

Appendix A

Team Meeting Minutes

(Note: Meeting Minutes were continued on from previous meetings for Assignment 1: Project Plan)

Overview:

- 06 Meeting – Discuss requirements for Design Solution Assignment 2
- 07 Meeting – Design a solution, then Describe and Define solution
- Testing for Prototype 1.0 (In Practical)
- 08 Meeting – Evaluate feedback for Prototype 1.0 and Plan for Prototype 2.0
- Testing for Prototype 2.0 (In Practical)
- 09 Meeting – Evaluate feedback for Prototype 2.0 and Plan for Prototype 3.0
- Testing for Prototype 3.0 – testing completed by individuals as able
- 10 Meeting – Evaluate feedback for Prototype 3.0 and Plan for Final Prototype
- Completed Changes for Final Prototype

Team Meeting 06

Team name: Design Thinkers

Date of Meeting: 02/09/2021

Start Time: 5:00pm

End Time: 6:00pm

Members present:

- Dannielle Jones
- Braydan Newman
- Adam Albert
- Jake Edmunds
- Samuel Barrett

Meeting Chairperson: Dannielle Jones

Minutes taken by: Dannielle Jones

Summary of Meeting:

Finalising assignment 1 and discussing requirements, progress tracking and general structure for meetings for assignment 2.

Prior to meeting:

Team collaborated on project plan draft on word document in OneDrive. As each team member was aware of their assigned role they completed as much as was practical in their section without needing to combine PDF documents.

Agenda

Item 1 – Writing the project plan.

Organiser (Dannielle) for the written plan assessed the current output from all team members and addressed gaps that required attention. Team members then collaborated to fill in the gaps for the written content.

Item 2 – Review Process.

Team members were then tasked to read through the completed written components to look for:

- Spelling and grammatical errors
- Odd or incorrect sentence structure
- Tense confusion
- Alternating between first, second and third person

Then make changes accordingly in order to achieve as coherent and cohesive document as possible.

Item 3 – Sort and Combine

Created sorting and organisation plan. Organiser discussed which pages needed to go where in the document by using a simple 01_ numbering system in the document filename and place these files into a single location (not changing the original documents). Once the order is created the chairperson will use a PDF combine program to join all documents together. Alterations were made as required and the final output is reviewed in-full ready for submission.

Deadline for missing components to be added and secondary/interview sections to be fleshed out: Saturday @ 12pm

Deadline for review and changes to be made and final submission to be combined together: Saturday @ 5pm

Item 5 – Discuss Assignment 2.

Discussed the requirements of assignment 2 and its connection to assignment 1. Looked at assignment description and rubric. Discussed the new team management plan and overall progress tracking in the OneNote notebook.

Next Meeting

Next meeting will address the following on our progress plan:

- Design solution

The new chairperson will be Samuel Barrett.

Action items: (who is doing what before next meeting?)

Actions for Team members:

| Job to do | Who will do this work? | By When? |
|---|-------------------------------|--------------|
| Go to the 07_ meeting folder and open the six thinking hats powerpoint. Using a text box add one thing to each hat. | All team members individually | Next meeting |

Next Meeting Date: 08/09/2021, Wednesday

Next Meeting Time: 2:30pm

I acknowledge and have read the team meeting minutes; I understand and will prepare for the activities required prior to next team meeting as outlined in this document:

Name and Date

Dannielle Jones – 02/09/2021

Ideation Methods

Six Thinking Hats

Reference:

<http://www.debonothinkingsystems.com/tools/6hats.htm>



Blue Hat Thinking- Process

- Thinking about thinking
- What thinking is needed?
- Organizing the thinking
- Planning for action



White Hat Thinking- Facts

- Information and data
- Neutral and objective
- What do I know?
- What do I need to find out?
- How will I get the information I need?



Green Hat Thinking - Creativity

- Ideas, alternative, possibilities
- Provocation - "PO"
- Solutions to black hat problems



Yellow Hat Thinking- Benefits

- Positives, plus points
- Logical reasons are given.
- Why an idea is useful



Black Hat Thinking - Cautions

- Difficulties, weaknesses, dangers
- Logical reasons are given.
- Spotting the risks



Red Hat Thinking - Feelings

- Intuition, hunches, gut instinct
- My feelings right now.
- Feelings can change.
- No reasons are given.

| | | | | | | |
|---|---|---|---|---|--|--|
| <p>Adam A roadmap or something that will convey the idea beyond the prototype</p> | <p>Dannielle Pen and paper, stickys, online applications for building prototypes.</p> | <p>Jake 3D printer, light metal and timber fabrication.</p> |  Process | <p>Adam A more sustainable thinking that will impact decisions made</p> | <p>Braydan</p> | <p>Dannielle The importance of the government acknowledgement.</p> |
| <p>Samuel From our interviews we can gather that people want to do something about it</p> <p>Consider the level or intensity of the information that we acquire.</p> | <p>Braydan</p> | <p>Dannielle There are many different types of green energy. Test on potential users.</p> |  Facts | <p>Samuel Solution not going to become obsolete and add to the waste pile (recycle)</p> | <p>Jake Low-maintenance solution (set and forget) to fit a busy life.</p> | <p>Adam If our solution will have Impact and if it will be something that could be something that will have continued to use</p> |
| <p>Jake Informing about government incentives. How to make this less about finance?</p> <p>What areas of the household have the potential to generate green energy.</p> | <p>Adam Is there a way to gamify or make sustainable solutions and information regarding it more enjoyable</p> <p>Dannielle Drainpipes use gravity to deliver waste water, hydropower runs on gravity water in motor.</p> | <p>Braydan</p> <p>Samuel Categorised points system relating to Adam's idea</p> |  Creativity | <p>Braydan</p> <p>Dannielle Pool filters that use gravity, hydropower systems.</p> | <p>Jake Unsure of the quality of our final prototype (I.e does it match what we envisioned)</p> <p>Adam Stress for the iterative development timeline.</p> | <p>Samuel Losing control of power – control of their own power sources and efforts</p> |

Team Meeting 07

Name of Team: Design Thinkers

Date of Meeting: 11/09/21

Start Time: 6:00pm

End Time: 8:30pm

Members present:

- Dannielle Jones
- Adam Albert
- Jake Edmunds
- Samuel Barrett

Members absent:

- Braydan Newman

Meeting Chairperson: Samuel Barrett

Minutes taken by: Samuel Barrett

Summary of Meeting:

This meeting was focused on the Phase 1 of the sprint model, the ‘Understand and Define’ stage. We chose to follow the ‘How might we’ method, with a Google Drive Jam Board brainswarming, six thinking hats and Affinity map technique for targeting and defining our ideas into a prototype. This was followed by the ‘Crazy8’ method over 8minutes for sketching our own versions of the prototype anonymously, then these were discussed.

Actions for Team members:

| Actions to do | Who will do this work? | By When? |
|---------------------|------------------------|----------|
| Prototype section 1 | Adam | Weds |
| Prototype section 2 | Sam | Weds |
| Prototype section 3 | Jake | Weds |
| Prototype section 4 | Danielle | Weds |
| Prototype section 5 | Brayden | Weds |

Prior to the meeting:

Pre-reading was uploaded to our group Discord channel for all of us to read in preparation. Information on the ‘How might we’ style of organising the phase 1 of the Design sprints was provided(1). An article on ‘Affinity mapping’(2) was also posted to inspire our group Jam board further.

References:

- 1) <https://designsprintkit.withgoogle.com/methodology/phase1-understand/hmw-sharing-and-affinity-mapping>
- 2) <https://designsprintkit.withgoogle.com/methodology/phase2-define/assumptions-mapping>

Agenda:

'How might we', 'Affinity mapping', 'Crazy8 - Sketching'

- We started with the 6 thinking hats technique to further refine and focus our project plan idea's needs and use cases. This was discussed as a group.
- We then placed our ideas on a Jam board using Brainswarming based on the goal question of: 'How might we better inform the user of sustainable energy opportunities that they could be taking advantage of'. This was done in silence.
- We then discussed these sticky note answers together and this enabled us to pick up on themes and drop aspects that were not relevant. As a result, we narrowed down an idea for a prototype that we were all starting to agree on as a team. This included deciding to go for an app instead of another type of technology.
- After this we commenced the 40 second per drawing 'Crazy-8 sketching' method anonymously (which we ran twice on the same sketch board as it was difficult to sketch on a computer) and then discussed these sketches before we were made aware of who's sketch's they were to eliminate any subconscious bias.
- We took all the ideas from the sketches and then defined and described our project with a layout of the different sections. This final stage enabled us to set the tasks for next week's prototype building and testing and plan for the next meeting.

Next Meeting Date: 15/09/21

Next Meeting Time: 1800 (subject to group change)

Meeting chairperson sign to approve of this meeting minute:

Name: Samuel Barrett
Date: 11/09/21

Signature: SB

Dannielle Jones – 14/09/2021

Meeting Overview

“How might we better inform the user of sustainable energy opportunities that they could be taking advantage of?”

Design solution: use and answer "How Might We" question; methods:

- ◊ Item 1. Six Thinking Hats – select a hat, members moves to different hat through meeting
- ◊ Item 2. Brainswarming – Goal/Objective at top, resources at bottom, make connections
- ◊ Item 3. Crazy Eights: divide paper into 8, 40 seconds per sketch; run at least 2 times
Anonymously sketch your best idea from crazy eights, present all sketches to group and discuss
At the end reveal whose sketch and what might have been missed
- ◊ Item 4. Evaluate ideas and Select project idea, then describe the project idea

Six Thinking Hats

From powerpoint/pdf

Designs of potential devices

Environmental impact studies showing comparisons of impacts

chart of power savings

List of technologies they could take advantage of

small video clips that highlight new technology for energy saving, monitoring, green energy generating, appliances

share ideas area for new upcoming ideas

links to find out further information but easy to read and understand information on ours

random suggestion for a new device or change to make

questions that find out what kind of household they are in to give better suggestions of advantages

not monitoring current energy but focus on how they can change using devices, new technology or informing what is on the market in a fun new way. Ranging from small tips to big items

sticky notes over top of each step to hide the next step (like with Adam's alarm clock)

points system for households

community boards
crypto currency
points

Household - individual members with a token for access

Kids restricted access

a section to talk about ideas or events in the community

active or future government incentives and the "GENERAL" information with access to get more

Interactive mini-games on various solutions

Information on systems that are in place around their area

cardboard or craft options

html prototype on a computer

Kids likes show on household account

Branswarming

"How might we better inform the user of sustainable energy opportunities that they could be taking advantage of?"

Paper and Pen 3D Printer builder

App prototype

Crazy Eights

Crazy Eights: divide paper into 8, 40 seconds per sketch; run at least 2 times

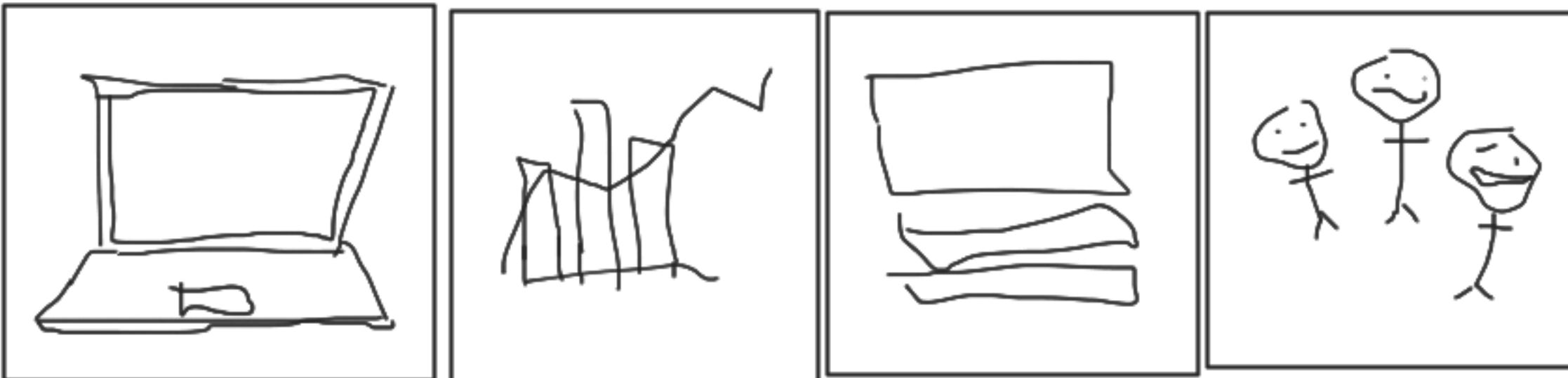
Anonymously sketch your best idea from crazy eights, present all sketches to group and discuss

At the end reveal whose sketch and what might have been missed

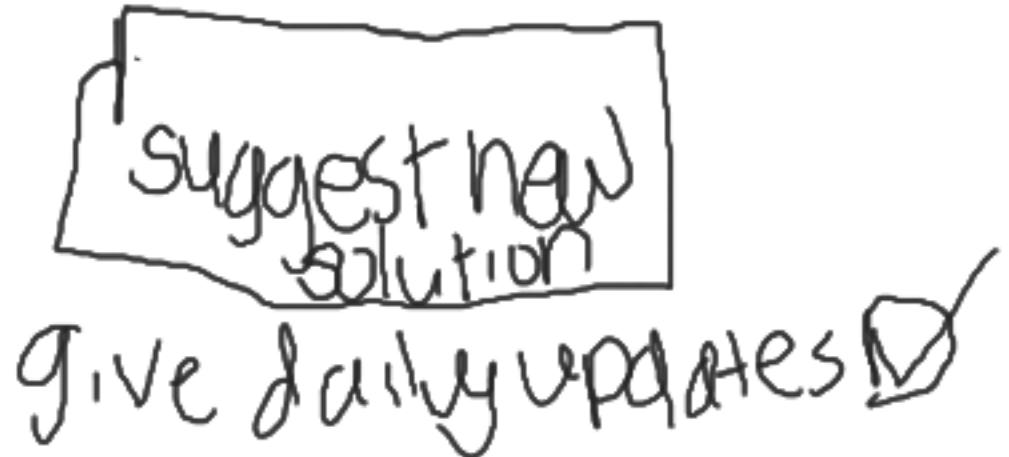
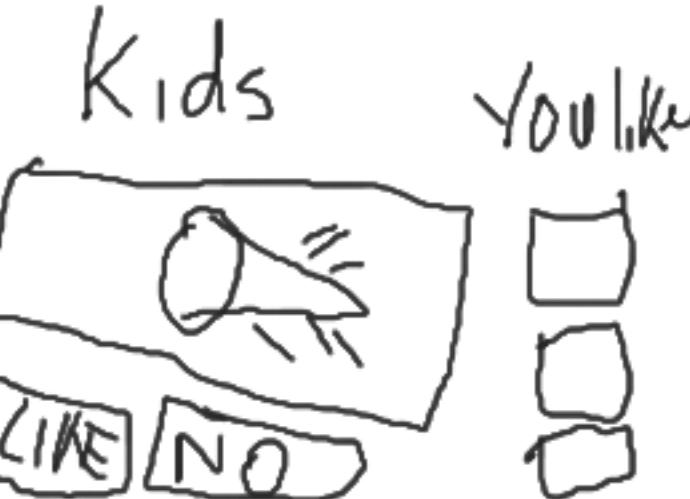
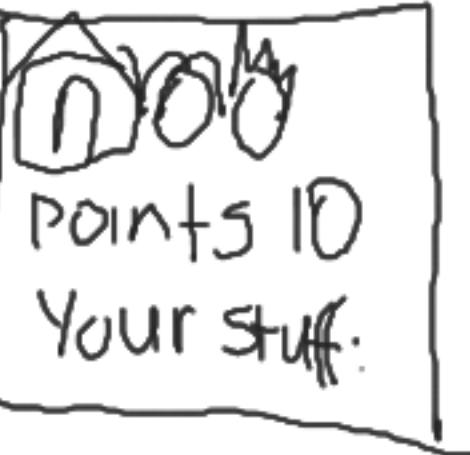
See slides that follow

Sam

Graphs - visual representation
Computer and app interchangeable
Multiple people, interaction when testing



Explore

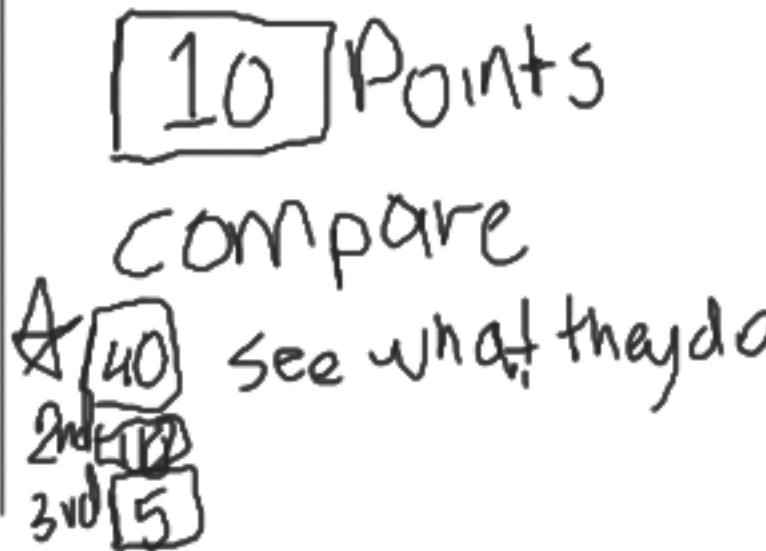


More details



Device name

where + 0
Buy
Ratings



Showing products

Members of the household with avatars and their points

Kids like/dislike and goes to sidebar tally of likes

Daily mission that could get more points

Automated app suggestion based on profile

A more detailed page about the device and where you can buy them

A leaderboard/ladder with comparison to other households

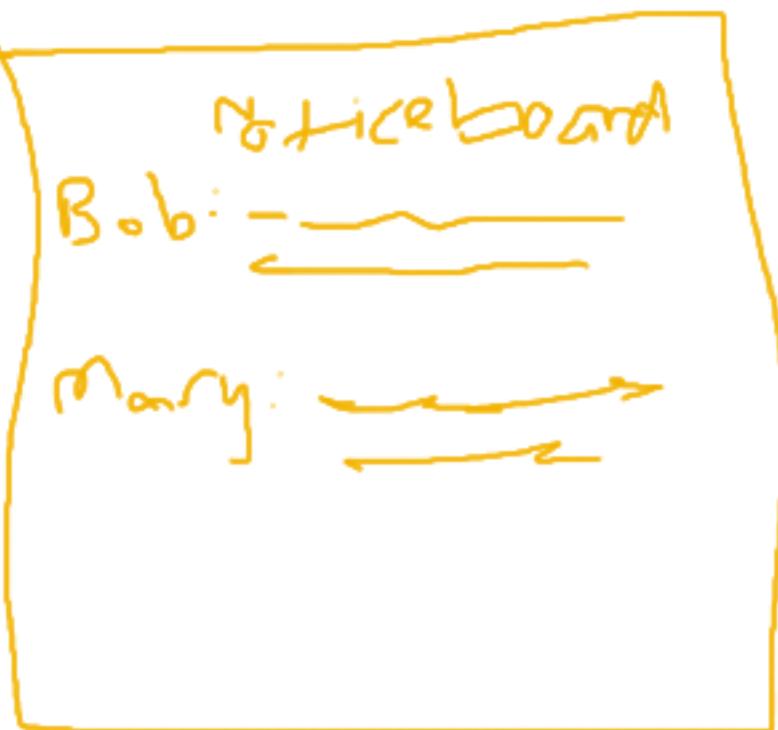
A limit on the amount kids like or what stays on their list (timeframe)

Danielle

Welcome



Usage



A welcome message at the beginning
Profiles in the household and able to login
screen to the user
Usage - using their existing electricity bill
Noticeboard - general chitchat and sharing
ideas

Jake



Gets a notification
Recognising what to turn off and talk to the family
about it and continue the cycle

Adam

A
First prototype - first test user sign up then explore or opposite???

1. Welcome screen

Household user input screen - pool, house type, how many people (generic)

S
J
2. User selection from household

D
3. Adding in current electricity bill information, what other household appliances (specifics)

B
4. Tutorial explanation on points, comparison

B
5. Explore area - videos and devices
---- more details: where to buy, ratings

Second Prototype

Notification board/Forum area - chating

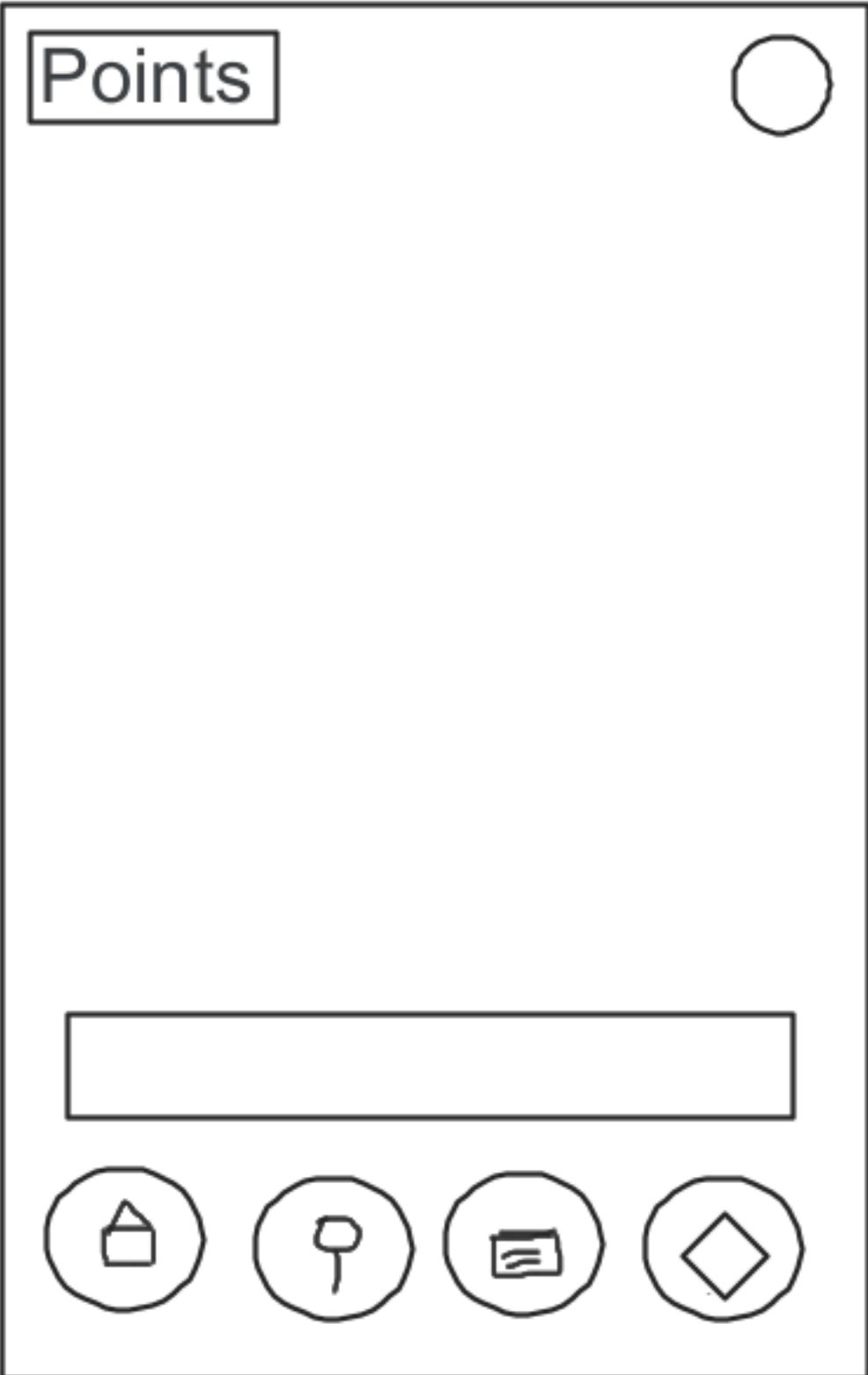
Notifications? What are we notifying about? (Top button design)

Comparison - leaderboard

My history - my profile - my household

Random/new device suggestion

Overall graph/projections



Later considerations

Particular Kids:

Kids user - restricted to likes and list of favourites

Crypto currency

Select and Describe Solution

Prototype Testing Script

Welcome

Hello, thank you for volunteering to test our prototype. We would just like to point out that we are looking for your open and honest feedback, any comments you have are valuable to our development and we do not expect you to know everything about how to do something so please do not feel silly if you do not know what to do at any point.

We would like to record this session for review later, do we have your permission to record this testing session?

Context Questions

So that we understand a little bit more about you, do you often use phone applications in your daily life? As this application is focused around energy sustainability and green energy, are you invested in anything involving energy conservation or green energy?

Introduce the prototype

Before we begin, are you willing to participate in our prototype testing?

Please know that our prototype is not complete and at this stage we are not focused on aesthetics, but we are concerned with interaction, flow and layout. This is a paper prototype, but we ask that you simulate the actions you would make on the screen as if it was on a real mobile device.

As you are completing tasks, we encourage you to talk out loud and explain what you are doing and why you are doing it.

Tasks to do:

1. Login using an existing account / Login with a new account
2. (When completing household details) Go back and change the number people in your house
3. Update your household to living in an apartment (Existing account)
4. You have implemented a home energy monitor in your home, add the points to your account
5. How many points do you have now?
6. Can you view what systems are not implemented on your plan yet
7. Can you remove a system from your household plan?
8. Go find information on sustainable city living
9. Find where to find information on where to buy
10. Compare your household with another
11. Are you doing better than other households?
12. Are you doing better than the average household on your power bill for the last quarter?

13. Add your recent power bill
14. Look for new posts on the forum

Debrief

What did you think of the sign-up process?

Was the navigation straight-forward?

What aspects would you change?

How comfortable do you feel answering the questions about your household?

How did you find the experience in finding a sustainable energy solution?

Team Meeting 08

Team name: Design Thinkers

Date of Meeting: 15/09/2021

Start Time: 4:30pm End Time: 6:30pm

Members present:

- Adam Albert
- Braydan Newman
- Dannielle Jones
- Jake Edmunds
- Samuel Barrett

Meeting Chairperson: Adam Albert

Minutes taken by: Adam Albert

Summary of Meeting:

Prior to meeting:

The prototype was tested by a user and the group captured feedback as well as a voice recording of the user to evaluate in this meeting.

Refer to appendix A

Agenda

In this meeting the group discussed our testing with a user and evaluated their feedback towards our prototype as well as tested ourselves to make up five people in total. This feedback was then brain swarmed and compared to look for patterns and similarities.

Once the patterns had become clear the group proposed improvements to the prototype and talked about how they could be implemented as well as what the next step in testing was then concluded the meeting

Next Meeting

Next meeting will address the feedback of 5 people for prototype version 2.

The new chairperson will be Jake Edmunds.

Action items: (who is doing what before next meeting?)

