

# Specification

## Executive Summary

Rubikke's mission is to provide clear and simple performance tracking to those who ride, hike or bike so they can focus on the activity and not on a screen.

## Target Audience

Age: 25-55

Education: Associates and above

Values: Family, Work-Life Balance, Friendship

Interests: Hiking, Biking, Running

Geographic Location: North and South America

User habits include:

- being healthy and living a moderately active lifestyle,
- exercising at least three times a week,
- enjoying outdoor activities both alone and with family or friends,
- being comfortable using cell phone apps related to exercise and health, and
- considering simplicity as an important characteristic of an app.

## Persona: Lindsey

Lindsey is 36. As a mother of three, Lindsey considers herself pretty healthy. She enjoys running throughout the week (early in the morning) and hiking about 2-3 times a month when time permits. Occasionally, she'll even grab her bike and go for a ride. She keeps track of her mileage in her activities journal and tries to do something active each day.

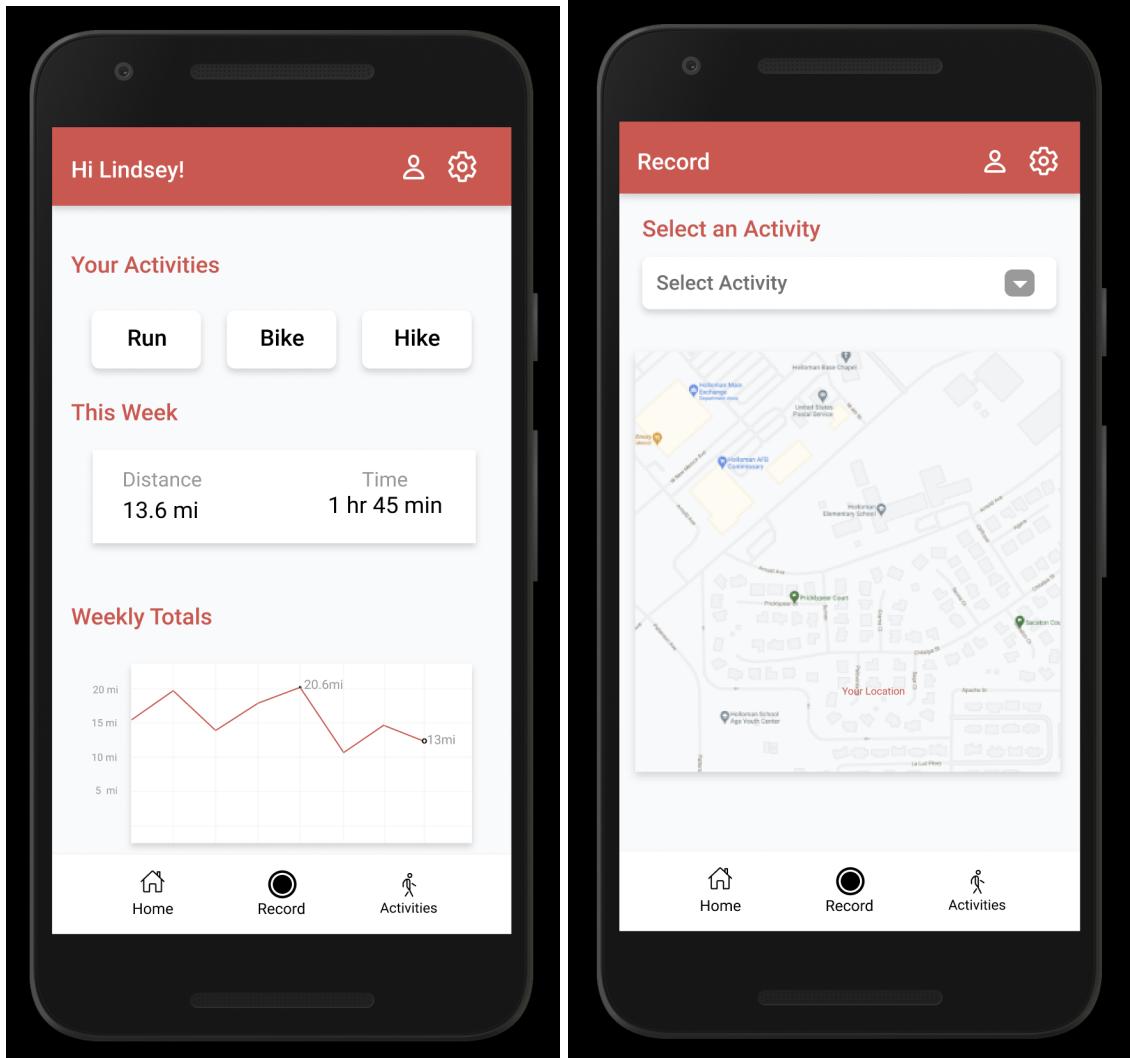
## Scenario

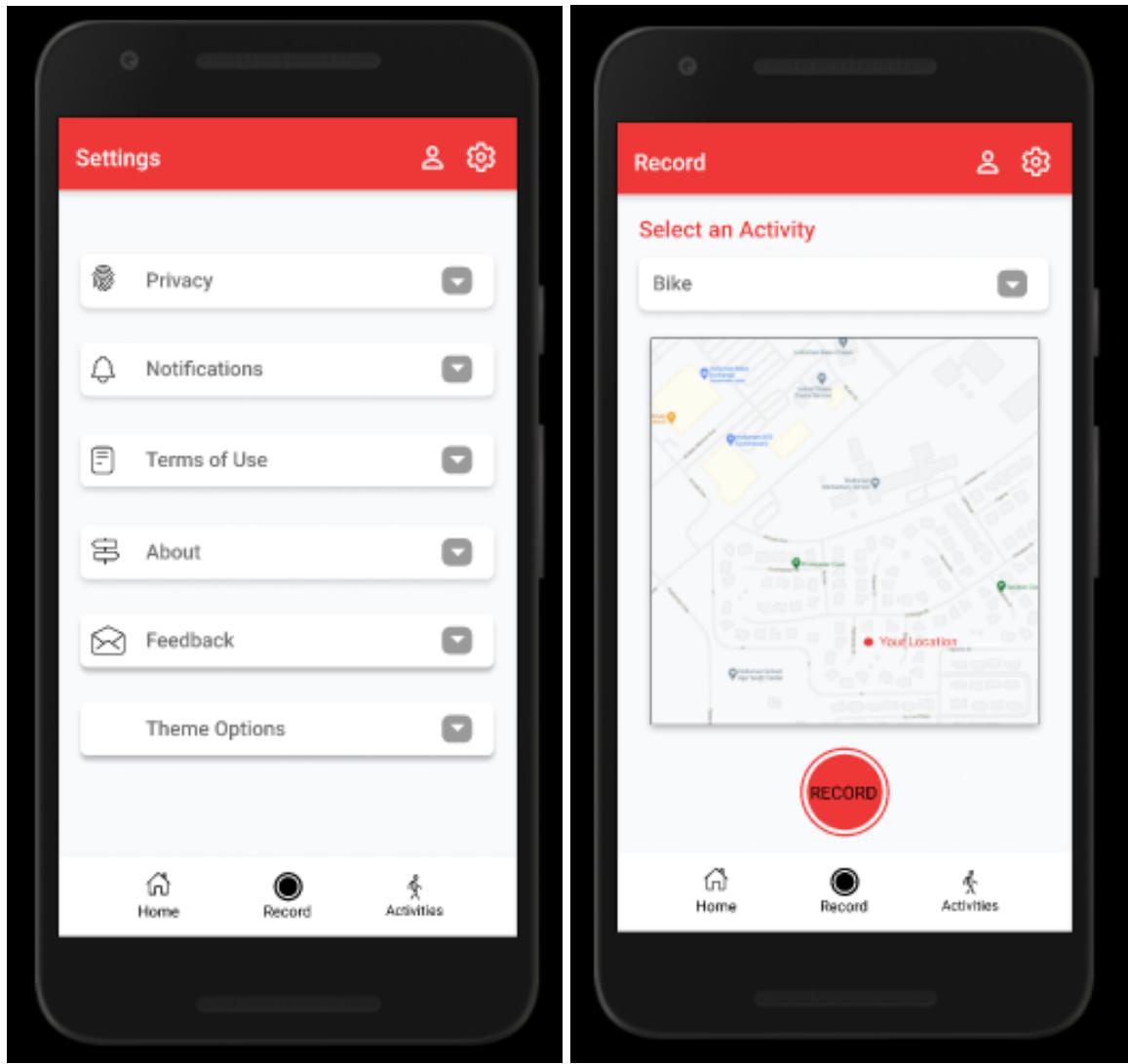
Lindsey is excited about the upcoming weekend. She plans on going for a bike ride Friday evening, a run on Saturday morning, and a hike with her family on Saturday afternoon. She uses her athletic app to look up a trail for her family to hike in the afternoon on Friday, to track each activity during the weekend, and to total her mileage as she goes.

