

# Scrounger

Alan Lopez, Gabriel Sanchez, Axel Martinez

## Problem Statement

Americans are not recycling as much as they should be; the USA is only recycling 34% of the waste that could be recycled. Trash has been around for centuries and has always been a problem. Although recycling has been around for years it was the environmental movement in 1970s that really got people motivated to recycle. Currently, most recyclable goods are either ending up in landfills or in the ocean harming the environment which could be prevented by just recycling.

## Justification

The reason we decided to work with recycling is that the current system in place is severely inefficient, leading to 66% of all recyclables ending up in a landfill. Our idea would insure that recycling actually get recycled.

## Attack Points

The app will focus solely on taking trash off the street and making big cities recycling empires. The customer wants their trash taken away from their house; they also want money. It needs a schedule page and a map/geolocation page. The cost of production is zero dollars. An estimate file size for this mobile application would be 200mb. The app will work in any metropolitan area. It will have scheduled maintenance done in order to keep it fresh and updated.

## Conclusion

The results told us that most people do recycle at home and at school. People also believed that our initial prototype app was practical. Finally our survey determined that our user interface was pleasing to the eye and easy to you. This is all great news for Scrounger. Unfortunately, China's Blue Sky Policy has jeopardized the future of Scrounger. Most recycling prices have dropped worldwide from the lack of global demand. One positive outcome from China's new policy is forcing Western countries to build more recycling infrastructure, such as MRFs. We will continue to add more features to Scrounger. Hopefully, using Scrounger would allow for a seamless pickup from our employees. Scrounger has a bright future ahead of itself.

## Expert/Credentials

Matt Keys  
Majored In Computer Science  
keyskid@gmail.com  
310-999-2411

## Prototype Build

Design Element	Picture
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.	
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.	
This is the section where you select the type and amount of recyclables that you wish to get picked up by workers. This page displays current market value of recyclable material. (Glass, Plastic and Aluminum).	
This page on the application appears once you select the recyclables that you wish to be picked up by one of the workers. It shows you the full list of what you requested to be picked up.	
This screen pops up in order to confirm your request, and the second screen shows you past orders including the amount of recyclables picked up.	

