Creatures

Make the change everyday.

Click Here To Play!
https://projects.invisionapp.com/prototype/ck41scza0002fj101o1t76os5/play

Context

“ Reduce community-wide greenhouse gas (GHG) emissions **25%** by 2025 and **90%** by 2050. ”

-- Ann Arbor Government

Data

- **75%** don’t really know much about trash recycle of Ann Arbor.
- **94%** will think about trash sorting before throwing trash to the bin for most of the time.

Solution

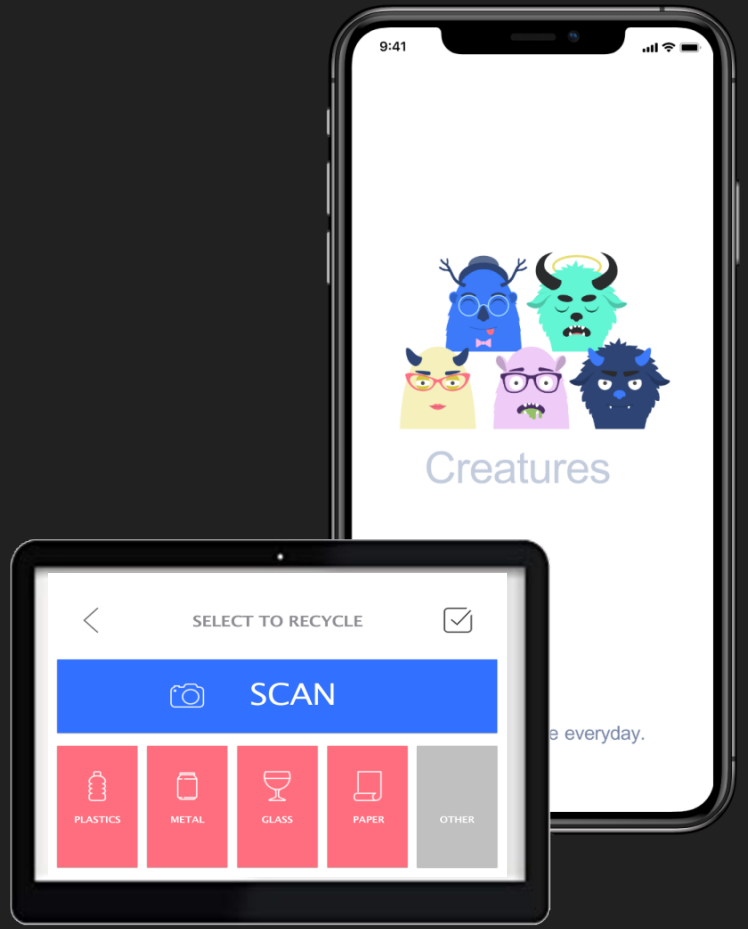
Creatures

An Eco-Friendly System: Smart Trash Bin + App

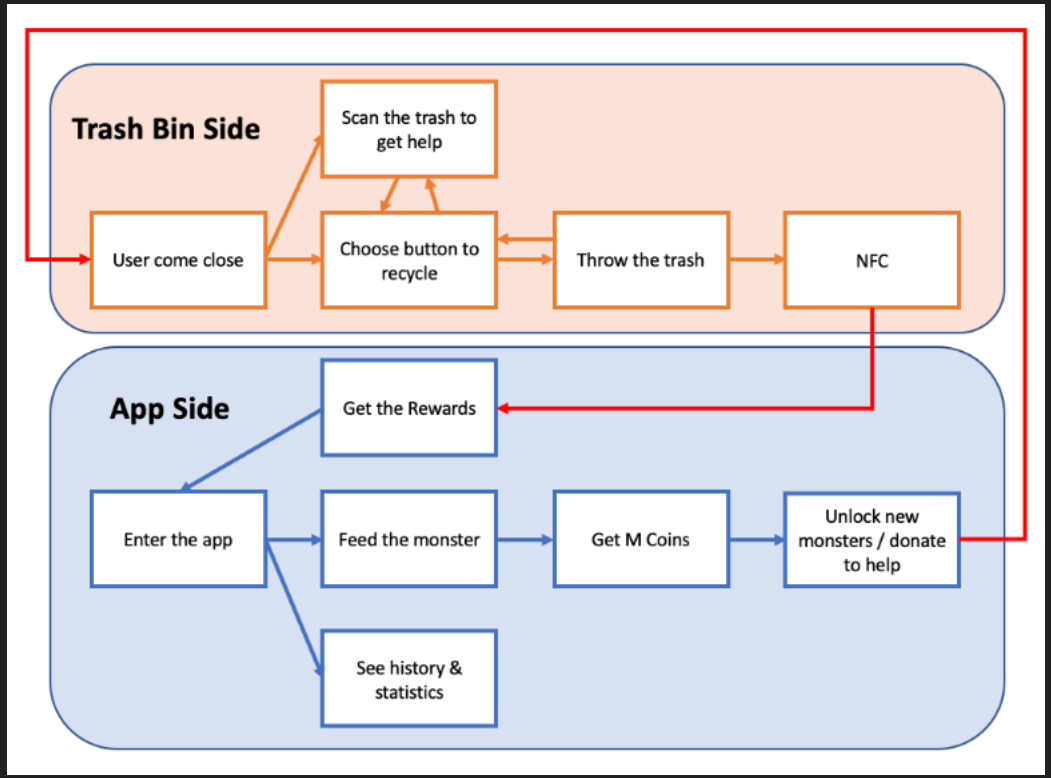
- Help people form the habit of trash recycling.
- Help recycle organizations better sort the trash.
- Help make the world better for all creatures.