## Criteria

Priority 1	Priority 2	Priority 3
<ul style="list-style-type: none"><li>• <b>Simplicity:</b> The user will easily be able to accomplish her outdoor goals.</li><li>• <b>Trust:</b> The user is confident that the data recorded is accurate and that the material is reputable across the app.</li><li>• <b>Visibility:</b> The user should find all of the information she needs for her outdoor sports.</li></ul>	<ul style="list-style-type: none"><li>• <b>Mapping:</b> The user should develop a basic mental model of the app and not get lost. Each control should be obvious and intuitive.</li><li>• <b>Familiarity:</b> The app should use concepts the user is already familiar with.</li><li>• <b>Motivation:</b> The app should be aesthetically pleasing to the user.</li><li>• <b>Learnability:</b> A novice user can master the application.</li></ul>	<ul style="list-style-type: none"><li>• <b>Simplicity:</b> The user should be able to easily share information with others (such as hikes and running routes).</li><li>• <b>Efficiency:</b> The user's input will be reflected promptly by the app compared to other apps.</li></ul>

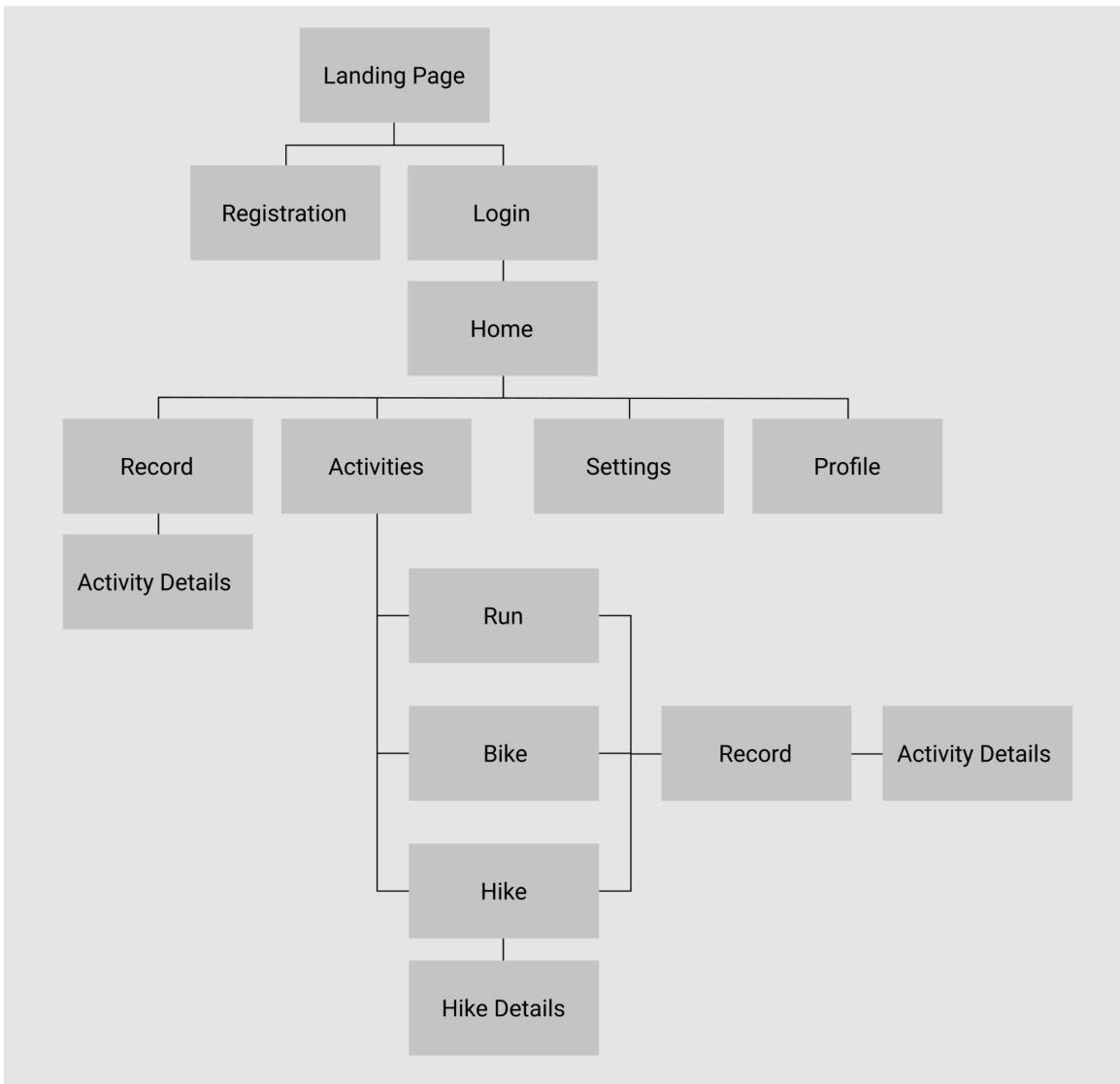
# Snapshot





# Detailed Design

## App Organization



## Views

### View - Bottom Navigation



#### Button Details

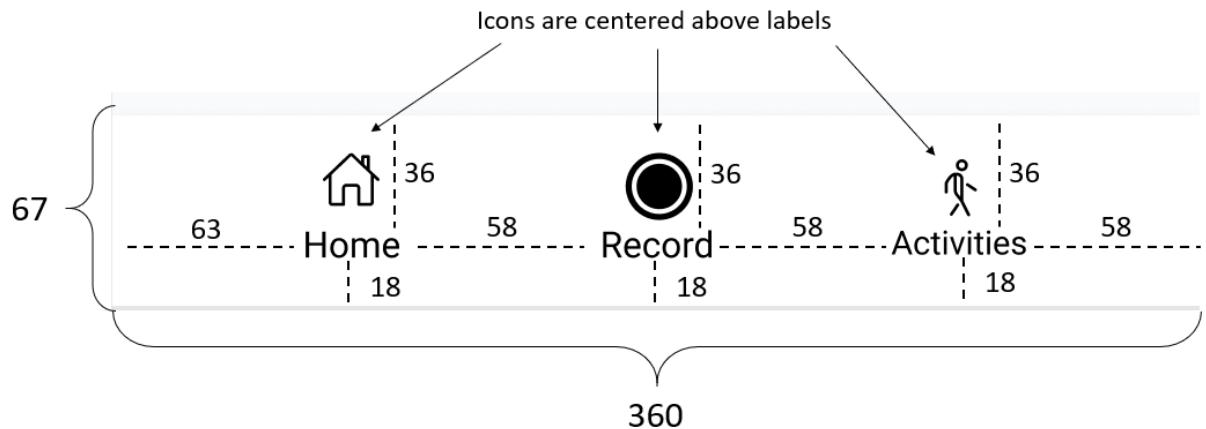
Button	Size (px)	Color	Action
Home	17.1 x 16.4	#000000	Navigates to Home page
Record	21 x 21	#000000	Navigates to the Record an Activity page
Activities	9.6 x 17.9	#000000	Navigates to the Activities page

#### Text Details

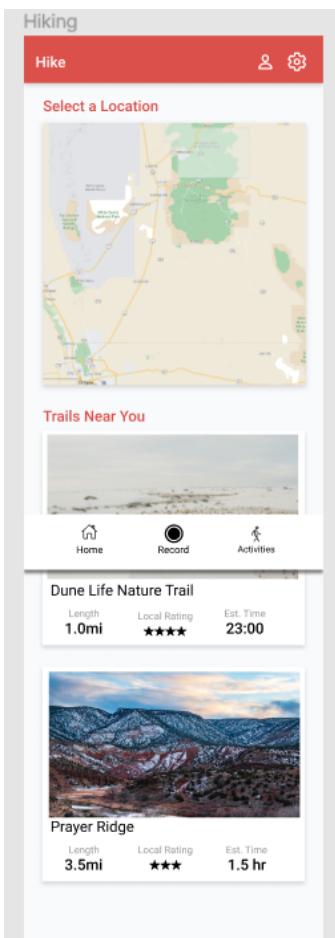
Text	Font	Size (px)	Color
Home	Roboto	12	#000000
Record	Roboto	12	#000000
Activities	Roboto	12	#000000

#### Sizes and spacing

See button sizes in the table above. Button icons are 3.1px above the text labels.