## Similar Solutions

### Pros

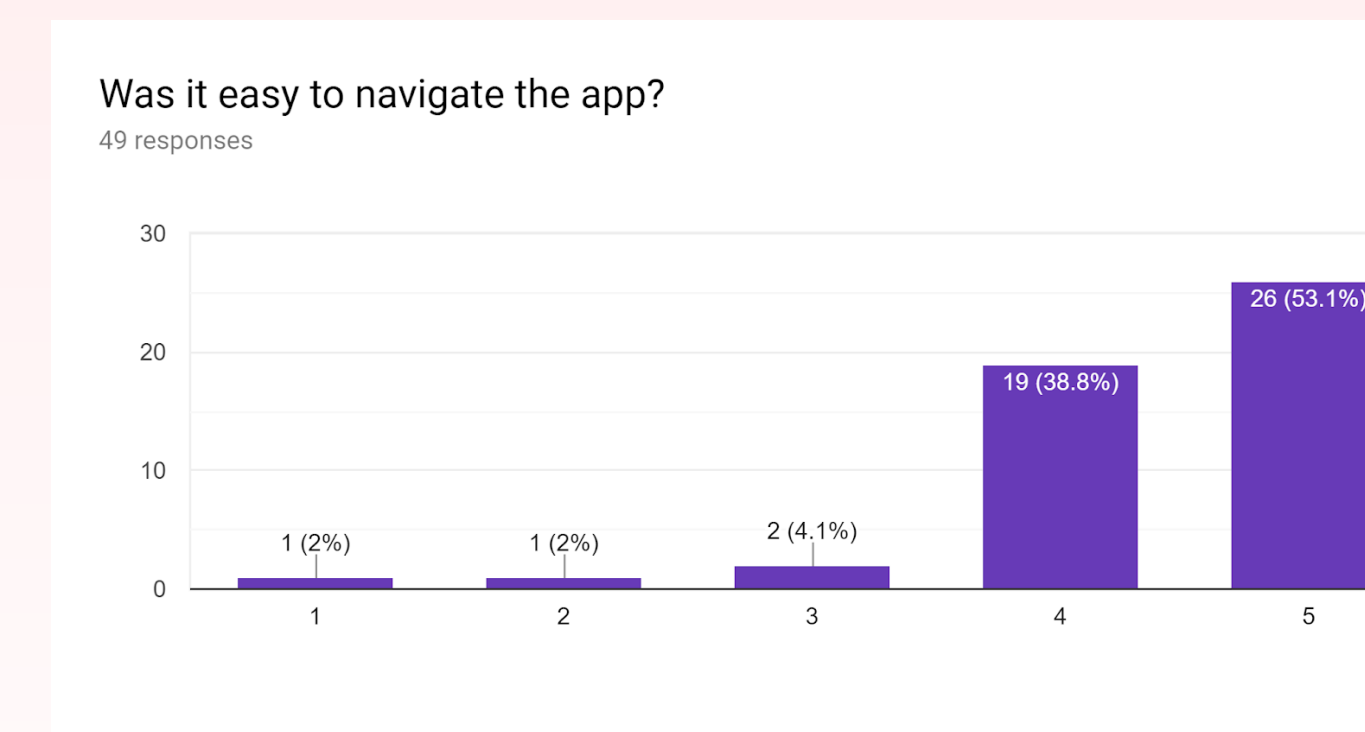
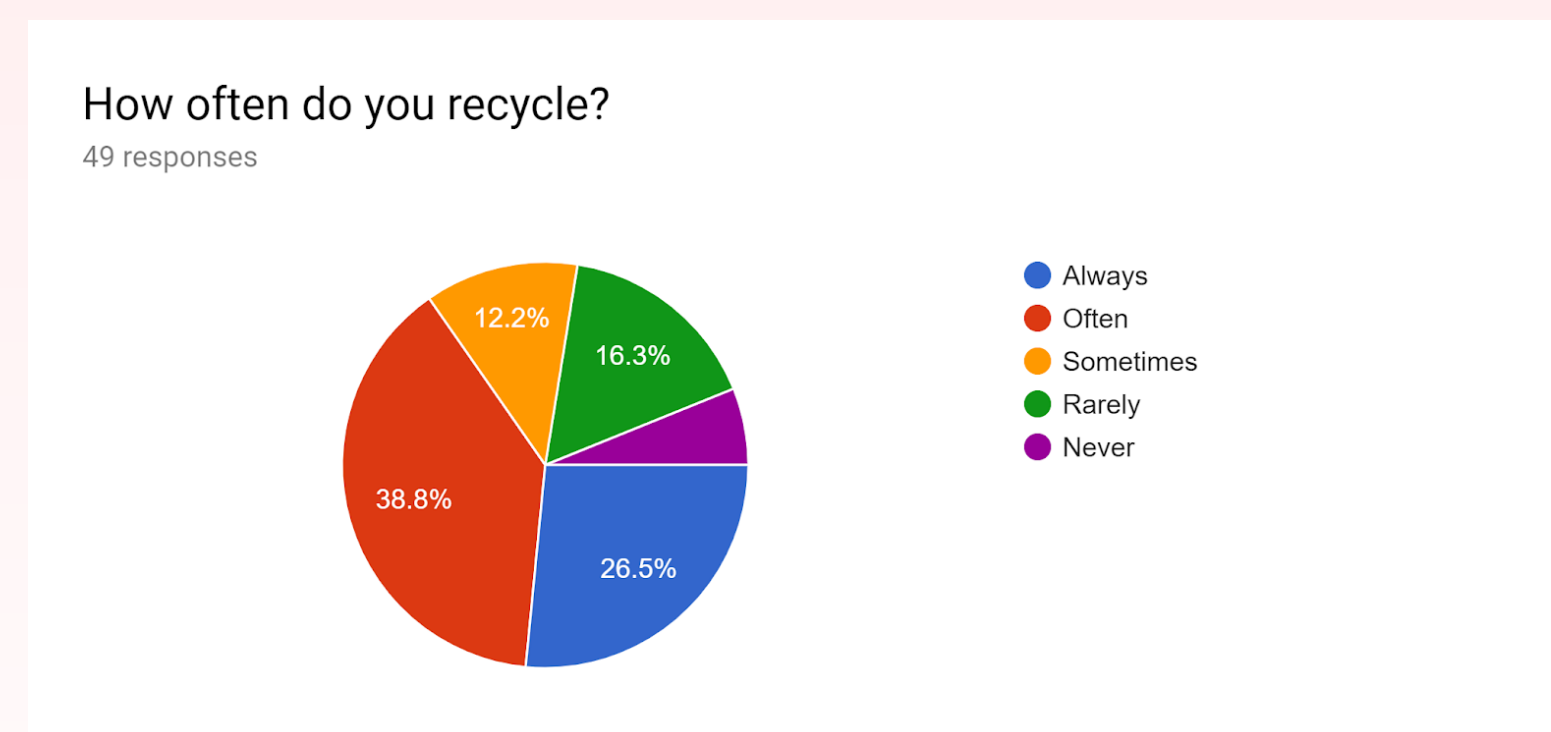
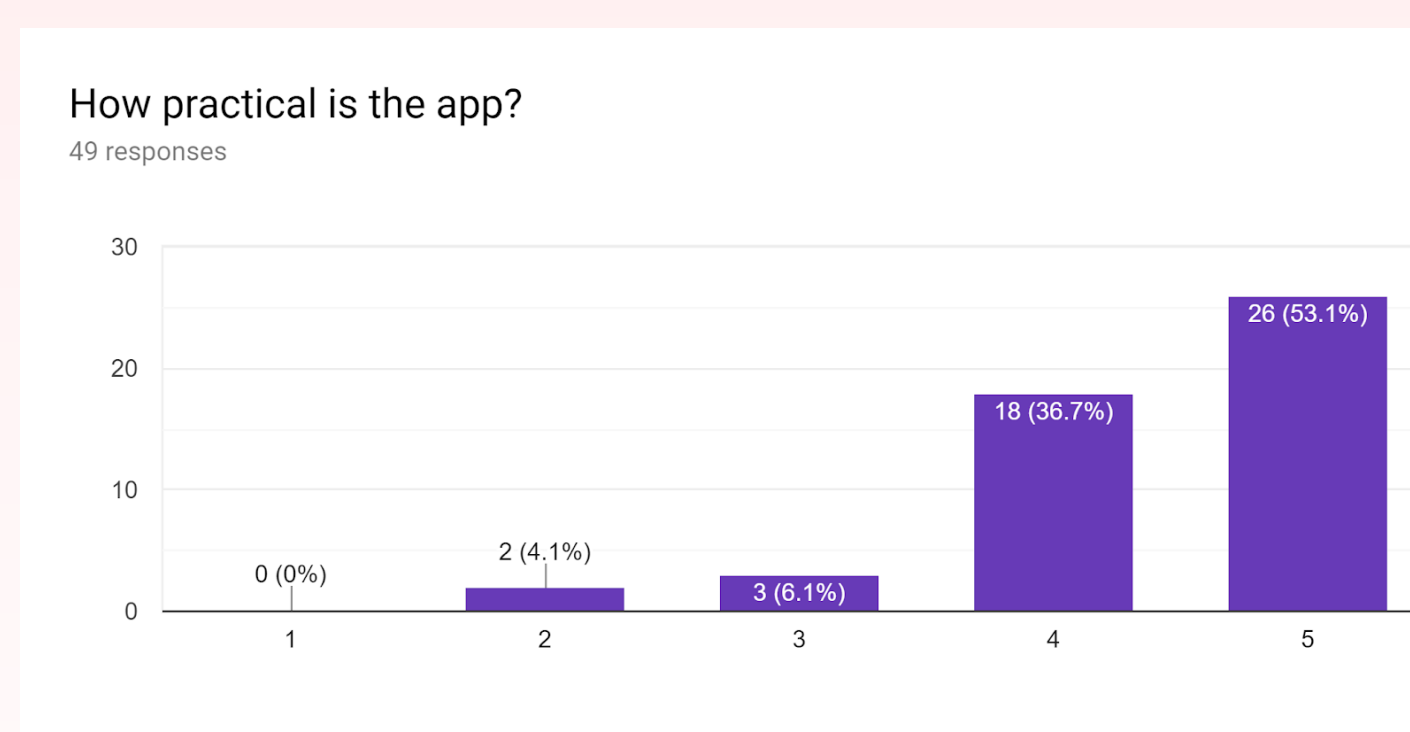
- Cities have a trash system in which trash and recyclables are picked up once every week from houses.
- Many cities have separate bins for recycling and trash around the city giving people easy access to recycle.
- Sweden has a model that recycles anything and everything making it the most efficient recycling method in the world earning them \$56 million USD.
- The Swedish Model also encourages citizens of the country to recycle.