Design Philosophy

- Easy to use.
- Last long.
- Help to connect.
  - People & Things.



Interaction Flow

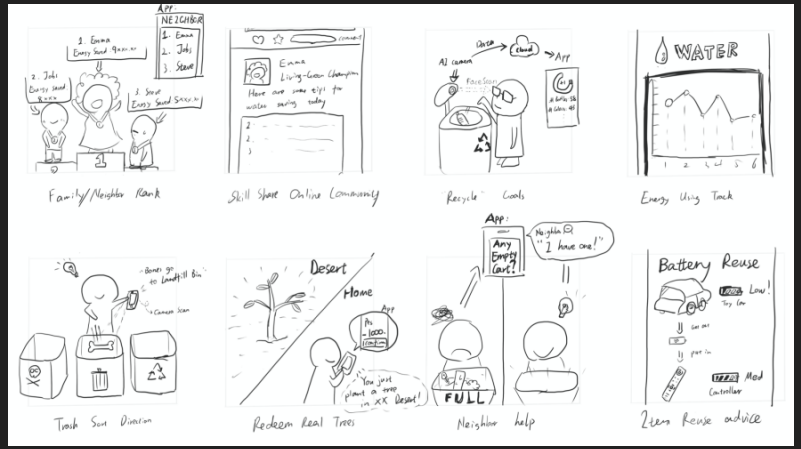


Design Process

Strength & Weakness Comparison Chat

	DTE Energy	City of Ann Arbor	Recycle Ann Arbor	MuniBilling	Go Green	RecycleNation
Things Covered	Gas, Electricity	Water, Normal Trash	Recyclable Trash	Gas, Electricity, Water, Normal Trash	Gas, Electricity, Water, Trash	Recyclable Trash
Platform	Web/Mobile	Web	Web	Desktop	Mobile	Mobile
Price	Free	Free	Free	Pay to use	Free	Free
Bill & Payment						
Account Opening	Phone Call	Phone Call	Phone Call	Web / Phone Call	Mobile	Mobile
Account Management	Web/Mobile/ Call	Web/Call	Phone Call	Web / Phone Call	Mobile	Mobile
Maintenance Report	Yes	Yes	Yes	Yes	No	No
Online Pay	Yes	Yes	No	Yes	No	No
Bill History	Yes	Yes	No	Yes	No	No
Living Green						
Tutorial Difficulty	Medium	Medium	Hard to follow	Medium	Easy	Medium
Daily Usage Monitoring	Yes	No	No	Yes	Yes	Yes
Visualization	Simple	No	No	Good	Good	No
Living Green Goals	No	No	No	No	No	No
Living Green Instructions	No	No	Yes	No	Yes	Yes
Online Community	No	No	No	No	Part Of	No

Competitive Analysis



Sketching

Design Process

Storyboarding

Pro Persona #3

Billy
Male
74 years old
Entry-level App User
Retired Resident

"Sometimes I feel I am too old to memorize things. Every time I went to the trash bin, I had no idea what to do, my mind just went blank completely." ——Billy

About Billy:
Billy is a retired resident living in Ann Arbor. His children are living in East Coast and his wife died a few years ago, so he lives alone. Billy noticed that Ann Arbor is promoting recycling trashes these years and he wants to support the local government. But because of his age, he finds it hard to memorize which trash belongs to which cart and he has difficulty reading the trash sorting signs on the trash bin.

Billy's memory started to fail about three years ago. He could sometimes forget very important things and feels difficult to learn new things.