## View - Hiking Page 1



Button Details

Button	Size (px)	Color	Action
Select a Location Map	334 x 334	N/A (map)	Marks a trail and then navigates to the

			Record Trail page
A Trail Near You Picture	302 x 176	N/A (picture)	Navigates to Hiking Page 2

#### Text Details

Text	Font	Size (px)	Weight	Color
Heading	Roboto	18	500	#DB504A
Trail Name	Roboto	18	400	#000000
Trail Detail Label	Roboto	12	400	#95989A
Trail Detail Data	Roboto	18	500	#000000

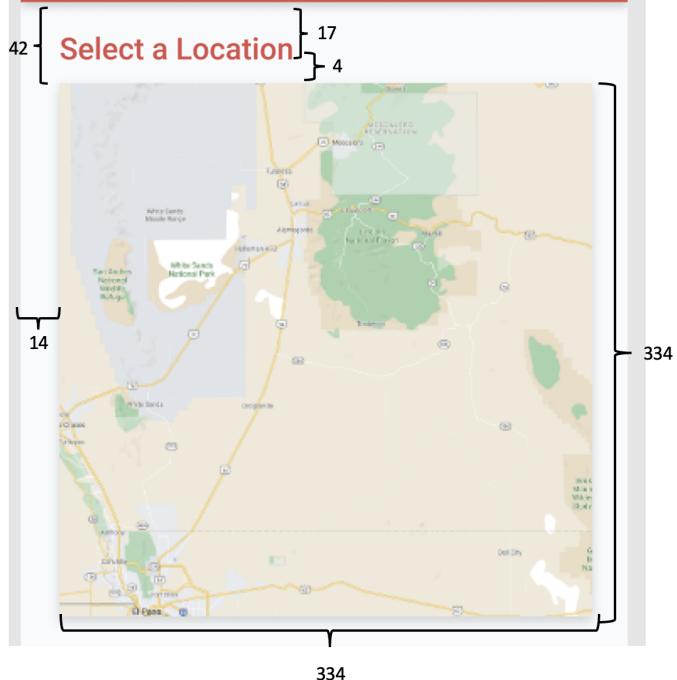
#### Color Details

Field	Color
Main Background	#F9FAFC
A Trail Near You Background	#FFFFFF

#### Sizes and spacing

Hiking

Hike



The image shows a mobile application interface for outdoor activities, likely trail running or hiking. At the top, there is a small map showing the location of the trails. Below the map, the text "Trails Near You" is displayed in red. To the right of this text is a bracket indicating a height of 48 units. Below this section is a large photograph of a snowy landscape.

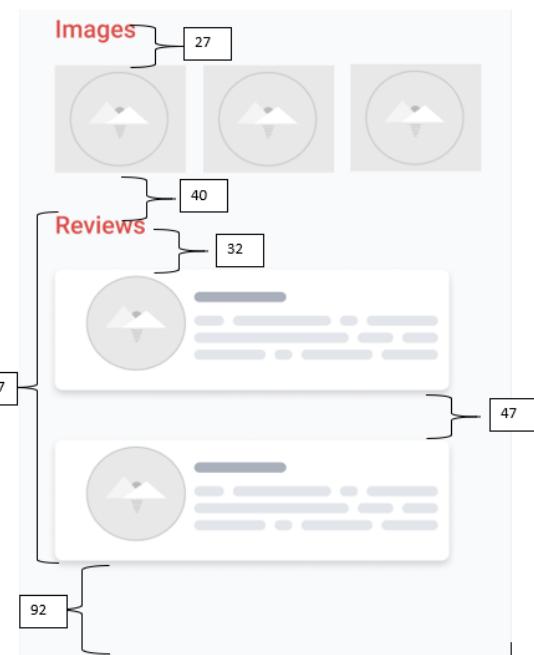
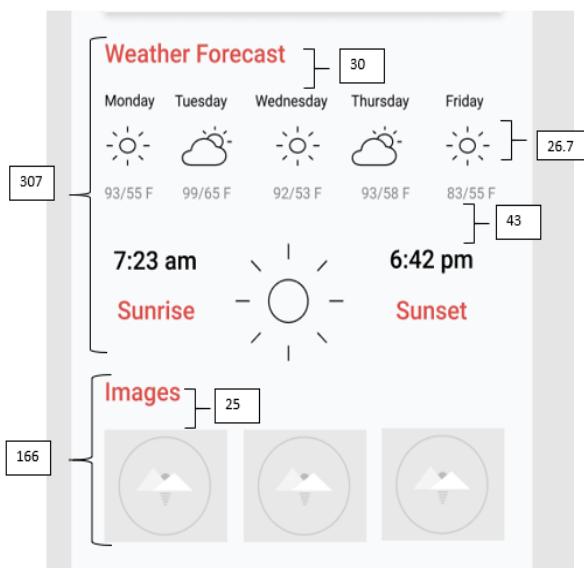
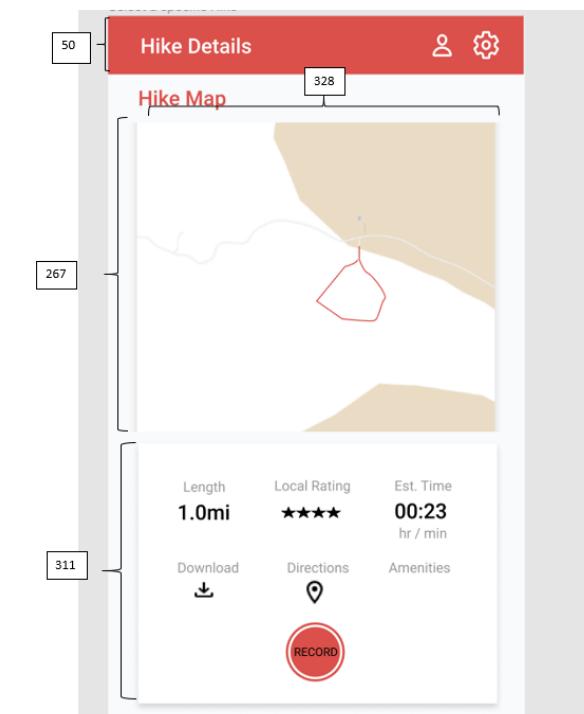
Below the photograph are three navigation icons: "Home" (house icon), "Record" (circle icon), and "Activities" (person icon).

The main content area displays two trail entries:

- Dune Life Nature Trail**  
Length: 1.0mi   Local Rating: ★★★★   Est. Time: 23:00  
A bracket to the right of the trail details indicates a height of 32 units.  
A bracket on the left side of the trail details indicates a width of 176 units.  
A bracket on the right side of the trail details indicates a width of 259 units.  
A bracket at the bottom of the trail entry indicates a total width of 316 units.
- Prayer Ridge**  
Length: 3.5mi   Local Rating: ★★★   Est. Time: 1.5 hr  
A bracket above the trail name indicates a height of 40 units.

## View - Hiking Page 2

Sizes and spacing



## Buttons, Colors, and Fonts

Section	Color
Banner bar	#DB504A
Background	#E5E5E5
Record interface background	#FFFFFF

Text description	Font	Font-size	Font-color
Hike Details	Roboto	18px;	#FFFFFF
Section description	Roboto	18px;	#DB504A;
Statistic and rating	Roboto	18px;	#000000
Statistic description and button description	Roboto	12px;	#95989A
Record button	Roboto	10px;	#000000
Sunrise/sunset time	Roboto	18px;	#000000
Daily high/low temp	Roboto	11px;	#848484

Button	Color	Size(px) (width x height)	Action
Record	#DB504A;	49 x 49	Start recording activity
Download	#000000	24 x 19.52	Download activity for offline activities
Directions	#000000	24 x 24	Gives user directions to where the activity is
Images	N/A	96 x 78.72	Shows user an image related to the hike trail
Reviews	Background:	289.43 x 88.54	Shows the user a

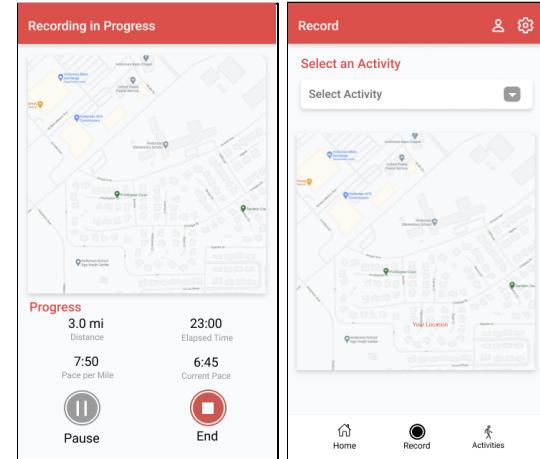
	#FFFFFF		review of a trail
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## View - Recording Without a Trail

From the menu options is the record button, when clicked it will lead the user to the following view: Record.

From this view, the user can select one of the three activities available—run, bike, or hike.

