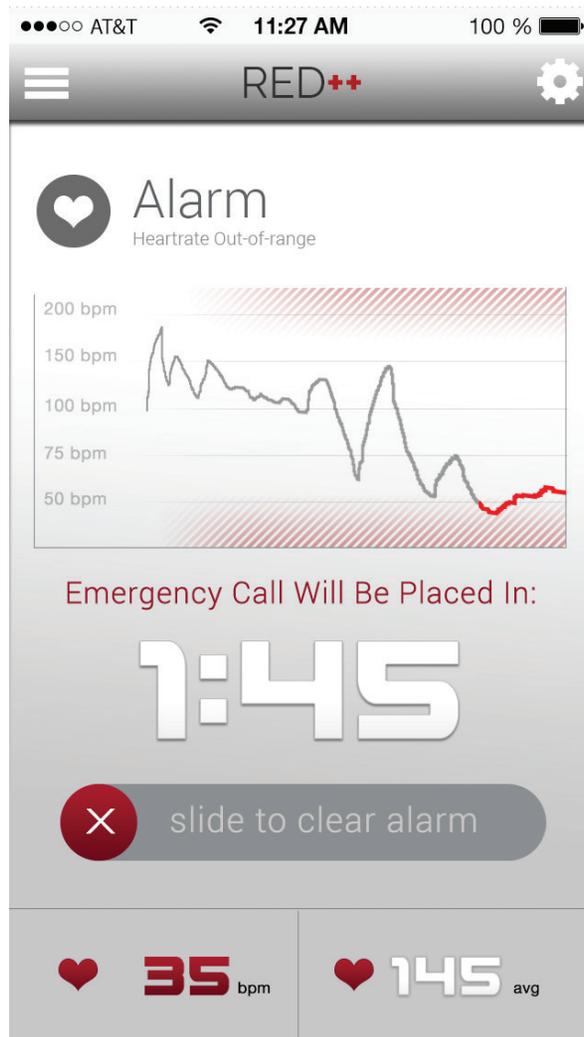


High-Fi Prototype









High-Fi Prototype User Test

Participant Tasks:

- You've lost 10 lbs! Please update your profile.
- (Instructions for tester: start on welcome screen, go from there)
You're going for a bike ride and will be using this app. Please begin.
- (Instructions for tester: initiate an alarm on the activity page)
You've triggered an alarm by stopping on the side of the road to talk to someone you know. Please cancel the alarm, identify why you stopped, and resume your bike ride.

Participant Questions:

- You need to change your alert volume. Where would you go to this?
- Under new activity click the edit pen next to road biking. What do you think the red icon indicates?
- Which set of icons did you prefer? The bubble icon, the flat red, or the grey in a circle?

Post-Test Survey

[Edit this form](#)

Red++ Questionnaire

It is easy to find my way around the app.

1 2 3 4 5

Strongly Disagree Strongly Agree

I can get to information quickly.

1 2 3 4 5

Strongly Disagree Strongly Agree

It is easy to remember where to find things.

1 2 3 4 5

Strongly Disagree Strongly Agree

Information is layered effectively on different screens.

1 2 3 4 5

Strongly Disagree Strongly Agree

Information is easy to read.

1 2 3 4 5

Strongly Disagree Strongly Agree

Screens have the right amount of information.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app's content interests me.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app's content would keep me coming back.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app has characteristics that make it especially appealing.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app is well-suited to first-time visitors.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app is well-suited to repeat visitors.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app has a clear purpose.

1 2 3 4 5

Strongly Disagree Strongly Agree

I always felt I knew what it was possible to do next.

1 2 3 4 5

Strongly Disagree Strongly Agree

My mistakes were easy to correct.

1 2 3 4 5

Strongly Disagree Strongly Agree

The overall app is attractive.

1 2 3 4 5

Strongly Disagree Strongly Agree

The app's graphics are pleasing.

1 2 3 4 5

Strongly Disagree Strongly Agree

The colors used throughout the site are attractive.

1 2 3 4 5

Strongly Disagree Strongly Agree

The typography is attractive.

1 2 3 4 5

Strongly Disagree Strongly Agree

What did you like best about the app?

If you could make one significant change to this Web site, what change would you make?

Any additional comments about the Red++ app?

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Post-Test Results

lashleyhiatt@gmail.com

[Edit this form](#)

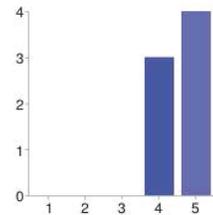
8 responses

[View all responses](#)

[Publish analytics](#)

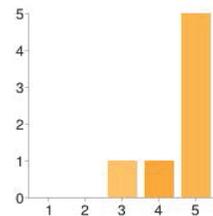
Summary

It is easy to find my way around the app.



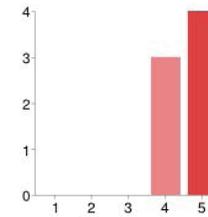
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2	0	0%
3	0	0%
4	3	43%
5	4	57%

I can get to information quickly.



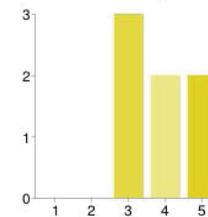
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2	0	0%
3	1	14%
4	1	14%
5	5	71%

It is easy to remember where to find things.