Actions for Team members:

| Job to do | Who will do this work? | By When? |
|---|--|--------------------|
| 1. Improve tutorial cohesion, household improvements, section | 1. Dannielle 2. Adam 3. Jake 4. Braydon 5. Sam | Sunday 19/09/21 |
| 2. Sign in sign up, cohesion of flow | | |

- | | | |
|---|--|--|
| <p>3. Household creation</p> <p>4. Forum section and discover improvements</p> <p>5. Comparison and Results</p> | | |
|---|--|--|

Next Meeting Date: 22/09/2021, Wednesday

Next Meeting Time: 4:30pm

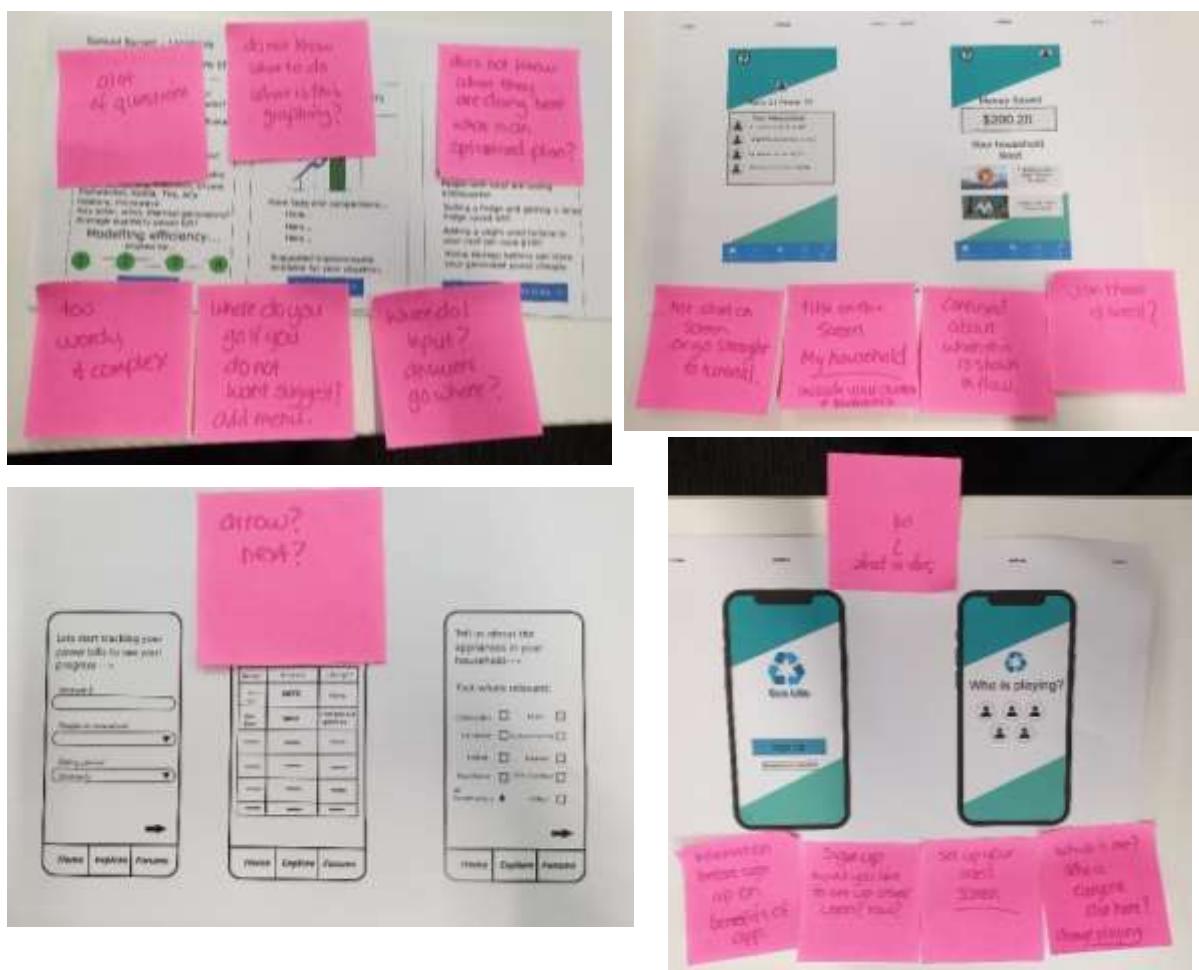
I acknowledge and have read the team meeting minutes; I understand and will prepare for the activities required prior to next team meeting as outlined in this document:

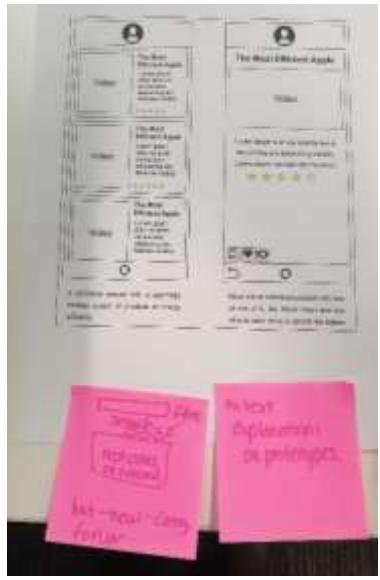
Name and Date

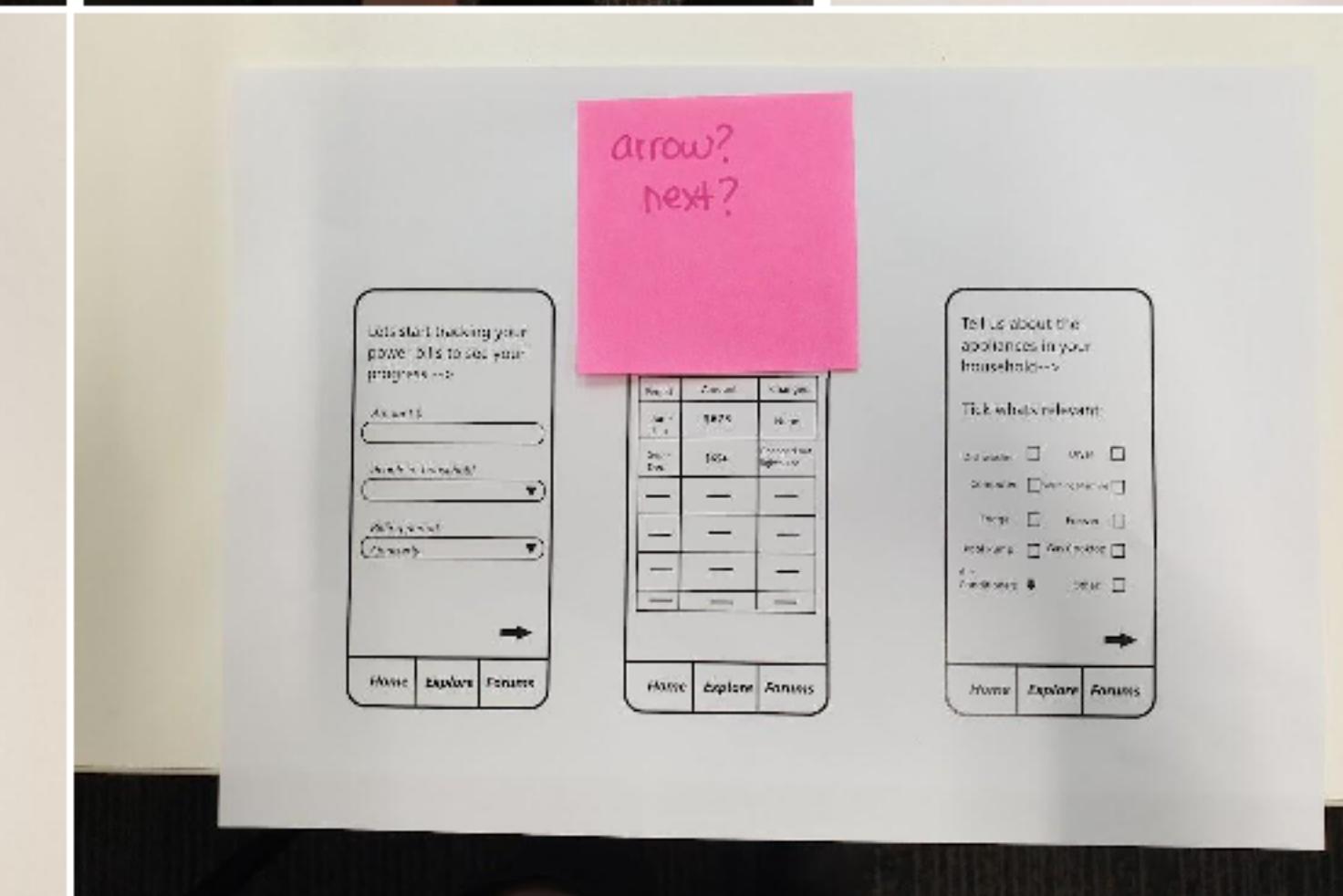
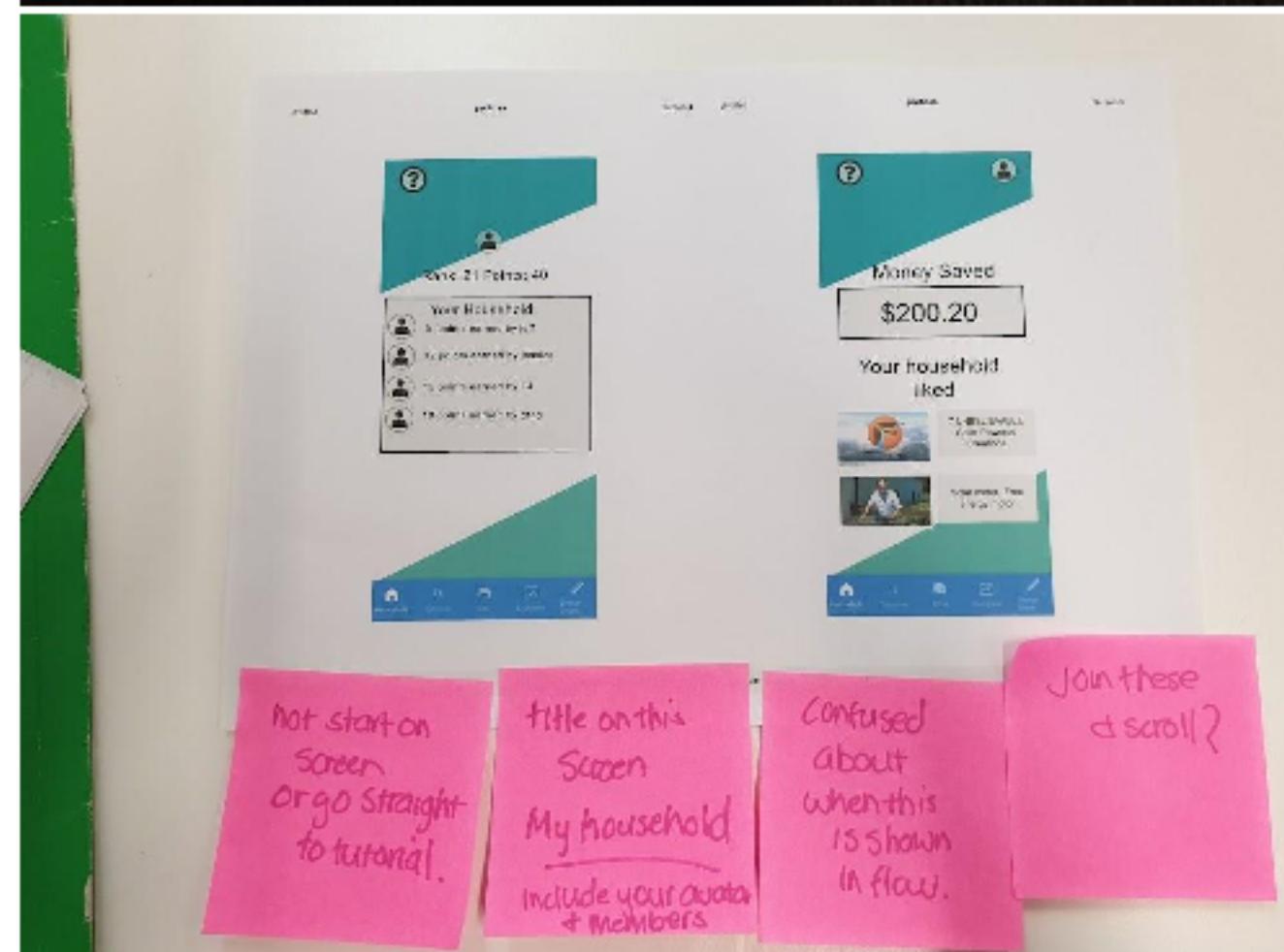
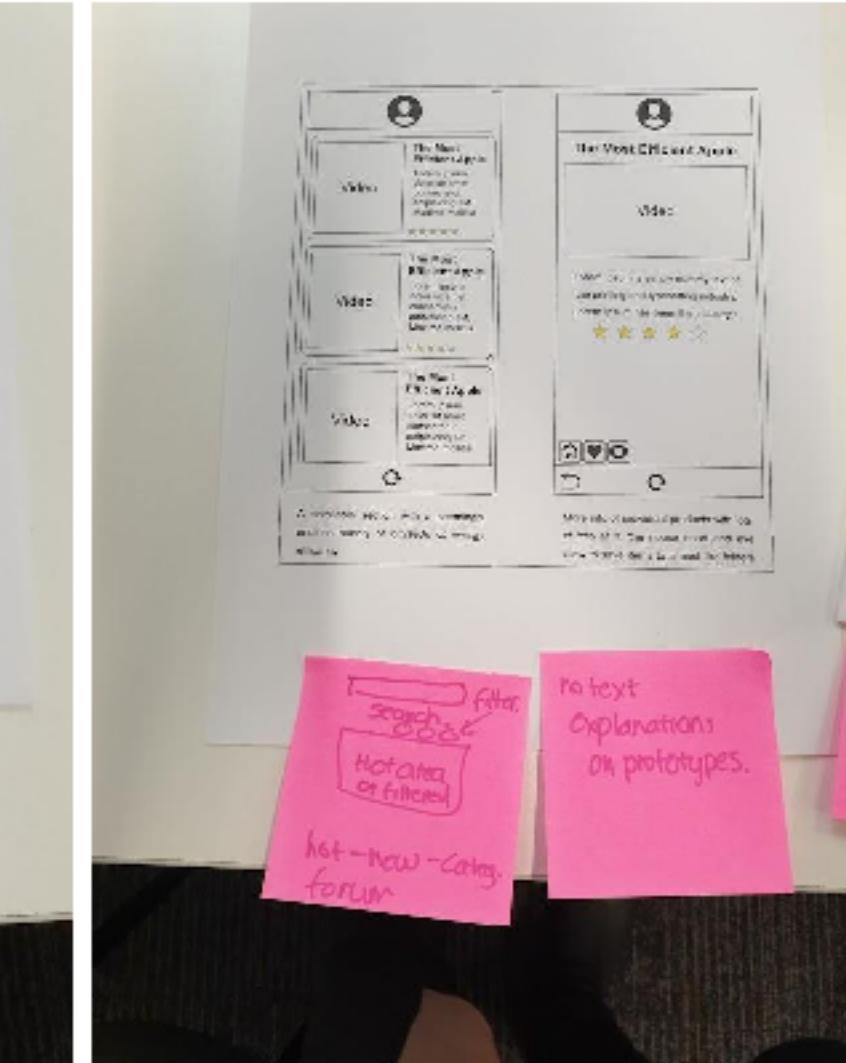
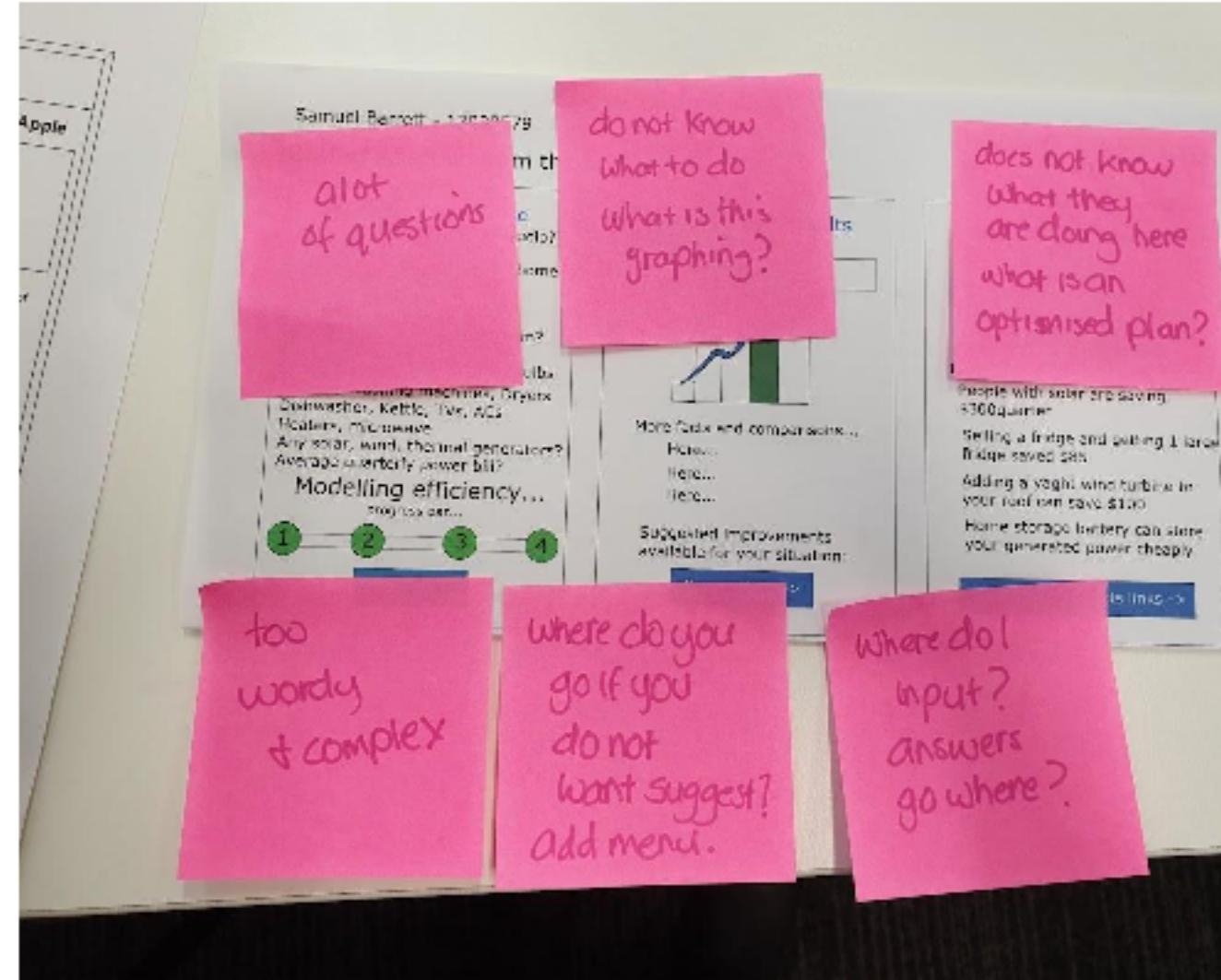
Adam Albert– 18/08/2021

Dannielle Jones – 02/10/2021

Appendix A







Tutorial before signup??

Sticky notes for each interview tester
Group together similar

Prototype 1 - Feedback and Evaluation

Key > Tester: Grace from Practical Yellow

Positives

discover tab was a good layout

understood where to sign up

jakes, first and last layout

jakes middle layout consistency and simplification, in profile instead of setup of electricity bill?

a lot of places to wordy and confusing

no set up pages or initial account adding

Changes

useless pages could be combined

simplify questions!!

Reduce questions

what am i playing

what page is she on for the household tab

where do i put the input?

what does optimised plan do what is it?

information before signup

navigation menu cohesion

condense information

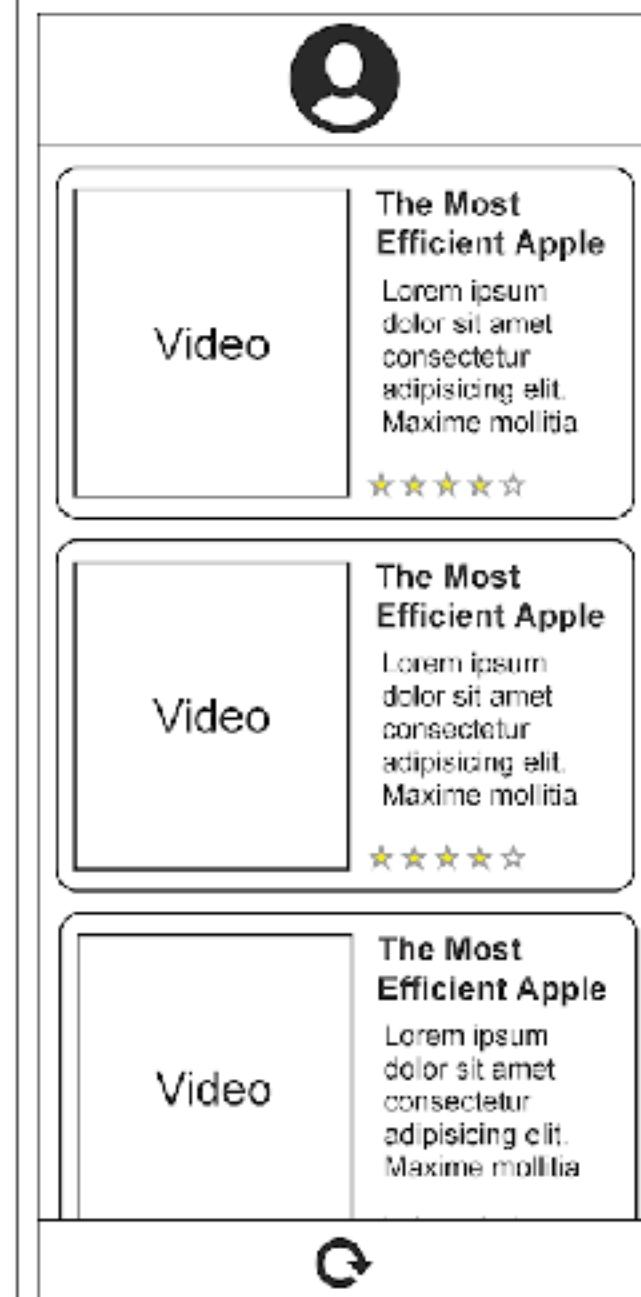
text beneath videos?

Questions

video size?

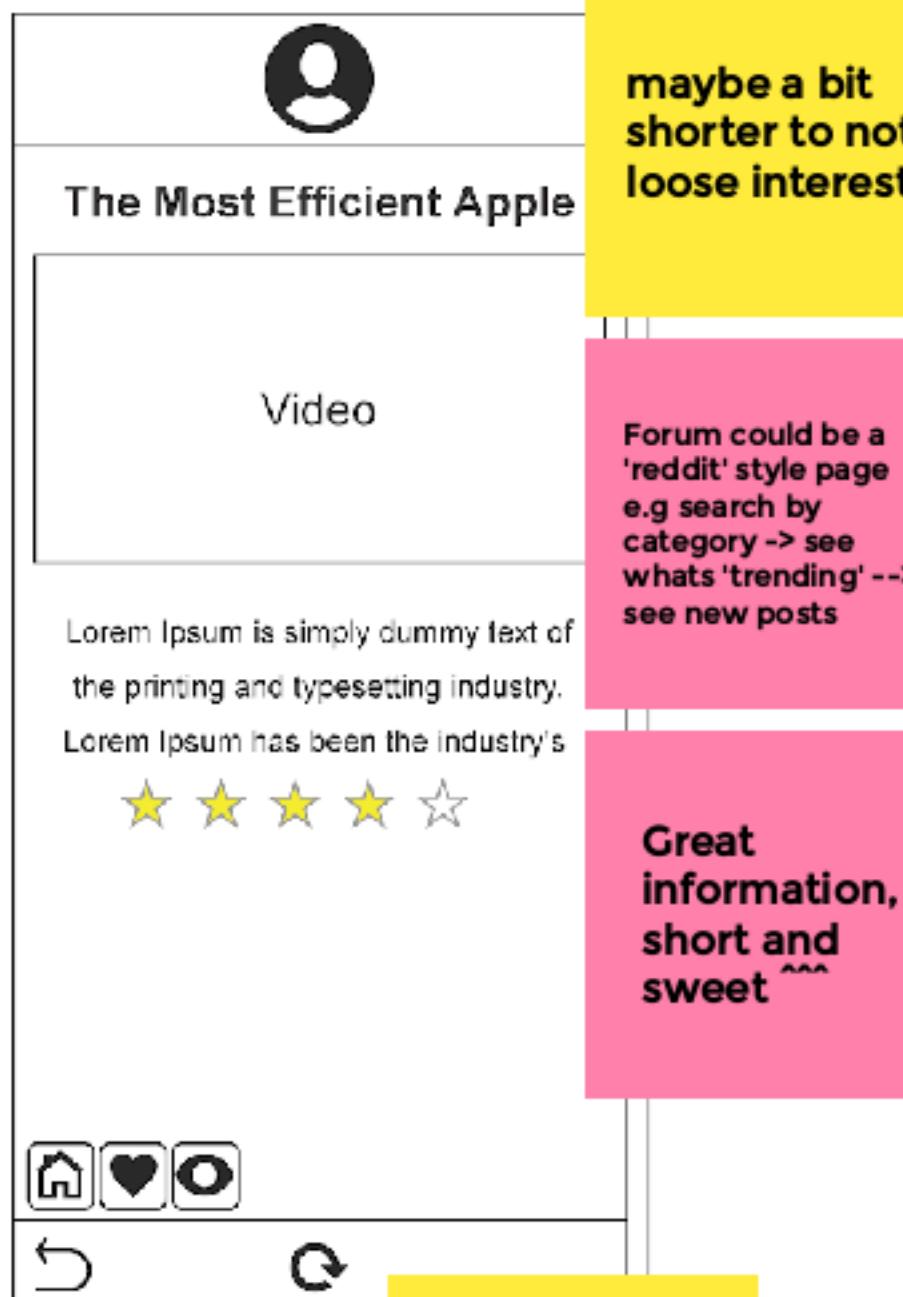
Ideas/Insights

Nice progressive info



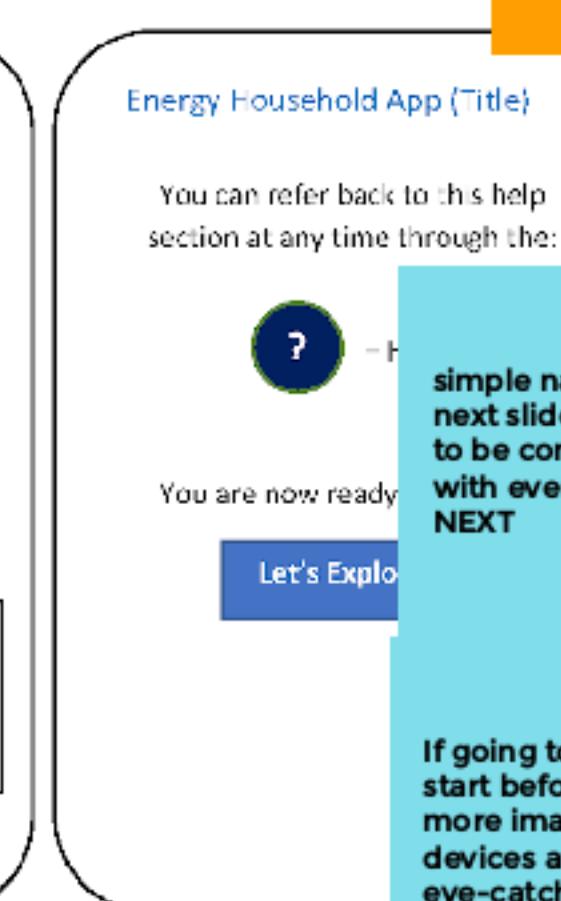
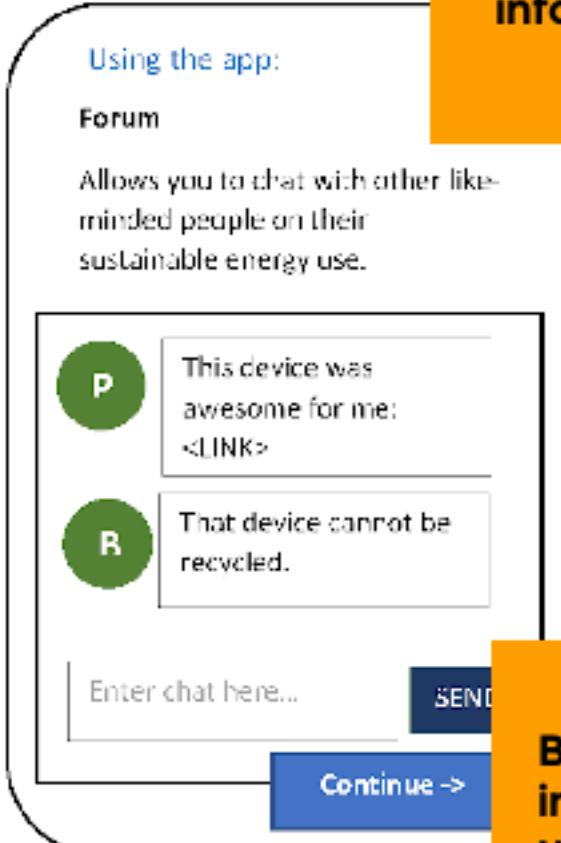
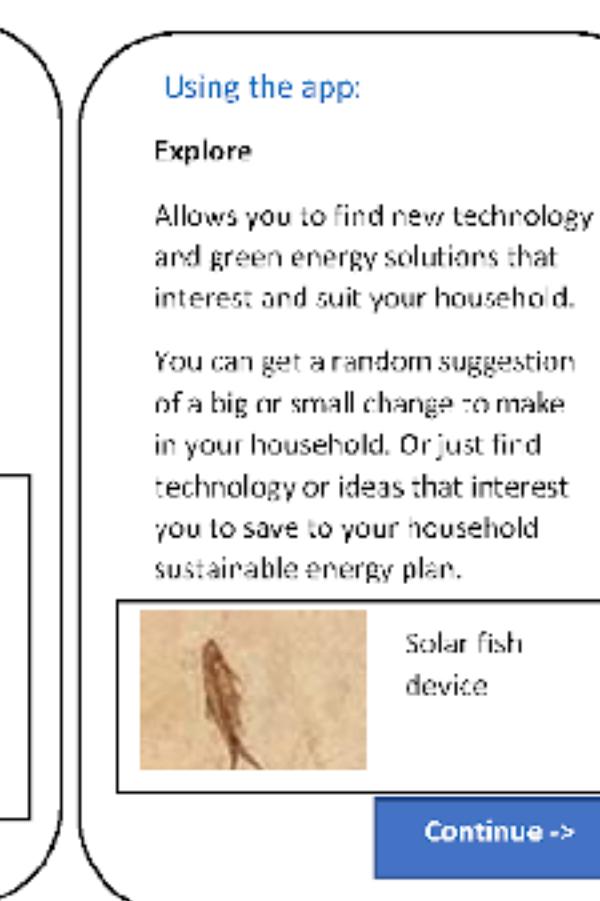
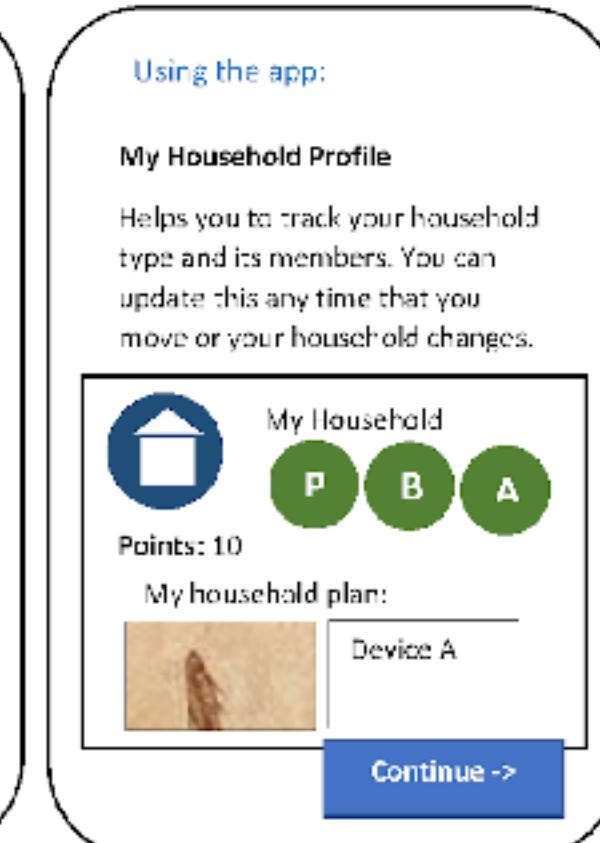
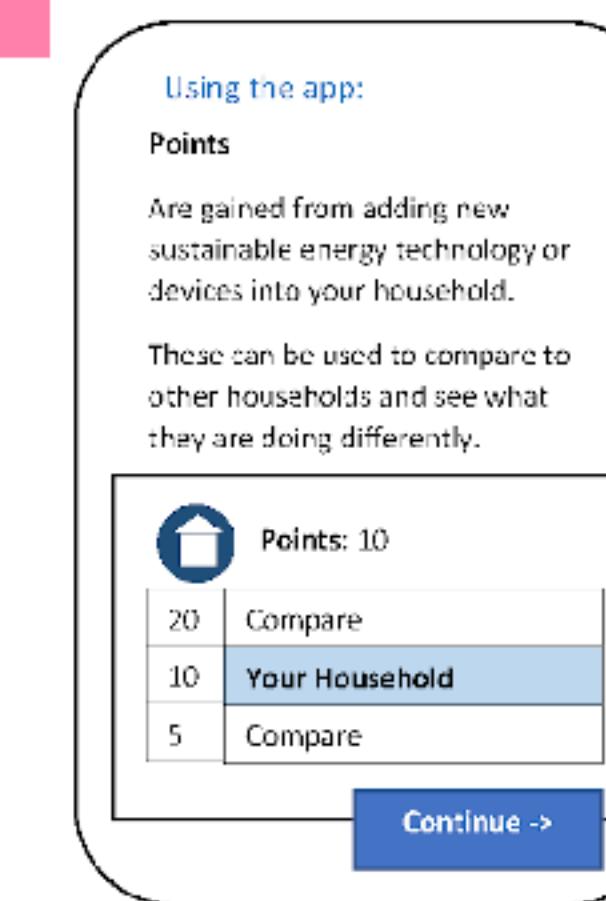
Like the layout, maybe see what a full width video would like?

