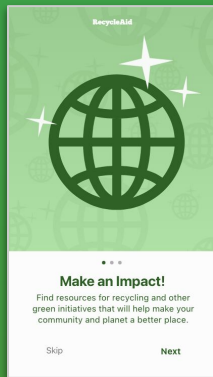


# RecycleAid

## Recycling Made Easy and Fun

### Mobile App Case Study



Analisa Fleischhacker / Chris Van Ert / Nhi Nguyen

# RecycleAid Mobile App

## 01. THE PROBLEM

### 02. USER RESEARCH

### 03. DEFINITION & IDEATION

### 04. PROTOTYPING

### 05. TESTING & ITERATING

## THE PROBLEM:

New residents in a city have a difficult time learning the local recycling guidelines and lack community support that can provide quick and easy recycling information.

## THE SOLUTION:

We believe an app that provides clear local recycling guidelines and friendly, goal-oriented competition/rewards for people who recycle or want to start recycling will create awareness, confidence and enthusiasm for community recycling.

**OUR ROLE:** UX research and design

**TOOLS:** Adobe Illustrator, Adobe XD, Figma, Miro

**User Research** / Define & Ideation / Prototyping / Testing & Iterations

# User Research

# Interview Plan

## Interview Plan Outline

We began by surveying **65 participants**, who currently **utilize recycling as a waste disposal method**.

Based off of our survey results we began to conduct 6 user interviews in order to gain insight on the **level of comfort/knowledge that people had with recycling** as well as their **pain points**.

# Interview Transcripts

## User Interview Notes

A number of people that were interviewed mentioned that they **struggle to identify which plastics can be recycled.**

**“I still don’t really know the difference between the numbers for plastics. I typically put everything in the recycling when I’m unsure.”**

Maria, Age 30

**“Plastics are difficult. I think we probably throw away a lot of plastic that could be recycled.”**

Jeanne, Age 45





# Andrea West

AGE	35	GENDER	Female
OCCUPATION	Marketing Specialist	LOCATION	Minneapolis, MN
STATUS	Married	RESIDENCY	House

## PERSONAL BIO

Andrea is a 35 year old marketing specialist who was environmentally active in college, but has gotten busy with her career. Now she has more time, and is looking for ways to get involved with recycling in her community. Andrea recently moved to Minneapolis and is unclear as to what the recycling guidelines are for her new city. Andrea assumed if she was having issues with what could be recycled, others around here were, too. She is looking for a way to get everyone on the same page.

## GOALS

- Wants to live a more sustainable lifestyle
- Reduce the amount of landfill waste
- Needs easier guidelines on how to recycle
- Wants a fun and engaging way to get community more involved

## FRUSTRATION

- Unclear guidelines
- Lack of community resources
- Takes too much time to figure out what can and cannot be recycled
- Not having recycling accessible



Living sustainably is important to me. I want to help give back to our planet and repair the damage that we have done.

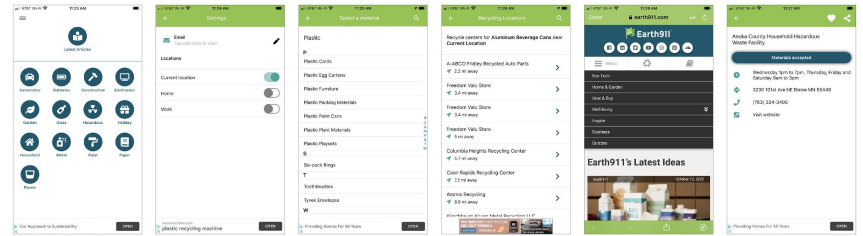


# Competitor Analysis

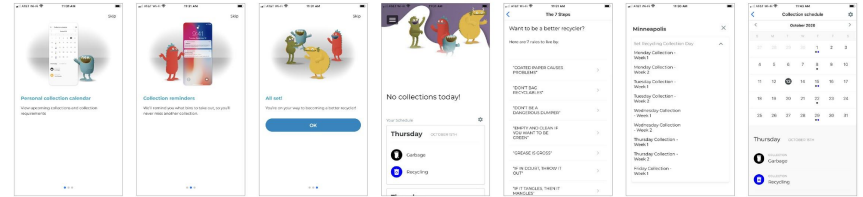
We downloaded, installed, and onboarded 6 recycling apps, and did a run through of features. This gave us an idea of the apps already out there, **what worked and didn't work** for onboarding, and where we had **opportunities** to provide features that the market is currently lacking.