### Cons

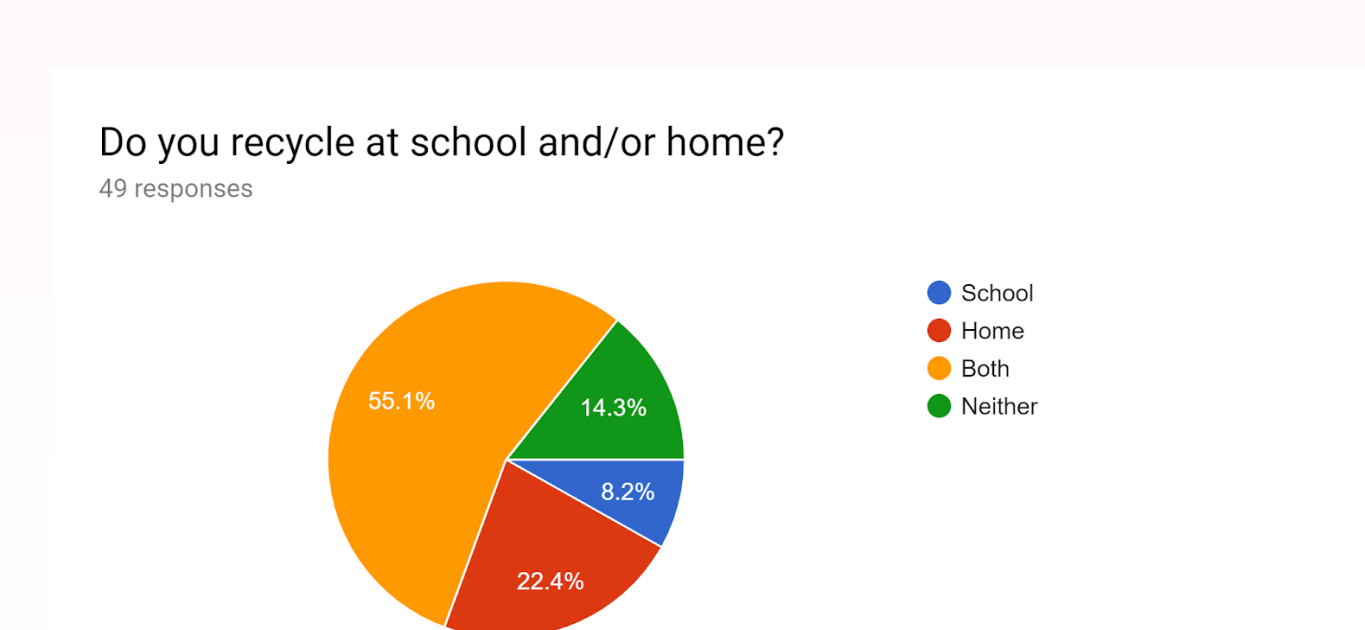
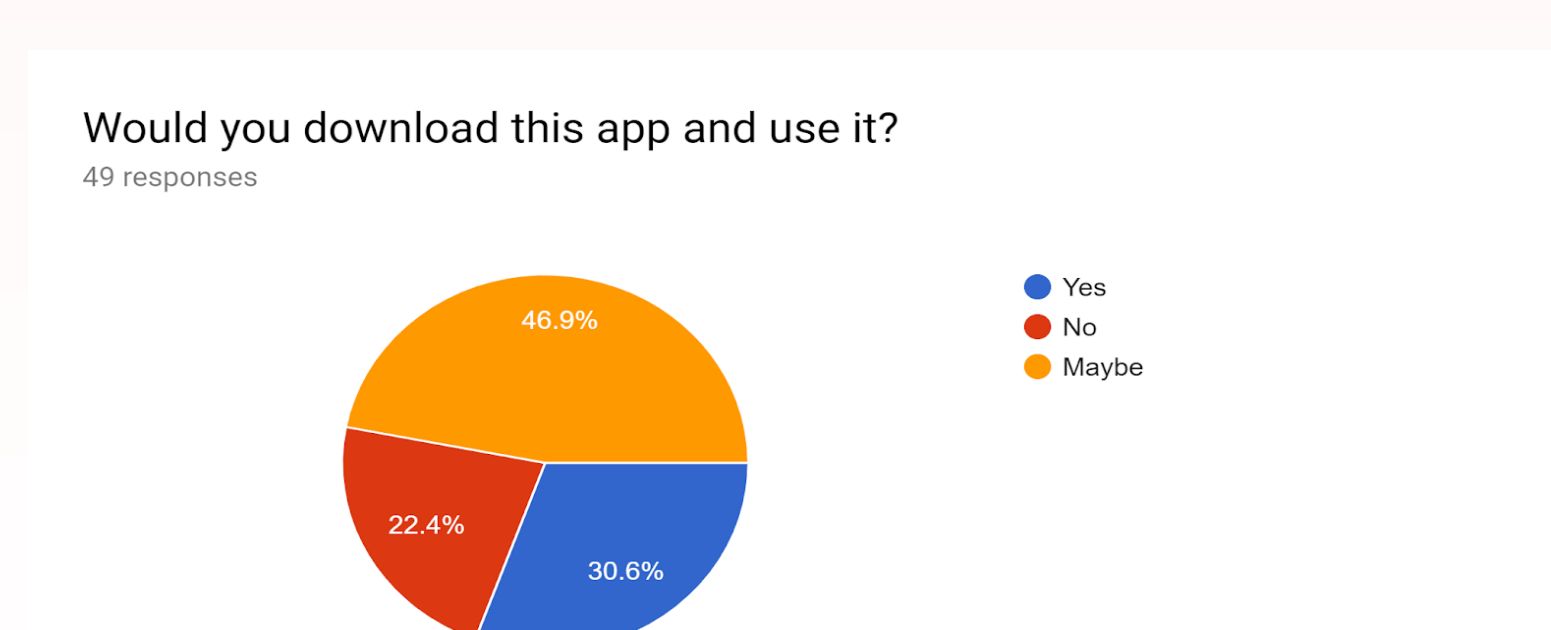
- Sometimes city trash trucks don't have dual compartments for trash and recyclables.
- Many cities don't have MRF's (Materials Recovery Facility) causing recyclables to end up in landfills or just being buried near the city.
- People usually neglect these bins and are not properly held accountable.
- The cities in the US (Such as Los Angeles) doesn't encourage it's citizens to recycle as much as they should.



## Testing Results/Stakeholder Feedback



The surveyors had responded positively to our survey. These results shows us that a fully working app may be viable in the future. This information displays the prior knowledge that many have when it comes to recycling.



## Modification/Next Steps

One of the next steps that we may attempt is to recreate the app using Nativescript replacing the Proto.io application. We wanted use this as our final prototype but we didn't have enough time and sufficient knowledge about coding to make this a reality. We've made this lay out with a new home bar on the bottom instead of having a side menu like our last app.

