



GreenLine



Contents

Vision + Goal	3
Specifications	4
Design Principles	5
Exclusive Features	6
User Research	7
User Personas	17
User Flows	21
Info. Architecture	23
UX Wireframes	24
Aesthetics	28

Vision + Goal

GreenLine is a public transportation app designed for the daily commuter. In order to reduce individual carbon footprints, overall carbon emissions, and traffic, GreenLine incentivizes the use of public transportation by offering reduced travel fares to those who use the app and collect points. By working in collaboration with the Washington Metropolitan Area Transit Authority (WMATA), anyone in the Greater Washington Area/DMV can utilize Metro and MetroBus to it's full potential. D.C. has a highly dense population, including the areas just outside the District limits. Thousands of people commute to D.C. everyday for work, resulting in crazy traffic and *lots* of pollution. WMATA provide a vast network of trains and buses to the DMV area, much of which is used frequently by commuters, by GreenLine strives to further increase that number of daily passengers.

The page features a green decorative graphic on the left side, consisting of a vertical line that turns right at the top and bottom, with a target icon (a circle with a dot) at the top left. A horizontal green line extends from the vertical line to the right, ending in a small circle. The background has a faint green leaf-like pattern.

Specifications

The app includes many valuable features to users, especially to those who have registered an account. The point system within the app allows for an immediate reward, which over time accumulates to give fare reductions to users. Additionally, the point leaderboards spark the competitive drive to further incentivize users app usage. A carbon footprint tracker lets the user see a statistic visual of their overall impact, as well as breakdowns of emissions reduced, time saved in traffic, and money saved from fare reductions. Registering routes takes the experience one step further by connecting GreenLines features all together to provide additional information and rewards for the user. GreenLine also lets users link third-party transportation and rental modes to extend the benefits of the app to other companies in hope that this will continue to incentivize greener ways to commute and navigate the city.

Design Principles

The design of GreenLine is meant to incentivize and reward users to use public transportation. By having a clean, friendly layout and aesthetic, users are able to benefit themselves and also the environment. Through the features provided, GreenLine teaches users about their environment impact in a non-foreful, non-invasive way. The app strives to put the user first, making sure that they feel good about themselves, what they're doing for the environment, and hopefully about their decision they've made to use the app. The anticipated user feelings are meant to any be positive; saving money, striving towards a goal, beneficial community (public, work, and personal) impact are amongst the many benefits offered by GreenLine. Overall, the app is designed to help make a positive impact on the environment without too much explicit work or attention needed.

Exclusive Features

Introducing NetCard, the all-in-one metro card. In addition to WMATA compatibility, users can link external accounts such as Bird, Capital Bikeshare, and other rented or fare-based modes of transportation to the card. Users will be able to gain points, track their carbon footprint, receive reduced fares and even join exclusive leaderboards catered to their choice of third-party transportation. The card is available digitally within the app, or a physical card can be sent to users at their request.

Allowing users to have a single card that allows access to all their transportation needs is meant to be convenience-based incentive to use the app. The NetCard is the new-age prospect of public transportation; breaking down restrictive walls and making public transportation more easily accessible.

The image features a light green background with several decorative elements. A thick green line runs vertically down the left side, then turns right and then down again, ending in a small white circle with a black outline. Another thick green line runs horizontally across the top, starting from a white circle with a black outline, then turning up and then right, ending at the top edge. A third thick green line runs horizontally across the bottom, starting from the left edge, then turning up and then right, ending in a white circle with a black outline. A fourth thick green line runs vertically down the right side, starting from a white circle with a black outline, then turning left and then down, ending in a white circle with a black outline. The text 'UserResearch' is centered in the middle of the page.

UserResearch



Q1: What is your first impression of this product? And the features? If it is positive, why? If it is negative, why?

U1: I like the idea. It seems like a really good way to get people to utilize public transportation to its maximum potential.

U2: The idea of the product is very positive and could potentially help with a big crisis that is happening right now. It's allowing people to make and see that they are having a positive impact by just taking public transportation. This also gives good incentives to drive more people to use public transportation.

U3: I think it is a great idea that has proven success in other functional areas that utilize user incentives, such as exercise apps. It is always interesting to see the immediate progress one can make and how it does make a difference to the whole.



A thick green line starts from the top left, goes down, then right, then up, ending in a small white circle with a black outline.

Q2: Is there anything you expect to gain from using this product?

U1: It would give people a good feeling about themselves.
Especially with the leaderboard function.

U2: A better understanding of how just taking public transportation
once can make a huge difference!

U3: More self-awareness of carbon footprint and ways I can
improve upon it.