## Competitor Analysis Matrix

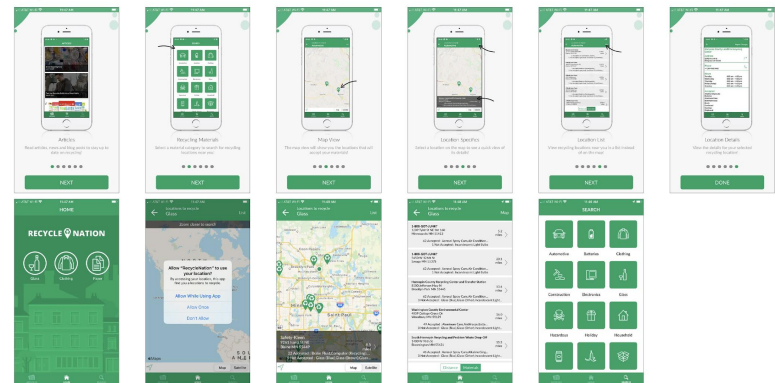
iRecycle Screenshots



Recycle Coach Screenshots



Recycle Nation Screenshots





User Research / **Define & Ideation** / Prototyping / Testing & Iterations

# Definition & Ideation

# User Insight

**Andrea** needs **convenient, accurate recycling information** because of **confusion about whether plastics and other materials can be recycled where she lives.**

During **interviews and surveys**, we discovered that **most people recycle and feel positive about it, but often are not sure which items can or cannot be recycled.**

Therefore, we believe that **household waste can be further reduced** and that we might be able to help if we **provided up to date resources for local recycling guidelines, and made recycling fun with friendly competition and/or rewards.**

# Problem Statement

Our **recycling app** was designed to **provide up to date, local recycling guidelines, and generate enthusiasm for community recycling**. We have observed that **current apps don't have ways to connect a user with their recycling provider, and the general guidelines those apps list may not apply to the user's local area**. Our app **will link to the user's recycling service for up to date guidelines, and provide fun ways to get involved, like a community leaderboard that tracks waste reduction and recycling over time, or other activities**.

# Ideation

[I Like, I Wish, What If link](#)

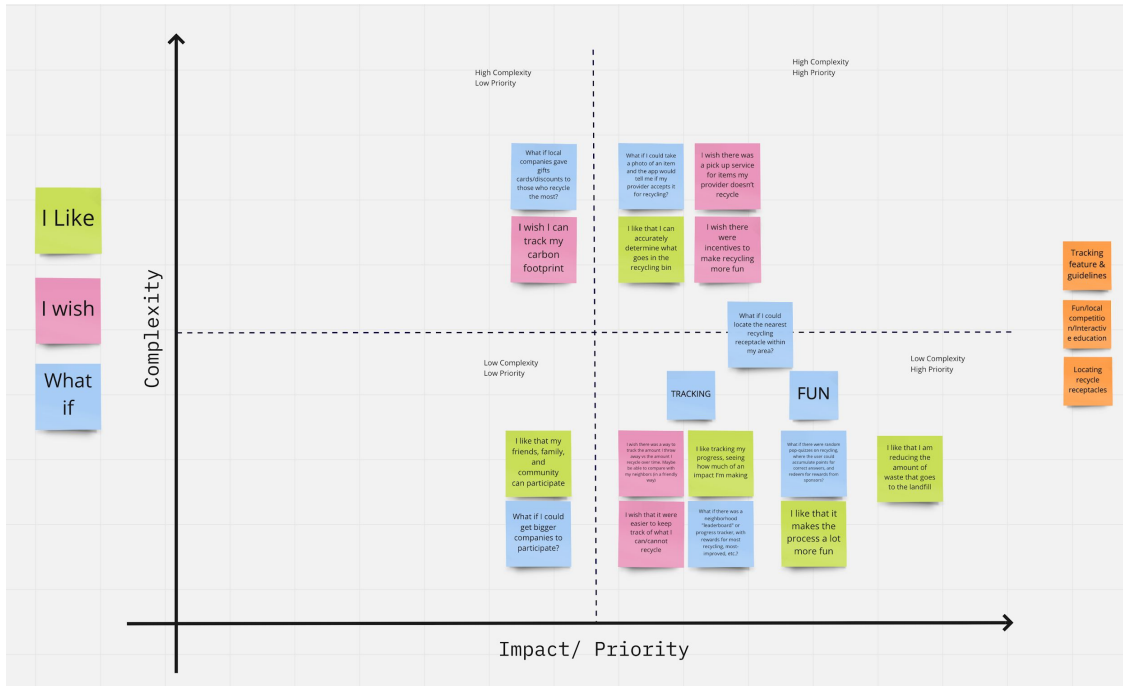
Our group utilized the **“I Like, I Wish, What If”** brainstorming to determine ways in which we could address our user’s needs, wants, and pain points with our app.