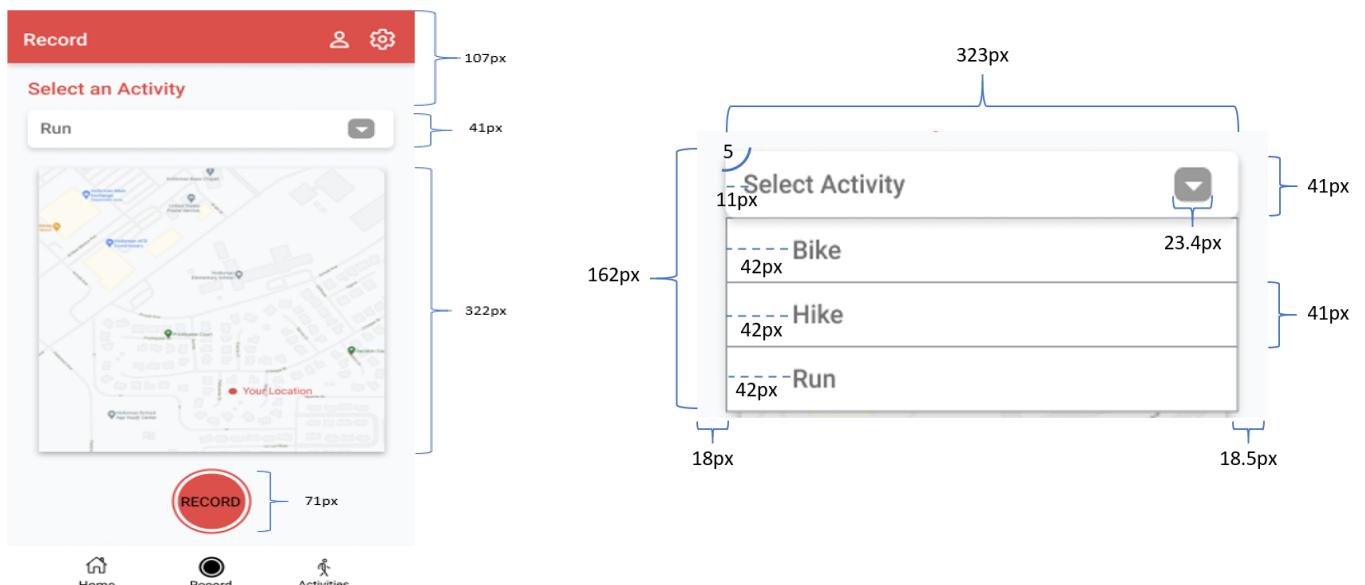
Then, when users begin their activity, they may hit the Record button, and Rubbike will map the user's trail, as well as the user's distance, travel time, pace per mile, and current pace.



### Text Details

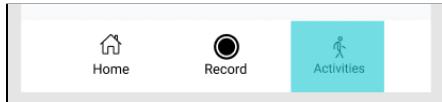
Text	Font	Size (px)	Color
Headers	Roboto	18	#DB504A
Drop Menu Options	Roboto	16	#707070
Stats	Roboto	18	#000000
Stat Names	Roboto	12	#95989A

## Spacing Details

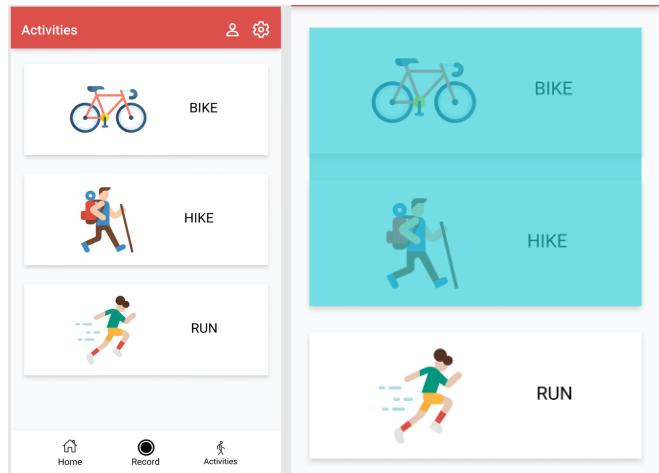


## View - Recording With a Trail User Makes

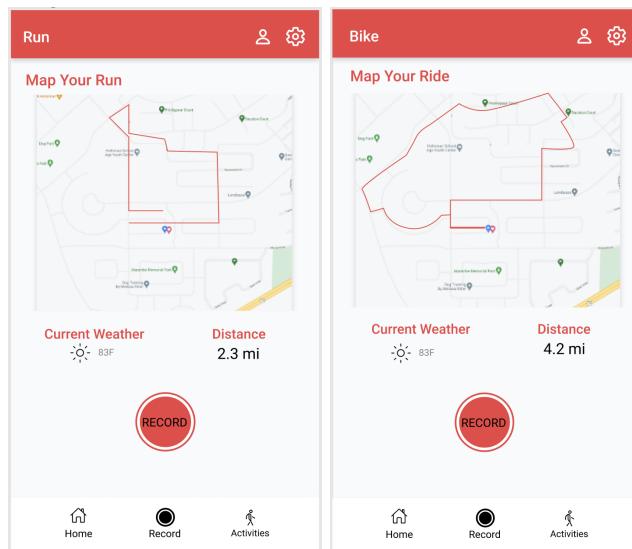
From the menu options is the activities button, when clicked it will lead the user to an activities menu.



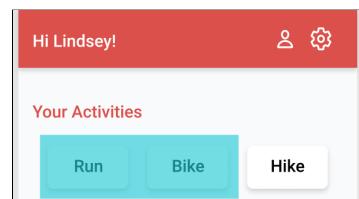
From this view, the user can select one of the three activities available: Run, Bike, or Hike. When "run" or "bike" are selected, the user will navigate to the activities view to map out their route before recording.

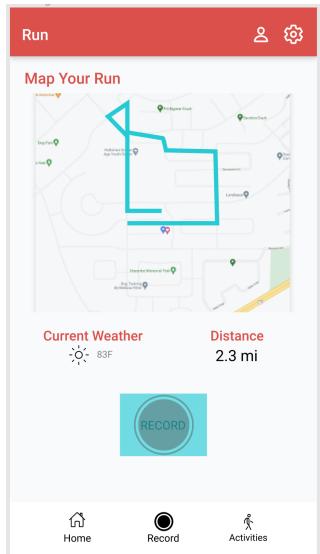


The view will be either labeled "Run" or "Bike" depending on which activity the user has selected.

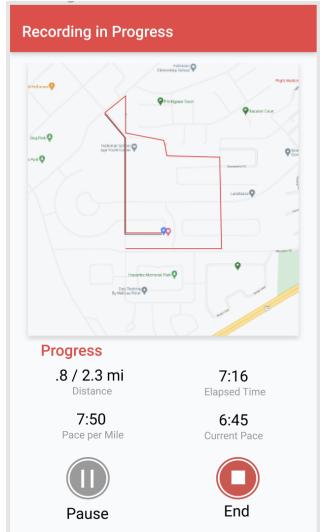


This same view can be reached by selecting the activity through the home page.

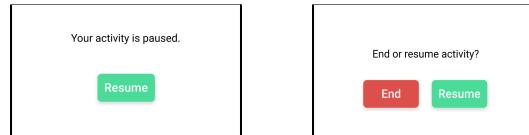




On this view, the user will use their finger to draw out their route on the map. It will show the distance in miles of the route they mapped out as well as the current weather. Once the user is finished drawing out their map and ready to begin their activity, they will hit the "record" button.



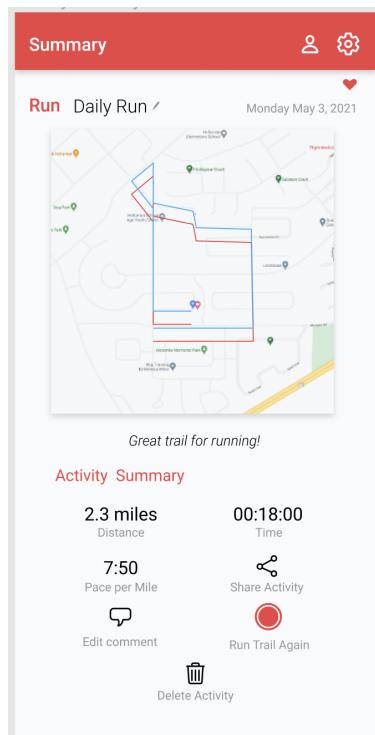
Rubbike will then map the trail of the user, as well as the user's distance gone out of the total mapped distance, time, pace per mile, and current pace.



From this "Recording in Progress" view, the user can hit the pause or end button, bringing up the above views that are vertically center-aligned and fit the entire width of the screen.

The "Resume" button will return the user to the Recording in Progress view and continue with the recording.

The end button will take the user to the Summary view:



On this view, the user can see a summary of their activity. It will show which activity the user just did, the date, their trail on the map, the distance they traveled in miles, their pace per mile, their time, as well as any comments they made about their route.

This view has the following buttons for the user:  
A Share Activity button, Edit Comment button, a Record button for the same path that they mapped, or a Delete button for that activity.



