# Scrounger



By; Axel Martinez, Alan Lopez, Gabriel Jason Sanchez

## What is the problem?

- China, the trash capital of the world, will no longer buy trash<sup>9</sup>
- America produces the most trash out of any country<sup>6</sup>
- America has little to no trash infrastructure<sup>7</sup>
- 90% of all recyclables end up in landfills<sup>3</sup>
- Making new plastics = Higher  $CO_2$  emissions
- Global warming
- Affects everyone



## Why we need to solve the problem?

- Soon the Earth will be covered in trash.
- To help the environment
- Aid the animals whose habitats are being destroyed
- Help future generations



### **Current Solution**

- Municipal waste management department
- People recycle on their own merit at a local recycling center



### Swedish Model

- Sweden produces the least amount of waste in the world<sup>5</sup>
- Motivated population when it comes to recycling
- Imports trash from other countries<sup>5</sup>
- Any waste that can't be recycled is converted to energy<sup>5</sup>
- Since 2015 Sweden makes 56 million USD<sup>5</sup>



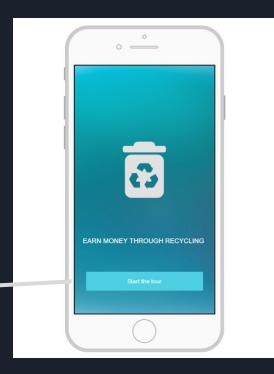
### Our Solution



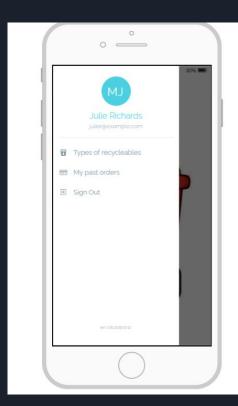
- Design Scrounger using Nativescript
- Employ a system to record and display data collected from users
- The app will give people the opportunity to earn money
- Will allow customers to order a pick up for recyclables

Design Element - Homepage that shows up the first opens up when the app is first opened. It teaches the user the basics of the app and how recycling can help.

Simple UI allows for \_\_ quick account setup



Design Element- This is the menu for the app. It will allow to navigate to your past orders, the type of recyclables you can select to get picked up and a sign out button.



Picture for this part of the construction

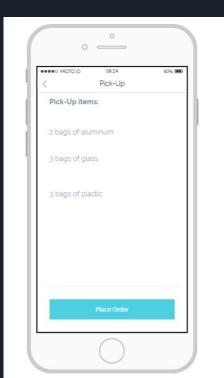
Design Element- This section is the section where you select the type and amount of recyclables that you wish to get picked up by workers.

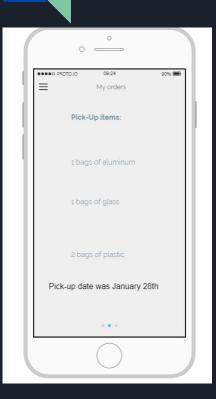


Displays current market value of recyclable material

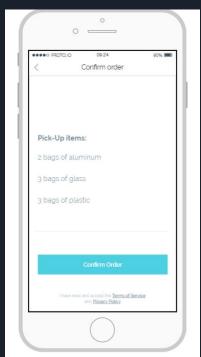
Design Element- This page on the application appears once you select the recyclables that you wish to be picked up by one of the workers.

Full list of items ordered





Design Element- The screen on the left is the "past orders" page that can be selected from the menu. The screen on the right pops up when you are confirming your request.



## Testing Plan

- 1. The app (UX) needs to be clean and easy to navigate. The UX is was what makes a mobile app successful.
- 2. Hoping to see the features in the app are easy to use.
- 3. Testers should take about 3 minutes to learn how to navigate the app

## Testing Plan Pt. 2

- UI-(User Interface) needs to be as uncluttered as possible. Only need features that are necessary to the app.
- 2. The program used is important since there are many programs for many different phone applications thus determining their practicality.
- 3. The aspects that are determined by the program being used is UI, maintenance, and device features.
- 4. The mobile app needs to be viable in the real world and in order to determine that
- 5. Test and then give test subjects survey so they can fill it out.