**I like that I can accurately determine what goes in the recycling bin**

**I wish that it was easier to keep track of what I can and cannot recycle**

**What if I could take a photo of an item and the app would tell me if my provider accepts it for recycling?**

# Feature Prioritization Matrix



Our priority matrix revealed common wants and needs from our interviews.

- **Clear Recycling Guidelines**
- **Make Recycling Fun**
- **Track Your Recycling Progress**

# Value Proposition

**New residents** in a city have a difficult time learning the **local recycling guidelines** and lack community support that can provide **quick and easy recycling information**.

We believe an app that provides clear local recycling **guidelines** and **friendly, goal-oriented competition/rewards** for people who recycle or want to start recycling will create **awareness, confidence and enthusiasm** for community recycling.

- **New Residents**
- **Recycling Guidelines**
- **Fun/Rewards**
- **Awareness/Enthusiasm**

# Storyboard

## 1. New City and Guidelines



Andrea has recently moved to Minneapolis and is unaware with her new city's recycling guidelines. She lacks a community resource and social group on local recycling practices.

## 2. Discovers the App



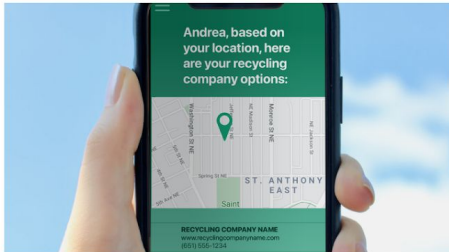
She saw a flyer from her apartment about a recycling app and decides to ask her neighbors for more information. They had mentioned that they use the app and it has made their recycling process much more efficient and enjoyable.

## 3. Downloading the App



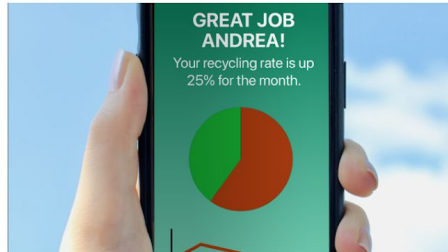
Andrea reads more about the app and decides to download it in hopes of making the recycling process in her new city easier.

## 4. Creates Account and Starts Using



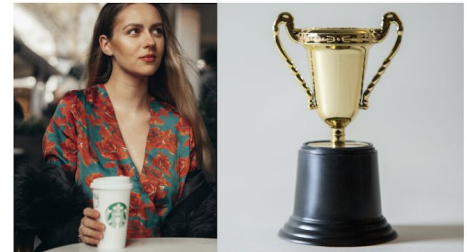
Andrea creates her account and is able to connect to her recycling provider. She now has quick reference to the guidelines and can set up reminders for her garbage/recycling pickup days.

## 5. Recycling and Tracking



Now that Andrea knows her city's guidelines she can recycle with confidence, track her recycling habits, and participate in the local friendly recycling competitions.

## 6. Neighborhood Leader Victory Coffee



Using the app's tracking features, Andrea was able to measure her progress in recycling efficiency, and the competition features kept her motivated to stay on track to reach her monthly goal. Andrea is on her way to saving the planet, and is enjoying her free coffee reward for topping the neighborhood leader board for the month.

# User Journey

## Problem

**1** Andrea has recently moved to MPLS and is unaware of the recycling guidelines

**2** Andrea lacks a community resource and social group on local recycling practices.

## Discovery

**3** Her neighbors mentioned the "app" that has helped them with their recycling experience.

**4** Andrea reads more about the app and decides to download it in hopes of making the recycling process in her new city easier.