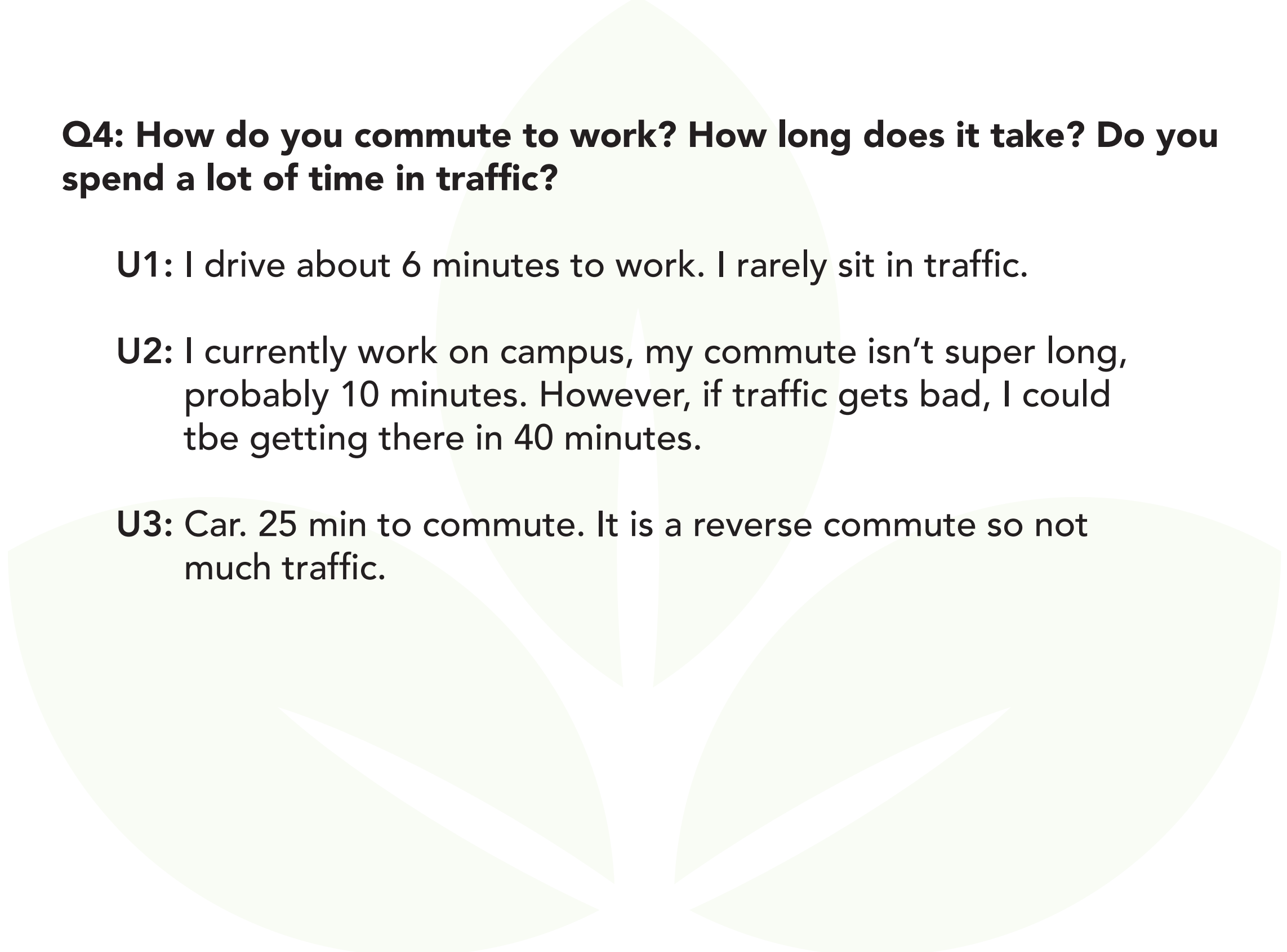
Q3: Are there any aspects of public transportation that you wish would change? If yes, what, and why? If no, what is working?

U1: The stigma that public transportation is for poorer people

U2: I would say the overall unpredictability can be hard when it comes to public transportation. Obviously, there is not much they can do about it; however, I think that's why a lot of people don't take advantage of it. If a bus or metro is late by just 5 minutes or even worse, completely shuts down, then you can't get to work.

U3: Overall it works pretty well for the masses in my opinion but always room for improvement. At one point when I was commuting in towards the city, I actually opted out of public transportation because I could drive the 4 miles in 10 min vs. 45-60 min to use public transportation because of all the transfers.





Q4: How do you commute to work? How long does it take? Do you spend a lot of time in traffic?

U1: I drive about 6 minutes to work. I rarely sit in traffic.

U2: I currently work on campus, my commute isn't super long, probably 10 minutes. However, if traffic gets bad, I could be getting there in 40 minutes.

U3: Car. 25 min to commute. It is a reverse commute so not much traffic.

Q5: What is your current understanding of carbon footprints? Do you think this app is progressive in attempting to offset carbon emissions?

U1: I think this app is progressive in the attempts because people that are unfamiliar with the idea of a carbon footprint would be lowering carbon emissions without even realizing it.

U2: I definitely think this app is progressive and could help. There have been other tactics that have tried to complete the same idea; however, none have stuck for very long.

U3: Not very knowledgeable of carbon footprints (probably about 4 on a scale 10).

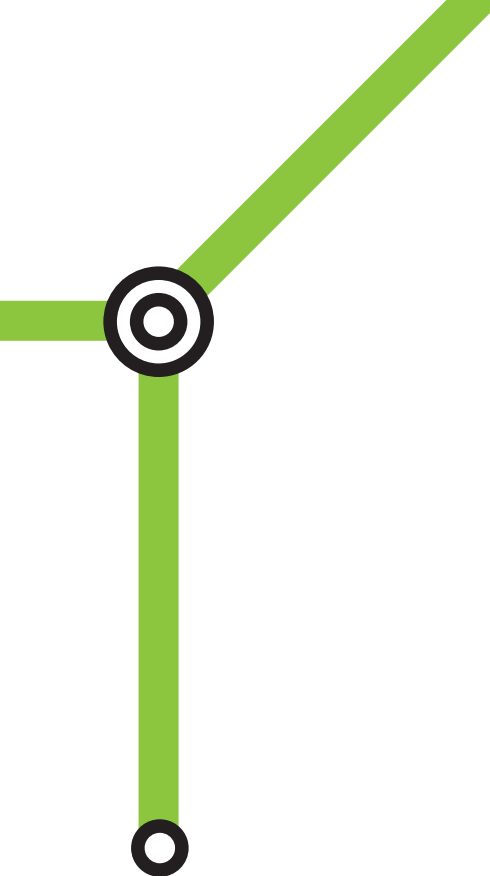


**Q6: Do you use any transportation apps already? If so, which ones?
What do you like about them?**

U1: I do not use any transportation apps.

U2: The Metro app and Bird

U3: Yes, Waze, Google Maps, Metro app.

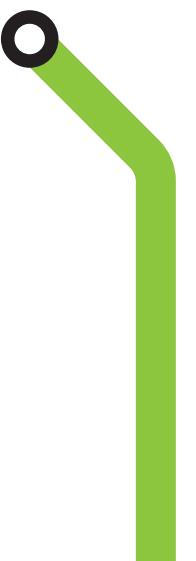


Q7: Would you benefit from having multiple transportation apps in one location in the way the app presents? Would this incentivize you to use the app more (for its intended purpose)?

U1: I think this would incentivize people that use a lot of apps to use this since it would be a one-stop-shop.

U2: Yes, it would make it easier to manage and see. I would definitely use the app more.

U3: Most likely would benefit, or certainly enhance the commuting experience.






Q8: Is the design of this app easy to follow? What did you like? What was confusing?