He thinks the graphs and the texts on the trash posters/signs are too difficult for him to read and he always forget which cart to throw in the trash, even if he carries the same trash as last time "Sometimes I feel I am too old to memorize things," Billy sighs, "Every time when I went to the trash cart, I had no idea what to do, my mind just went blank completely." Billy wants some help and remainder on the trash sorting.

Frustrations:
- Memory started to fail so that he can't remember how to sort the trash very often.
- Reading the graphs and texts are too difficult for him.
- Nobody could help him when he comes to the trash bin.

Motivation:
- Want to support the local government to recycle trashes.
- Very independent, wants to solve problems by himself.

Goals:
- Need a tool/guidance to remind him which trash belongs to which cart.
- Want to be corrected when throwing a trash into a wrong cart.
- Want some throwing trash history to remind him the mistake he made for the future good.

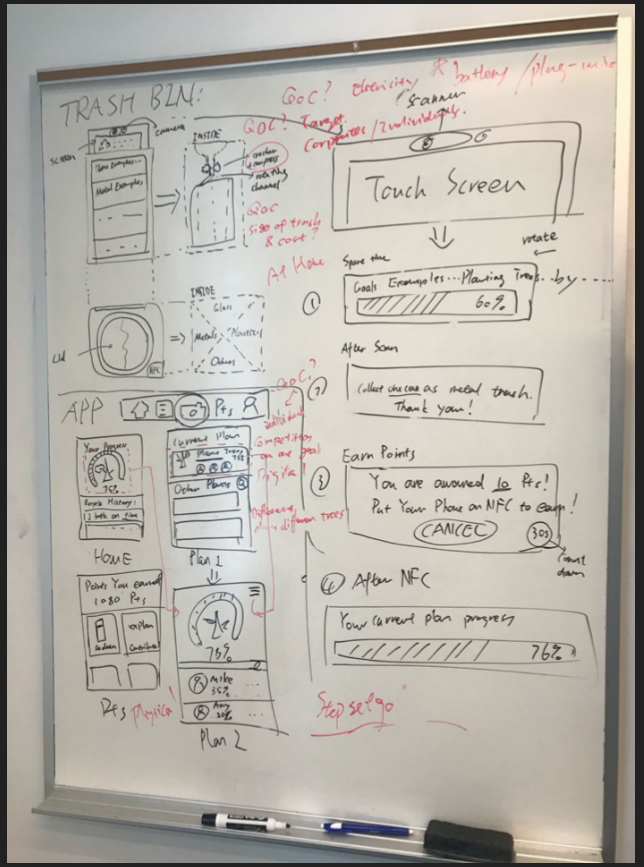
Personas

Design Process

QOC Table 1: How to identify the user in a good way?

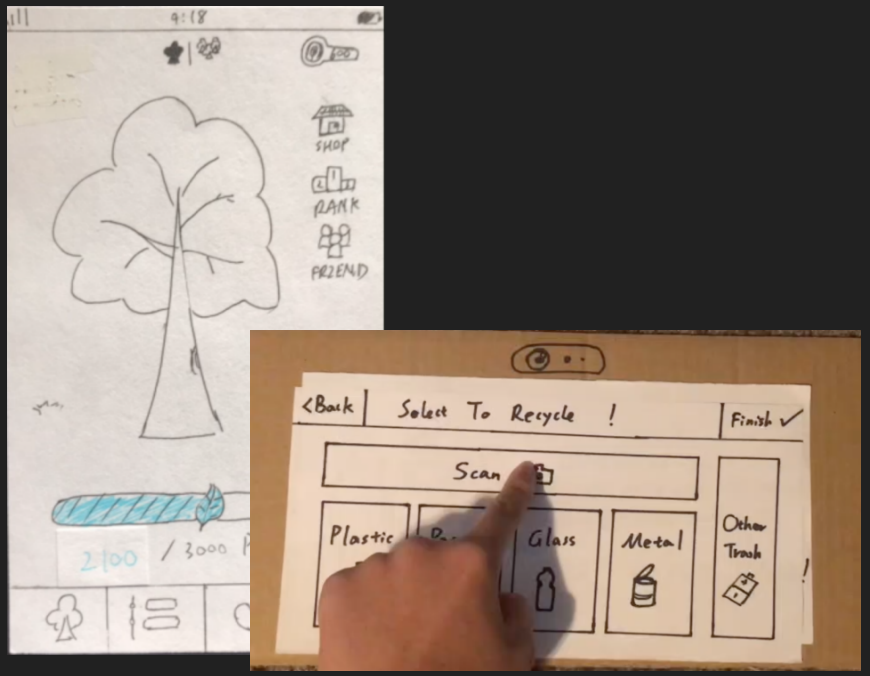
	Bluetooth	QR code	NFC
User Privacy	-1	0	1
Convenience	1	-1	0
Accuracy	-1	1	1
Cost	0	1	0
Total	-1	1	2