## Actions

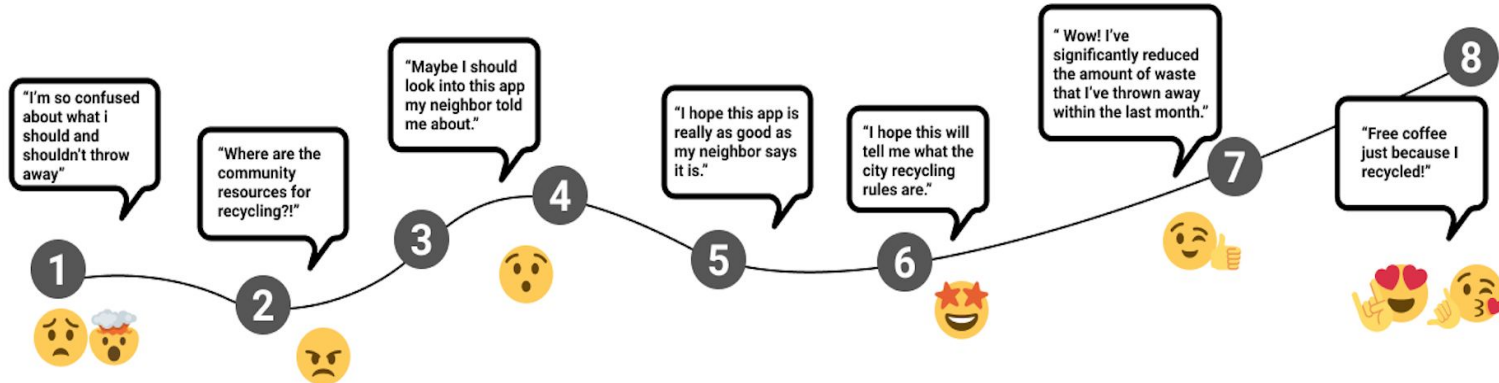
**5** Andrea creates an account on the app and continues with the onboarding.

**6** She enters in her current location and is able to find the local recycling guidelines for her city. She begins to track her recycling habits.

## Results

**7** With a clear understanding of what can/can't be recycled, Andrea's recycling increased by 25% since she began using the app, according to the tracking feature.