U1: Yes, I liked how all of the aspects of it were thought out and exciting.

U2: I think it is easy to follow. There would definitely have to be some initial set up information, but past that I think it would be easy to understand.

U3: I understand the design concept and correlate it to some of the exercise apps I use to help incentives my workouts. I was unclear how the carbon footprint tracker would visualize information.





Q9: Overall, what would prevent you from using this app? Are there any reasons specific to you? (i.e. mode of commuting, access to public transportation, general use of apps, etc.)

U1: I don't live in an area with a big public transportation network.

U2: Personally, I would use the app. However, I can see individuals not wanting to use it due to lack of transportation near them, having a far commute, or the unpredictability of this mode of transportation.

U3: My work destination and it being a reverse commute outside the city. The amount of time utilizing public transportation vs driving myself would not justify any cost savings app provides or the lost time commuting. If there was an option to show me others near me commuting to the same area, that would be beneficial.

The image features several decorative green lines and circles. A prominent line starts from the top left, goes down, then right, then down again, ending in a circle. Another line goes from the top left, down, then right, ending in a circle. A third line goes from the bottom left, right, then up, then right, ending in a circle. A fourth line goes from the bottom left, right, then up, then right, ending in a circle. A fifth line goes from the bottom left, right, then up, then right, ending in a circle. A sixth line goes from the bottom left, right, then up, then right, ending in a circle. A seventh line goes from the bottom left, right, then up, then right, ending in a circle. A eighth line goes from the bottom left, right, then up, then right, ending in a circle. A ninth line goes from the bottom left, right, then up, then right, ending in a circle. A tenth line goes from the bottom left, right, then up, then right, ending in a circle.

User *Personas*



Markus



32 | Entrepreneur

Markus is an up-and-coming entrepreneur working for his start-up company. He has an eye for the nice things in life and has a love for music. He produces music on the side as a hobby and enjoys attending local venues and concerts when he can.

Charasmatic

Dedicated

Intelligent

Goals

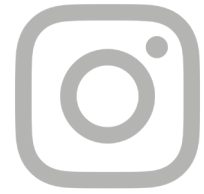
- Build a successful company
- Make meaningful connections (professional and personal)
- Collaborate with music artists for the company

Painpoints

- Commuting by metro isn't always reliable
- Option of working remotely is better than going into the office

"If no one hates it, no one really loves it."

– Jessica Walsh



Lilli



College Student | 21

Lily is a graphic design major attending George Washington University. When school isn't swamping her schedule, she likes going out with friends for lunch or shopping on M St. Additionally, she works a part time job at a local coffee shop near campus.

Hardworking

Creative

Personable

Goals

- Graduate magna cum laude
- Land a secure job after college
- Branch out into architectural design

Painpoints

- Living close to campus doesn't require metro
- Can't always afford bus and metro fares

***"Art is to be free.
Design is to fix"***
– Kanye West



Chris

49 | Marketing Advisor

Chris works at a large marketing firm in the heart of DC. When he isn't hard at work, he enjoys taking day trips out of the city with his family. Over the summer, he enjoys going to Nationals games with his daughter.

Sociable

Tech-saavy

Family-focused

Goals

- Start own firm in New York
- Set daughter up for career and financial success
- Move to the beach after retirement

Painpoints

- Nearest metro stop isn't close enough to use daily
- Doesn't like how congested metro gets on gamedays

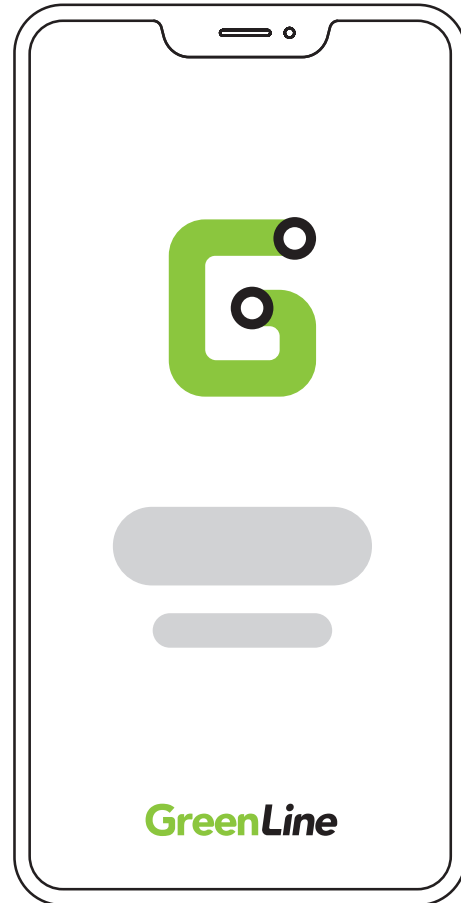
"Creativity is nothing but a mind set free."

–Torrie T. Asai

The background features several thick green lines that form a partial circuit board or network diagram. These lines are connected at various points by small white circles with black outlines. One line runs vertically on the left, another runs horizontally at the bottom, and a third runs vertically on the right. A fourth line starts from the top right and runs diagonally down to the right edge. The text 'UserFlows' is centered in the middle of the page.

UserFlows

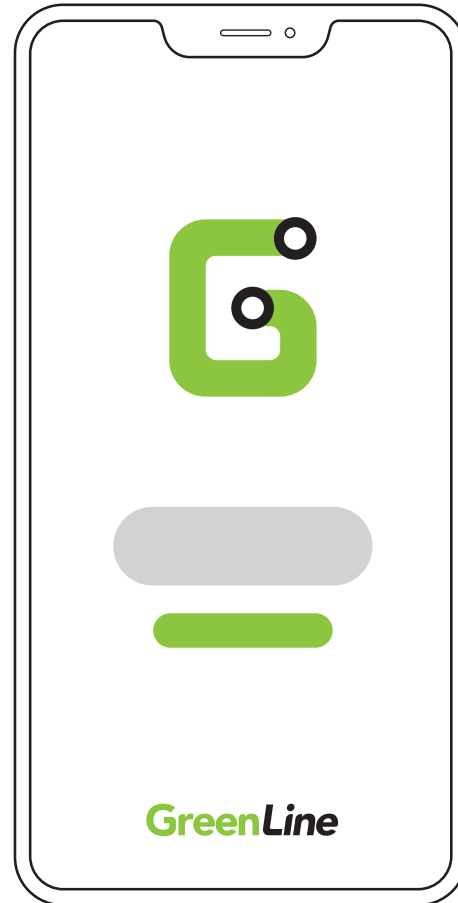
Create an Account + Carbon Footprint Survey