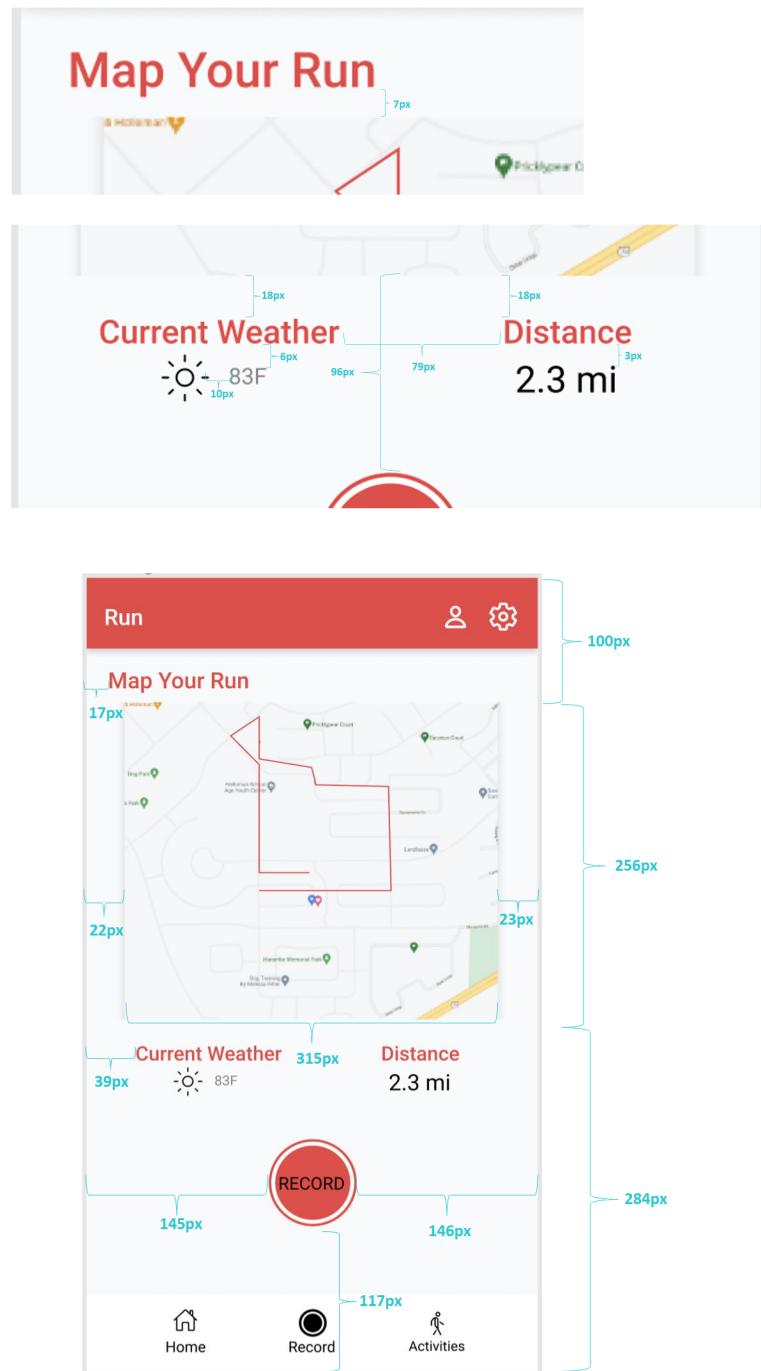
## Text Details

Text	Font	Size	Color
Headers	Roboto	18px	#DB504A
Stats	Roboto	18px	#000000
Stat Names	Roboto	12px	#95989A

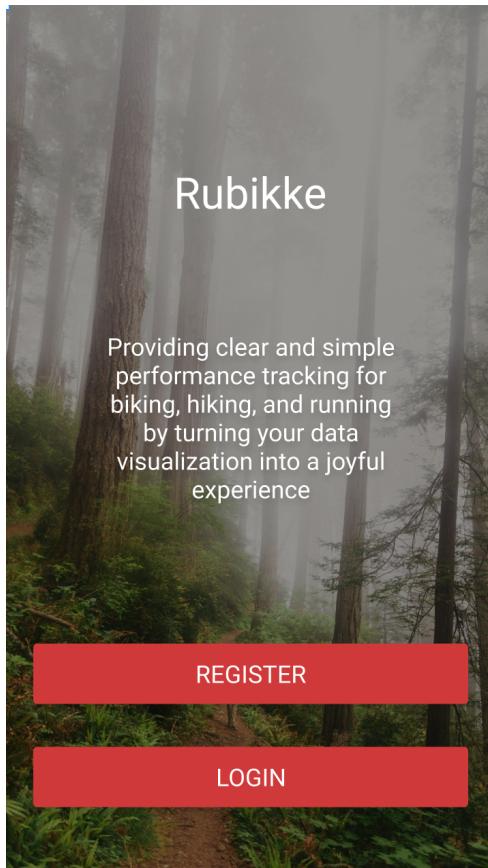
## Button Details

Button	Font	Size	Color
	font-family: Roboto; font-size: 10px; font-style: normal;	71 x 71px	background: #DB504A; Font: #000000;
	font-family: Roboto; font-size: 18px; font-style: medium;	86 x 42 px	Background: #4ADB99; Font: #F9FAFC; #F9FAFC;
	font-family: Roboto; font-size: 18px; font-style: medium;	86 x 42 px	background: #DB504A; Font: #F9FAFC;
		50x50px	#9A9A9A
		50x50px	#C95950
		26x26px	#DB504A
		19x20px	Stroke: #000000; Background: transparent
		20x17px	Stroke: #000000; Background: transparent
		17x20px	Stroke: #000000; Background: transparent

## Spacing Details



## View - Welcome Landing Page



### Button Details

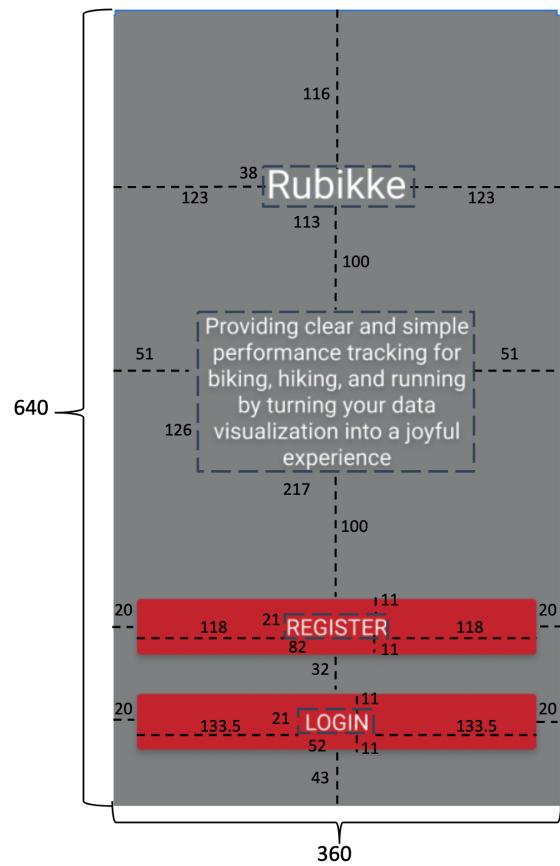
Button	Size	Color	Action
Register	319x44.47	#DB504A	Start the registration process
Login	319x44.47	#DB504A	Start the login process

### Text Details

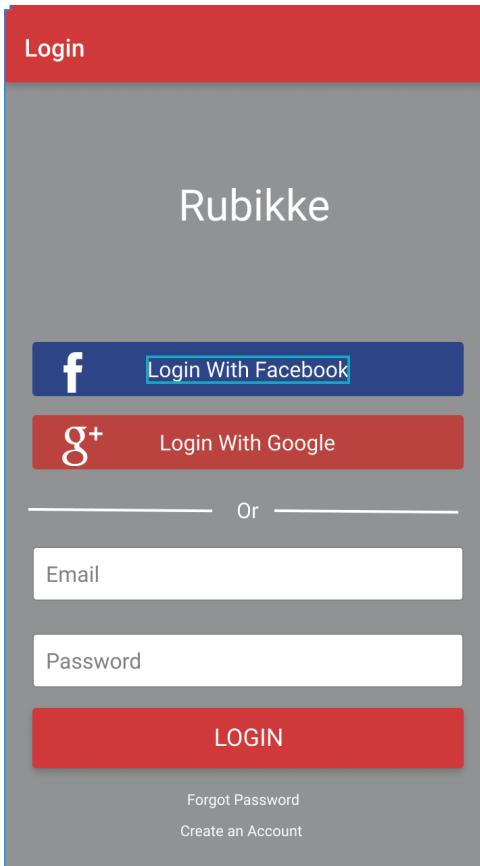
Text	Font	Size	Color
Rubikke	Roboto	32px	#FFFFFF
Providing clear and simple performance tracking for biking, hiking, and running by turning your data visualization into a joyful experience	Roboto	18px	#FFFFFF
Register	Roboto	18px	#FFFFFF
Login	Roboto	18px	#FFFFFF

### Sizes and spacing

See button sizes in the table above.