**8** Andrea celebrates her "recycler of the month" victory with a free coffee at her corner coffee shop.



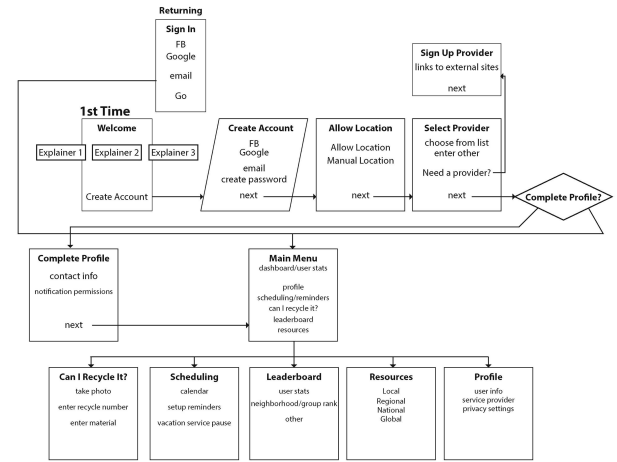
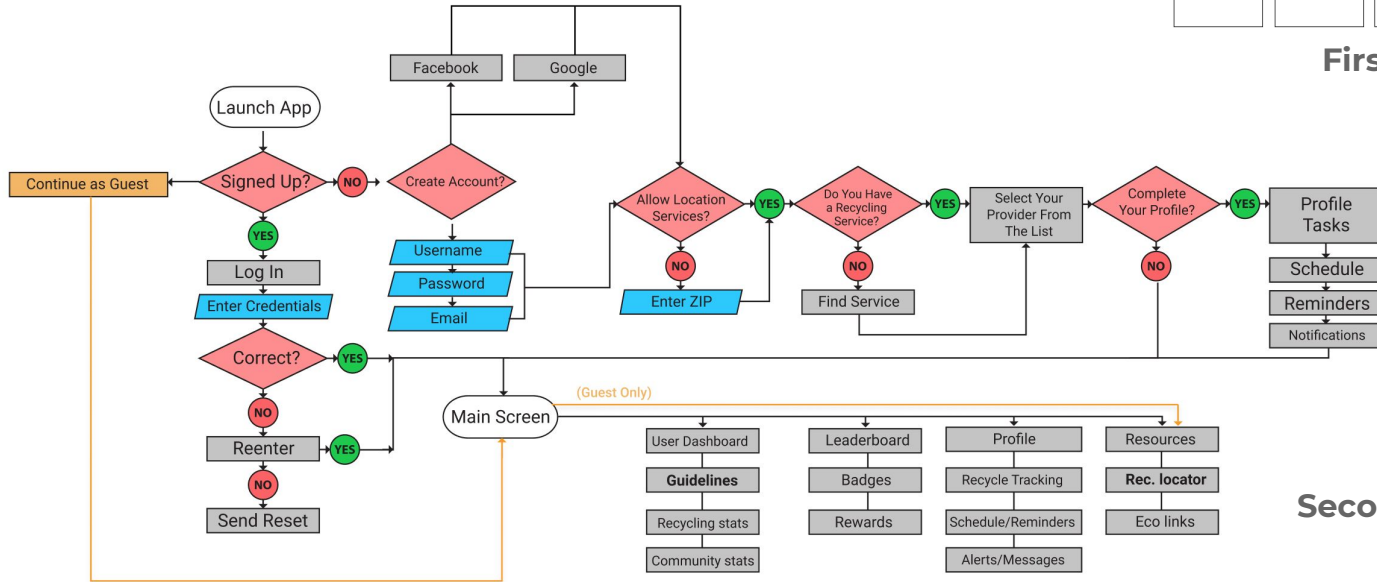


User Research / Define & Ideation / **Prototyping** / Testing & Iterations

# Prototyping

# User Flow

The user flow shows the sign up and onboarding process, as well as navigation from the main screen to some of the features on the app.