Step One

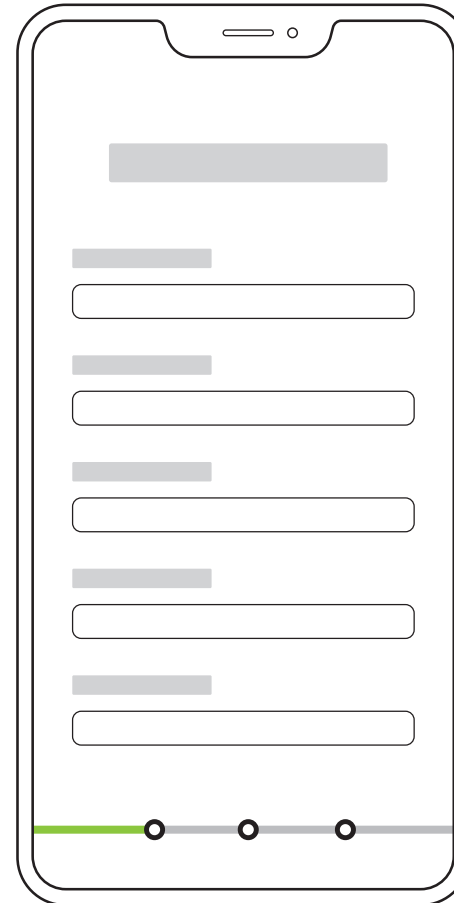
Upon opening the app, the user is shown the opening screen, where they are given two options:

"Go Green" (login option) and "Register" (account creation option)



Step Two

User selects "Register" to continue to the next screen.



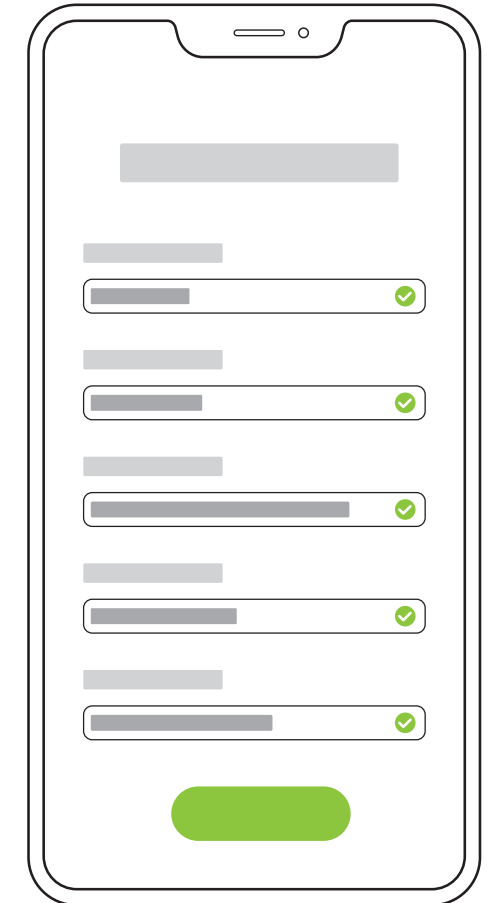
Step Three

User fills out basic information (name, email, username, password) to move on to next step of account creation.



Step Four

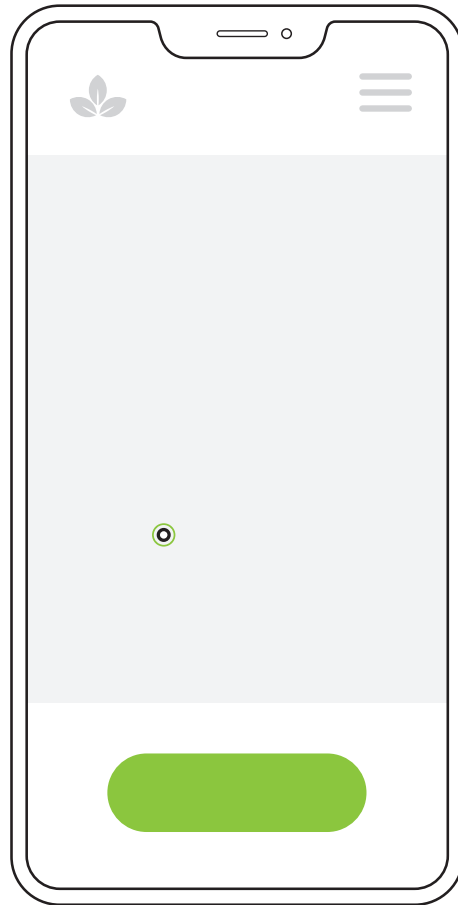
The user then completes a short survey to calculate their current carbon footprint so that future evaluation and comparison is more accurate.



Step Five

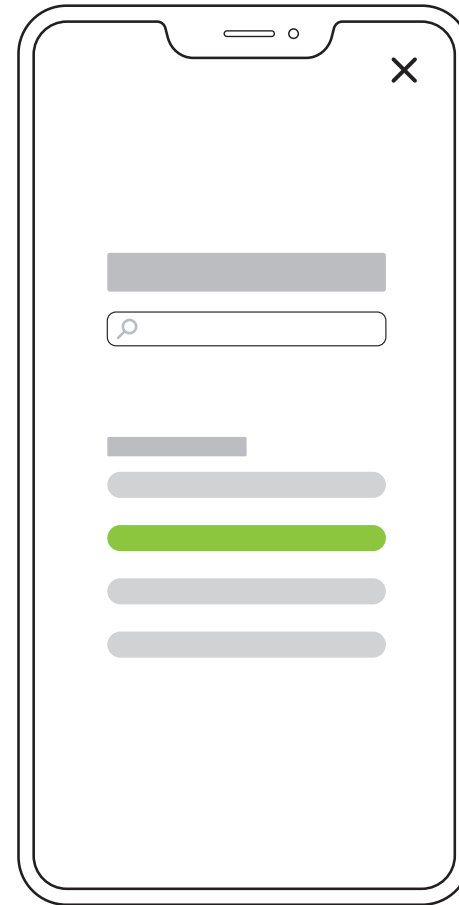
Once the user completes each step of account creation, they may go back over their info. to verify before selecting the "Submit" button.