QOC Analysis

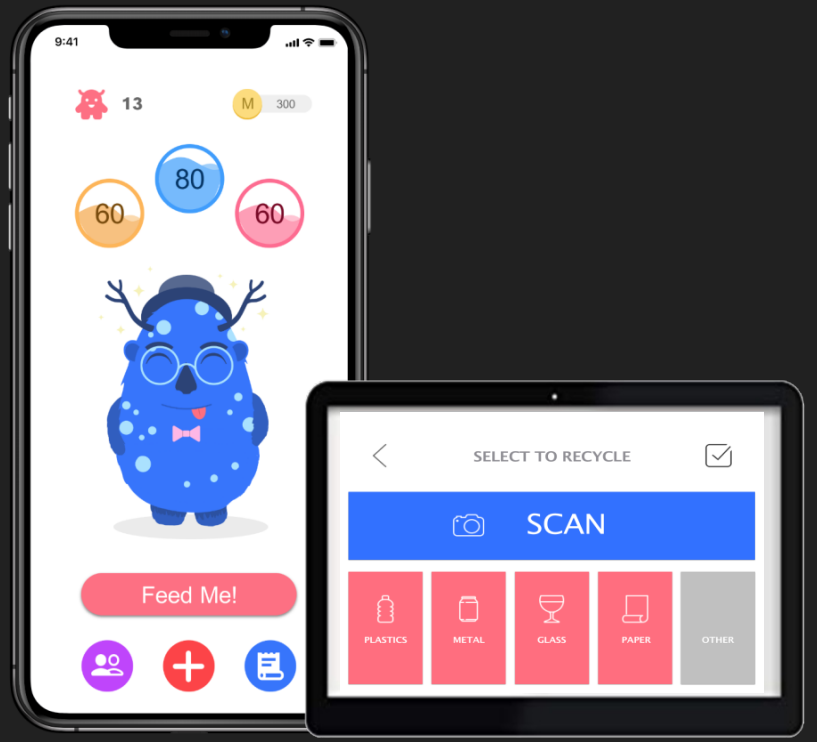


Brainstorming

Design Process



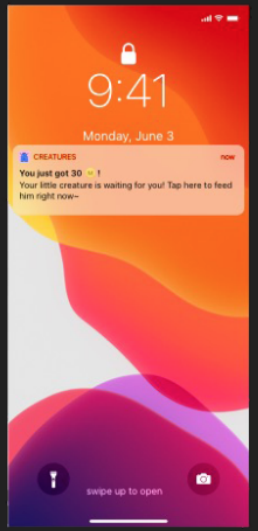
Paper Prototype



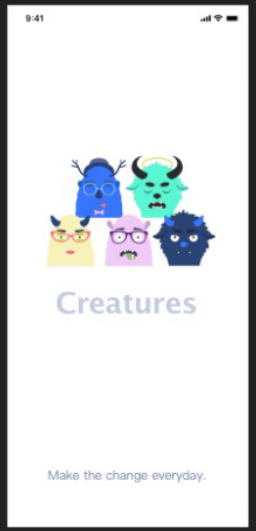
Digital Prototype

Overview

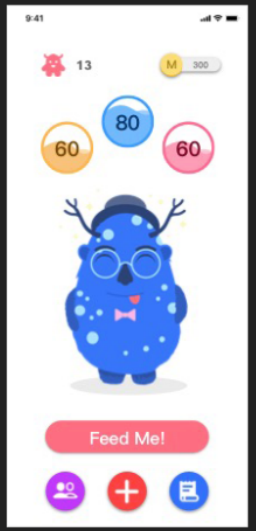
iPhone 11 Pro Max



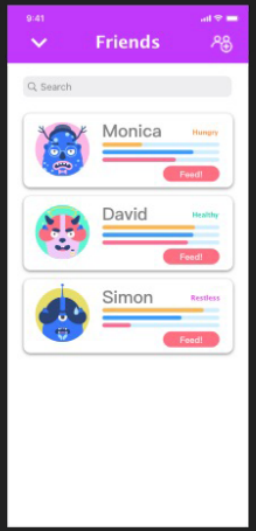