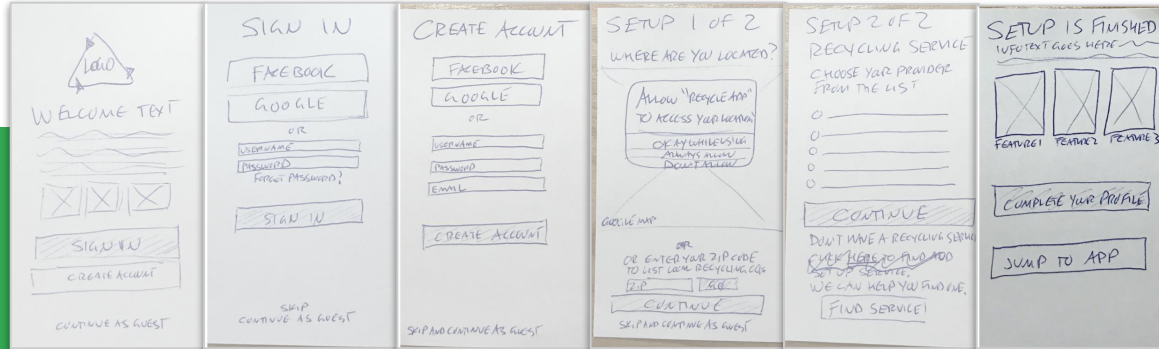


First Iteration

Second Iteration

# Sketches & Digital Wireframes

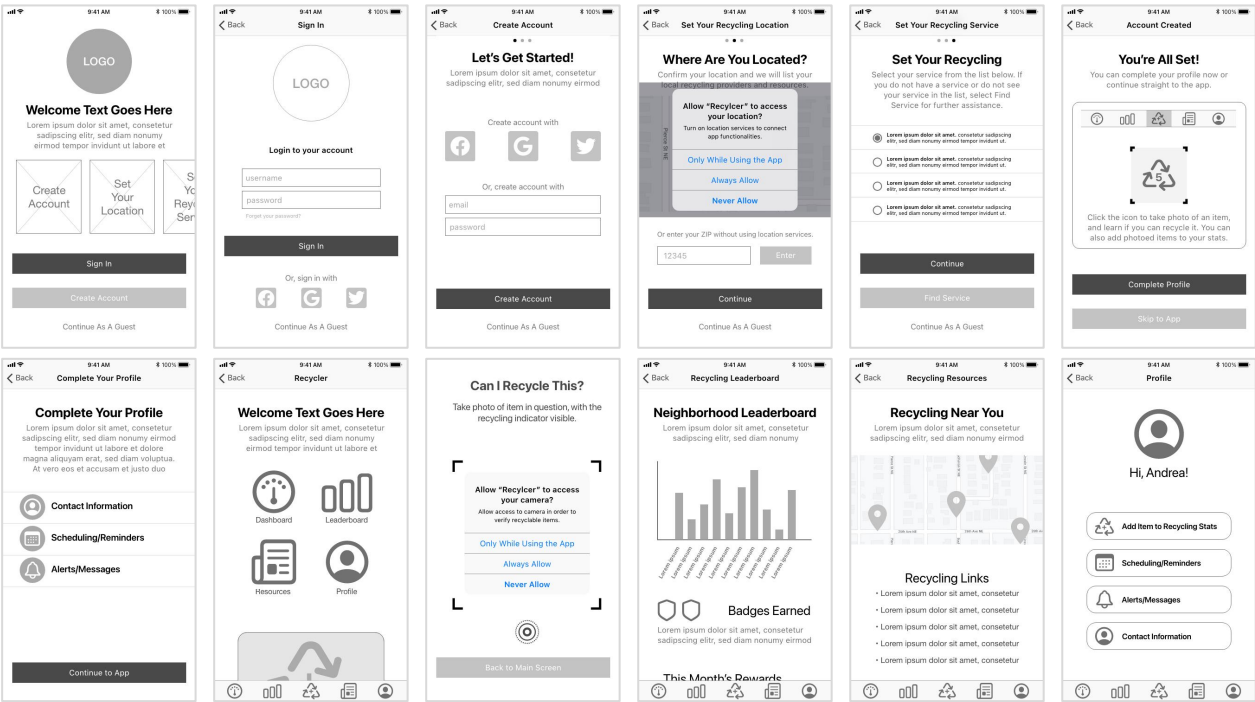
Sketches brought into Adobe XD for user testing.



# Testing and Iterating

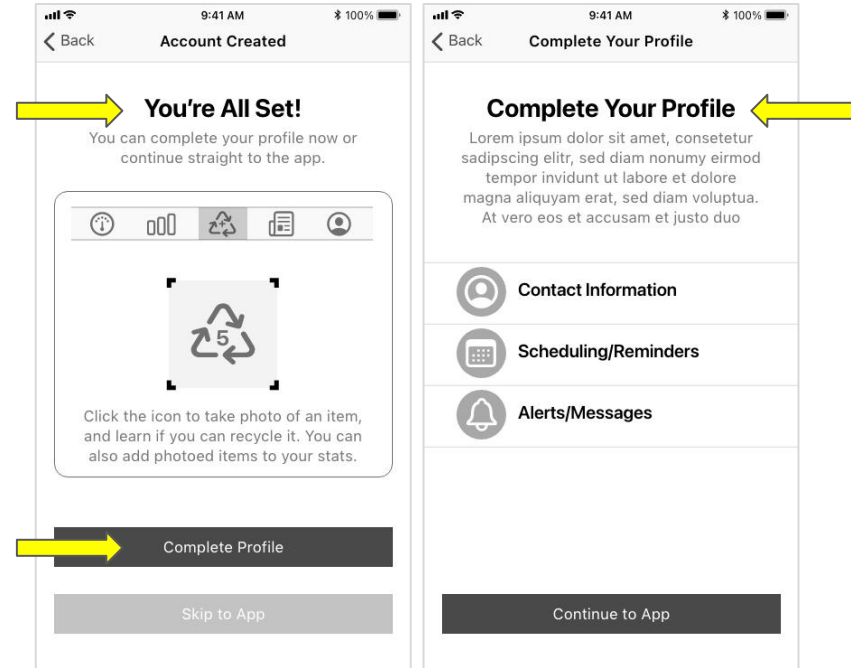
# Hi-Fi XD Prototype & Guerrilla Testing

Guerrilla testing was done with 5 people to identify any further issues with user flow.