### Testing Goals

- People testing the app need to be able to navigate it easily.
- Should be easy to use because users will have to swipe right and left and up and down.
- People testing our app will find it to look simple with our layout.
- Testers should find the app to be practical and worth downloading.
- Also want to see how they react to this app hoping that it's a good positive reaction.

### Procedure to test

- Need to find a variety of testers from different ages in Santa Monica.
- Will tell them about our mobile application and let them figure out the app without our help to see if it's easy to navigate.
- Feedback will then be taken by the testers to see how we can improve the mobile application.
- Will send the mobile application to our mentor Matt Keys and get feedback from him.
- All feedback received will be used to update and finalize the mobile application.

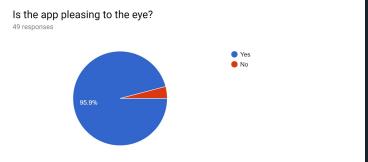
#### Materials needed to test

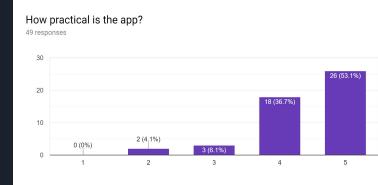
Phone, Application, Computer, Nativescript, People, Recyclable material, Internet Connection

#### **Safety Concerns**

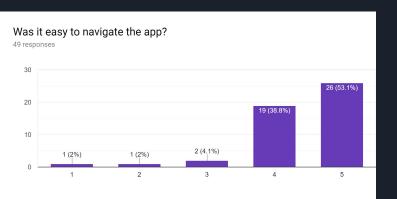
There are no immediate safety concerns with our mobile application.

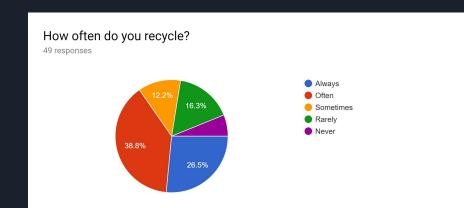






## Testing Results





## Testing



Prototype Survey

#### Citations

Alfred. "Importance Of UI/UX Design In The Development Of Mobile Apps." *Dot Com Infoway*, Dot Com Infoway, 6 Mar. 2019,

www.dotcominfoway.com/blog/importance-of-ui-ux-design-in-mobile-app-development.

Babich, Nick. "A Comprehensive Guide To Mobile App Design." *Smashing Magazine*, 12 Feb. 2018, www.smashingmagazine.com/2018/02/comprehensive-guide-to-mobile-app-design/.

Favell, Andy. "How to Test the Viability of Your Mobile-Friendly Website or App Project." *ClickZ*, ClickZ, 4 Feb. 2016,

www.clickz.com/how-to-test-the-viability-of-your-mobile-friendly-website-or-app-project/91410/.

"Mobile App Development Timeline: A Realistic Perspective." *BuildFire*, 29 Jan. 2018, buildfire.com/mobile-app-development-timeline/.

Team, ThinkMobiles. "What Are the Popular Types and Categories of Apps." *Thinkmobiles*, ThinkMobiles, 25 Feb. 2019, thinkmobiles.com/blog/popular-types-of-apps/.

### Citations

- 1. <a href="https://www.youtube.com/watch?v=s4LZwCDaoQM">https://www.youtube.com/watch?v=s4LZwCDaoQM</a>
- 2. <a href="https://www.youtube.com/watch?v=b7GMpjx2jDQ">https://www.youtube.com/watch?v=b7GMpjx2jDQ</a>
- 3. <a href="https://www.youtube.com/watch?v=oRQLiIXLAIU">https://www.youtube.com/watch?v=oRQLiIXLAIU</a>
- 4. <a href="https://www.youtube.com/watch?v=-Yp1KKWpPpU">https://www.youtube.com/watch?v=-Yp1KKWpPpU</a>
- 5. https://www.youtube.com/watch?v=14r7f9khK70
- 6. <a href="https://www.youtube.com/watch?v=BxKfpt70rLl">https://www.youtube.com/watch?v=BxKfpt70rLl</a>
- 7. <a href="https://www.sioneer.com/mission-and-process/">https://www.sioneer.com/mission-and-process/</a>
- 8. <a href="https://www.greenbiz.com/article/yes-recycling-still-good-business-if-happens">https://www.greenbiz.com/article/yes-recycling-still-good-business-if-happens</a>