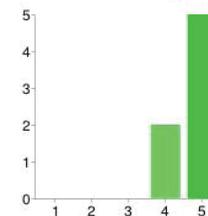
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3	0	0%
4	3	43%
5	4	57%

Information is layered effectively on different screens.



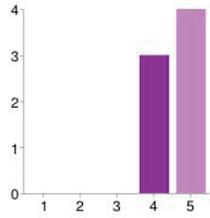
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3	3	43%
4	2	29%
5	2	29%

Information is easy to read.

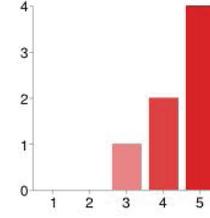


1	0	0%
2	0	0%
3	0	0%
4	2	29%
5	5	71%

Screens have the right amount of information.

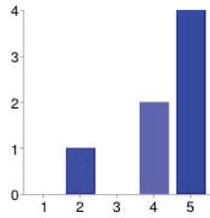


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3	0	0%
4	3	43%
5	4	57%



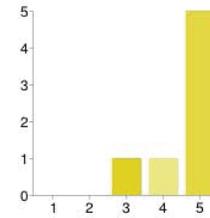
1	0	0%
2	0	0%
3	1	14%
4	2	29%
5	4	57%

The app's content interests me.



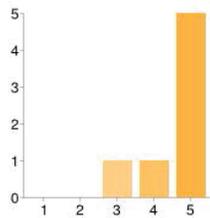
1	0	0%
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3	0	0%
4	2	29%
5	4	57%

The app is well-suited to first-time visitors.



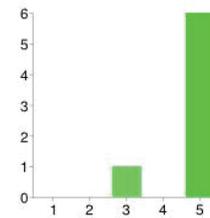
1	0	0%
2	0	0%
3	1	14%
4	1	14%
5	5	71%

The app's content would keep me coming back.



1	0	0%
2	0	0%
3	1	14%
4	1	14%
5	5	71%

The app is well-suited to repeat visitors.

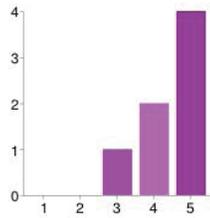


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2	0	0%
3	1	14%
4	0	0%
5	6	86%

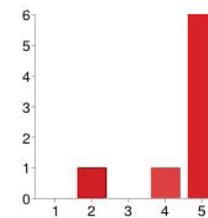
The app has characteristics that make it especially appealing.

The app has a clear purpose.

Post-Test Survey& Results

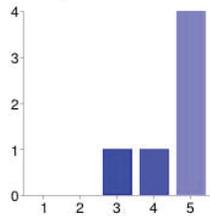


1	0	0%
2	0	0%
3	1	14%
4	2	29%
5	4	57%



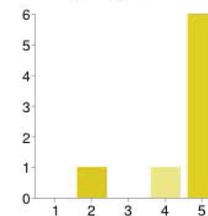
1	0	0%
2	1	13%
3	0	0%
4	1	13%
5	6	75%

I always felt I knew what it was possible to do next.



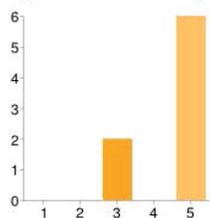
1	0	0%
2	0	0%
3	1	17%
4	1	17%
5	4	67%

The app's graphics are pleasing.



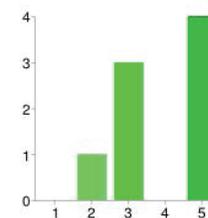
1	0	0%
2	1	13%
3	0	0%
4	1	13%
5	6	75%

My mistakes were easy to correct.



1	0	0%
2	0	0%
3	2	25%
4	0	0%
5	6	75%

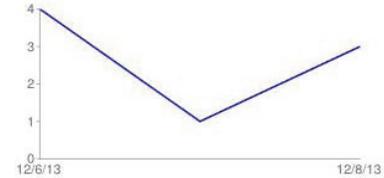
The colors used throughout the site are attractive.



1	0	0%
2	1	13%
3	3	38%
4	0	0%
5	4	50%

The overall app is attractive.

The typography is attractive.



What did you like best about the app?

Easy for first time users to navigate the app. I like the visual aesthetic and user interface. It's very clean and slick looking. Simple to use as a first time user. the ability to track the distance covered. It was simple and clean. I really liked that. Everything was easy to find and it was easy to know where to go, how to select things. The clean look and the functionality/wealth of information.

If you could make one significant change to this Web site, what change would you make?

The grey icons on the new activity page. Maybe a way to compare past exercise side-by-side, or find a way to show improvement/decline I would also maybe add in a Help section in case you wanted clarification on certain parts, also I would change the name -- that's the only reason I feel like the app doesn't explain what it should be used for. Change the icons to be more flat and clean. Nothing comes to mind. the graphics for the activity page. Maybe being able to chose background colors or icon colors.

Any additional comments about the Red++ app?

It should cost \$19.99! I'd pay! calories burned calculator Great work, it looks awesome! I can't wait to test a functional version. Very well done -- good design, smart amount of content -- I thought it was a nice app. Awesome job! The app is nice, but is there any functionality to make it social? Link to Facebook, etc.? Share activities with friends, compare times with friends, etc.

Number of daily responses