Starting a Trip + NetCard



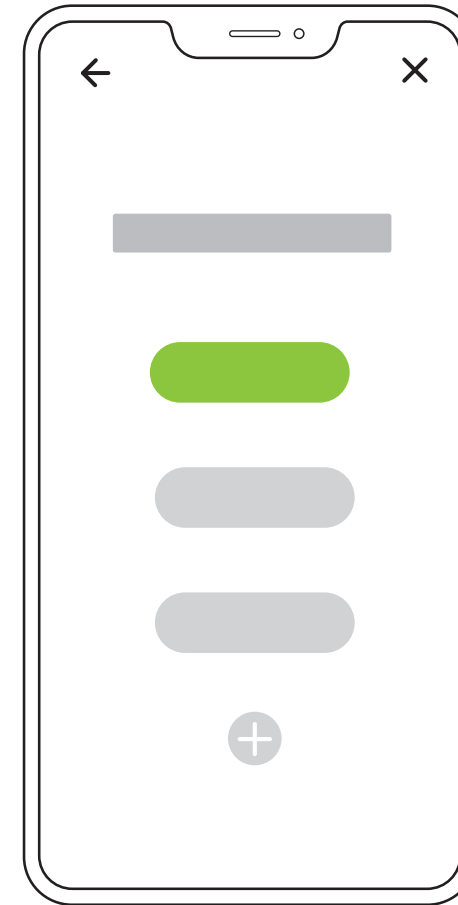
Step One

When viewing the home screen, user will see a live map along with menu, profile, and "Commute" buttons. To begin trip, user will select "Commute".



Step Two

User is asked of their destination, in which they may search for a location or select one from a list of saved places.



Step Three

After selecting a destination, user chooses their mode of transportation (WMATA or third party), or may add another mode if not already listed by selecting the "+".

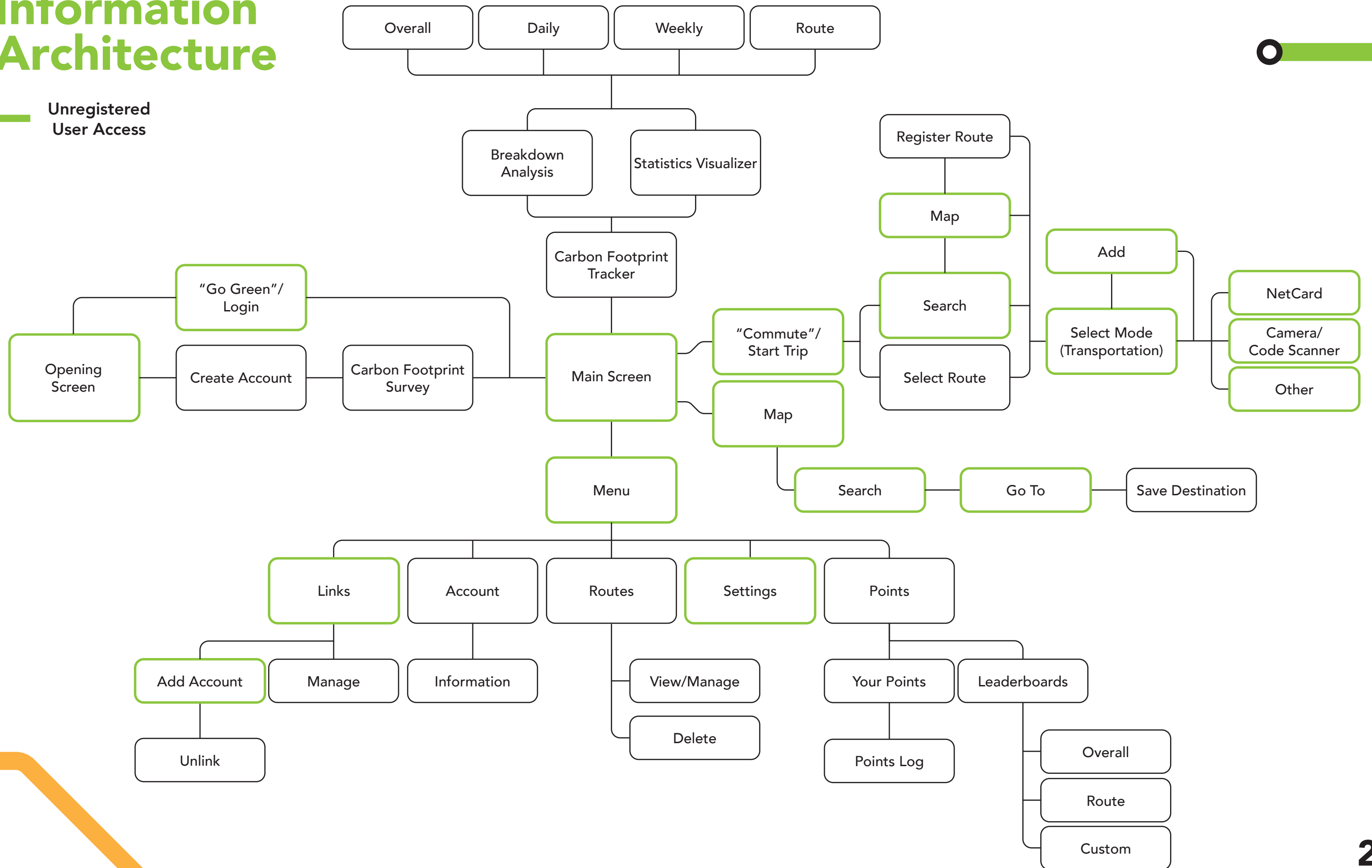


Step Four

User may now use their (digital) NetCard to tap-scan, if applicable. Otherwise, they may cancel the digital card to use physical version, or access the camera if a code needs to be scanned.