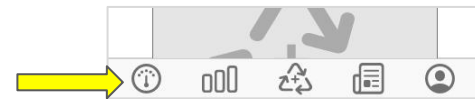


# Key Takeaways from Guerrilla Tests

We conducted five guerrilla user tests on the new prototype and found a few key issues. Some of the onboarding steps were confusing, and users weren't quite sure what all of the navigation icons were for the first time they used the app.



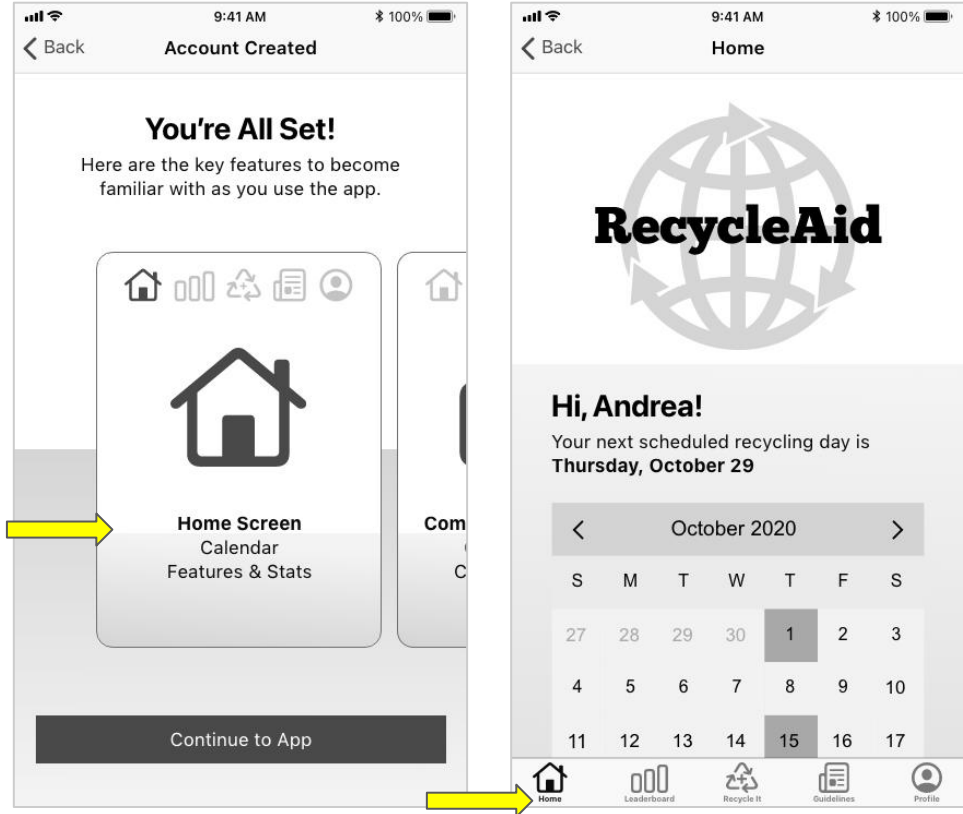
## Confusing Onboarding Steps



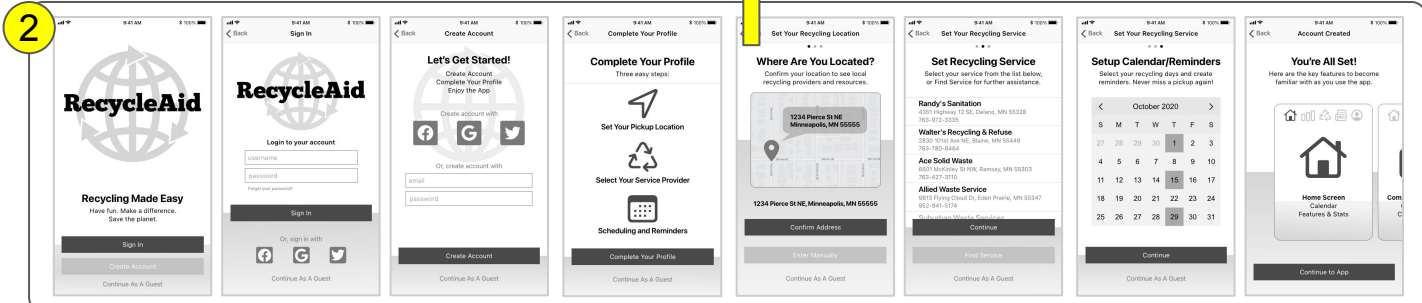
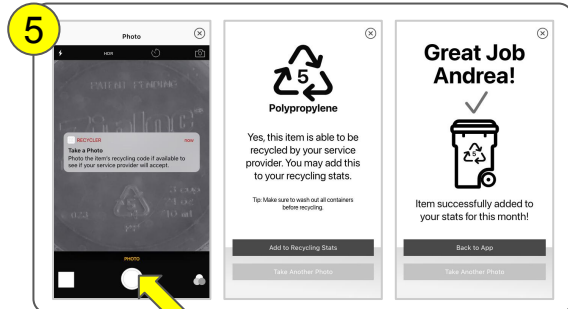
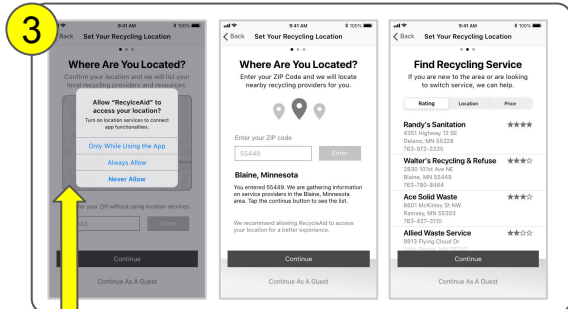
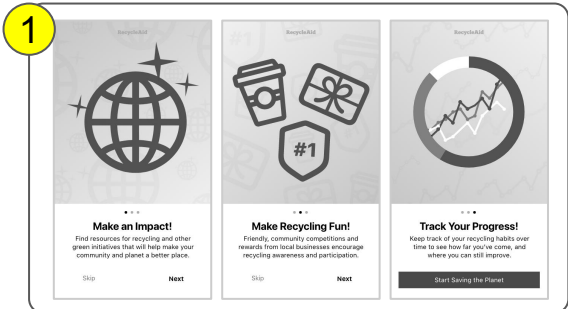
## Ambiguous Nav Icons

# Iterations Made Based on User Test

- Eliminated unnecessary screen at the end of onboarding
- Added coaching cards to explain the navigation and features
- Added text to the nav icons to better inform the user