More Info on each product



Add main menu navigation and where to buy in more details section. Add a Explore/Discover header at the top of page?

Clear separated look for each individual device.



Bring score in after the user profile created

If going to be at the start before signup, more images of devices and eye-catching things.

Lets construct your home

House, Apartment, Unit, or Studio?
Do you own or rent?
How many people live in your home?
How many rooms?
Are any rooms vacant?
Gas or Electric stove?
How many thermal water system?
How many
LED lights, Fluorescent lights, Bulbs
Fridge, Washing machine, Dryer
Dishwasher, Kettle, TVs, ACs
Heaters, microwave
Any solar, wind, thermal generators?
Average quarterly power bill?

Modelling efficiency...

progress bar...



Continue >

adapted and simplified ease of use

Remove questions:
vacant rooms, Use
more icons to
answer questions or
clickable yes/no
type response areas.
We do not need the
user to give short
answer feedback?

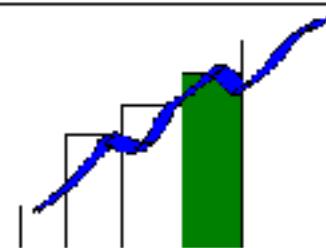
Progress easily displayed

Layout more open here

Here are your results

Your power bill is:

Above average



More facts and comparisons...

Here...

Here...

Here...

Suggested Improvements
available for your situation:

Suggestions ->

Suggested efficiency upgrades:

For fully optimised solar and appliances see a numbers in the home construction tab

Now? ->

skip

In your situation:

People with solar are saving \$300/quarter

Selling a fridge and getting 1 large
fridge saved \$65

Adding a veget wind turbine to
your roof can save \$120

Home storage battery can store
your generated power directly

Suggested products links ->

**good link to final
submission of the user
profile**

**Clear and
easy to
read**

Great form layouts
for the questions,
quick and easy,
profile would
generate on
submission

**very
simple
easy for
everyone**

Clean and easy to
respond with drop
downs with not too
many questions.

Lets start tracking your
power bills to see your
progress -->

Amount \$

People in household

Billing period

Home Explore Forums

Your bill history -->

| Period | Amount | Changes |
|-----------|--------|------------------------|
| Jun - Sep | \$673 | None |
| Sep - Dec | \$654 | Changed out lightbulbs |
| — | — | — |
| — | — | — |
| — | — | — |
| — | — | — |

Home Explore Forums

Tell us about the
appliances in your
household-->

Tick what's relevant:

- Dishwasher Dryer
Computer Washing Machine
Fridge Freezer
Pool Pump Gas Cooktop
Air Conditioners Other:



Home Explore Forums

This image displays a collection of user interface prototypes for an 'Eco Life' application, arranged in a grid-like structure. Each prototype is accompanied by one or more colored callout boxes containing user feedback, observations, or design critiques.

Row 1:

- proto00:** A sign-up screen featuring a teal header with the 'Eco Life' logo. It includes a 'Sign Up' button, a 'Already have a profile?' link, and two large feedback boxes:
 - A light blue box: "Your household liked -- could be two lists --- just things they like and a list for their household plan that is stuff they commit to implementing in their household"
 - A pink box: "Not sure about the whole multiple people on one account idea"
- proto01:** A 'Who is playing?' screen showing a recycling icon and five user icons. It includes a question mark icon and a 'Sign Up' button.
- proto02:** A 'Welcome Back' screen with a teal header, a recycling icon, and the 'Eco Life' logo.
- proto03:** A user profile screen showing a teal header with a question mark and user icon, a 'Rank: 21 Points: 40' section, and a list of household members with their points: Your Household (3), Jessica (12), TJ (15), and Greg (10).

Row 2:

- proto04:** A 'Money Saved' screen showing a teal header with a question mark and user icon, a 'Money Saved' section with '\$200.20', and a 'Household liked' section with two items: 'TIMELESS Solar Powered Clocks' and 'Solarmotor-Free energy motor'. It includes a navigation bar at the bottom.
- proto05:** A yellow box with the text: "money starts at zero for new users".
- proto06:** A navigation bar with icons for Home, Discover, Chat, Compare, and Design Share. A light blue box to its right says: "change position of icons in menu".

Row 3:

- proto07:** A 'Household' screen featuring a teal header with a house icon and a magnifying glass icon, and a 'Discover' screen featuring a teal header with a speech bubble icon and a magnifying glass icon.
- proto08:** A green box with the text: "Absolutely amazing colour scheme".
- proto09:** A yellow box with the text: "no consistency with pages (no FLOW!)".
- proto10:** A blue box with the text: "Amzing flow".

Row 4:

- proto11:** A yellow box with a black arrow pointing left.

Test this
ourselves
and our
friends

Nice
layout
and name

**Clear and
easy to
read**

Clean and easy to respond with drop downs with not too many questions.

Absolutely amazing colour scheme

Positives

Good scrolling layout

Great information, short and sweet ^^

Nice progressive info

Bring scores in after the user profile is created

good link to final submission of the user profile

very simple easy for everyone

Layout more open here

user is not over burdened with content

Prototype 1 - Feedback and Evaluation

Elle: Blue, Jake: Pink, Sam: Orange, Adam: Yellow, Brayden: Green

no consistency with pages (no FLOW!)

Sticky notes for each interview
Group together similar

Forum could be a 'reddit' style page e.g search by category -> see whats 'trending' --> see new posts

maybe a bit shorter to not loose interest

Changes

Like the layout, maybe see what a full width video would like?

More Info on each product

Add main menu navigation and where to buy in more details section. Add a Explore/Discover header at the top of page?

full screen the video thumbnails when clicked

Clear separated look for each individual device.

different layout, smaller videos more room for comments?

If going to be at the start before signup, more images of devices and eye-catching things.

Not sure about the whole multiple people on one account idea

adapted and simplified ease of use

Progress easily displayed

Remove questions: vacant rooms. Use more icons to answer questions or clickable yes/no type response areas. We do not need the user to give short answer feedback?

Icon not related to icon, aesthetic of block not sure if connects and clutters view a little. New name closer to energy.

Looks more like a login screen for existing users, app should open for a single user only, with an add extra user button

money starts at zero for new users

simple navigation to next slide but needs to be consistent with everyone else NEXT

could we condense information on a lot of pages and add icons instead?

could we improve flow of the app?

What do the navigation buttons do? Need consistent main menu

is there a way to order everything as to not lose potential users

Could we improve usability for disabilities

can we make the point system more prominent and beneficial ?

How can we make it even simpler? 1) tute info 2) sign-up 3) get house info 4) results/compare 5) suggestions

Whens the perfect time to drop the 'sign-up' button

Eye-catching start

change main menu to forum chat on right

Nav bar = Household -> Discover -> Compare -> Forum

reduce unnecessary clutter

comments in discover section

Questions

take parts of household questions section and put into compare. have a separate section in compare that contains overview and suggestions - this is inside of my household profile

re-arrange the order for flow electricity bills is last

Need more images and icons then plain text

clickable keywords for help or information

pull appliance data from various suppliers based on user house profile, then have a more like this option

Ideas/Insights

Second Prototype

Notification board/Forum area - chatting

Notifications? What are we notifying about? (Top button design)

Comparison - leaderboard

My history - my profile - my household

Random/new device suggestion

Overall graph/projections

Settings - gear icon

Prototype 2 - Plan

Find common problems from testers and solve them

dani - tutorial improvements and cohesion, household improvements, section 1

adam- sign in sign up, cohesion of flow. section 2

jake - household creation, section 3

braydon - forum section and discover improvements, section 4

sam- comparison and results, section 5

Team Meeting 09

Team name: Design Thinkers

Date of Meeting: 22/09/2021

Start Time: 4:30pm

End Time: 6:30pm

Members present:

- Jake Edmunds
- Adam Albert
- Danielle Jones
- Sam Barrett

Members absent:

- Braydon Newman

Meeting Chairperson: Jake Edmunds

Minutes taken by: Jake Edmunds

Summary of Meeting:

This meeting was to unpack feedback gathered from our second round of user testing on our prototype. As a group we went through the tester's comments and worked out fixes to problems mentioned. Problems ranged from text placement and spacing to re-thinking of entire pages for better understandability.

Agenda

- Unpack the information gathered from the testing conducted.
- Discuss the changes we could make to our solution as a group
- Assign sections for people to work on before next meeting

Link:

https://jamboard.google.com/d/1PwM8UZLhrrwPysD1POpRmFcS1lh2m-vMuf_JiNFt9Js/viewer?f=3

Next Meeting

Next meeting will be to review our changes as a group and make improvements if necessary.

The new chairperson will be Braydon Newman

Next Meeting Time: Wednesday 4:30PM (29/09/2021)

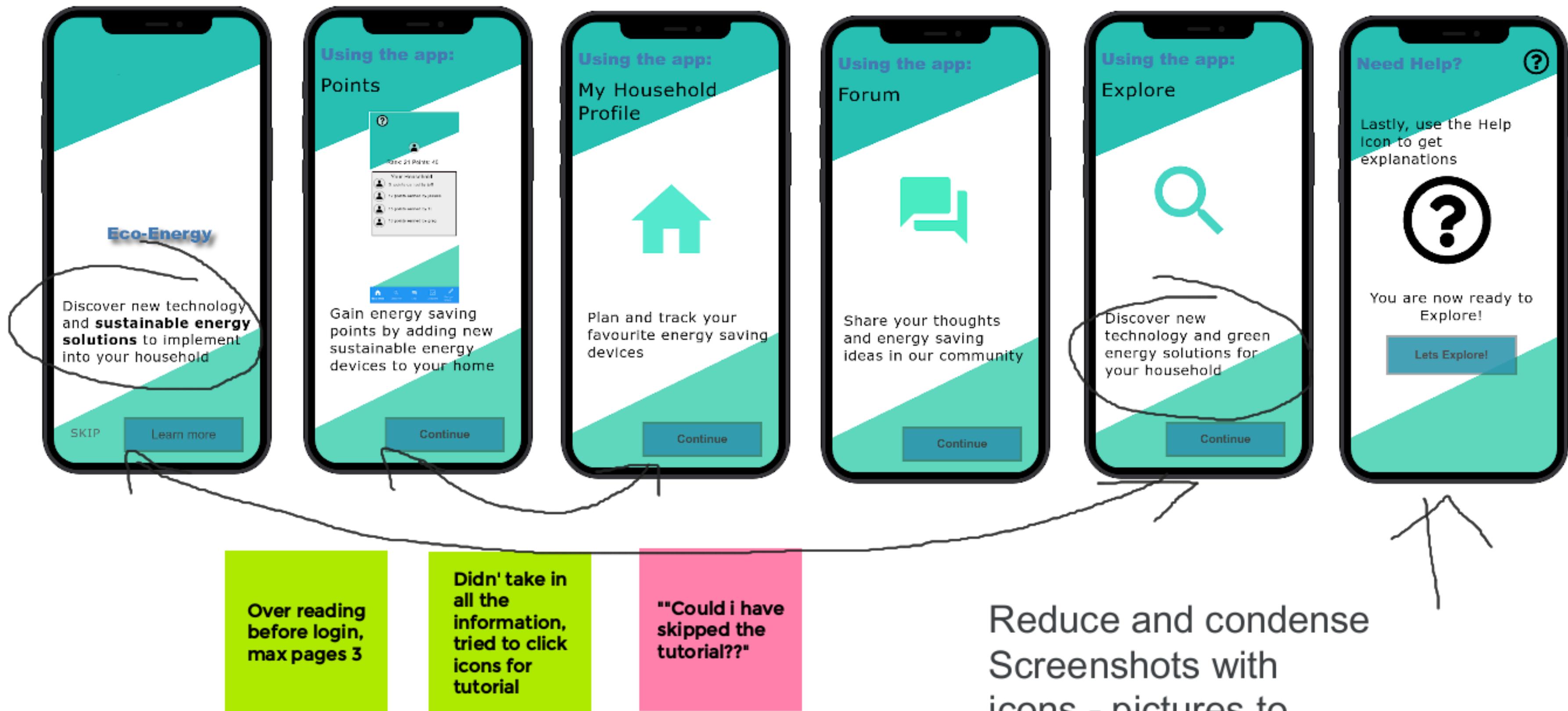
I acknowledge and have read the team meeting minutes; I understand and will prepare for the activities required prior to next team meeting as outlined in this document:

Name and Date

Jake Edmunds – 22/09/2021

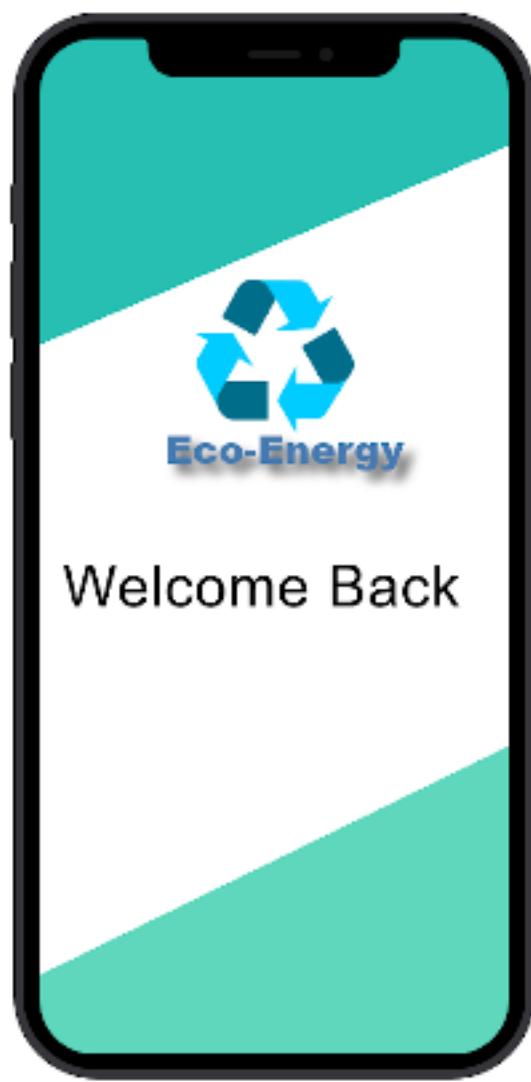
Dannielle Jones – 24/09/2021

Tutorial



Reduce and condense
Screenshots with
icons - pictures to
explain

Login



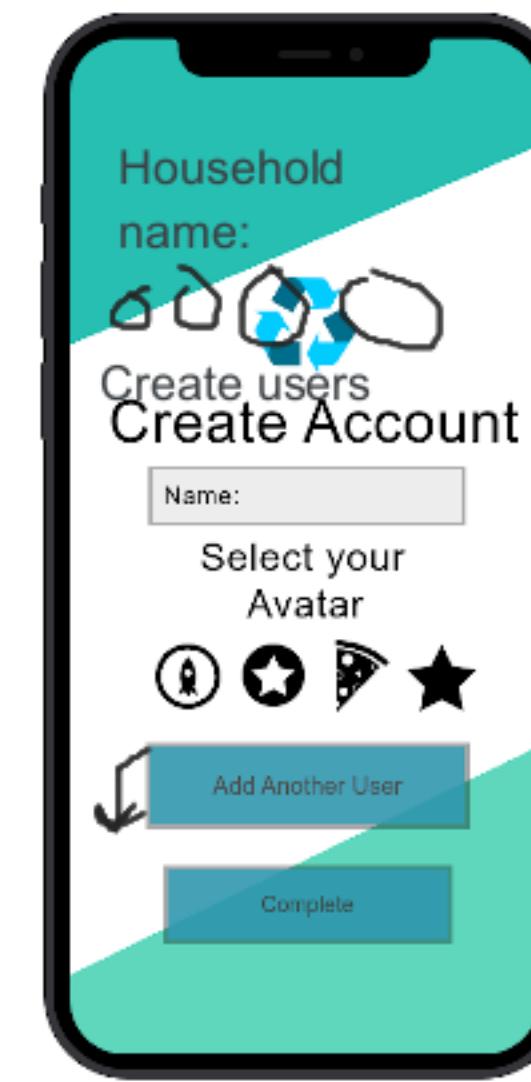
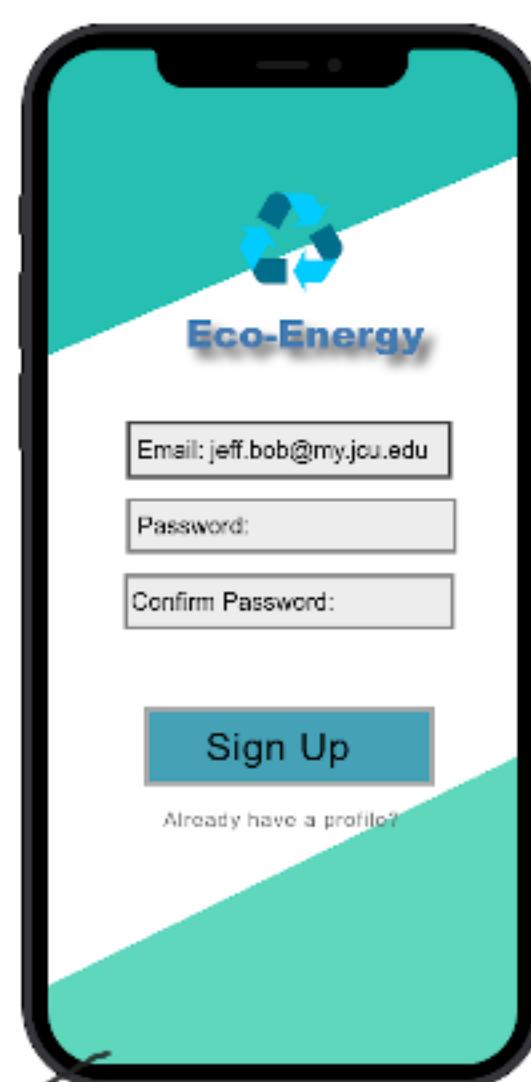
Filled out email and password to sign up then clicked Sign up

Larger signup and change to ALL CAPS

New screen with signup and signin on same as same level

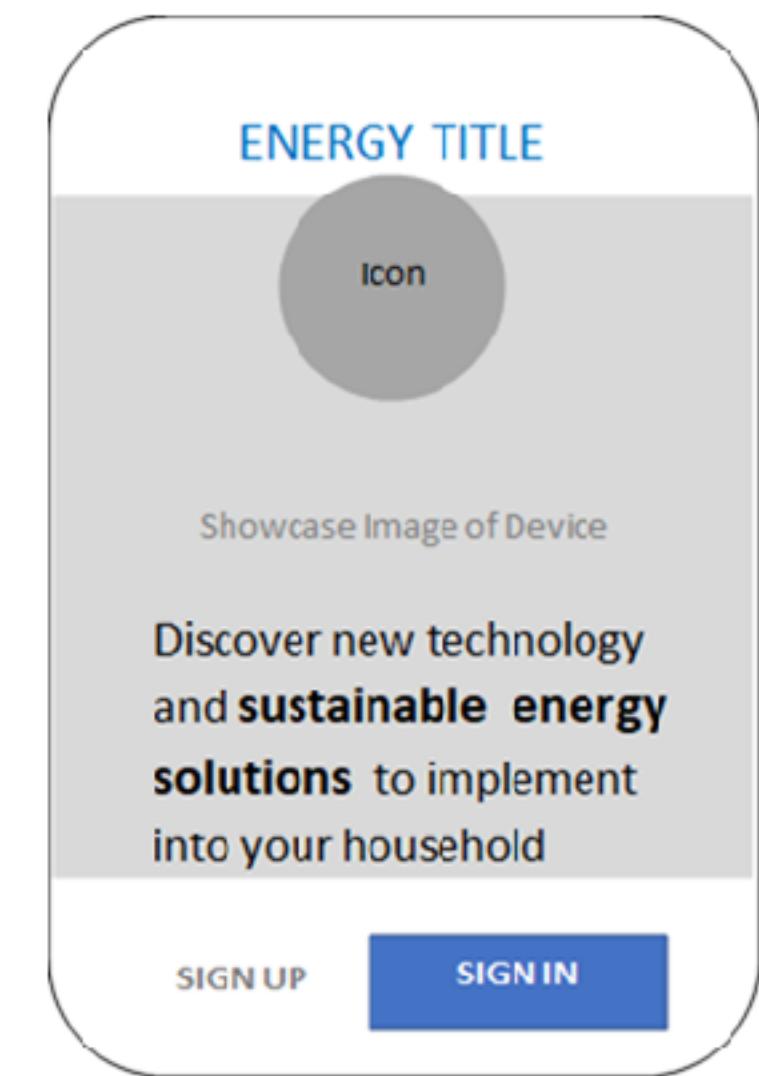
welcome only

Sign Up



"Name as in Nickname??"
username

Add user
Needs to show a user after they are added



side by side but sign in is then greyed out one

Setup/Update Household

owner spelt
incorrect
owner of
property

"Property Details"

Household Details

Are you an owner or a renter of the household?

Owner: Renter:

What best describes your dwelling?

House

How many People live in the Household?

3

Continue

Household Details

Appliances in my Household

Dishwasher Dryer
Computer Washing machine
Fridge Freezer
Pool Gas cooktop
Air Conditioner(s) Other

Continue

Household Details

My Household contains Tick all that apply

Solar Power system
Standalone Battery
Wind Harnessing system
Compost station

Continue

Household Details

Add Your most recent power bill to track progress

Amount \$
\$400

Period start date
13 Feb 2021

Billing Period
Quarterly

Complete

number of
people is
drop down
and multi-
input box
(can write to
override)

gaps
between the
checkboxes
and the text

gas cooktop
to heater

Does
computers
include
laptops?

Computer/
Laptop
A/C Units

Wording on
these - why do
we have a
compost
station for
energy?

Wind turbine?
Battery
connected
to...?