## View - Login Page



### Button Details

Button	Size	Color	Action
Login with Facebook	319x40	#3B5999	Start the login process through Facebook
Login with Google	319x40	#C95950	Start the login process through Google
Login	319x44. 47	#C95950	Start the login process

Field Details

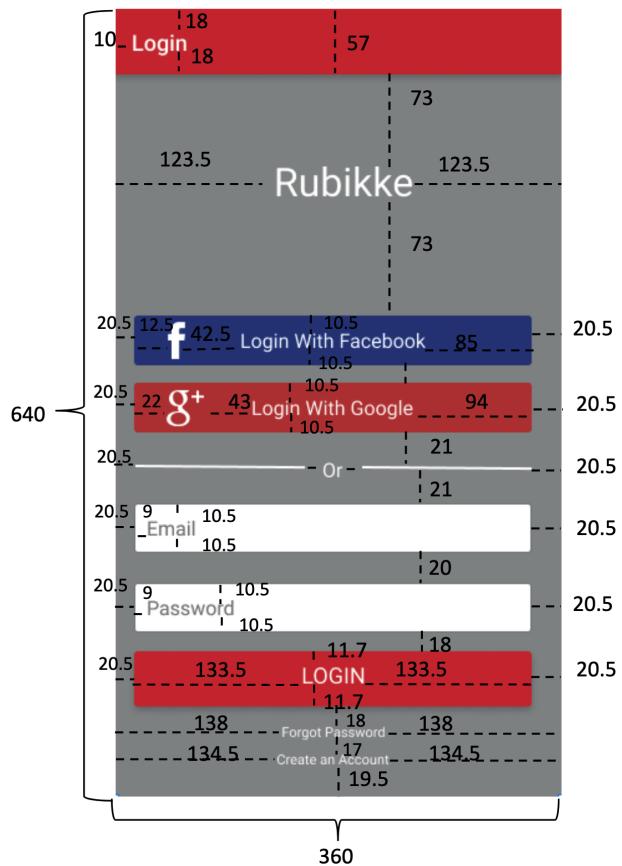
Input Field	Size	Color	Action
Email	319x40	#FFFFFF	Asks for user's email
Password	319x40	#FFFFFF	Asks for user's password

Text Details

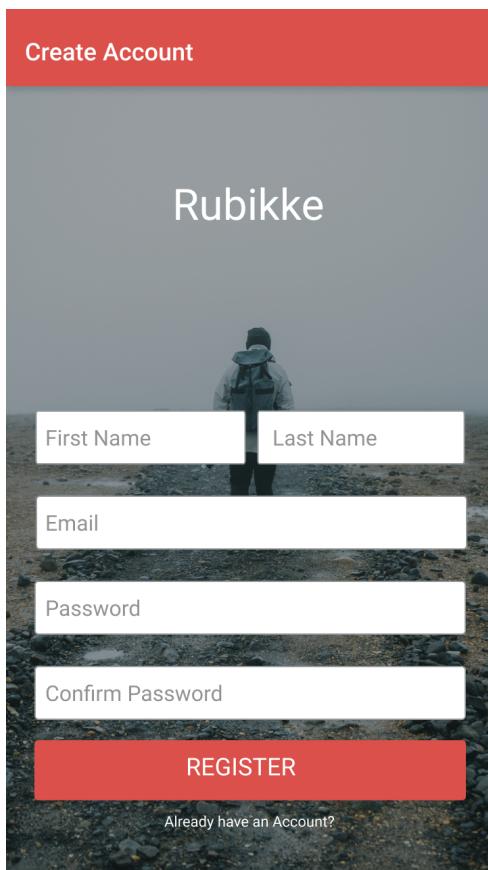
Text	Font	Size	Color
Login	Roboto	18px	#FFFFFF
Rubikke	Roboto	32px	#FFFFFF
Login with Facebook	Roboto	16px	#FFFFFF
Login with Google	Roboto	16px	#FFFFFF
Email	Roboto	16px	#939393
Password	Roboto	16px	#939393
Or	Roboto	16px	#FFFFFF
Login	Roboto	18px	#FFFFFF

Forgot Password	Roboto	11px	#FFFFFF
Create an Account	Roboto	11px	#FFFFFF

### Sizes and Spacing



## View - Create Account



### Text Box Details

Text	Font	Size	Color
First Name	Roboto	16	#939393
Last Name	Roboto	16	#939393
Email	Roboto	16	#939393
Password	Roboto	16	#939393
Confirm Password	Roboto	16	#939393

### Button Detail

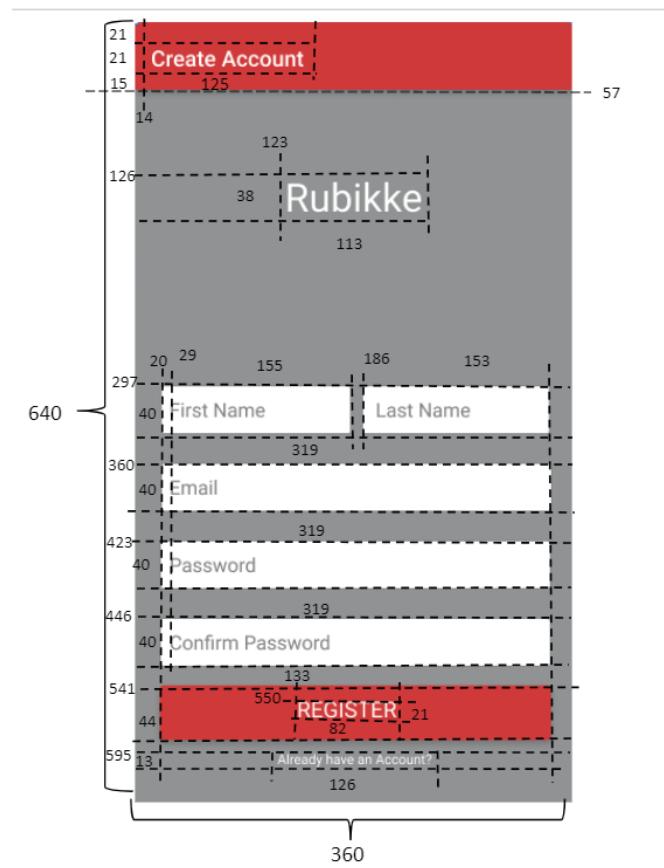
Button	Size	Font	Color	Action
--------	------	------	-------	--------

Register	18	Roboto	#FFFFFF	Register the user's new account.
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### Link Detail

Link Text	Size	Font	Color	Action
Already have an Account	11	Roboto	#FFFFFF	Navigates to the login screen.

### Sizes and Spacing



## View - Home page

Hi Lindsey!  

Your Activities

Run Bike Hike

This Week

Distance	Time
13.6 mi	1 hr 45 min

Weekly Totals



Home Record Activities

Month in Review

M	T	W	T	F	S	S
🏃						
	🚴		🏃	🚶	🏃	🏃
🚴	🚴	🚶		🚶	🚴	
🚴	🚴		🚴			
🏃			🏃		🚶	
🚴						

Activity Feed

Sort by: Run

Run 3.0mi 00:22:30 Monday May 3, 2021
Run 3.0mi 00:22:30 Monday May 3, 2021
Bike 3.0mi 00:22:30 Monday May 3, 2021
Run 3.0mi 00:22:30 Monday May 3, 2021
Hike 3.0mi 00:22:30 Monday May 3, 2021
Run 3.0mi 00:22:30 Monday May 3, 2021
Bike 3.0mi 00:22:30 Monday May 3, 2021
Run 3.0mi 00:22:30 Monday May 3, 2021
Run 3.0mi 00:22:30 Monday May 3, 2021
Hike 3.0mi 00:22:30 Monday May 3, 2021