Information Architecture

Unregistered User Access



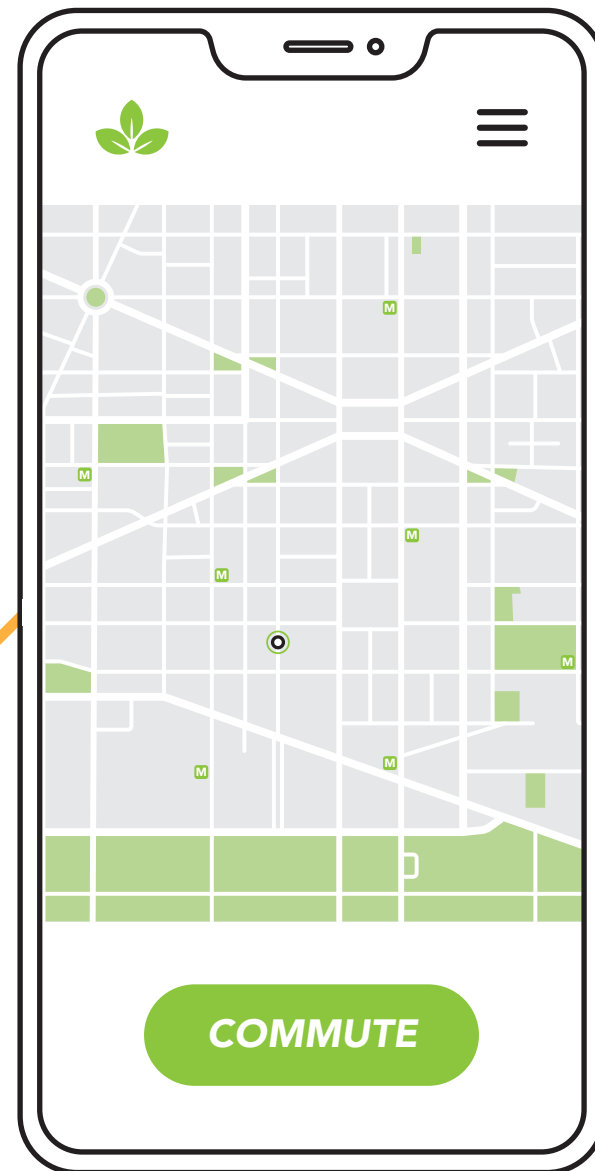
The background features several decorative green lines and circles. A vertical line on the left has a small circle at its bottom end. A horizontal line at the top right has a small circle at its right end. A horizontal line at the bottom left has a small circle at its left end. A vertical line on the right has a larger circle at its bottom end, which is composed of two concentric circles. A diagonal line connects the top left to the top right horizontal line.