Wind
Turbine,
instead of
Wind
harnessing
system

compost
changes to
skylights

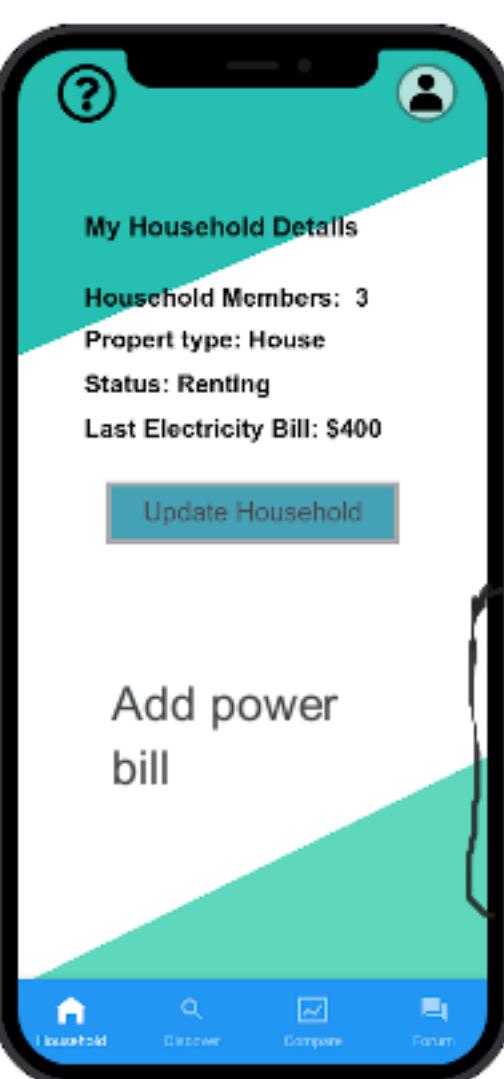
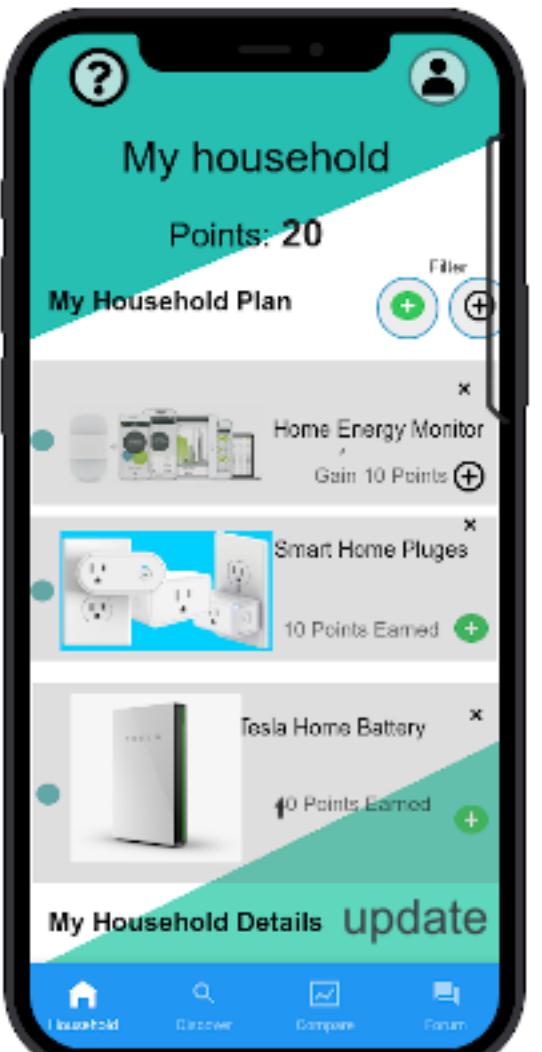
complete
different
shade/
colour than
normal
continue
buttons

— My Household —

values
wrong

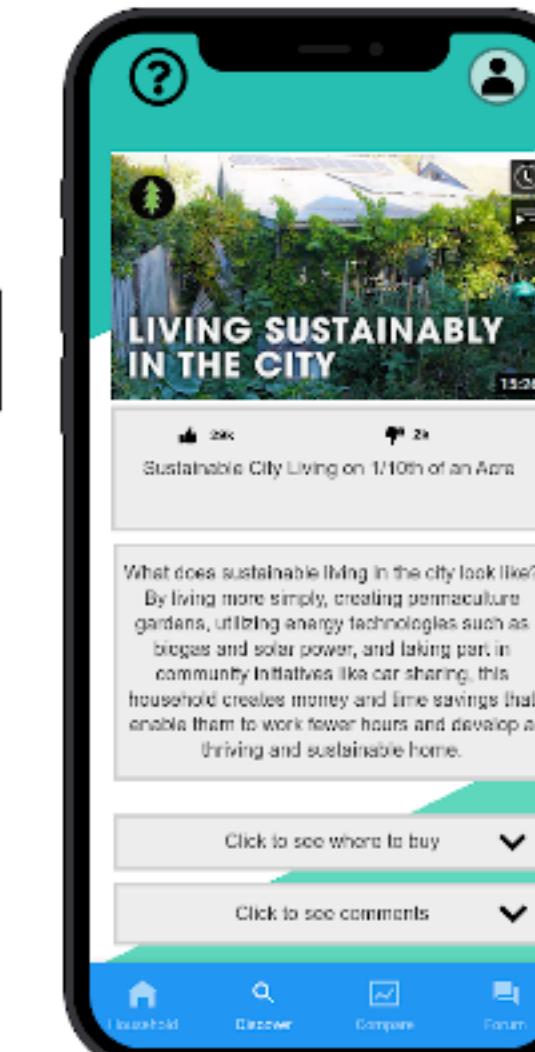
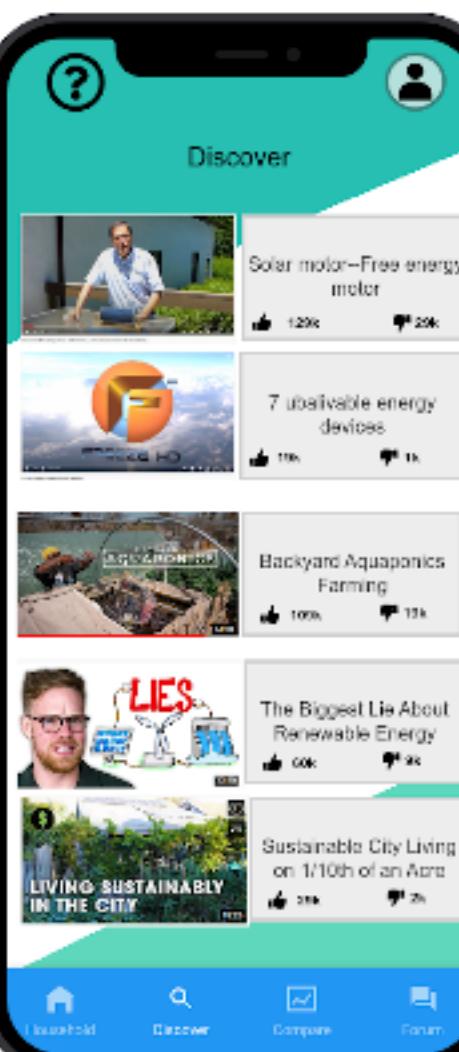
change + to
ticks like in
tutorial_04
file

scroll bar to
indicate the
continuously
scrolling

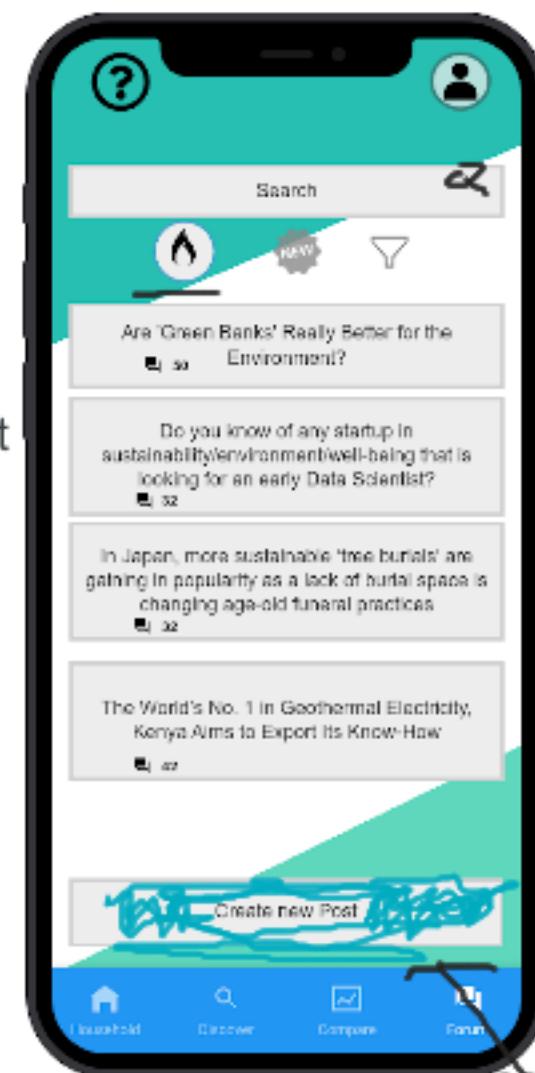


Add power
bill

add to
household
plan button
in discover



bold titles
not content



Post

colour

Points system was confusing, mainly because values were wrong

Clear adding and finding device

Clicked on the "home energy monitor" tab not the + sign when adding to household plan

Understood point system and how to add device

Tried to add device to the plan, question to open?, bad design

Most UI elements easy to understand

More emphasis on the discover button

Search/Discover would normally be up top. Not looking at bottom first

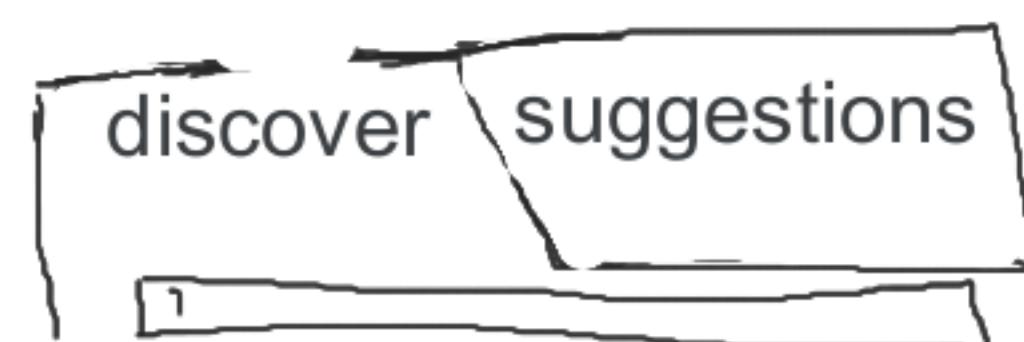
tab for suggestions in the discover page



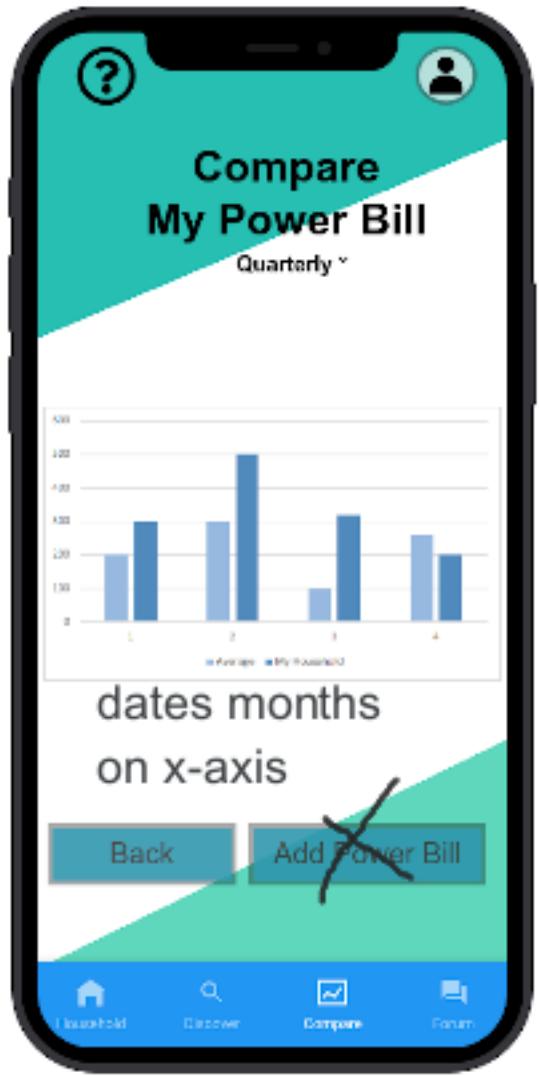
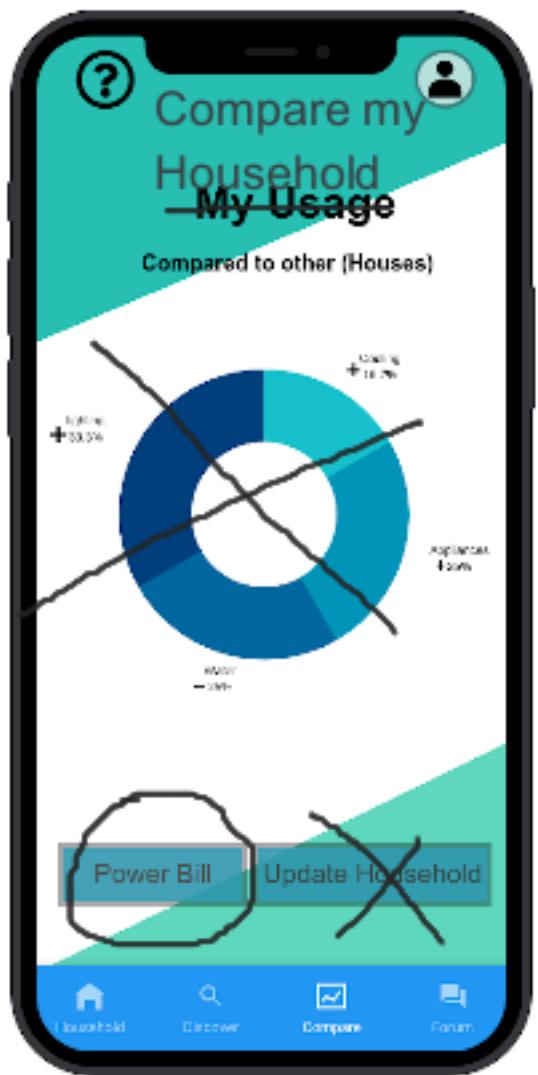
title keywords and content post button

Took a while to find Forum/Navbar

Underline for what tab your on in Forum new at top/start



Compare



Leaderboard

Ranking: 1

10 My household

5 other house



Unsure about how the information provided by graph

Positive means better? Wasn't sure what to do on the page.

Power bill sounds past tense, not sure on where to update

Unsure how to add power bill. In "update household" or "Power Bill"

When asked if the household was performing better than others replied yes. Then admitted she didn't know what the comparison was

Doesn't like the pie graph - Use a table

Can't get clear info on the compare page

Un-clear pie graph with + and -

Prototype 2 - Feedback and Evaluation

Key: tester_01: blue, tester_02: pink, tester_03: orange, tester_04: yellow, tester_05: green

Positives

Changes

Questions

Team decided not to fill this in this time as it
was posted beside each screen to see clearer

Ideas/Insights

Later considerations
Kids user - restricted to likes
and list of favourites
Crypto currency
Random suggestions for
new device
Comparison leaderboard

Plan to make changes:



Prototype 3 - Plan

App Name: Green Surge
App logo ideas:



sustainable - energy -
power - renewable -
green energy

colour scheme: green/blue

Adam: Primary for changes,
suggestions - new pages

Danielle/Jake: minor changes
danielle first half & logo, jake
last

Braydan/Sam: conduct next
round of testing

Team Meeting 10

Team name: Design Thinkers

Date of Meeting: 25/08/2021

Start Time: 2:30pm

End Time: 4:30pm

Members present:

- Jake Edmunds
- Braydan Newman
- Adam Albert
- Danielle Jones
- Samuel Barrett

Meeting Chairperson: Braydan Newman

Minutes taken by: Braydan Newman

Summary of Meeting:

Prior to meeting:

During the practical the prototype was tested and given out to multiple people for feedback

Agenda:

During the meeting it was planned to go through the prototype feedback to come up with positives, changes and ideas/insights for the next prototype iteration (the final exhibition prototype).

We went through the project report template and discussed as a group what some of the things would go into each section and to refer back to the meeting minutes if not sure.

Result of Meeting:

The meeting resulted in a lot of comments on the prototype, most if not all comments made were only very minor things and could be changes in a matter of minutes, no major faults were found in our prototype to change at this stage.

Once all meeting minutes were uploaded Danielle would combine into a single PDF document for each team member to use for Appendix A. Adam and Jake would make graph changes to the final prototype and Danielle was to make very small adjustments as discussed. Braydan and Sam would continue to test Prototype_03 to ensure that nothing was missed in first two iterations.

Next Meeting:

No further meeting will be held before due date.

I acknowledge and have read the team meeting minutes; I understand and will prepare for the activities required prior to next team meeting as outlined in this document:

Name and date:

Braydan Newman - 30/09/2021

Danielle Jones – 02/10/2021

Prototype 3 - Feedback and Evaluation

Changes

Key: tester_01: yellow (Team comments)

Positives

Logo design and the s-shape

Scroll bar works for indicating scroll interactivity

Add latest power bill in update power bill section

Move down sign in and sign up on help tutorial screen

Change the colour of the help icon on pages 6 onwards

Change to create username on page 7

My household contains... I have these green solutions... etc. Change the wording

Change the key for the graph to be clearer on compare my household section

My power bill - months Feb-Apr

Avatar in the top right corner changes to avatar symbol, outer circle to match help icon colour

Change household name placeholder to Smith Family

Spelling mistake in appliances in household details

Y in your is a captial letter

Green Energy, Monitoring, Appliances, other - categories for the compare section graph. These categories are dynamic based on the devices available on the app.

Have we answered our HMW question?

Do we meet our POV statement?

Questions

Text cutting through the background visual

Filter leaderboard by area for future prototype comparisons

Future thought for implementation to app - the My Household and points is sticky to the screen so you can scroll and still see those elements

Rounded and shadow to help further distinguish between discover and suggestions.

In forum move icons to filter on right-hand side

Ideas/Insights

Final Prototype Exhibition - Week 13

& Write Individual Reports

Appendix B

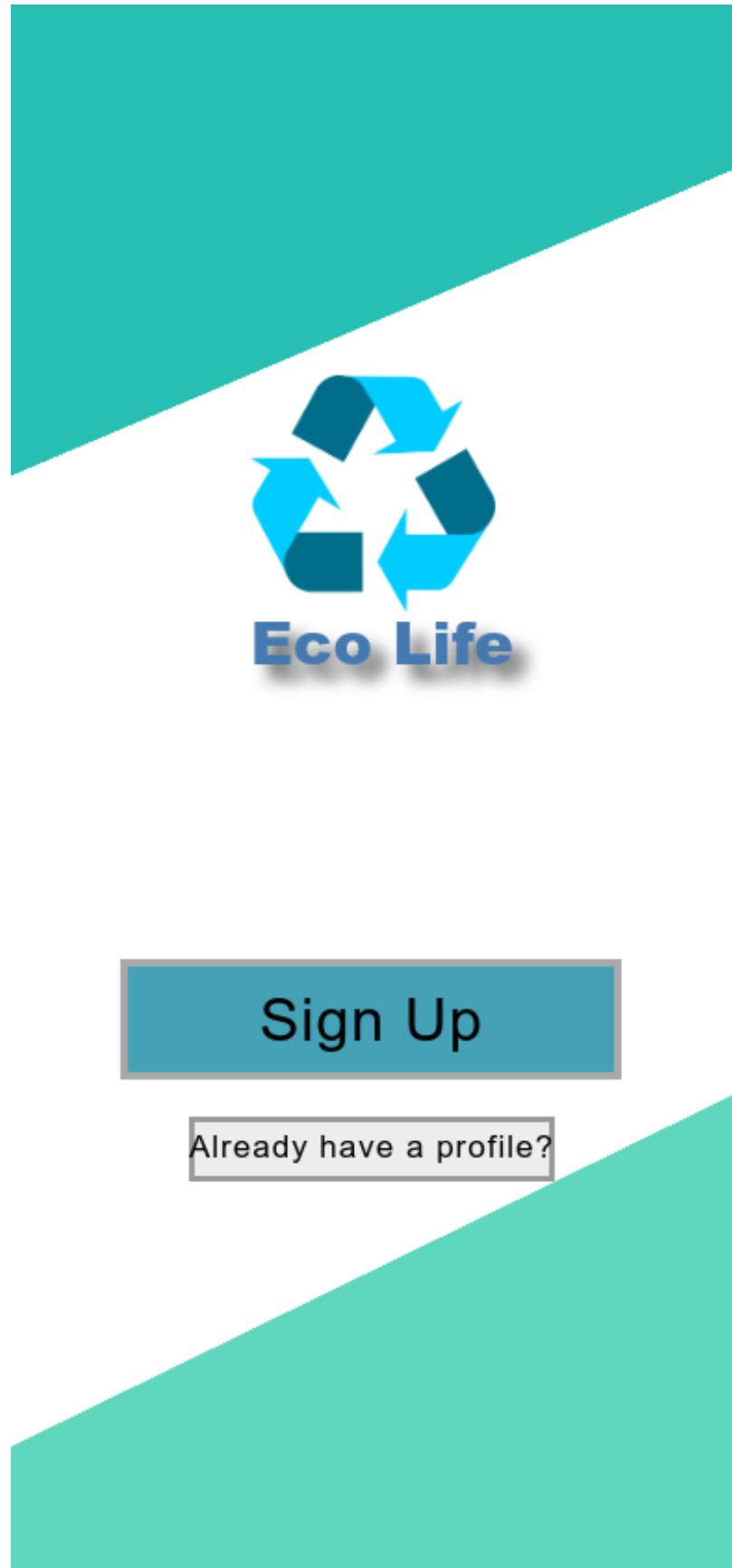
Prototype Iterations

Our group felt more comfortable using computers to develop our prototype than drawings and sketches on paper. This also permitted us to easily share these ideas in real-time with each other to make and discuss changes by using Discord share screen or using the prototype application area itself.

Overview:

- Prototype 1.0 – sections were completed by individual team members using word or other applications
- Prototype 2.0 – sections were completed by individual as listed using word application, Adam at this point was already in development for Prototype 2.1 to combine our ideas into a cohesive app
- Prototype 2.1 – used Proto prototype software using all ideas from all previous individual sections
- Prototype 3.0 – used Proto prototype software to refine sections and keep cohesive across prototype
- Prototype 4.0 – final prototype for this project

Prototype 1.0



ADAM ALBERT



Who is playing?



ADAM ALBERT



Welcome Back

ADAM ALBERT

Rank: 21 Points: 40

Your Household

- 3 points earned by jeff
- 12 points earned by jessica
- 15 points earned by TJ
- 10 points earned by greg

Household Discover Chat Compare Design Share

ADAM ALBERT

The screenshot shows a mobile application interface. At the top left is a question mark icon inside a circle, and at the top right is a user profile icon. The main heading "Money Saved" is displayed above a large bold dollar amount "\$200.20". Below this, the text "Your household liked" is followed by two recommended items: a thumbnail for "7 UNBELIEVABLE Solar Powered Creations" and a thumbnail for a video showing a man demonstrating a solar motor. The bottom navigation bar includes icons for Household, Discover, Chat, Compare, and Design Share.

Money Saved

\$200.20

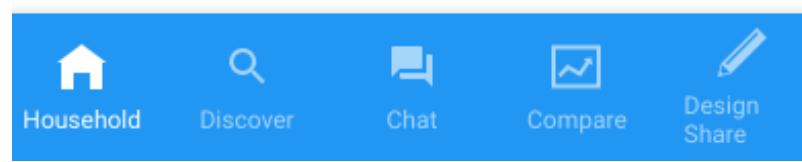
Your household liked

7 UNBELIEVABLE Solar Powered Creations

Solar motor--Free energy motor

Household Discover Chat Compare Design Share

ADAM ALBERT



ADAM ALBERT/DANNIELLE JONES

Energy Household App Tutorial

We are about:

- helping your household to implement more sustainable energy solutions

We want to inform you:

- on the life-cycle of your sustainable solutions
- how or what you can do to take action in your home
- where you can save or buy sustainable energy solutions
- help you to discover new and wonderful technology!

SKIP

Continue ->

Using the app:

My Household Profile

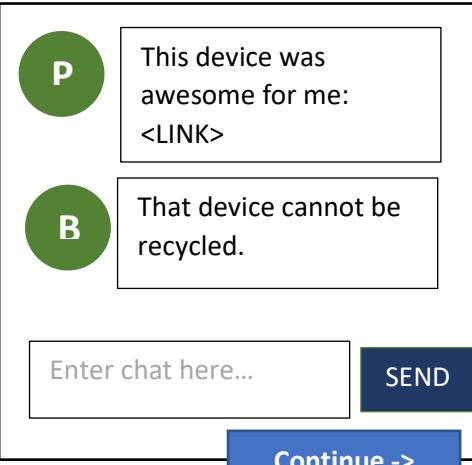
Helps you to track your household type and its members. You can update this any time that you move or your household changes.



Using the app:

Forum

Allows you to chat with other like-minded people on their sustainable energy use.



Using the app:

Points

Are gained from adding new sustainable energy technology or devices into your household.

These can be used to compare to other households and see what they are doing differently.



Points: 10

20

Compare

10

Your Household

5

Compare

Continue ->

Using the app:

Explore

Allows you to find new technology and green energy solutions that interest and suit your household.

You can get a random suggestion of a big or small change to make in your household. Or just find technology or ideas that interest you to save to your household sustainable energy plan.



Solar fish device

Continue ->

Energy Household App (Title)

You can refer back to this help section at any time through the:



= help

You are now ready to explore!

Let's Explore!

Lets start tracking your power bills to see your progress -->

Amount \$

People in household

Billing period

Quarterly



Your bill history -->

| Period | Amount | Changes |
|-----------|--------------|------------------------|
| Jun - Sep | \$673 | None |
| Sep - Dec | \$654 | Changed out lightbulbs |
| — | — | — |
| — | — | — |
| — | — | — |
| — | — | — |
| — | — | — |

Tell us about the appliances in your household-->

Tick whats relevant:

Dishwasher Dryer

Computer Washing Machine

Fridge Freezer

Pool Pump Gas Cooktop

Air-Conditioners Other:



Home **Explore** **Forums**

Home **Explore** **Forums**

Home **Explore** **Forums**



Video

The Most Efficient Apple

Lore ipsum
dolor sit amet
consectetur
adipisicing elit.
Maxime mollitia



Video

The Most Efficient Apple

Lore ipsum
dolor sit amet
consectetur
adipisicing elit.
Maxime mollitia



Video

The Most Efficient Apple

Lore ipsum
dolor sit amet
consectetur
adipisicing elit.
Maxime mollitia



A scrollable section with a seemingly endless supply of products of energy efficacy

BRAYDAN NEWMAN



The Most Efficient Apple

Video

Lore Ipsum is simply dummy text of the printing and typesetting industry.

Lore Ipsum has been the industry's



More info of individual products with lots of info of it, the house heart and eye allow to save items to almost like folders

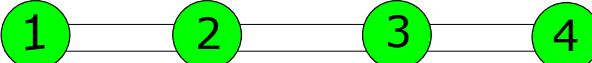
2. User selection from the household

Lets construct your home

House, Apartment, Unit, or Studio?
Do you own or rent?
How many people live in your home?
How many rooms?
Are any rooms vacant
Gas or Electric stove?
How many litre hot water system?
How many:
LED lights, Fluorescent lights, Bulbs
Fridges, Washing machines, Dryers
Dishwasher, Kettle, TVs, ACs
Heaters, microwave
Any solar, wind, thermal generators?
Average quarterly power bill?

Modelling efficiency...

progress bar...



[Continue ->](#)

NOTE: Each of these questions can open in separate windows to refine size of appliance, power rating.
Any home generation of power would open on a separate window to refine.
Lights can average time on? (Difficult)

Here are your results

Your power bill is:

Above average



More facts and comparisons...

Here...

Here...

Here...

Suggested improvements available for your situation:

[Suggestions ->](#)

This section needs refining to compare to things like fully Earthified homes with maximum sustainable living choices. The algorithm would sort based on the situation entered in the 'Lets construct your home' tab. ie: If renting this list, If 4 bed owner, this list etc

Suggested efficiency upgrades:

For fully optimised plan add appliance serial numbers in the home construction tab

[Now? ->](#) [Skip](#)

In your situation:

People with solar are saving \$300 quarter

Selling a fridge and getting 1 large fridge saved \$85

Adding a yacht wind turbine to your roof can save \$100

Home storage battery can store your generated power cheaply

[Suggested products links ->](#)

This product page can be like the the list in Amazon where they also show other people also bought etc. Algorithm can link to suppliers sites, they would pay to have their links, and a commission would arrive for all sales from links to the app developers.

Forum/Notification
Board is under
construction

Go Back

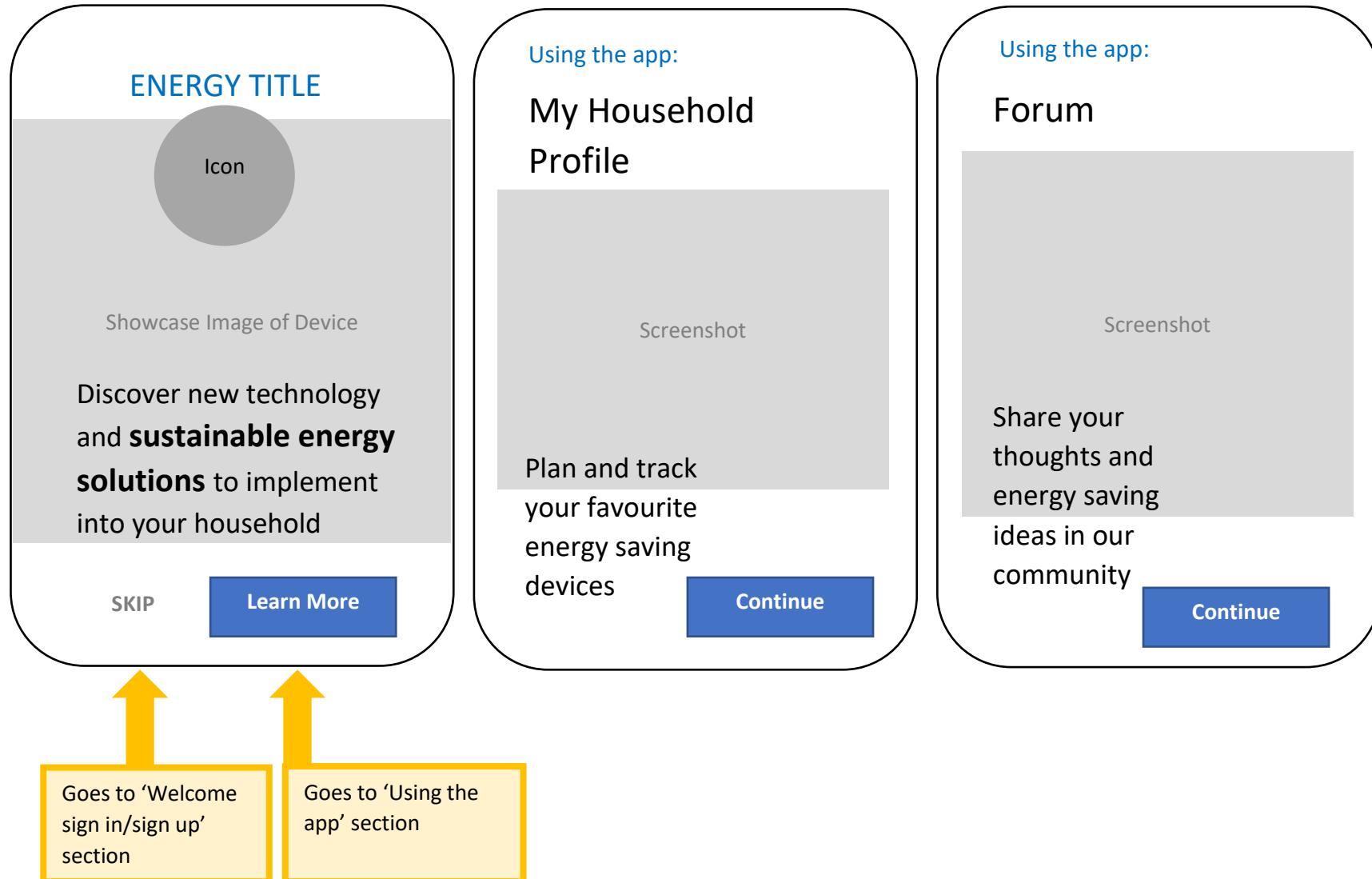
Compare my
household is under
construction

Go Back

My Household is
under construction

Go Back

Prototype 2.0



Using the app:
Points

Screenshot

Gain energy saving points by adding new sustainable energy devices to your home

Continue

Using the app:
Explore

Screenshot

Discover new technology and green energy solutions for your household

Continue

Need Help? 