Button Details

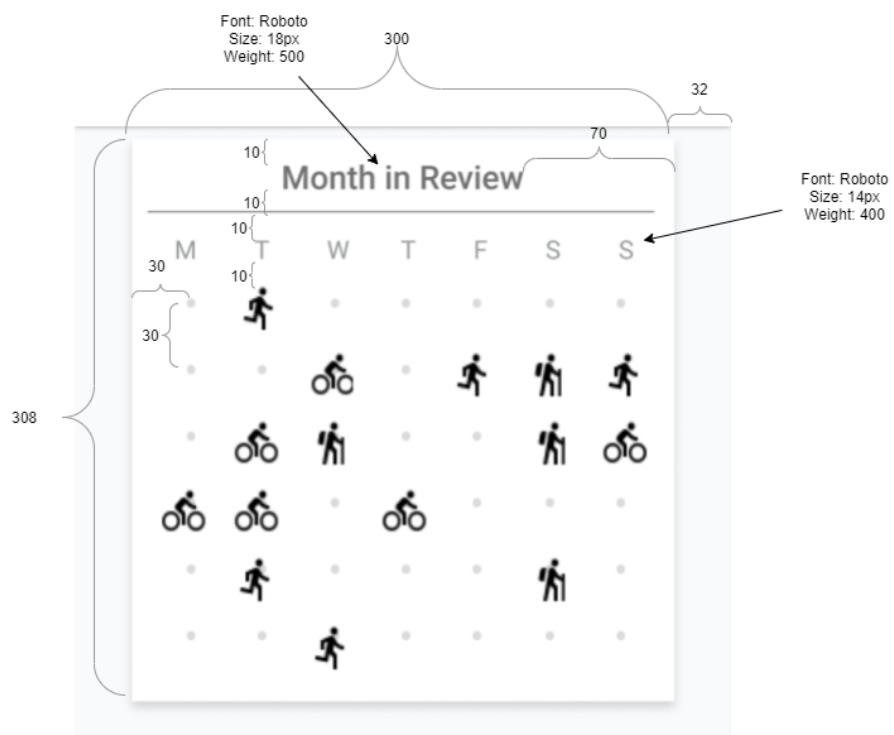
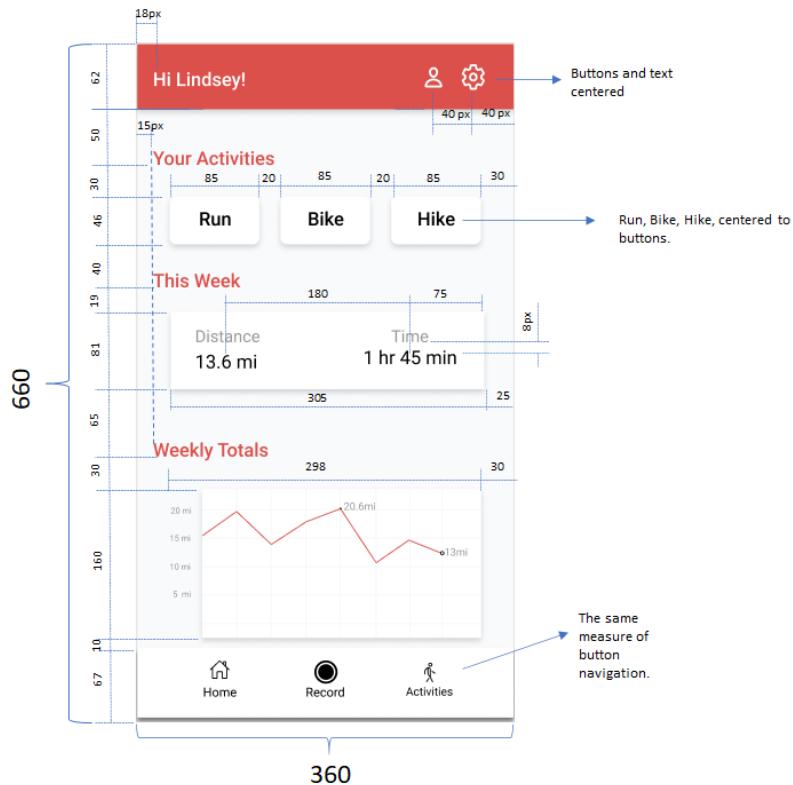
Button	Size	Color	Action
Run	85.71x 45.95	#000000	Navigates to Home page
Bike	85.71x 45.95	#000000	Navigates to Record (without trail) page
Hike	85.71x 45.95	#000000	Navigates to Activities page
Profile	Icon	#000000	Navigates to Profile page
Settings	Icon	#000000	Navigates to Settings page

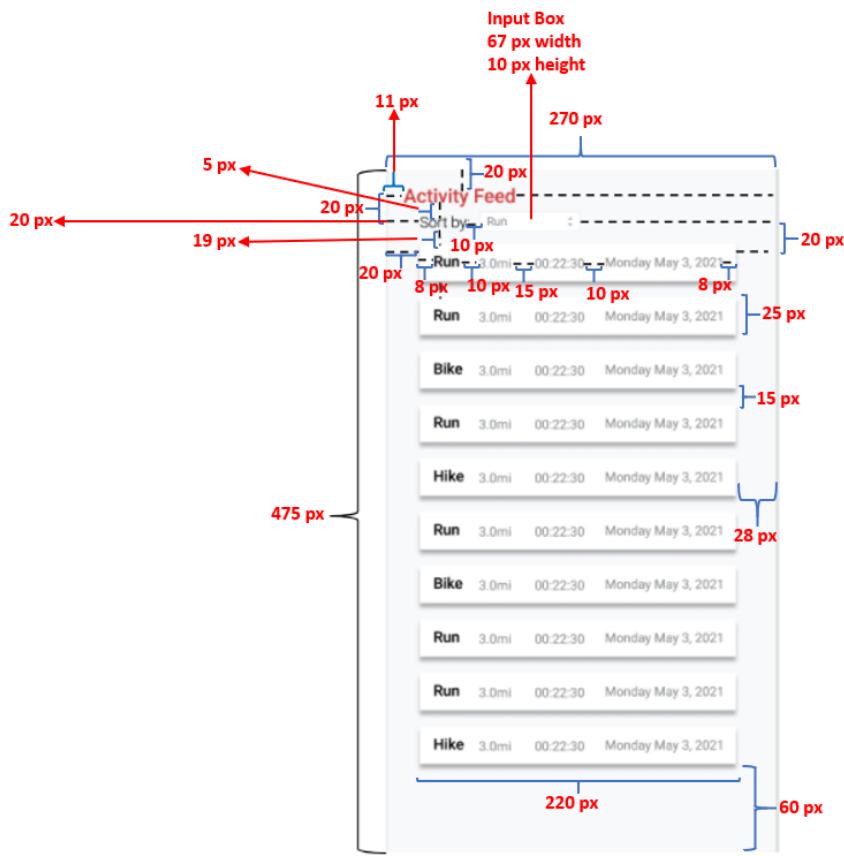
Text Details

Text	Font	Size	Color
Greetings	Roboto	18px	#FFFFFF
Your Activities	Roboto	18px	#DB504A
This Week	Roboto	18px	#DB504A
Weekly Totals	Roboto	18px	#DB504A
Run	Roboto	18px	#000000

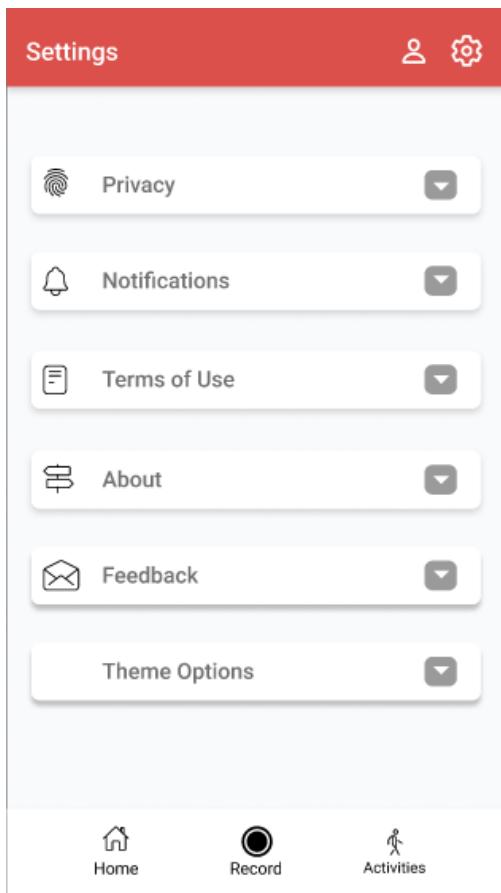
Bike	Roboto	18px	#000000
Hike	Roboto	18px	#000000
Distance	Roboto	16px	#979797
Time	Roboto	16px	#979797
Numbers/ Hour / Min	Roboto	16px	#000000
Activity Feed	Roboto	18 px	#DB504A
Sort by	Roboto	14 px	#000000
Text in the input box	Roboto	12 px	#979797
Run	Roboto	14 px	#000000 Bold
Bike	Roboto	14 px	#000000 Bold
Hike	Roboto	14 px	#000000 Bold
Miles, Time, Date	Roboto	12 px	#979797

## Sizes and Spacing





## View - Settings Page



Buttons

Name	Size	Color
Privacy	323 x 41 px	FFFFFF
Notifications	323 x 41 px	FFFFFF
Terms of Use	323 x 41 px	FFFFFF
About	323 x 41 px	FFFFFF
Feedback	323 x 41 px	FFFFFF
Theme Options	323 x 41 px	FFFFFF

Button Function

Name	Function	Options
Privacy	Shows privacy options and information	Nothing to select. Just shows info.

Notifications	Shows notification options	<ul style="list-style-type: none"> <li>• Complete activity</li> <li>• New nearby trails</li> <li>• Not met weekly goal</li> </ul>
Terms of Use	Shows terms of use document	Shows terms of use document
About	<ul style="list-style-type: none"> <li>• Shows version number</li> <li>• Link to submit help</li> </ul>	Update button
Feedback	Form to provide feedback	Form to provide feedback
Theme Options		

#### Text

Text	Font	Size	Color
Privacy	Roboto	16	707070
Notifications	Roboto	16	707070
Terms of Use	Roboto	16	707070
About	Roboto	16	707070
Feedback	Roboto	16	707070
Theme Options	Roboto	16	707070
<b>Private section</b>			
Privacy	Roboto	16	707070
Do we sell your personal information?	Roboto	13	333333
Do we share or sell aggregate information?			
Do we share your data with third party API partners?			
NO/YES	Roboto	18	DB504A
<b>Notification section</b>			
Notification	Roboto	16	707070

Notify me when I complete an activity	Roboto	13	333333
Notify me with new trails nearby			
Send notifications when I have not met a weekly goal			

## View - Profile Page

The screenshot shows a mobile application's profile page. At the top, there is a red header bar with the word "Profile" on the left and two icons on the right: a person icon and a gear icon.