Welcome



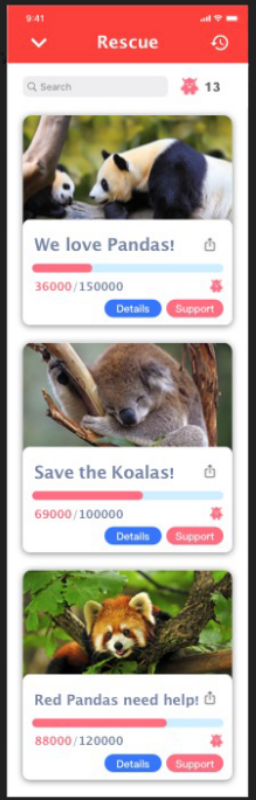
Creature



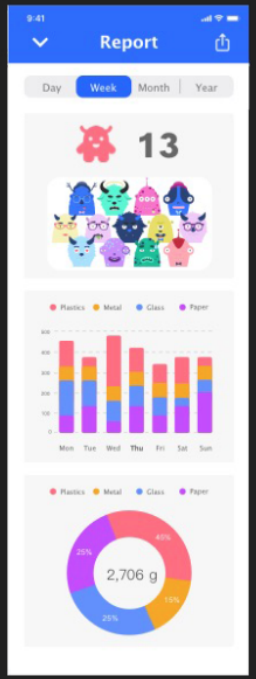
Friends

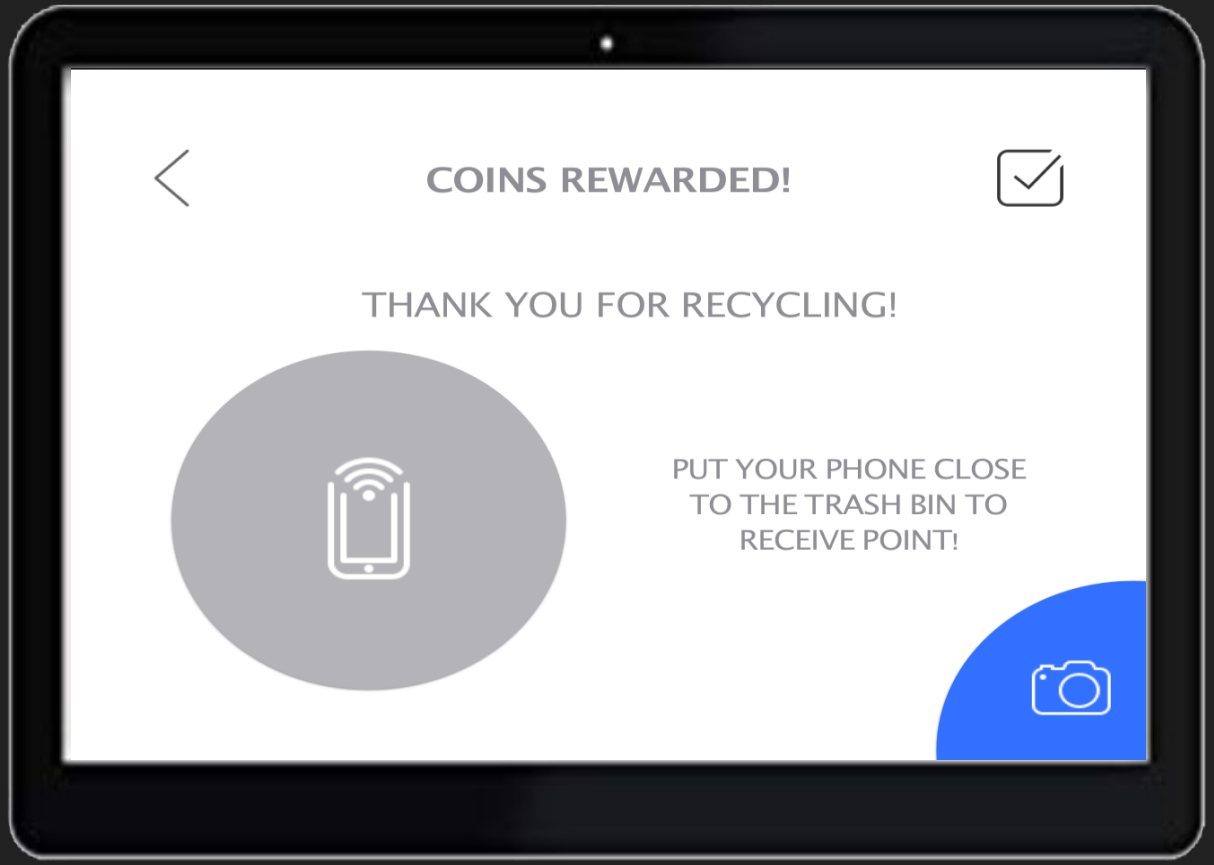


Rescue



Report

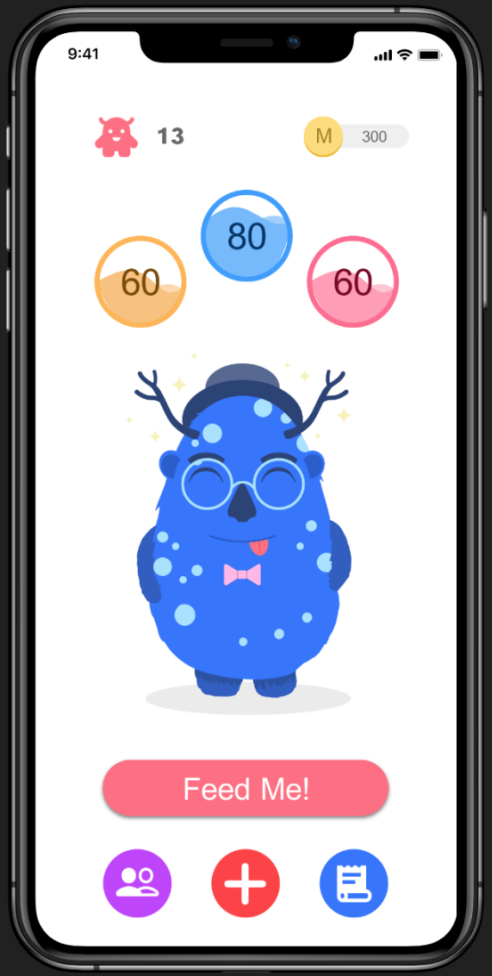



COINS REWARDED!
THANK YOU FOR RECYCLING!
PUT YOUR PHONE CLOSE TO THE TRASH BIN TO RECEIVE POINT!