Lastly, use the help icon to get explanations:

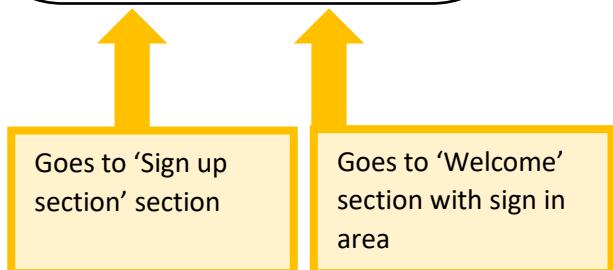
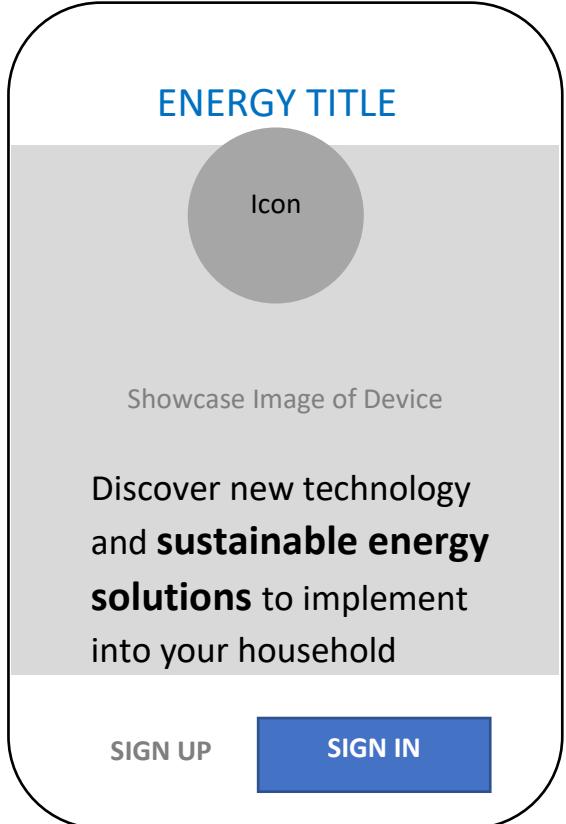


You are now ready to explore!

Let's Explore!

Goes to 'Welcome sign in/sign up' section





This screen appears if a user has used the app before but no account is logged in

?

My Household

Points: 20

My Household Plan

Filter  

| Device | Video | Action |
|----------|--------------|---|
| Device A | Device Video |  Gain 10 points  |
| Device B | Device Video |  10 points earned  |
| Device C | Device Video |  10 points earned  |

My Household Details

Household members: 3
Property type: House
Status: Renting
Last electric bill: \$400

Update Household

My Household Details

 Household  Discover  Chat  Compare  Design Share

Device Video 

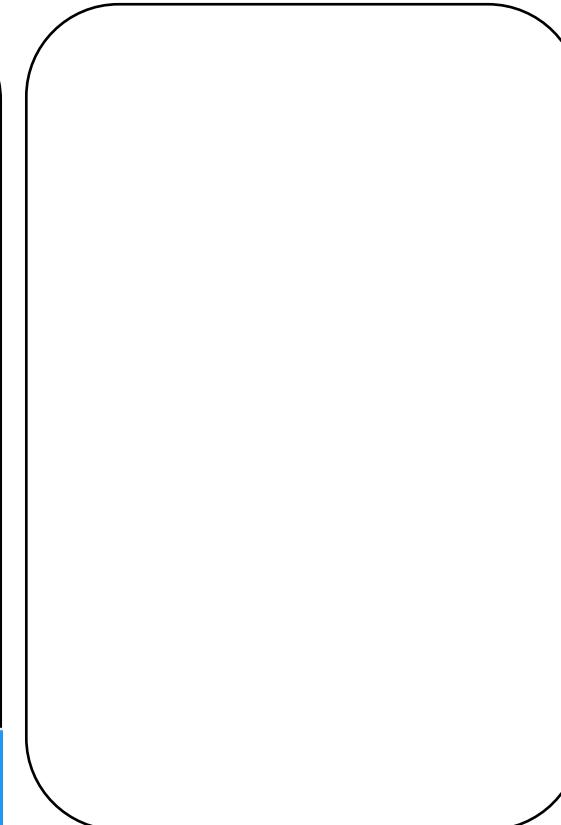
10 points earned 

My Household Details

Household members: 3
Property type: House
Status: Renting
Last electric bill: \$400

Update Household

 Household  Discover  Chat  Compare  Design Share



Lets start with the make-up of your household -->

Are you an owner or do you rent?

Owner Rent

What best describes your dwelling?

House



How many people in your household?

4



[Home](#)

[Explore](#)

[Forums](#)

Tell us about the appliances in your household-->

Tick what's relevant:

Dishwasher Dryer

Computer Washing Machine

Fridge Freezer

Pool Pump Gas Cooktop

Air-Conditioners Other:



[Home](#)

[Explore](#)

[Forums](#)

Does your household contain any of the following -->

Tick all that apply:

- Solar power system
- Standalone Battery
- Wind harnessing system
- Compost station



Add your recent power bill to track your progress in the future -->

Amount \$

Period Start Date

▼

Billing period

▼

Home

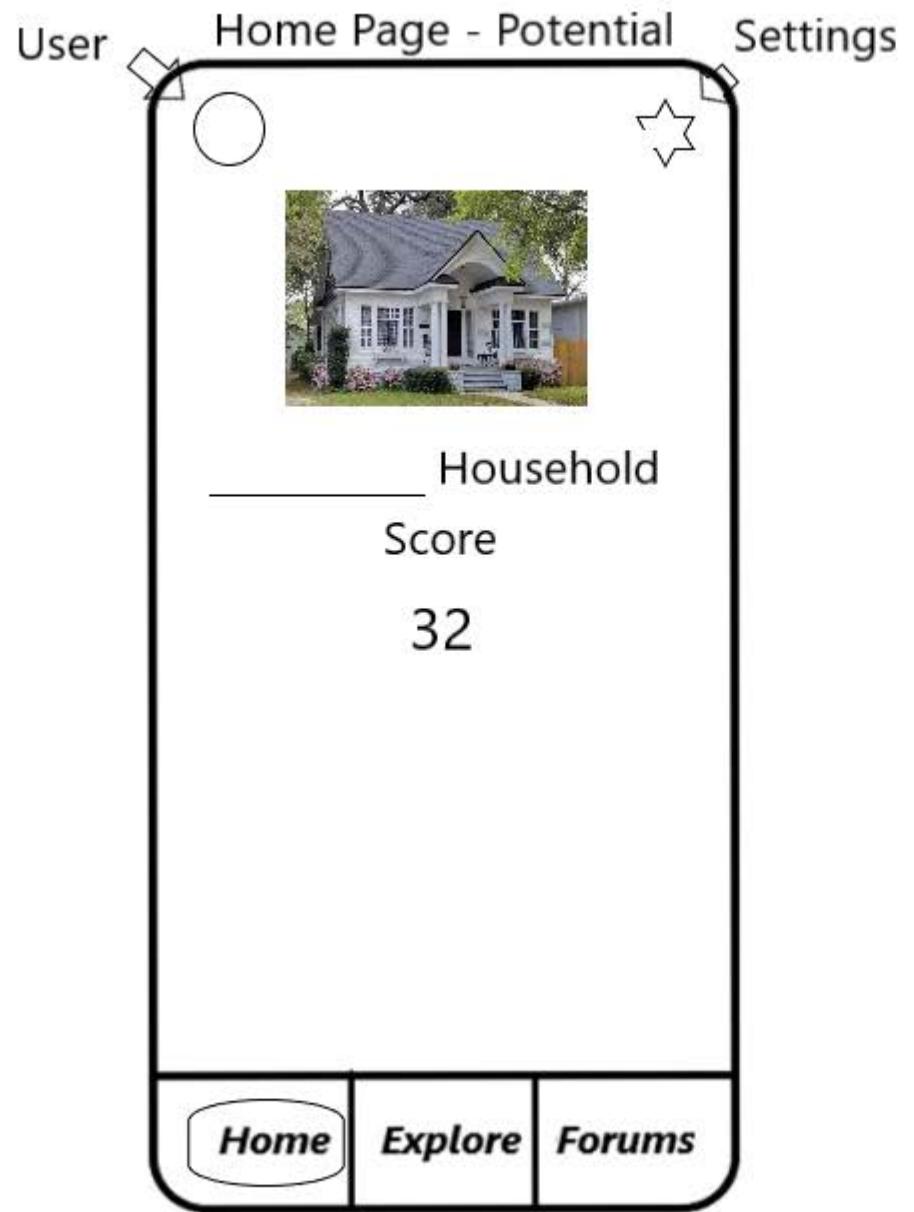
Explore

Forums

Home

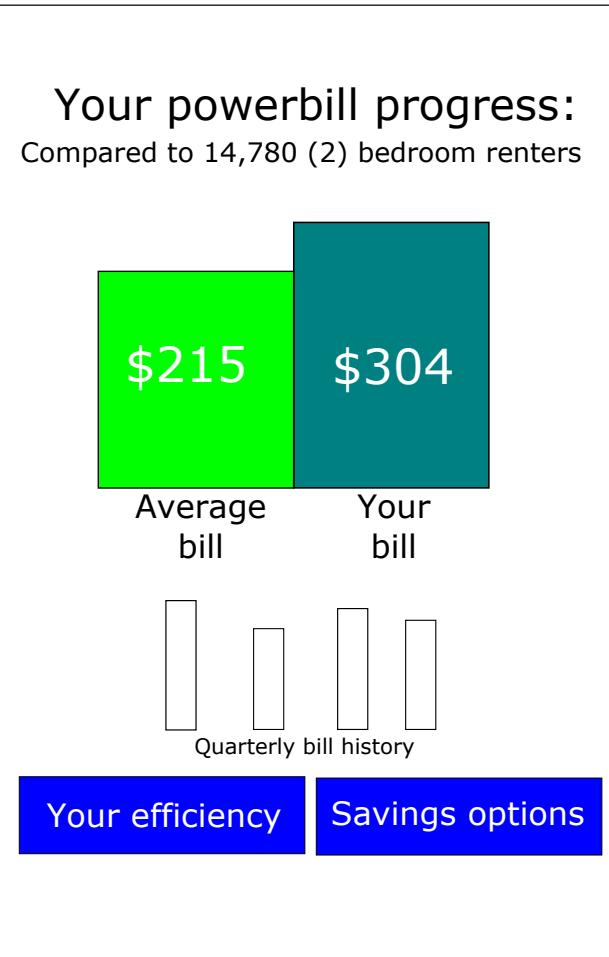
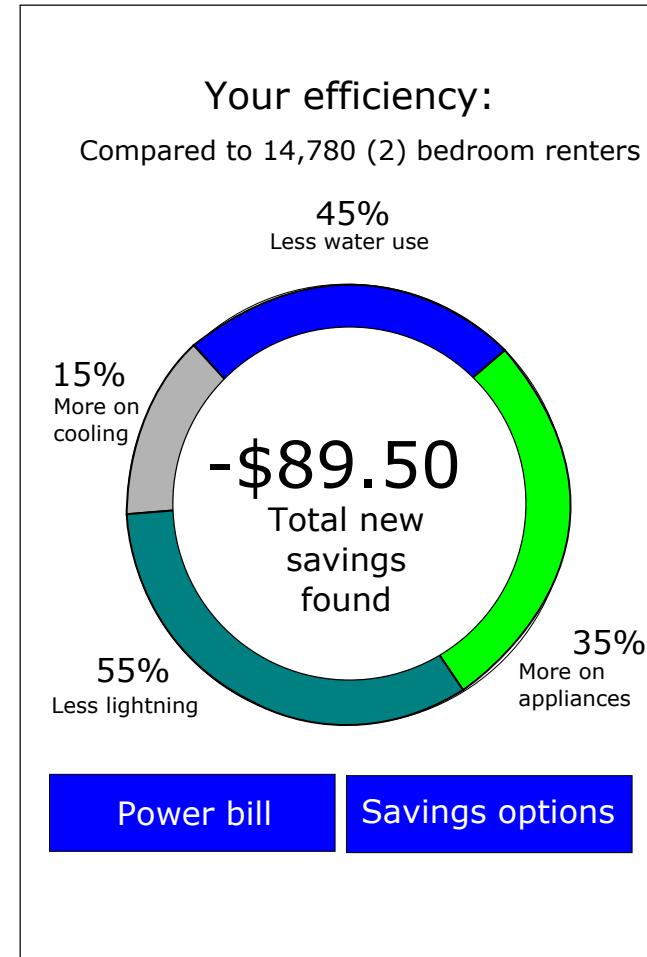
Explore

Forums



Compare section

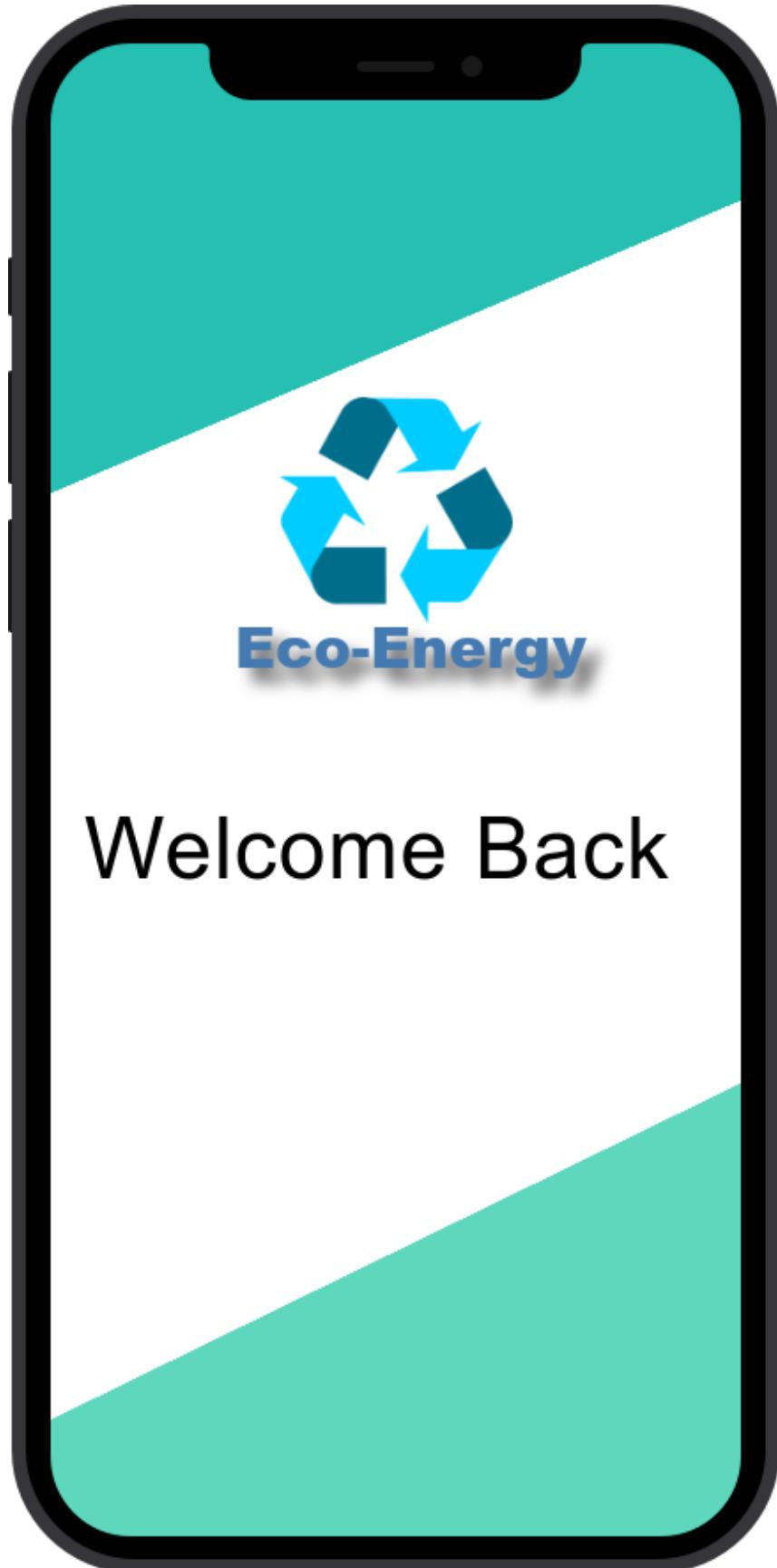
From contract
your home section



To savings
suggestions
section



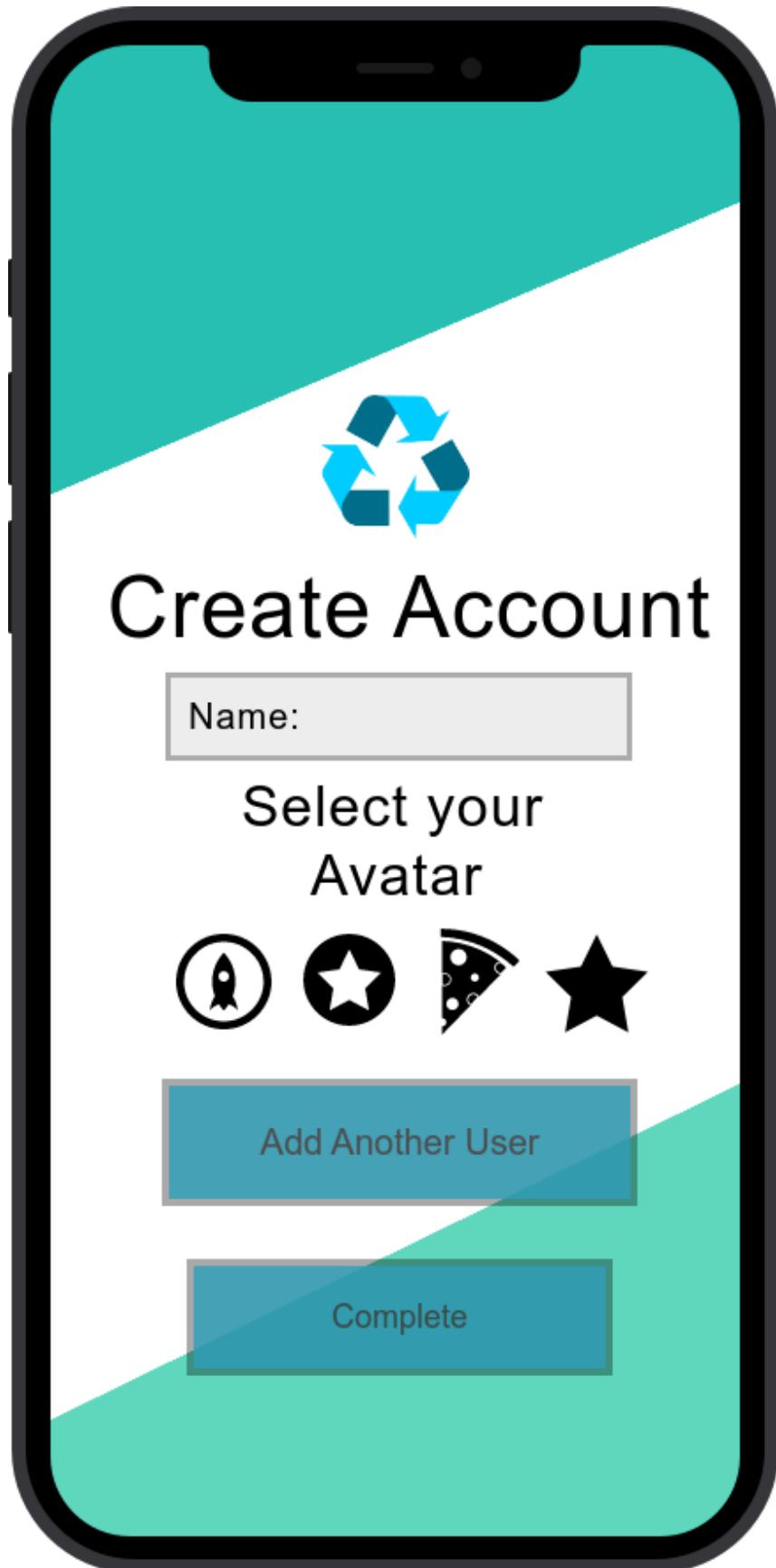
Prototype 2.1

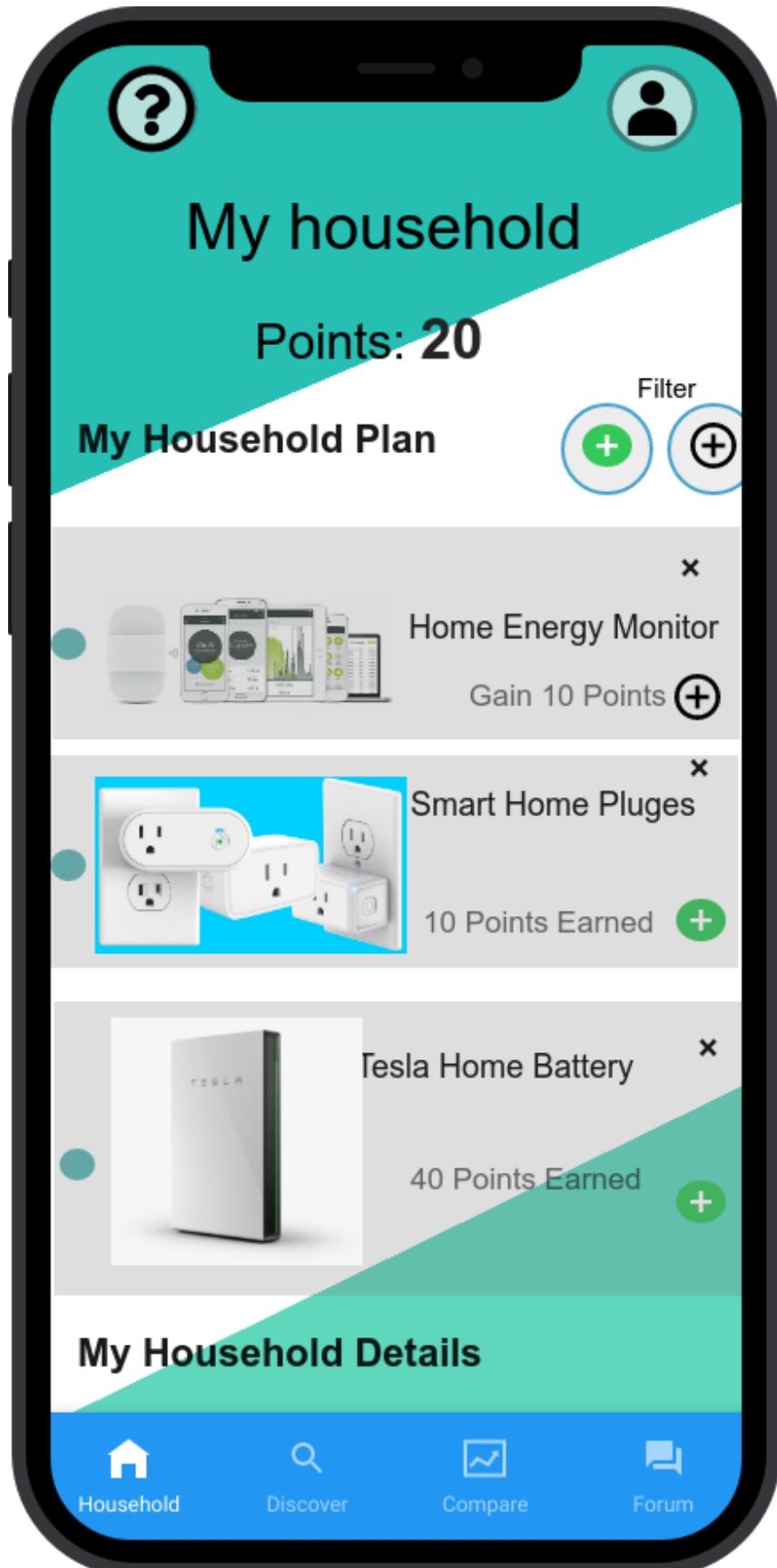


The screen shows a 'Discover' feed with five video thumbnails:

- Solar motor--Free energy motor**
Thumbnail: A man in a white shirt demonstrating a solar motor on a table. Likes: 129k, Dislikes: 29k.
- 7 ubalivable energy devices**
Thumbnail: A logo for 'FREEZE HD' with a stylized 'F' and 'HD'. Likes: 19k, Dislikes: 1k.
- Backyard Aquaponics Farming**
Thumbnail: A person working in a backyard aquaponics system. Likes: 109k, Dislikes: 19k.
- The Biggest Lie About Renewable Energy**
Thumbnail: A man with glasses and a beard, with the word 'LIES' overlaid in red. Likes: 60k, Dislikes: 9k.
- Sustainable City Living on 1/10th of an Acre**
Thumbnail: A green roofed building with the text 'LIVING SUSTAINABLY IN THE CITY'. Likes: 29k, Dislikes: 2k.

At the bottom, there is a navigation bar with four icons: Household (home icon), Discover (magnifying glass icon), Compare (graph icon), and Forum (speech bubble icon).