UX *Wireframes*

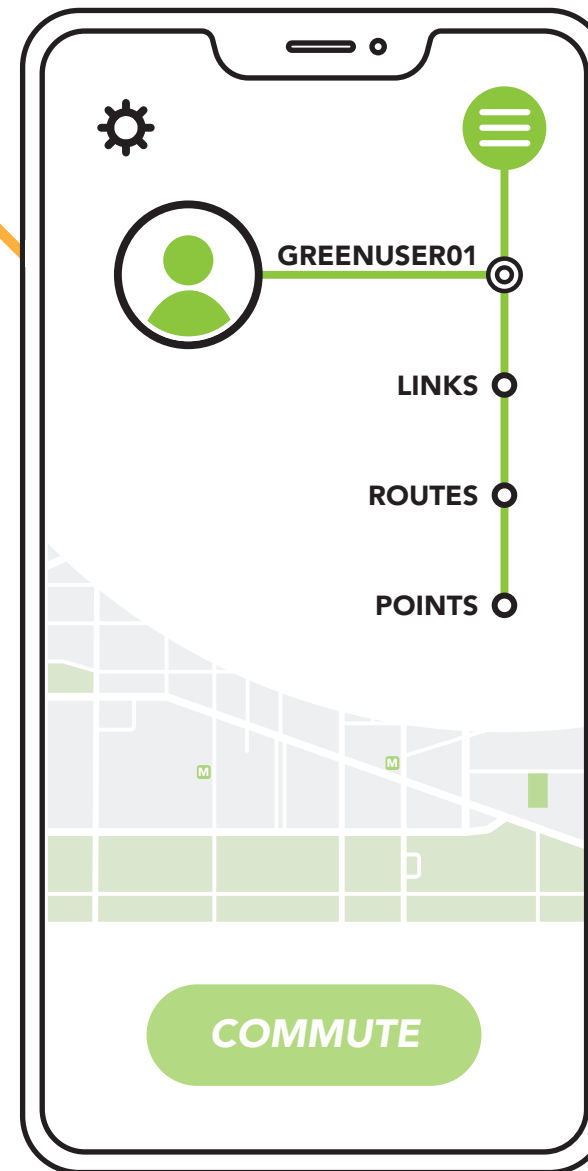
Welcome Screen



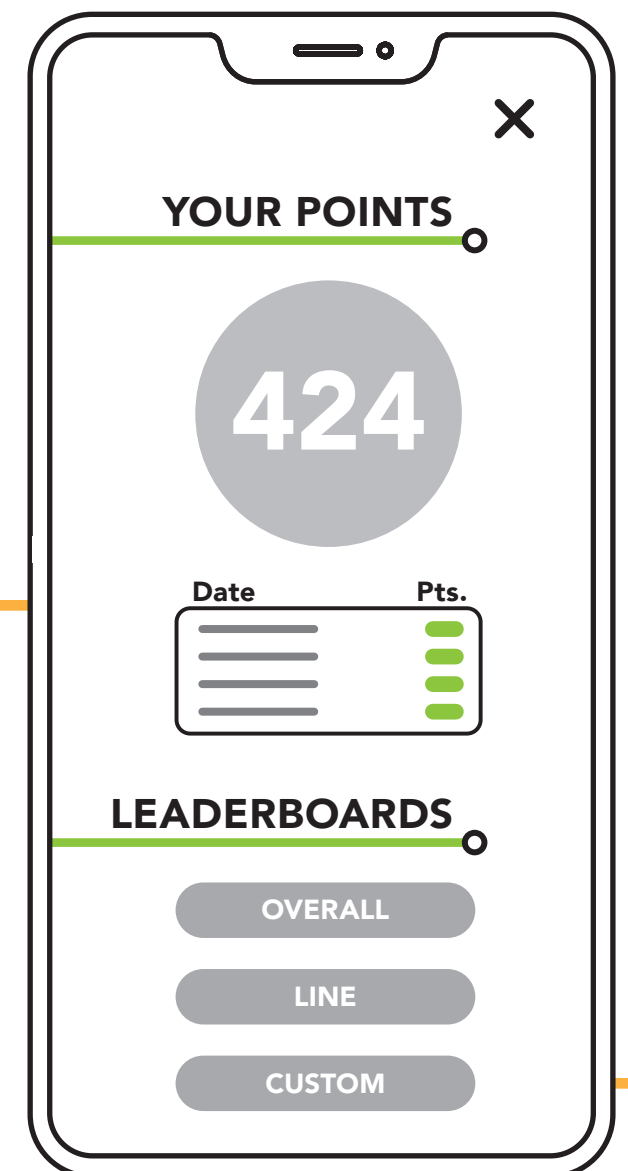
Home Screen



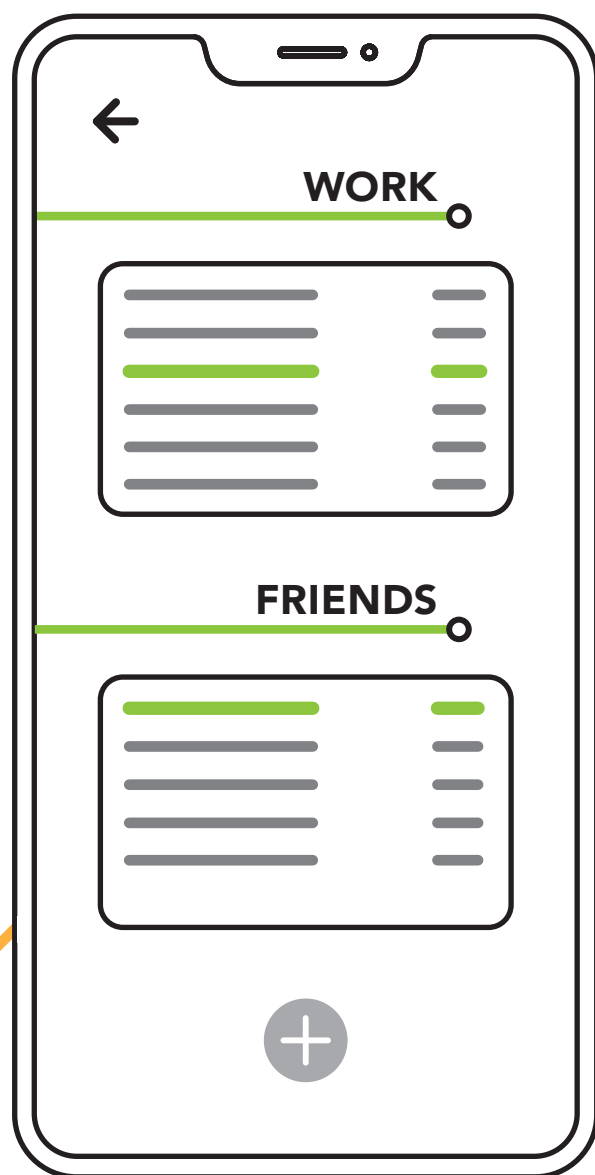
Drop-Down Menu



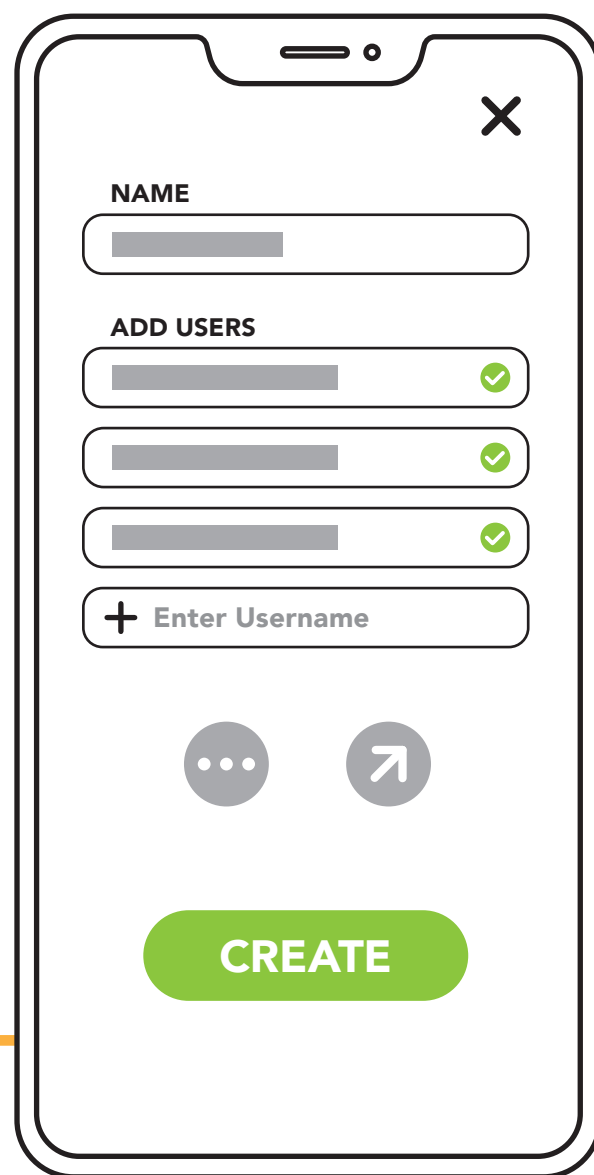
Points Center



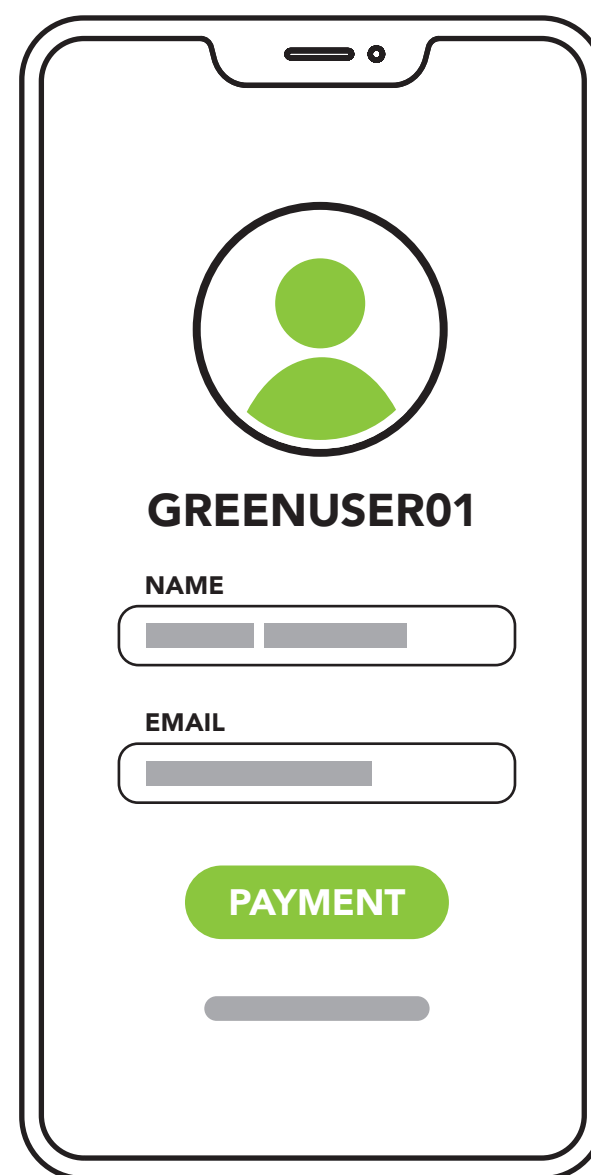
Custom Leaderboards



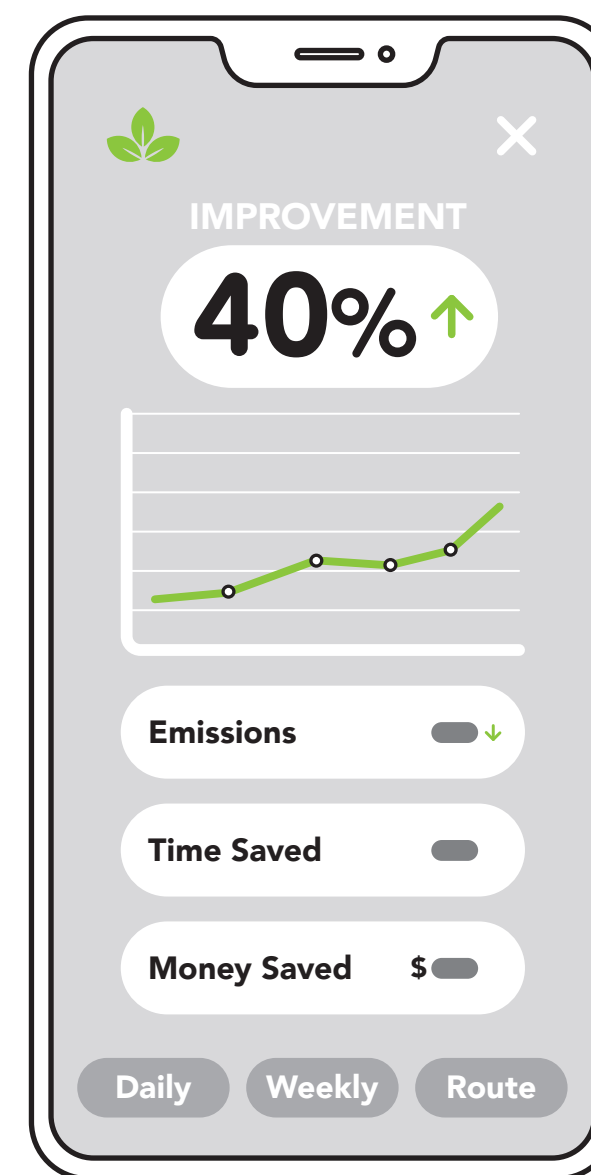
Add Leaderboard