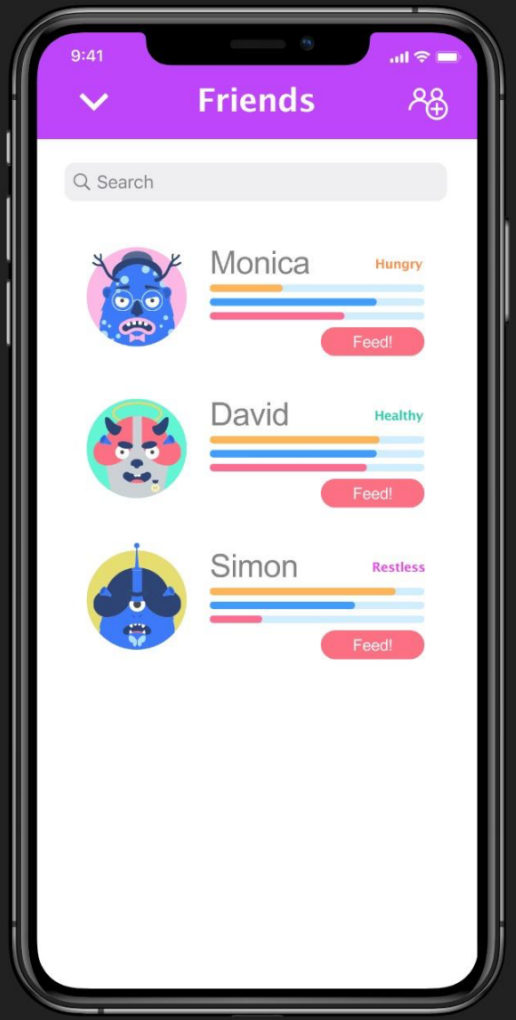
A few seconds

later...

Feed Me.



Make the change.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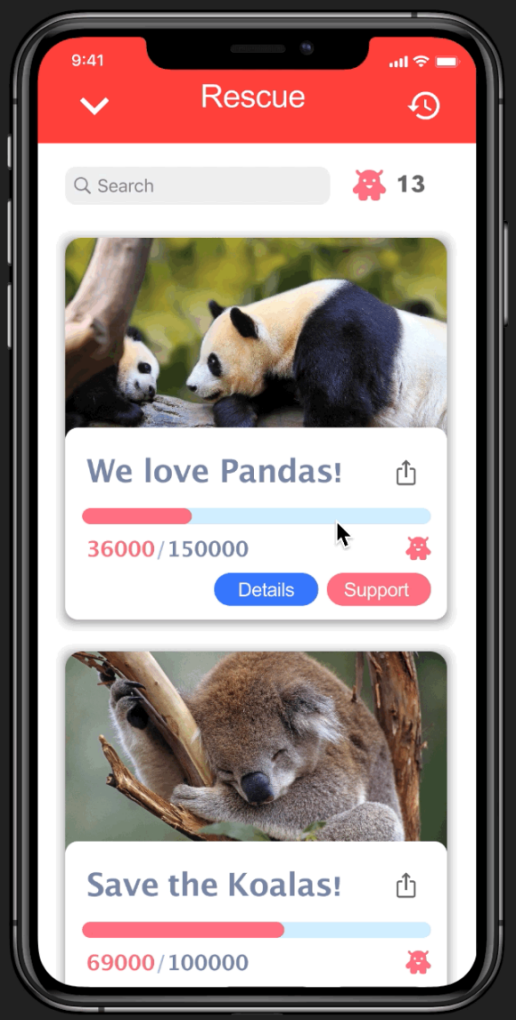
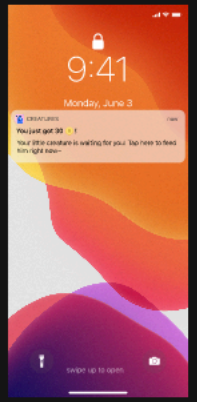
Friends
Search
Monica
Hungry
Feed!
David
Healthy
Feed!
Simon
Restless
Feed!