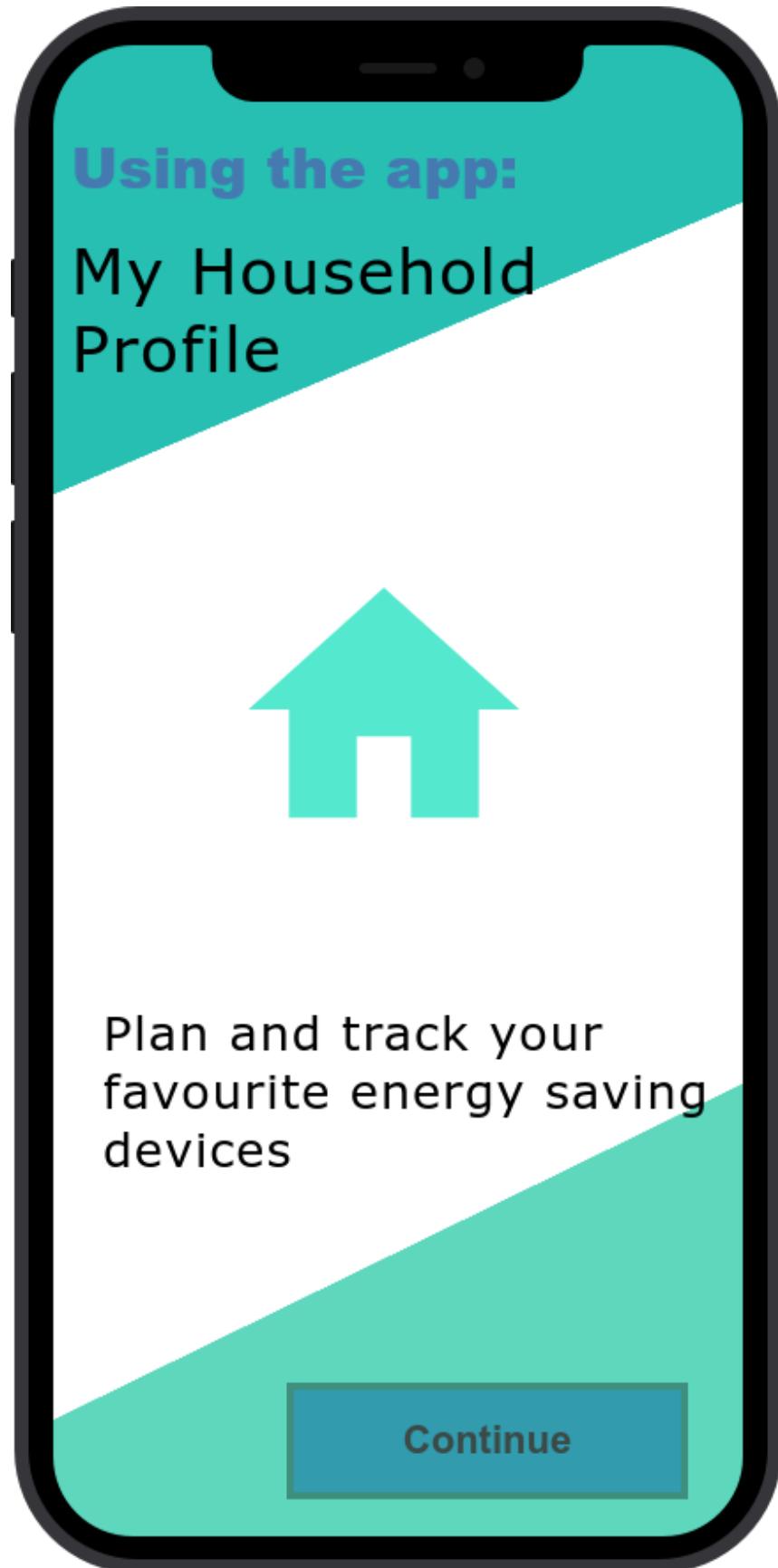


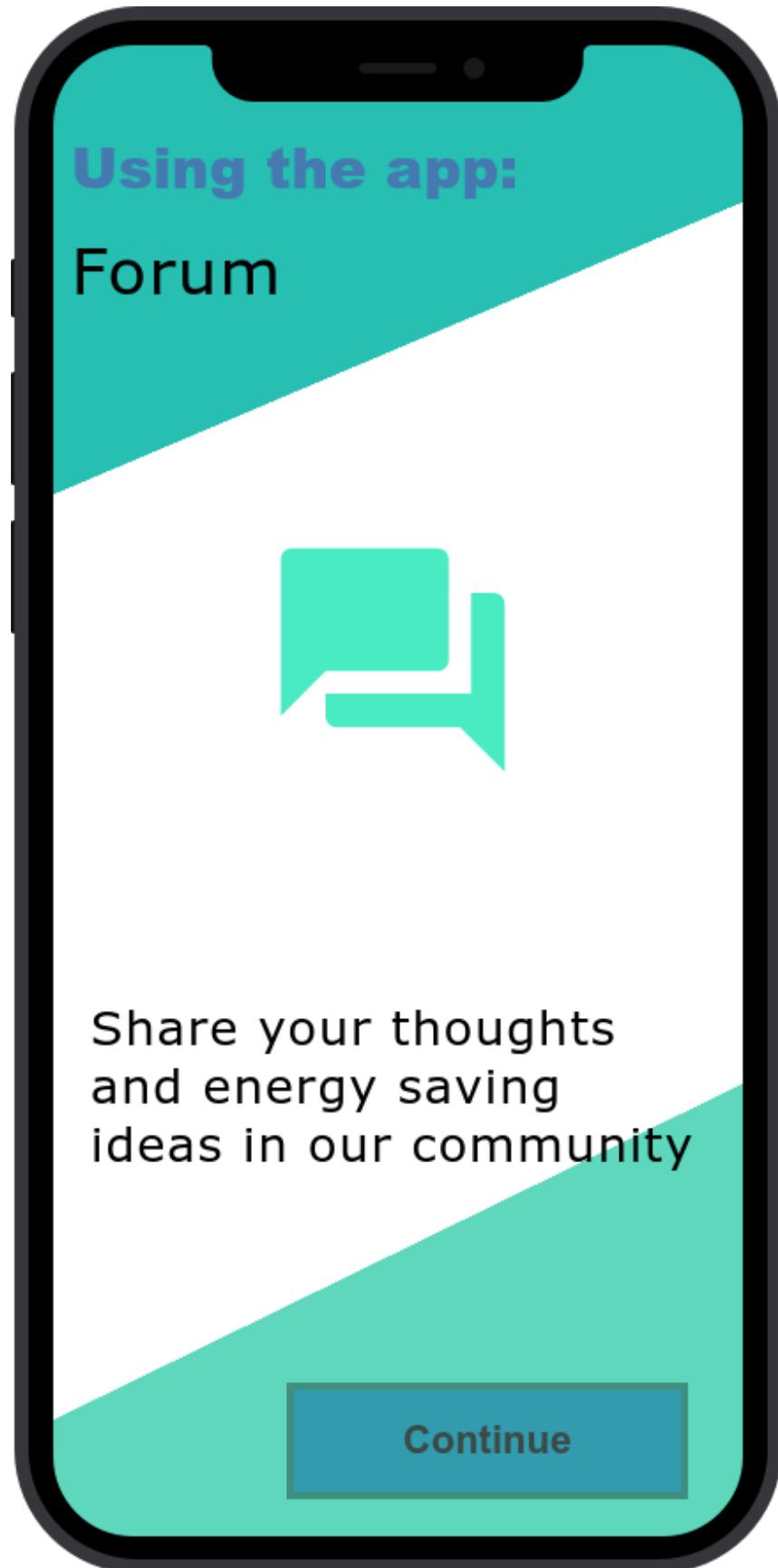


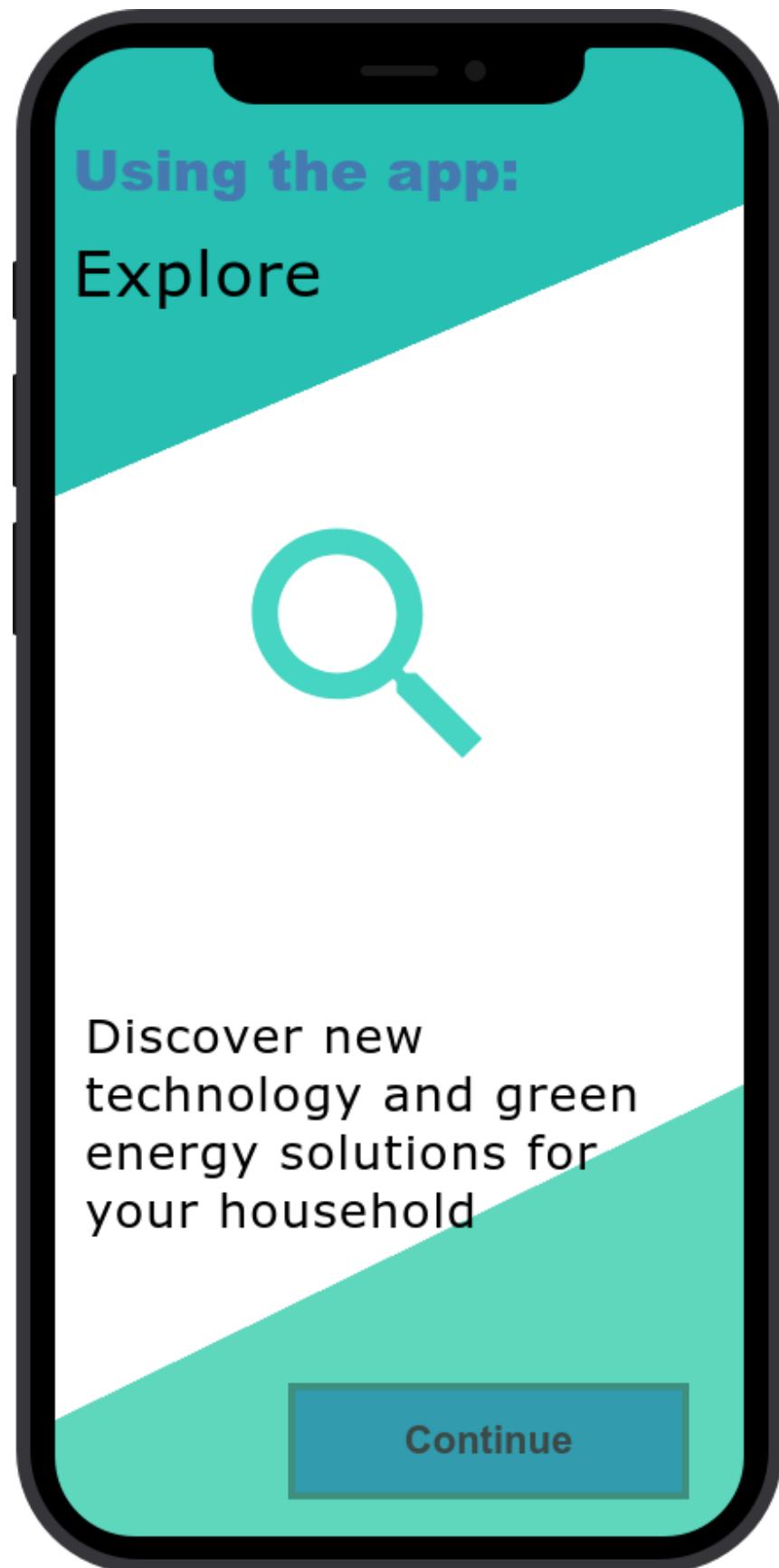


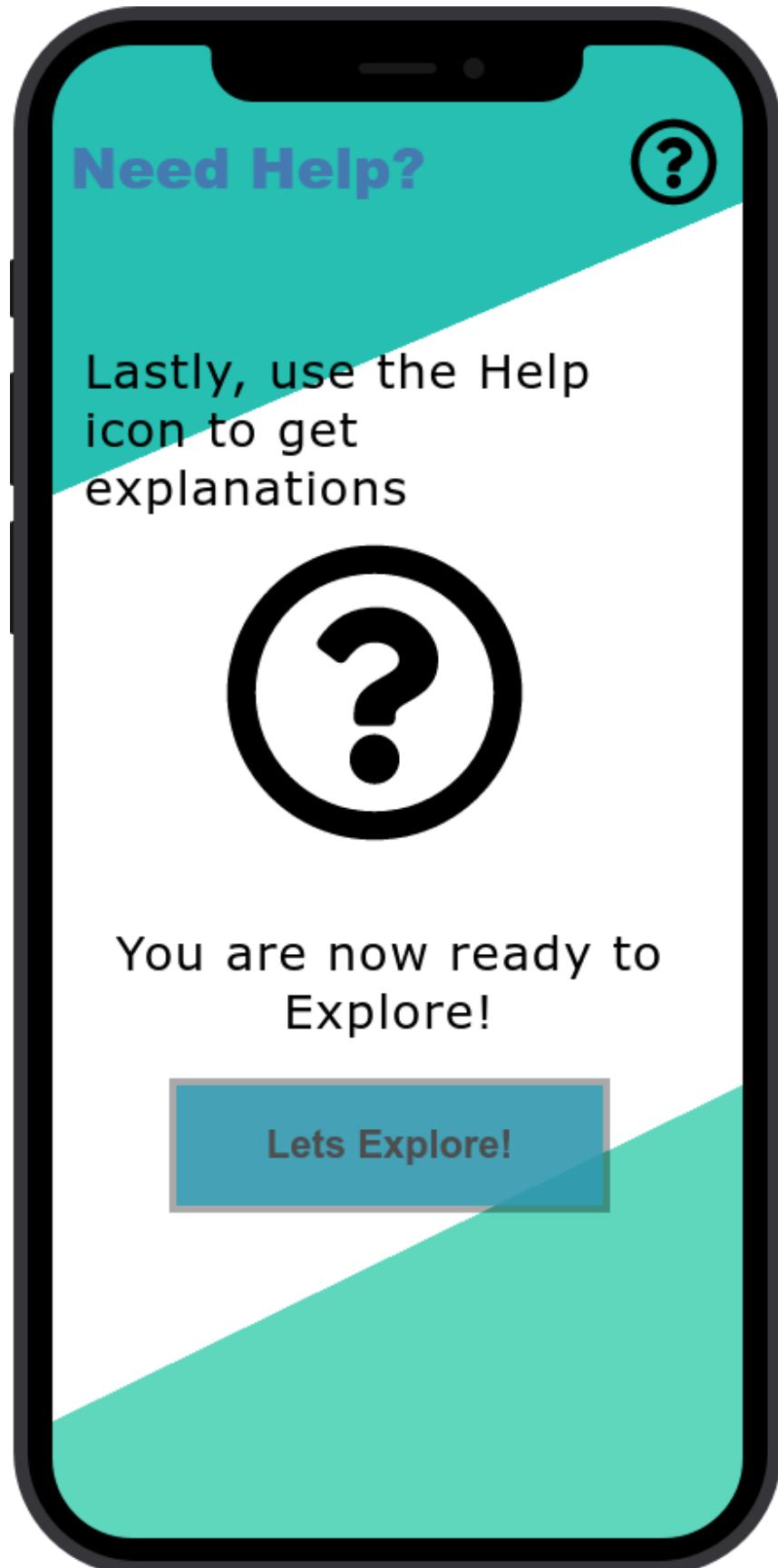


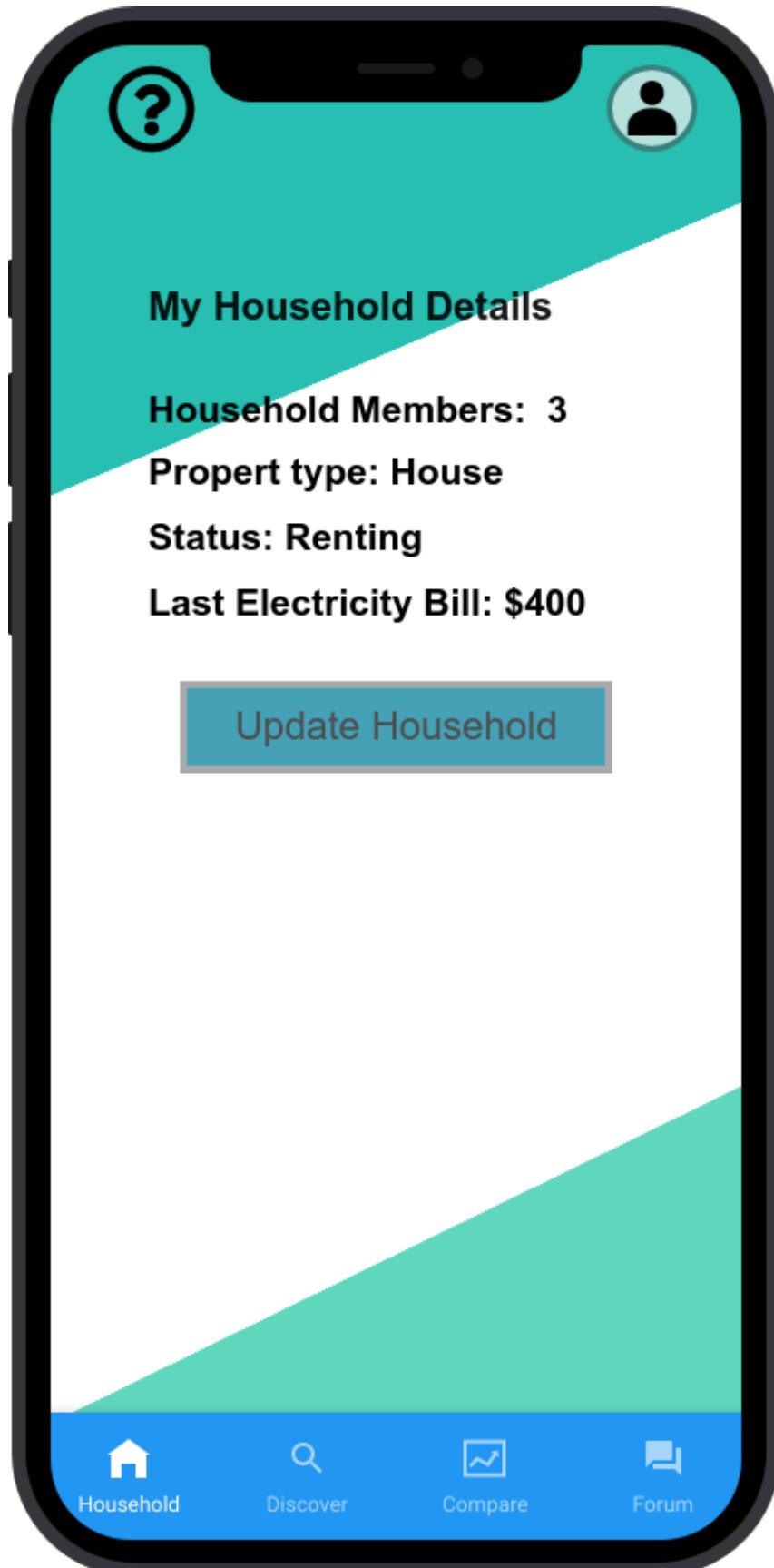


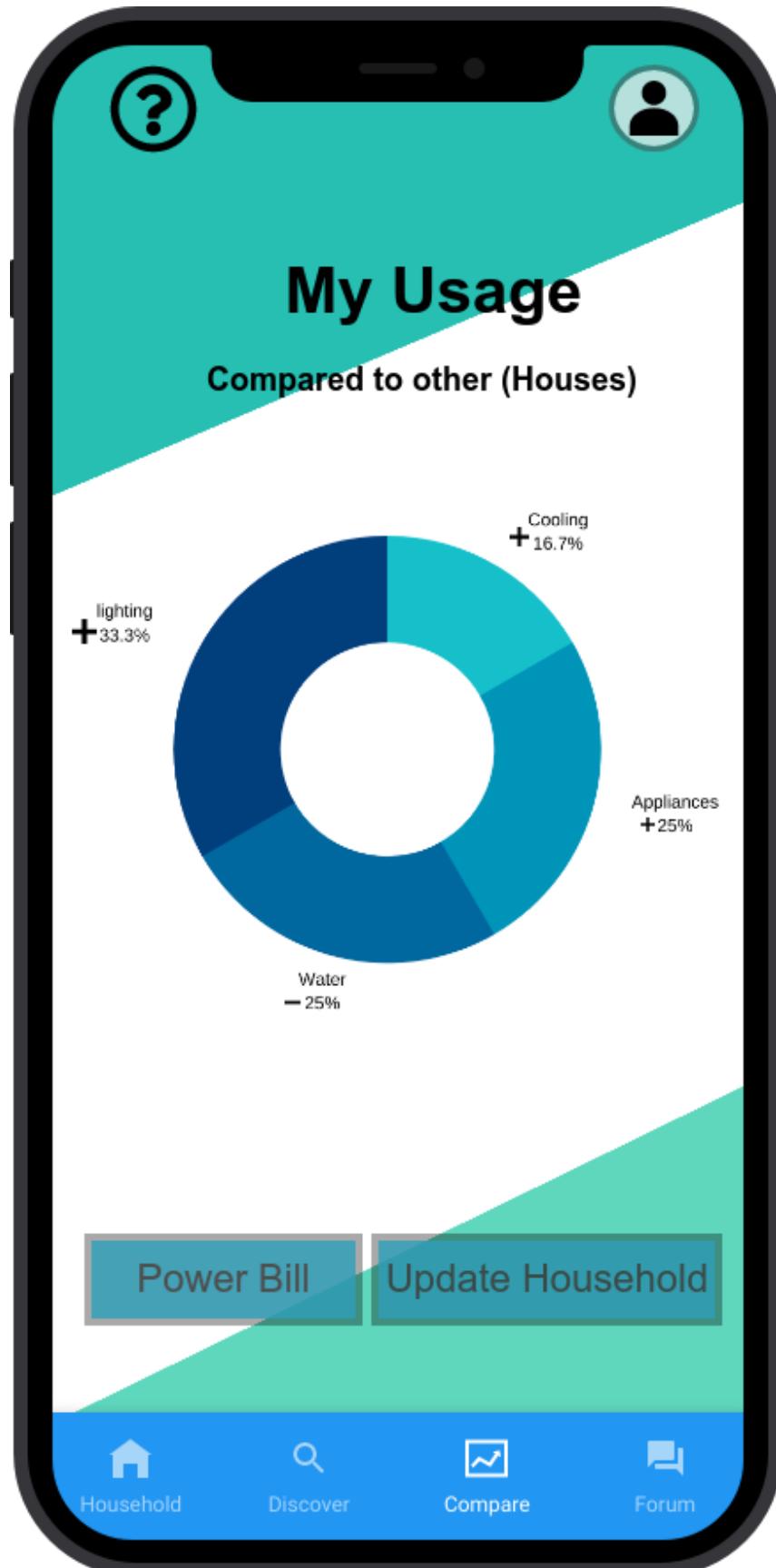














The image shows a mobile application interface for a survey. At the top left is a question mark icon, and at the top right is a user profile icon. The title "Household Details" is centered at the top. Below it is a question: "Are you an owner or a renter of the household?" followed by two radio buttons: "Owner: " and "Renter: ". Next is a question: "What best describes your dwelling?" with a dropdown menu set to "House". Below that is another question: "How many People live in the Household?" with a dropdown menu set to "3". At the bottom is a large blue button labeled "Continue". A progress bar at the bottom shows four steps, with the first step highlighted in green. The bottom navigation bar includes icons for "Household" (home), "Discover" (magnifying glass), "Compare" (chart), and "Forum" (speech bubble).

Household Details

Are you an owner or a renter of the household?

Owner: Renter:

What best describes your dwelling?

House

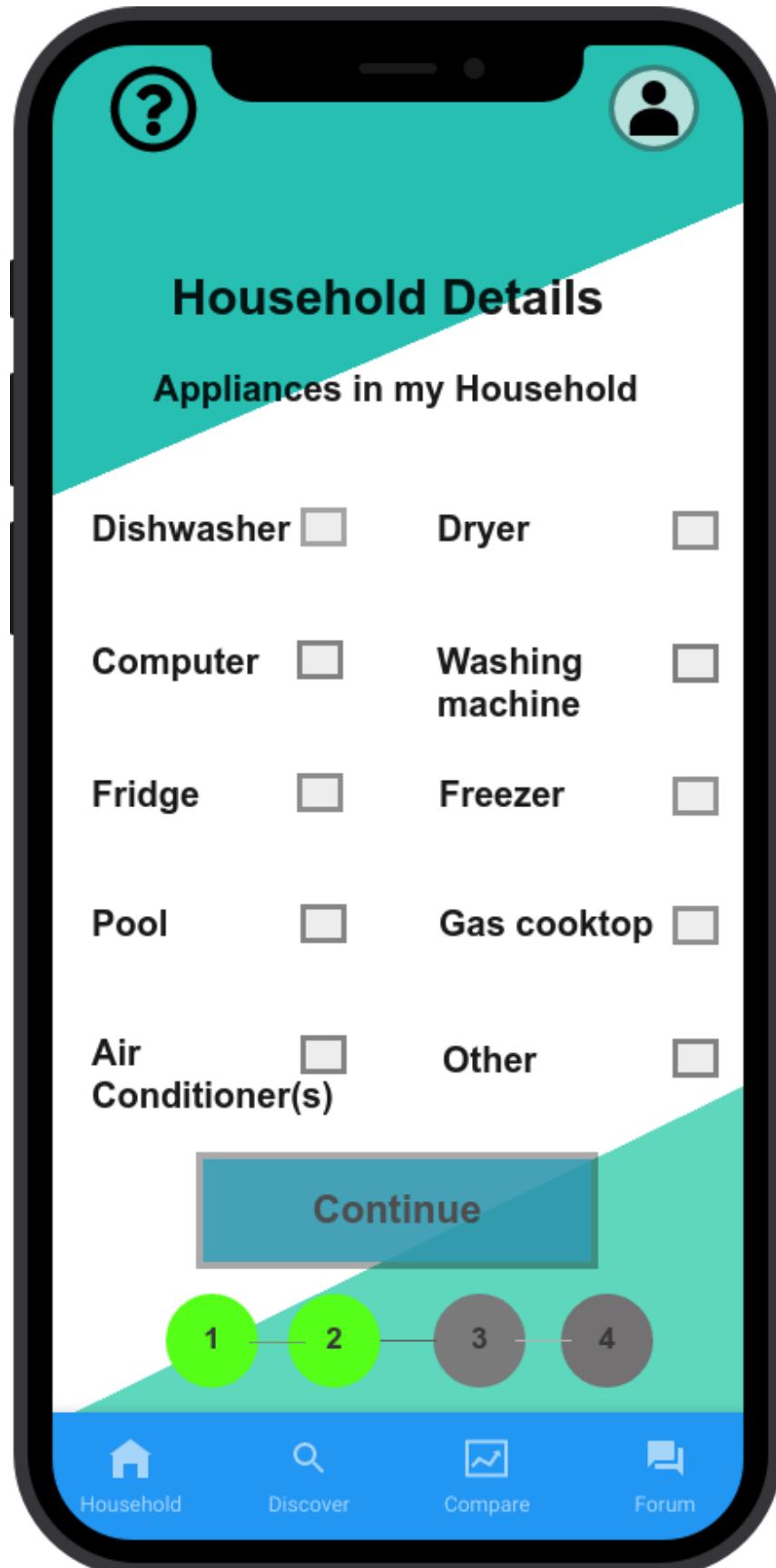
How many People live in the Household?