Below the header is a white card containing the user's profile picture (a woman with curly hair wearing sunglasses), the name "Lindsey Smith", and the email "lindsey13@gmail.com". There are two buttons at the bottom of this card: "Update Info" and "Logout". To the right of the "Logout" button are three small colored dots (blue, blue, red).

Underneath this card are three dropdown menus with arrows on the right side:

- A heart icon followed by "Heart check".
- A "kcal" icon followed by "Calories burnt".
- A key icon followed by "Change Password".

At the bottom of the screen, there is a section titled "Your Summary" in red. It displays the following data:

Total activities recorded	2
Run activities recorded	0
Bike activities recorded	0

Buttons

Name	Size	Color
Heart Check	323 x 41 px	FFFFFF
Calories Burnt	323 x 41 px	FFFFFF
Change Password	323 x 41 px	FFFFFF
Update Info	82 x 24 px	9A9A9A
Logout	82 x 24 px	9A9A9A

Text

Text	Font	Size	Color
Name	Roboto	18	000000
Email	Roboto	12	95989A
Update Info	Roboto	12	FFFFFF
Logout	Roboto	12	FFFFFF
Hearth Check	Roboto	16	707070
Calories burnt	Roboto	16	707070
Change password	Roboto	16	707070
Your Summary	Roboto	18	DB504A
Total activities recorded	Roboto	16	707070
Run activities recorded	Roboto	14	707070
Bike activities recorded	Roboto	14	707070
Hike activities recorded	Roboto	14	707070
Avg Distance/Week	Roboto	16	707070
Avg Activities/Week	Roboto	16	707070
Achievements	Roboto	18	DB504A
Newcomer	Roboto	16	707070

Recorded at least one activity in the first 24 h after registration.	Roboto	13	AFAFAF
Newcomer on steroids	Roboto	16	707070
Recorded an activity of each type in the first 24 h after registration.	Roboto	13	AFAFAF

# Appendix A: Change History

Date	Change
05/17/2021	First round of design iterations for main pages and features Draft of app flow and page structure
05/19/2021	Second and third round of design iterations for main pages
05/21/2021	First rough draft of entire app
06/01/2021	First Usability Study conducted with storyboard and online app design
06/05/2021	Login and registration are too similar. Registration should have more fields such as First and Last name. Registration should have a "confirm password" Login needs a "Forgot my password" button Changed to tabs over the circle for activities options. My user suggested login with google or facebook accounts. Show the elevation gain. The user would not like to see the option to delete a recording in a place that is easy to press. The user would like to add a slider to confirm that the activity is finished to avoid ending it by mistake. The user thinks the record button shouldn't look functional until an activity is selected to record. Record button needs to be labeled clearly. Record button should not look the same as the pause/stop button. Fewer record buttons throughout the app The user would like a place on the hike details page to see all of the pictures of that hike. Include the intensity level of the hike on the details page. Hike page needs to have elevation gain Home page needs to show daily activities. Home page should be clear if totals are for all activities or just one activity type. Make the home page more clear to track daily activity. *The process to record an activity needs to have fewer steps. *The home page needs to track calories burned.

	<p>When an activity is completed it needs to be clear that the activity is automatically saved or gives the option for the user to click save so they know it's saved.</p> <p>***the Record button should be labeled - "Record"</p> <p>The user would prefer the "Activities 1" layout better than the alternative to the activity screen.</p> <p>*The user would like to add: heart rate, calories, pace</p> <p>The user prefers to choose the activity as a default so he can just focus on one or two instead of having a lot of useless information.</p> <p>The user would like to have the weather in all activities, not only in the hiking activity.</p> <p>Be able to add favorite routes for all activities.</p> <p>A notification that the "Email IS username" would clarify the registration activity.</p> <p>A Local danger/wildlife alerts</p> <p>REPORT danger option</p> <p>CALL EMS feature, Multiple press-record button to send emergency beacon</p> <p>Self rewarding stops in the route, ie personal interest "treat shops" as rewards</p> <p>Night color option</p> <p>The Activity Feed should have an alternative "List View" to show activity-history. This recommendation comes from the user not wanting to scroll through each card to see all of the historic activities completed.</p> <p>The user wants to make comments on the hike after the hike is completed in the Summary page</p> <p>The settings page is lacking information—all the user saw was unopened clusters.</p> <p>The app's title should not be in the top nav bar in the landing page. Instead it should be bigger on the page, just like the register and login screens.</p> <p>The record activity button on the bottom nav should be omitted altogether because it requires an extra step to record an activity (with the drop down and the second record button). Either this or the icon needs to change.</p>
06/12/2021	Paper prototype developed for second usability study
06/14/2021	Second usability study conducted
06/19/2021	<p>Add an erase or "clear" button to the mapping page so that if the user wants to change the map path they drew out they can.</p> <p>Include hike intensity on the hike overview or details page.</p> <p>Remove calories burnt and the heart checker from settings and add it to the profile or summary pages.</p> <p>Display the hike's highlights or any highly voted comments for other users to see.</p>

	<p>Include a way to filter the activity feed other than by date so users can find a certain distance they ran or speed, etc.</p> <p>Change the color of the record button from the teal-ish color to a color that matches the red color scheme a little better.</p> <p>Add incentives to the app to get the user out on their runs or bike rides.</p>
06/26/2021	Developed interactive mockup
06/29/2021	Third usability study conducted
07/01/2021	<p>Minor design alterations</p> <p>Make sure the navigation is all the way at the bottom of the page and isn't covering information</p>

# Appendix B: Boneyard

See attached document for a series of design iterations and feature iterations.

 Milestone 5: Design

# Appendix C: Rubric

Based on the design priorities above, we developed the following rubric to make our design decisions.

Criteria	W (%)	2	1	0	-1	-2
Visibility	25	The app displays everything needed (and only everything needed) for Lindsey's needs	The app suits most of Lindsey's needs by displaying a little less or 1-2 things more than what she needs	Lindsey's current app does all of the things this app can do.	The app contains only one or two things Lindsey can use in her fitness goal, or 3-4 things more than what she needs	The app contains nothing Lindsey can use in her fitness goal or 5+ things more than what she needs
Simplicity	17	Lindsey completes the intended tasks in the simplest way possible	Lindsey completes the intended tasks in a simpler way than other apps	Lindsey completes the intended tasks with a complexity comparable to other apps	Lindsey completes the intended tasks, but the process is more complex than other apps	Lindsey completes the intended tasks, but the process followed is too complex that it's unusable for Lindsey
Trust	18	All data on the app is reputable and accurate to Lindsey	Some data on the app is reputable and accurate to Lindsey	The data on the app is similar to the other apps	More data on the app is inaccurate than the competition	All data on the app is significantly worse than the competition concerning accuracy.

Learnability	10	All users will figure it out on the first use	Most users will figure it out in a minute or two	Familiar and learnable, but more difficult than necessary	With help from a little training, users can figure out the app	The app cannot be figured out without multiple professional tutorials.
Familiarity	10	All function screens are similar to what Lindsey is already familiar with in other applications	Most function screens are similar to what Lindsey is already familiar with in other applications	Some similarity is present	No similarity with other applications	No similarity with other applications and it's a new concept
Motivation	10	Lindsey will be motivated to use the app by the aesthetics, rewards, and/or gamification.	Lindsey will be slightly motivated by the app	The app will not particularly appeal to Lindsey's motivation with its aesthetics or rewards	There is no motivation on the app	Lindsey will seek another app to motivate her.
Mapping	10	Every user will create a clear mental model of the app	Most users will have a clear mental model of the app	The design does not encourage or discourage a consistent mental model of the app	Previous exercise apps hinder the user's ability to create a mental model of the app	The user will never create a clear mental model of the app because of previous experience

## Appendix D: Interactive Mockup

Here is a link to our interactive mockup:

<https://www.figma.com/file/jEFWPMvKHT6TKyf91u3iJJ/Rubikke?node-id=0%3A1>

# Appendix E: Issues

## Active State for Buttons in Navigation

There is no obvious active state in the navigation bar when a button is clicked. If the user is on the home page and they click on home, it will return them to the top of the page. If the user clicks on activities as they are on the home page, it will take them to the activities page. Otherwise, there is no visual change in the button when it is clicked.

## Back Button on Pages

The design utilizes the best practices put out by Google when designing for an android device. That is, we are utilizing the back button that is standard on every android device as our back button between pages. Therefore, in the design, you will not see additional back buttons on the design.