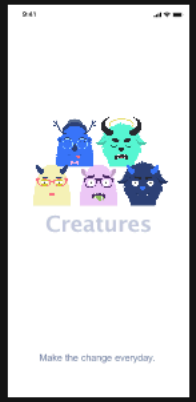

9:41
Rescue
Search
13
We love Pandas!
36000/150000
Details
Support
Save the Koalas!
69000/100000

9:41
Report
Day
Week
Month
Year
13
Plastics
Metal
Glass
Paper
500
400
300
200
100
0
Mon
Tue
Wed
Thu
Fri
Sat
Sun
Plastics
Metal
Glass
Paper

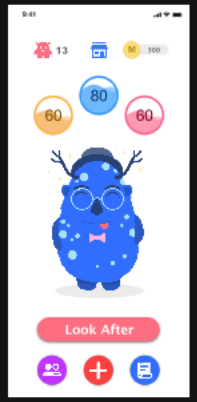
iPhone…



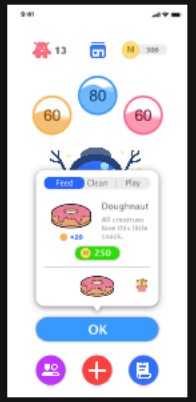
Welc…



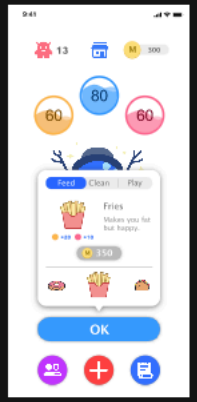
Creat…



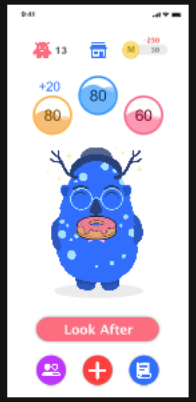
Feed



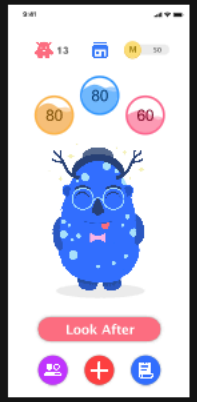
Feed 1



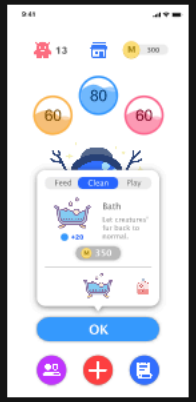
Feed 2



Feed 3



Clean



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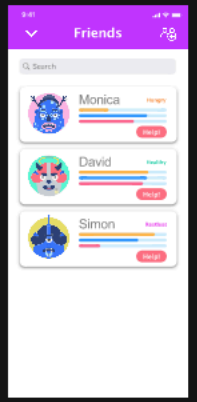
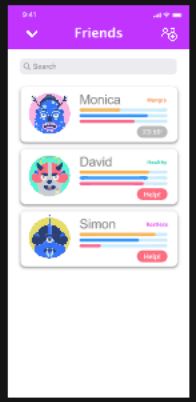
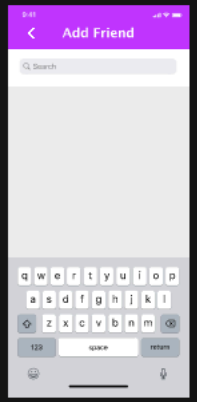


Help…



Add F…



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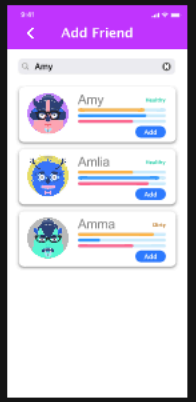