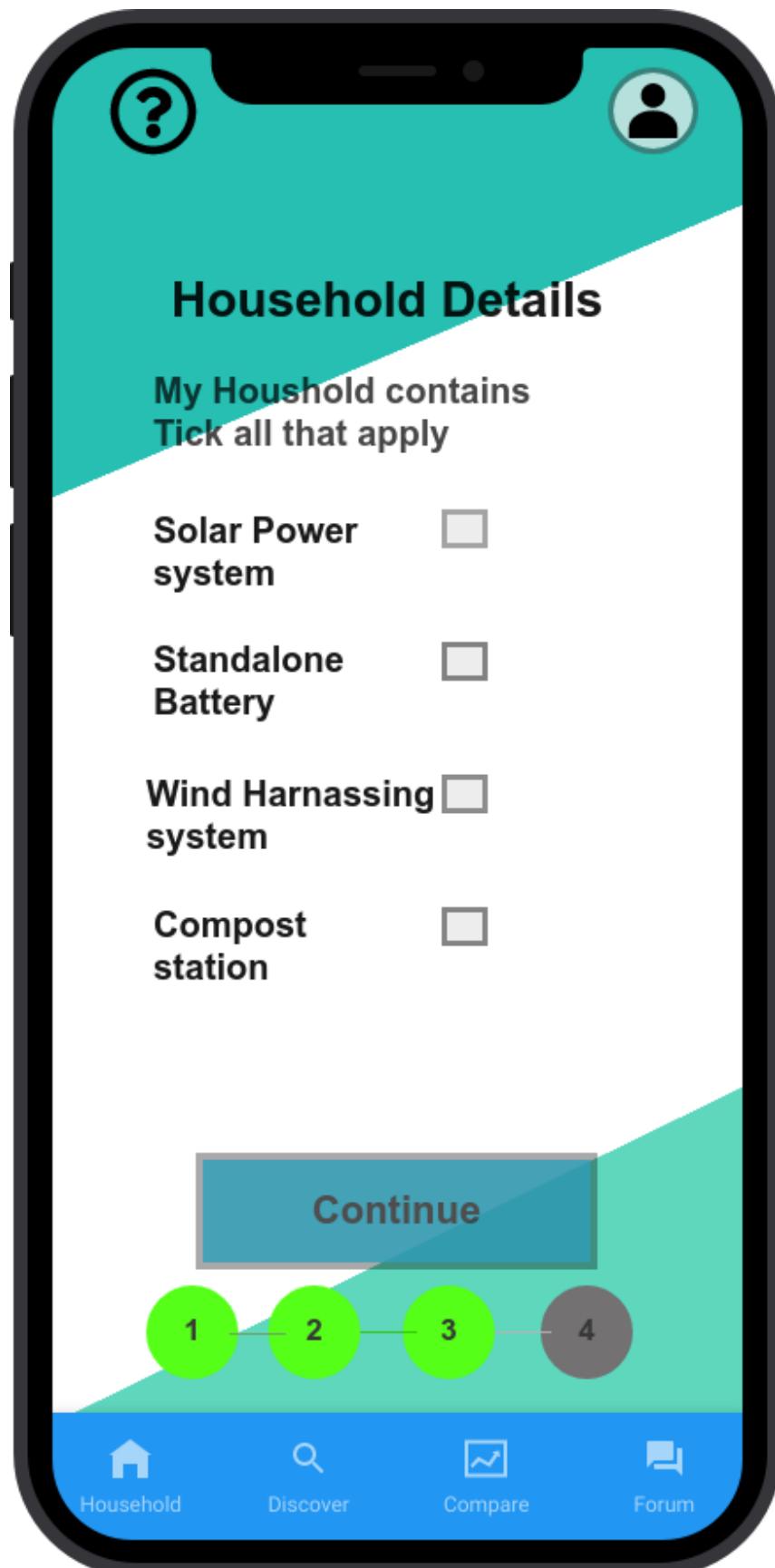
3

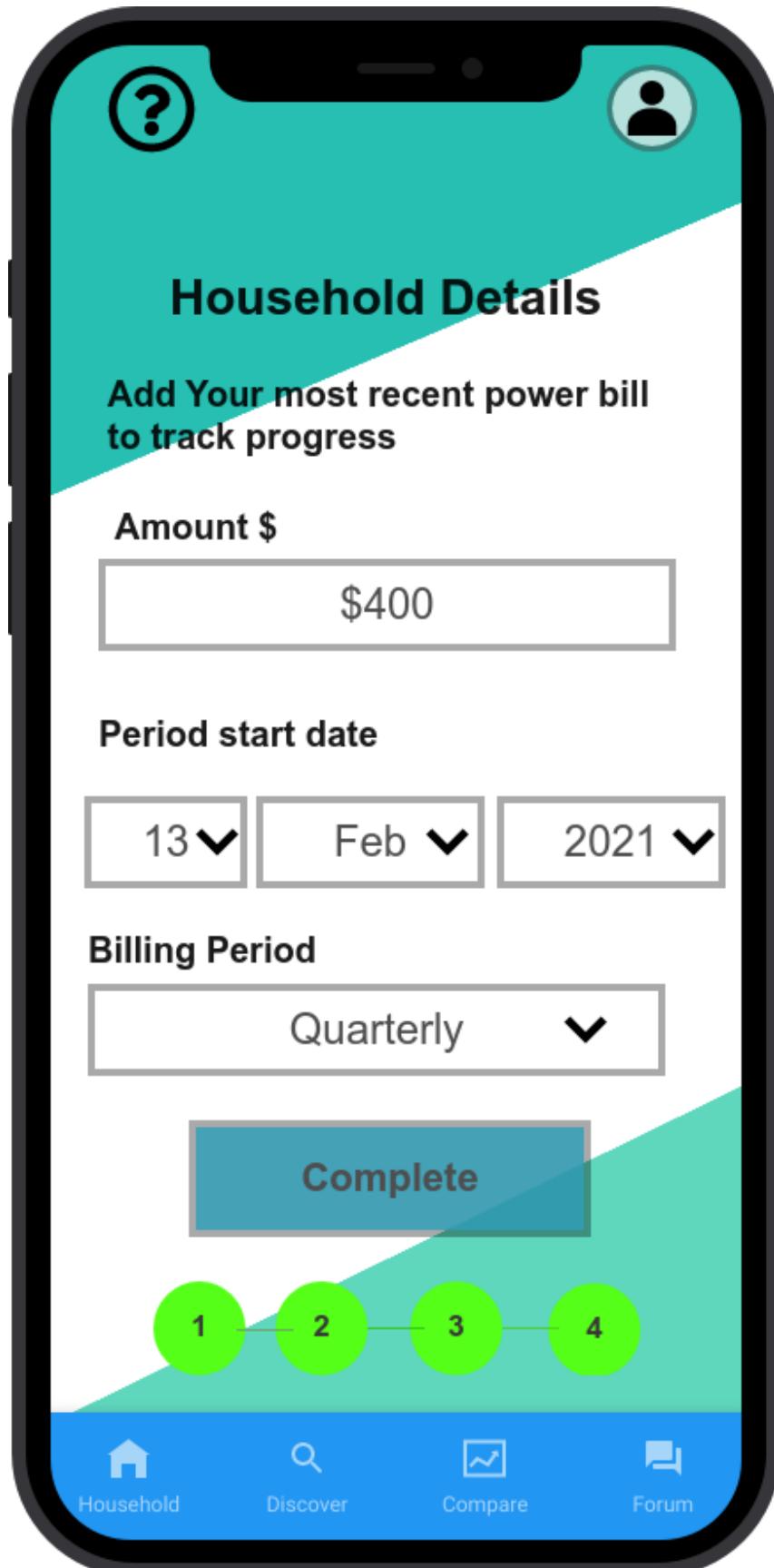
Continue

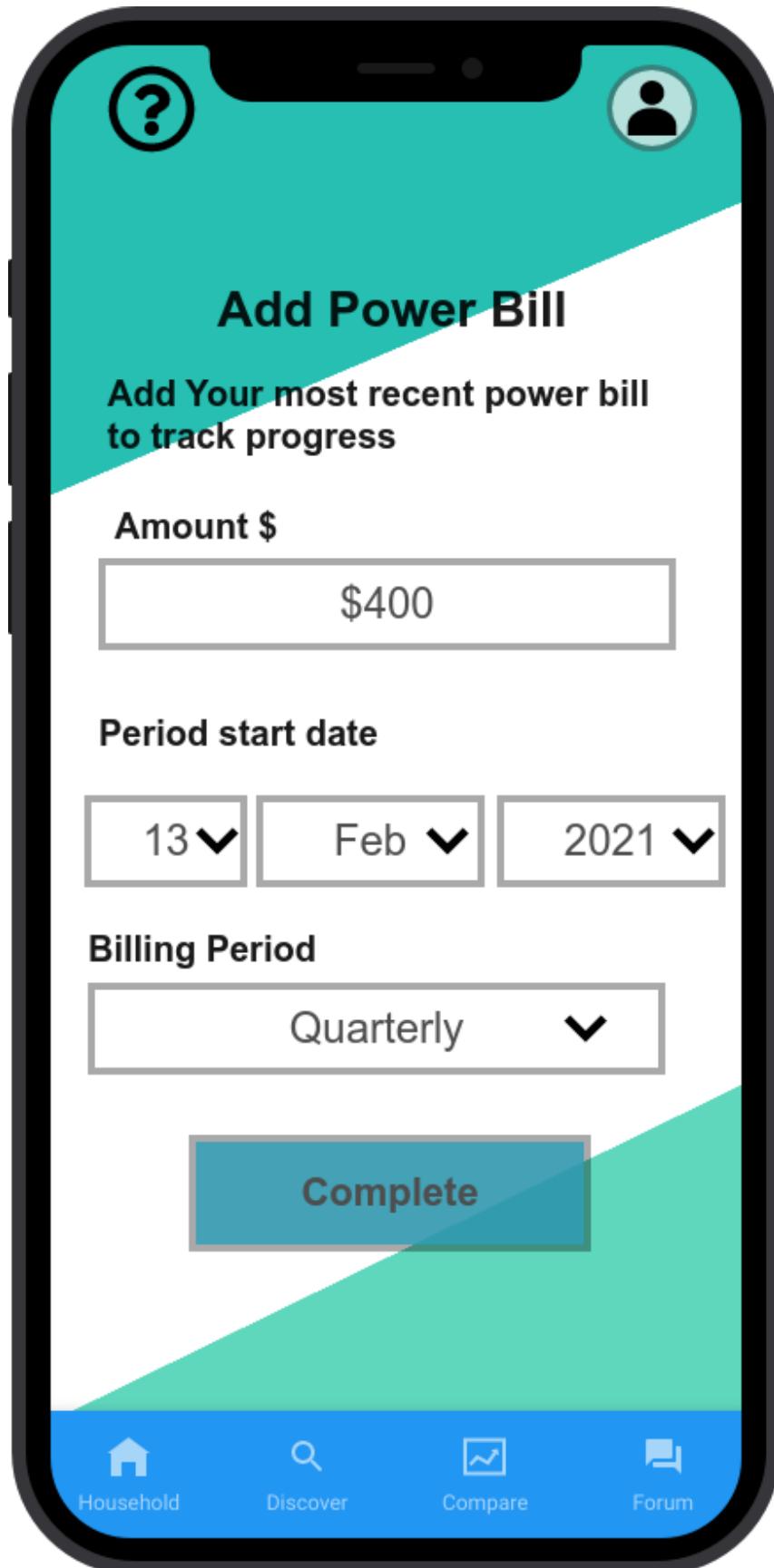
1 2 3 4

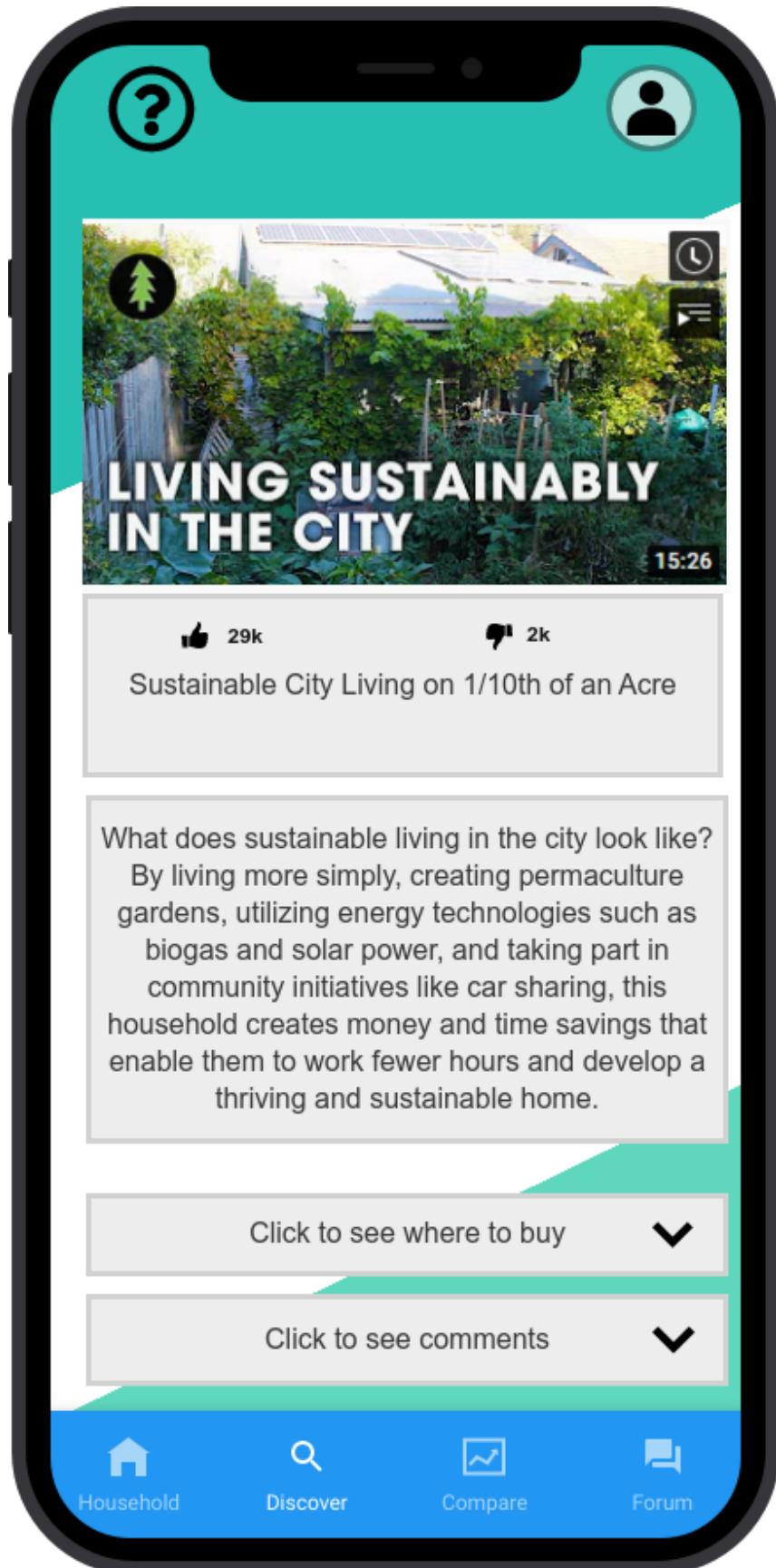
Household Discover Compare Forum

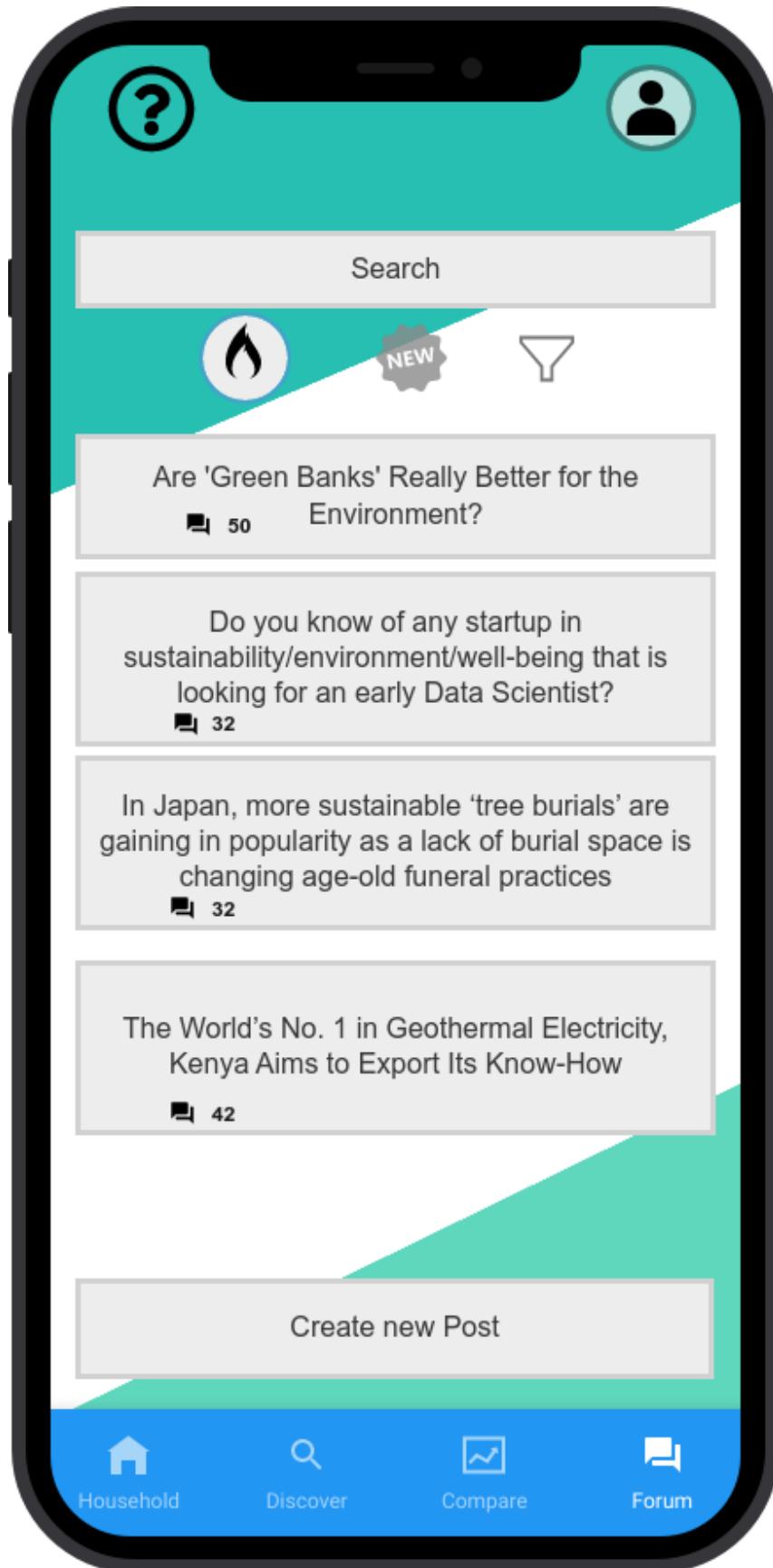




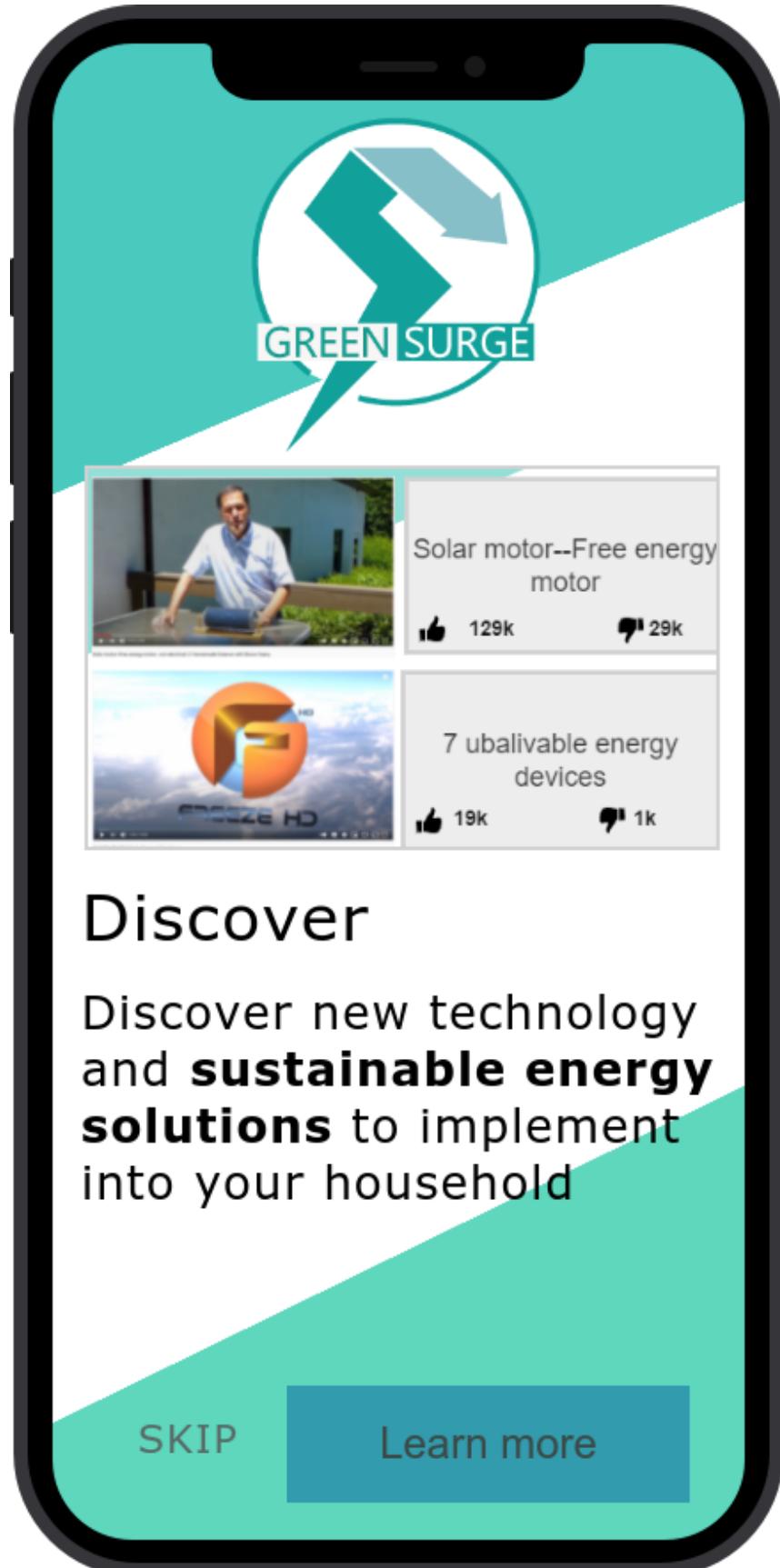








Prototype 3.0

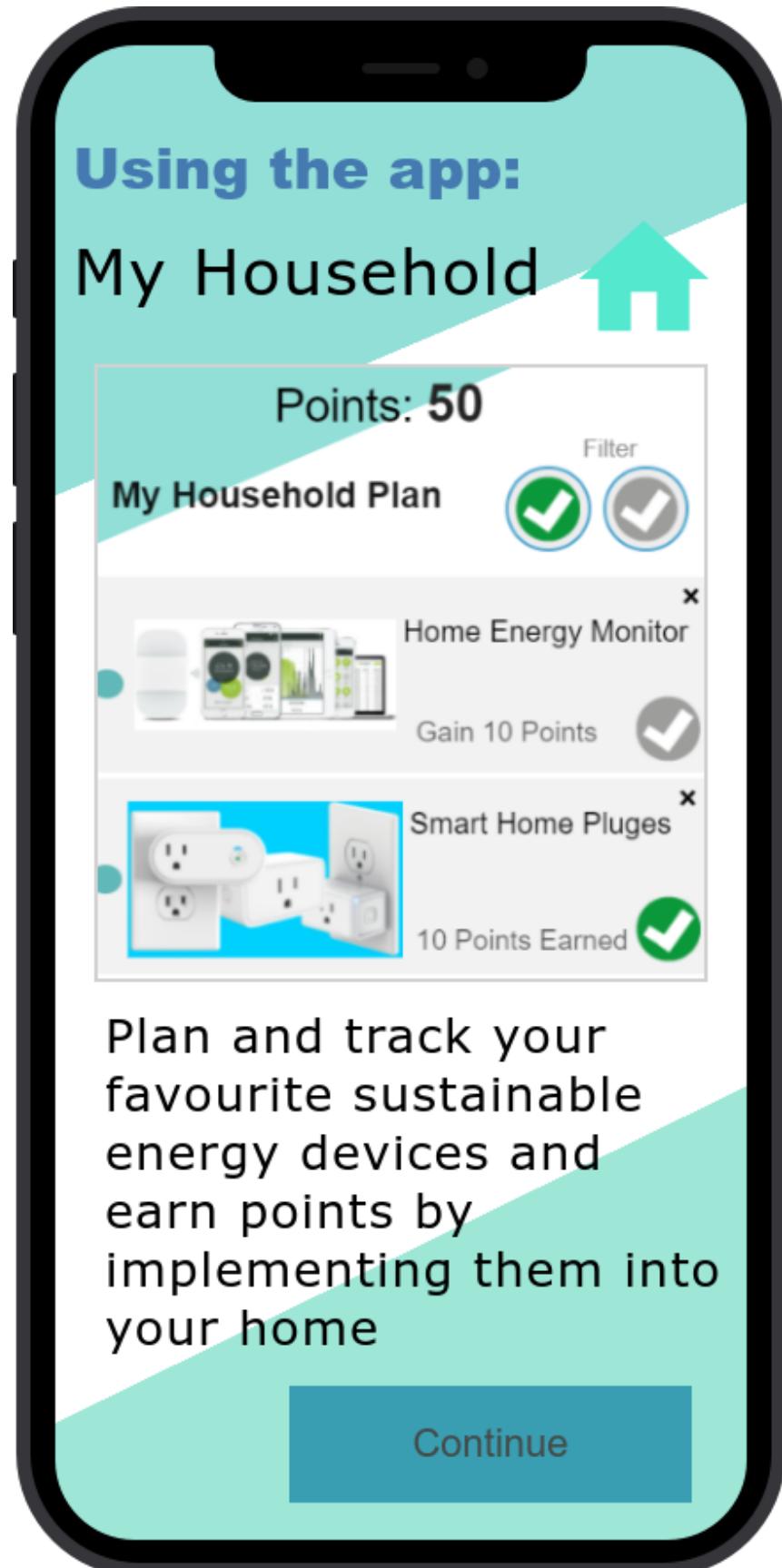


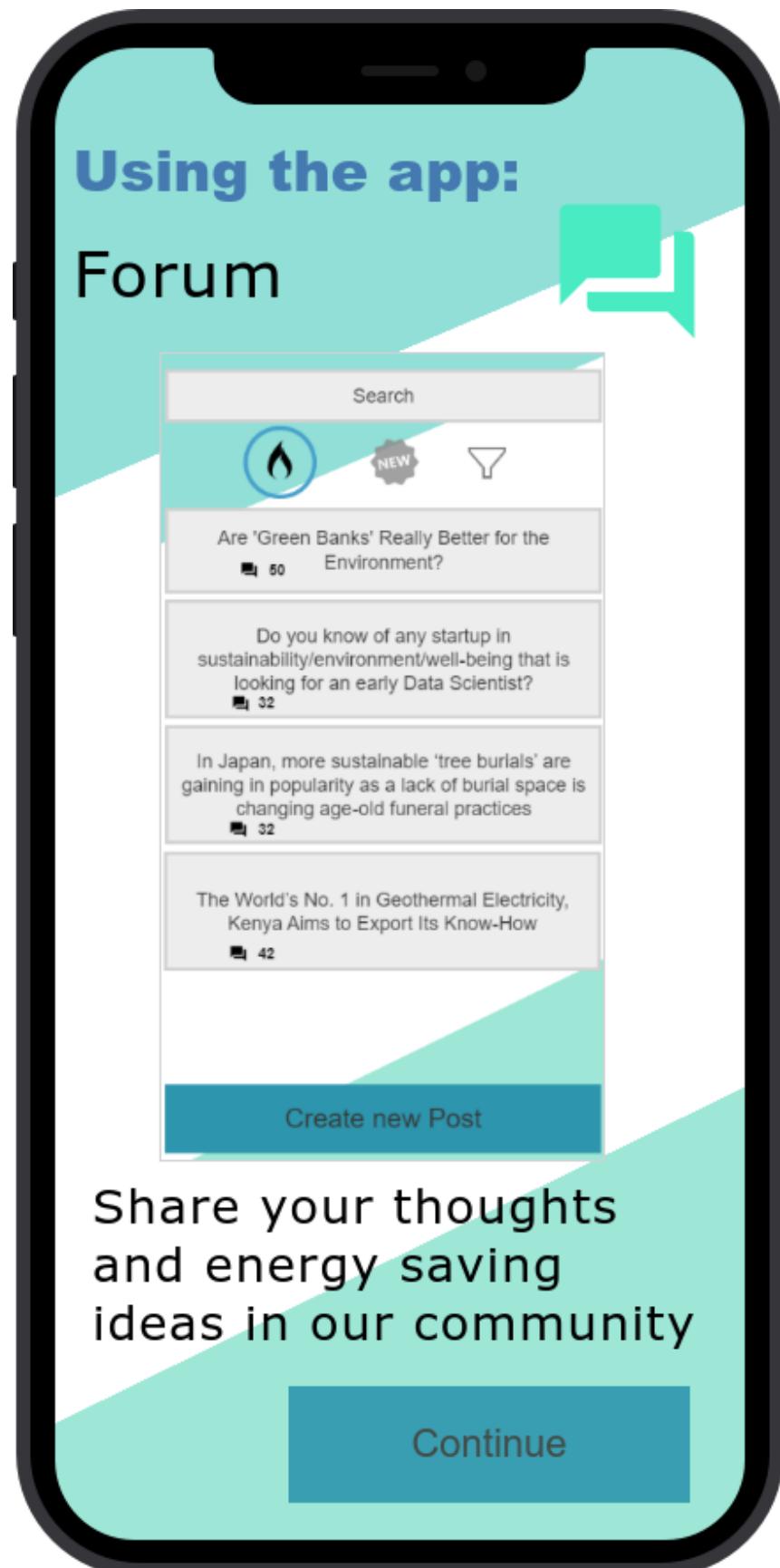
Discover

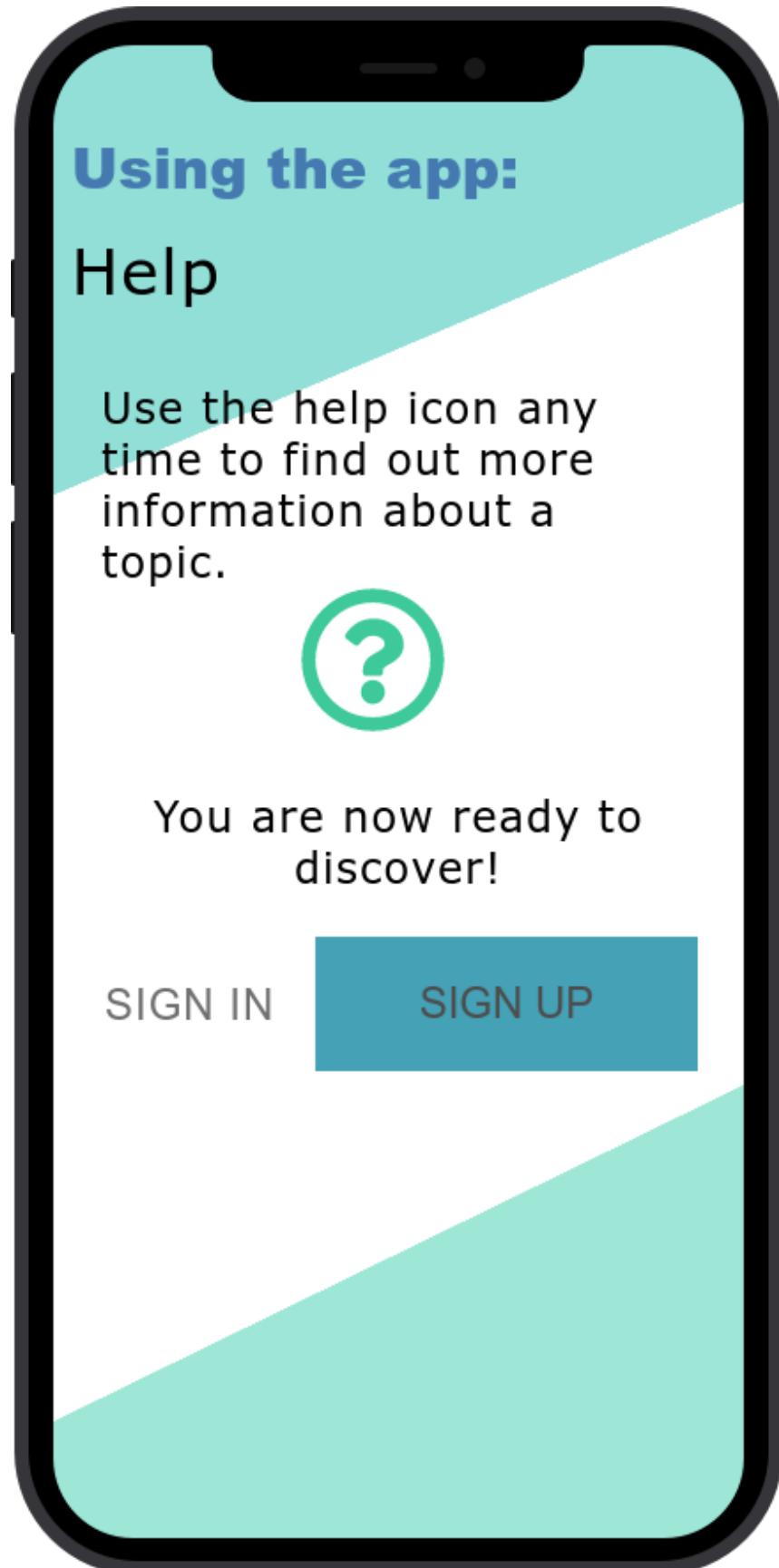
Discover new technology and **sustainable energy solutions** to implement into your household