# iOS Mockups

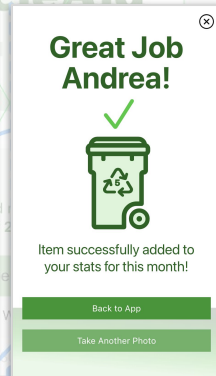
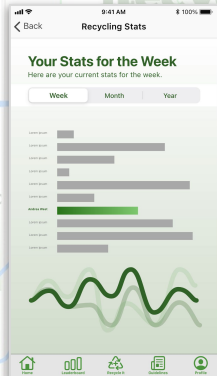
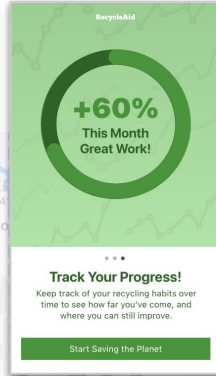
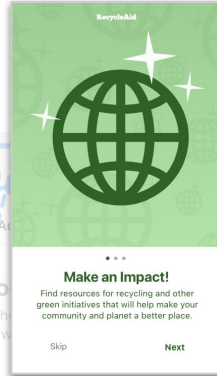


1. Splash Screens
2. Onboarding
3. Permissions
4. Main App
5. Camera Feature



# iOS Prototype

[iOS Prototype Link](#)



# Final Thoughts / Conclusion

Even though recycling is an everyday part of most people's lives, there is still confusion and ongoing changes regarding what can be recycled. The RecycleAid app eliminates that confusion and makes recycling fun with its tracking features and friendly neighborhood competitions and rewards.

## Next Steps

Finalize features and content  
Develop tracking and rewards systems (content and design)



## KPI/Metrics

Recycling company ad revenue  
Local business support/revenue  
User retention/activity

# Questions?