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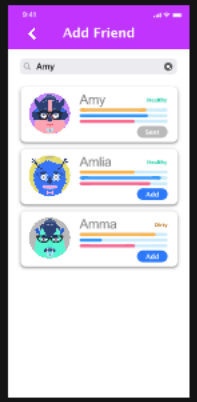

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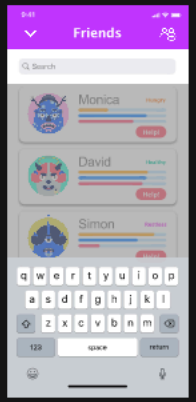

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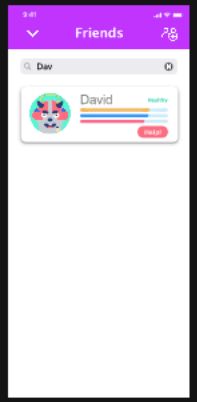
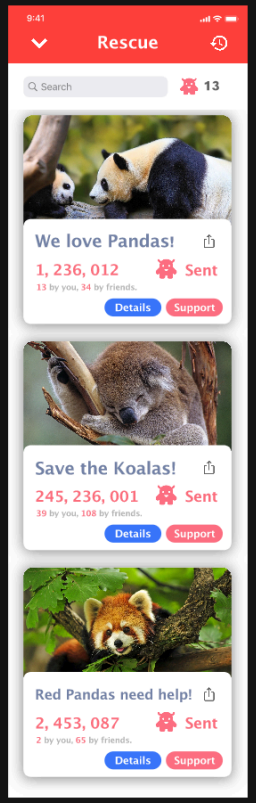
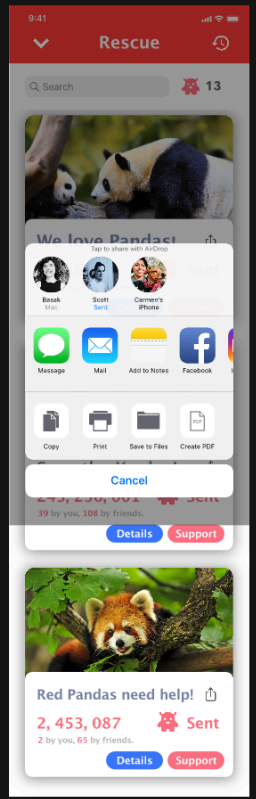


Rescue

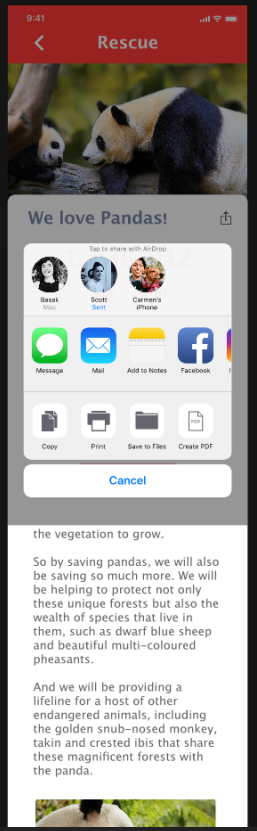


Rescue 1

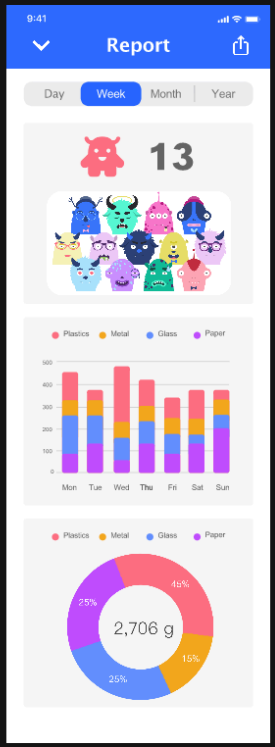
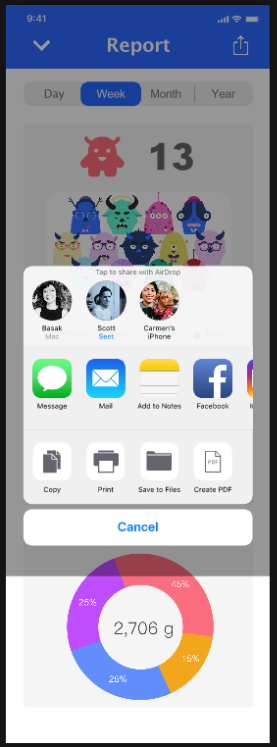
Rescue 2



Rescue 3



Report



Report 1