User Account



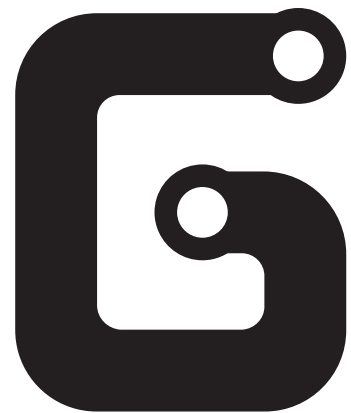
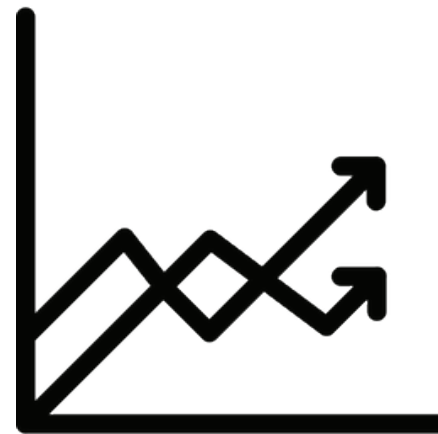
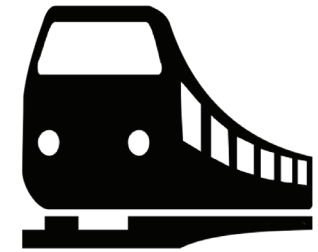
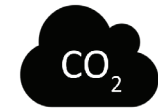
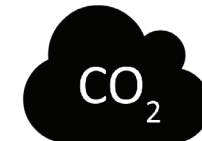
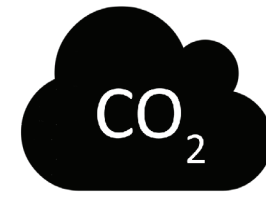
Carbon Footprint Tracker



Aesthetics



Avenir Black
Avenir Heavy
Avenir Medium



GreenLine