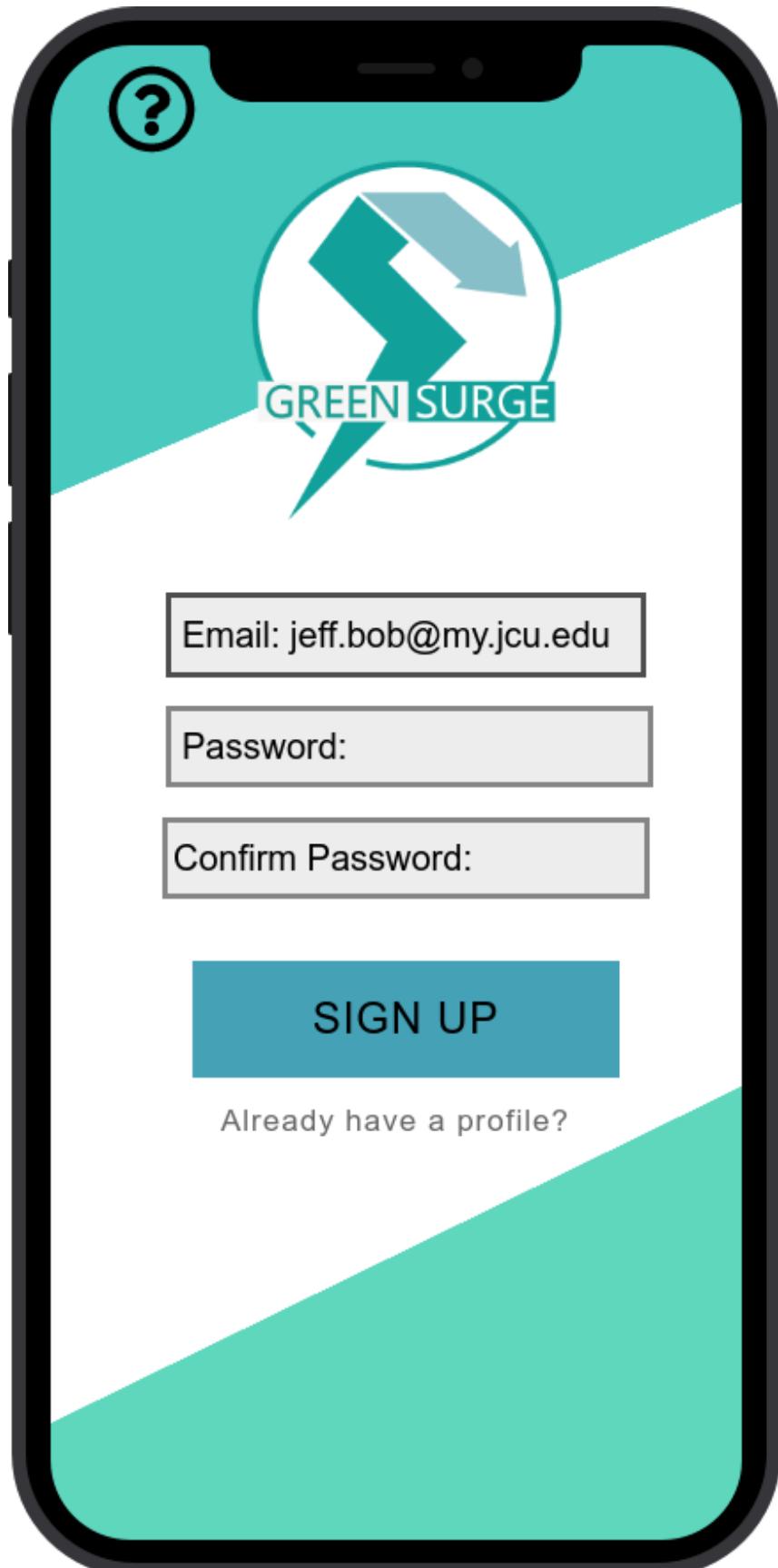
SKIP

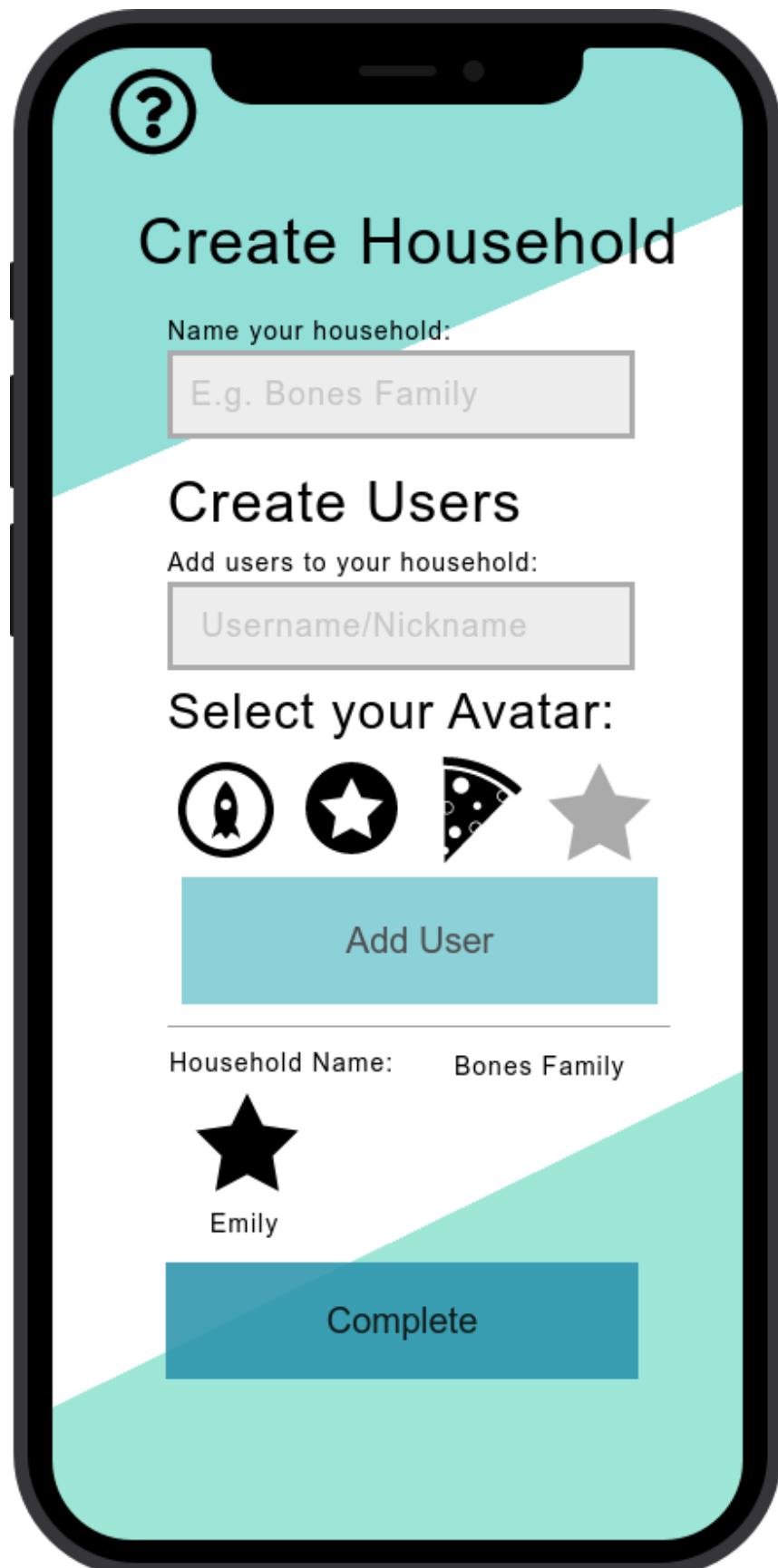
Learn more











The image shows a smartphone displaying a user interface for setting or updating household details. The screen has a light blue header and footer, and a white central content area.

Household Details

Are you the owner or a renter of the property?

Owner: Renter:

What best describes your dwelling?

House ▼

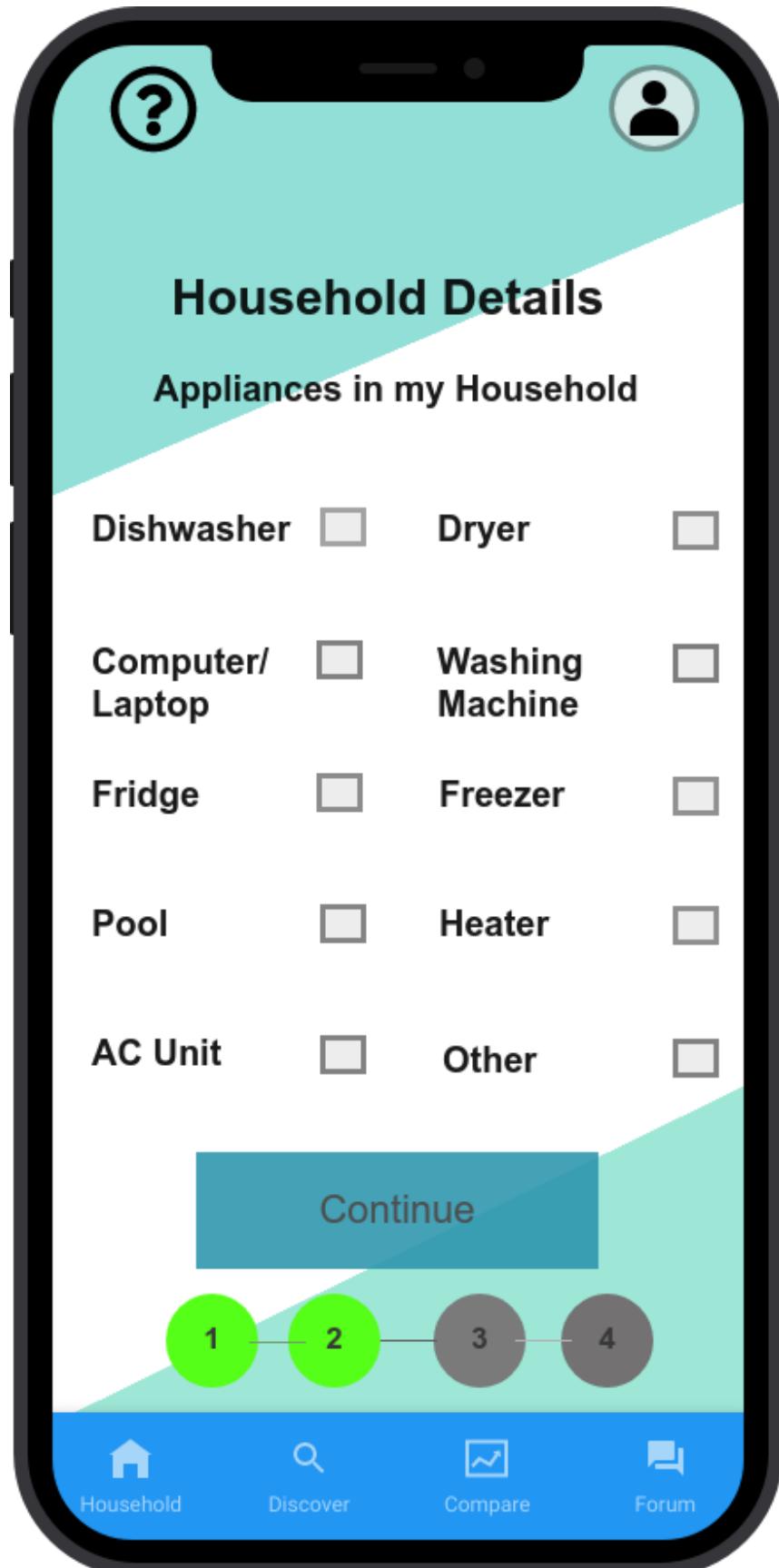
How many People live in the Household?

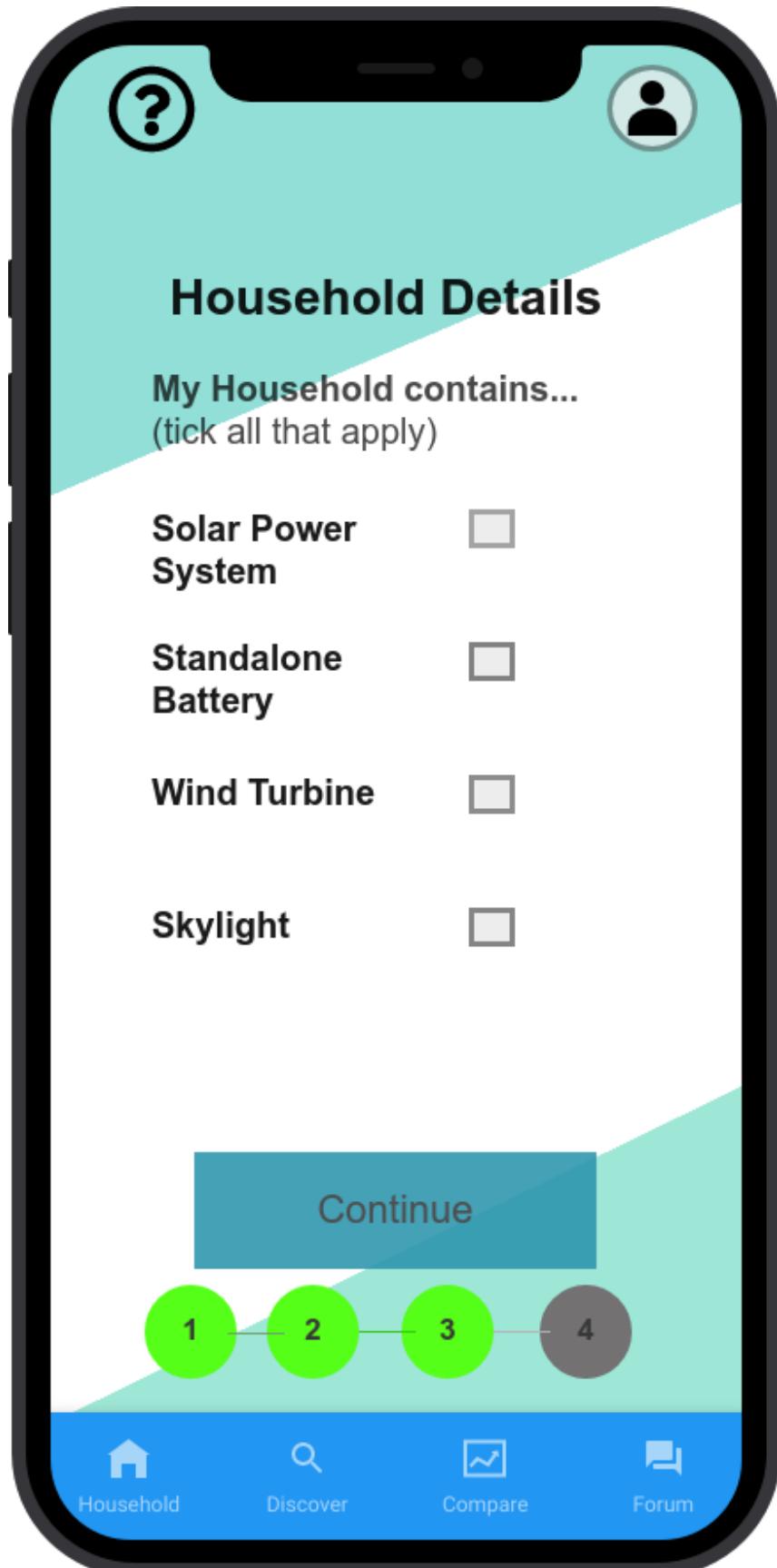
3 ▼

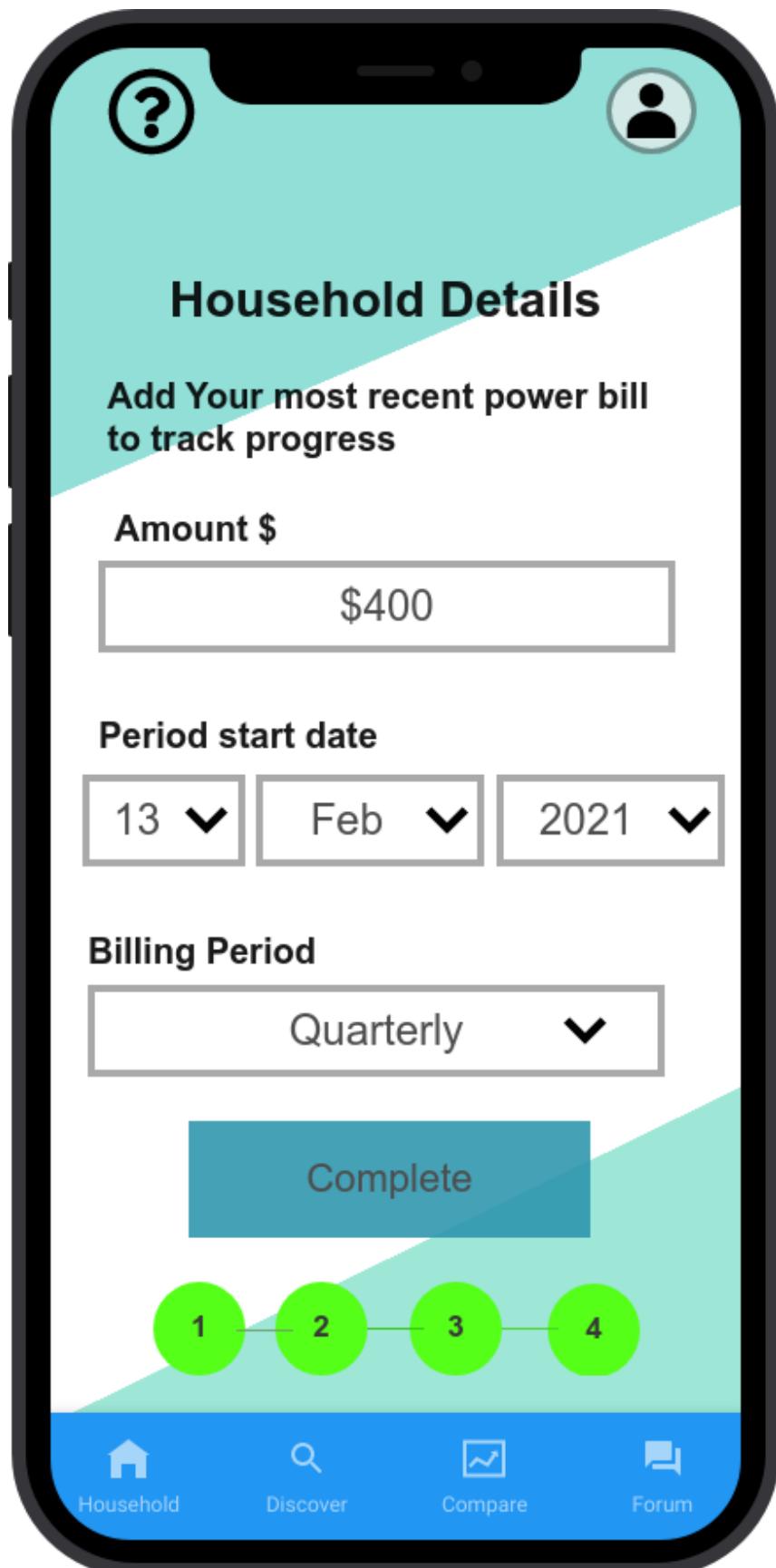
Continue

1 2 3 4

Household Discover Compare Forum



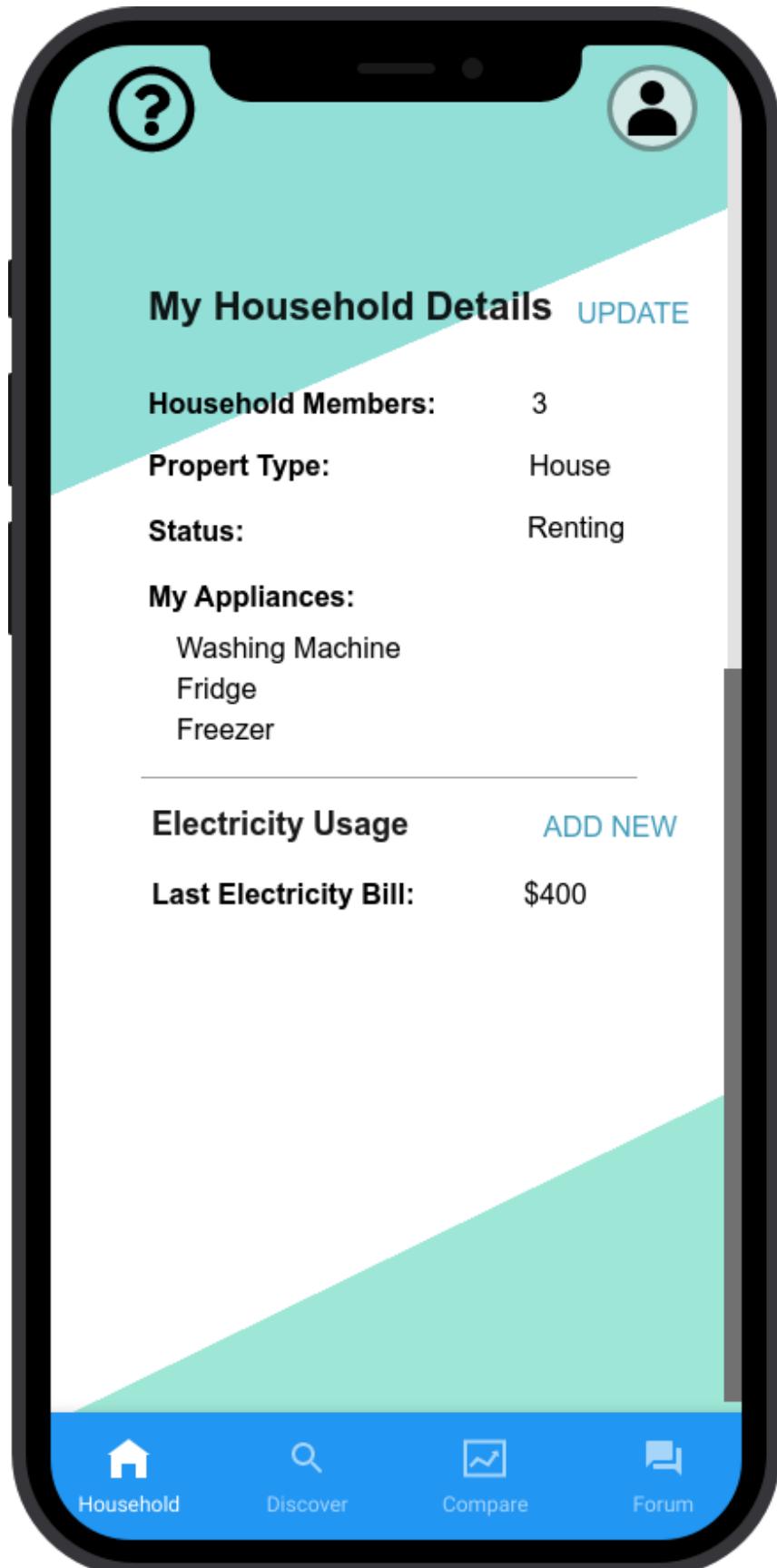


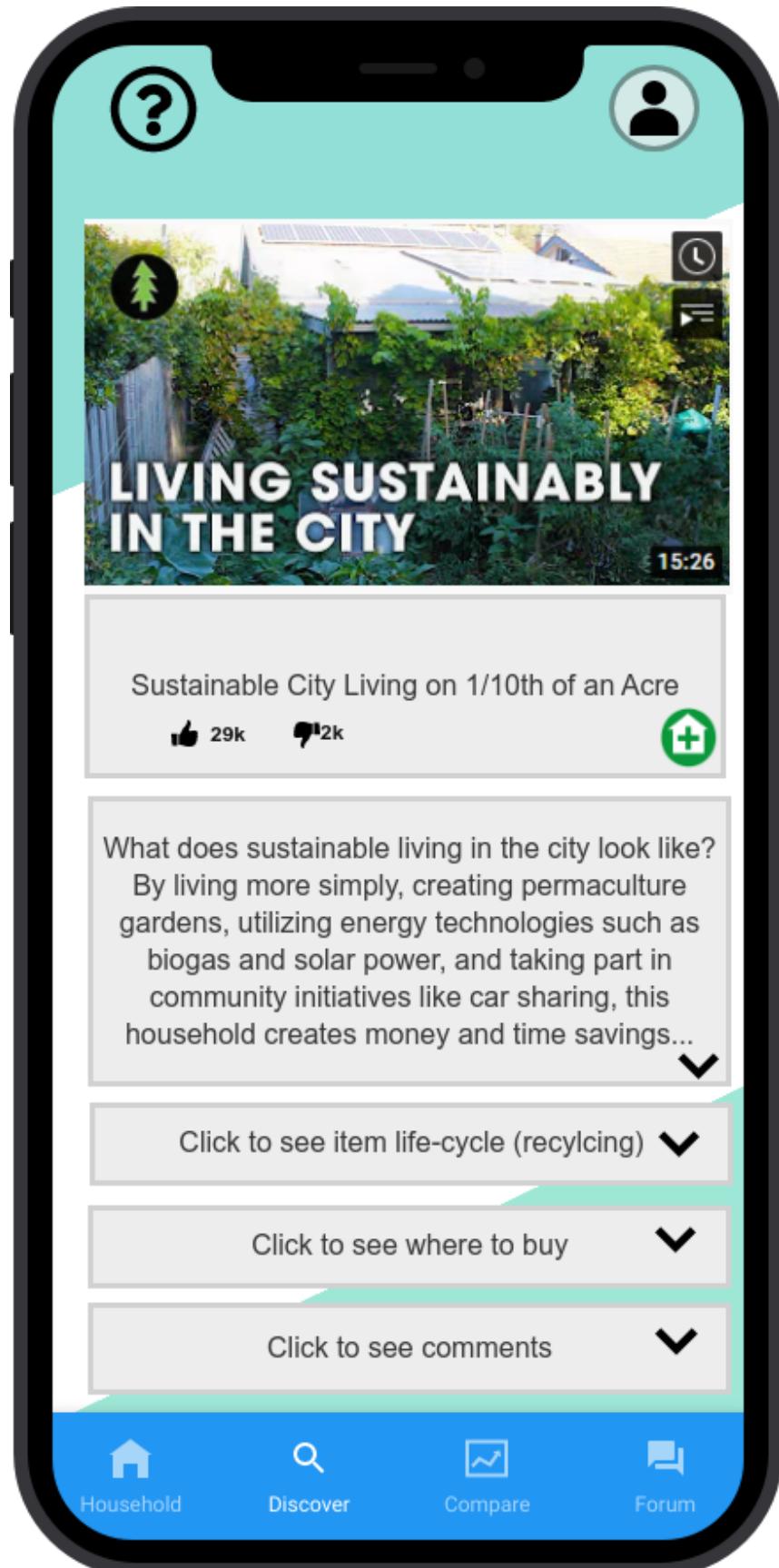












The image shows a mobile application interface titled "Compare My Household". At the top left is a question mark icon, and at the top right is a user profile icon. The main title "Compare My Household" is centered above a "Leaderboard" section. The leaderboard table has columns for Rank, Household, and Points:

| Rank | Household | Points |
|------|---------------|--------|
| 1 | Pumpkin Gang | 105 |
| 2 | Saint Nicolas | 95 |
| 3 | Tickled_pink | 82 |

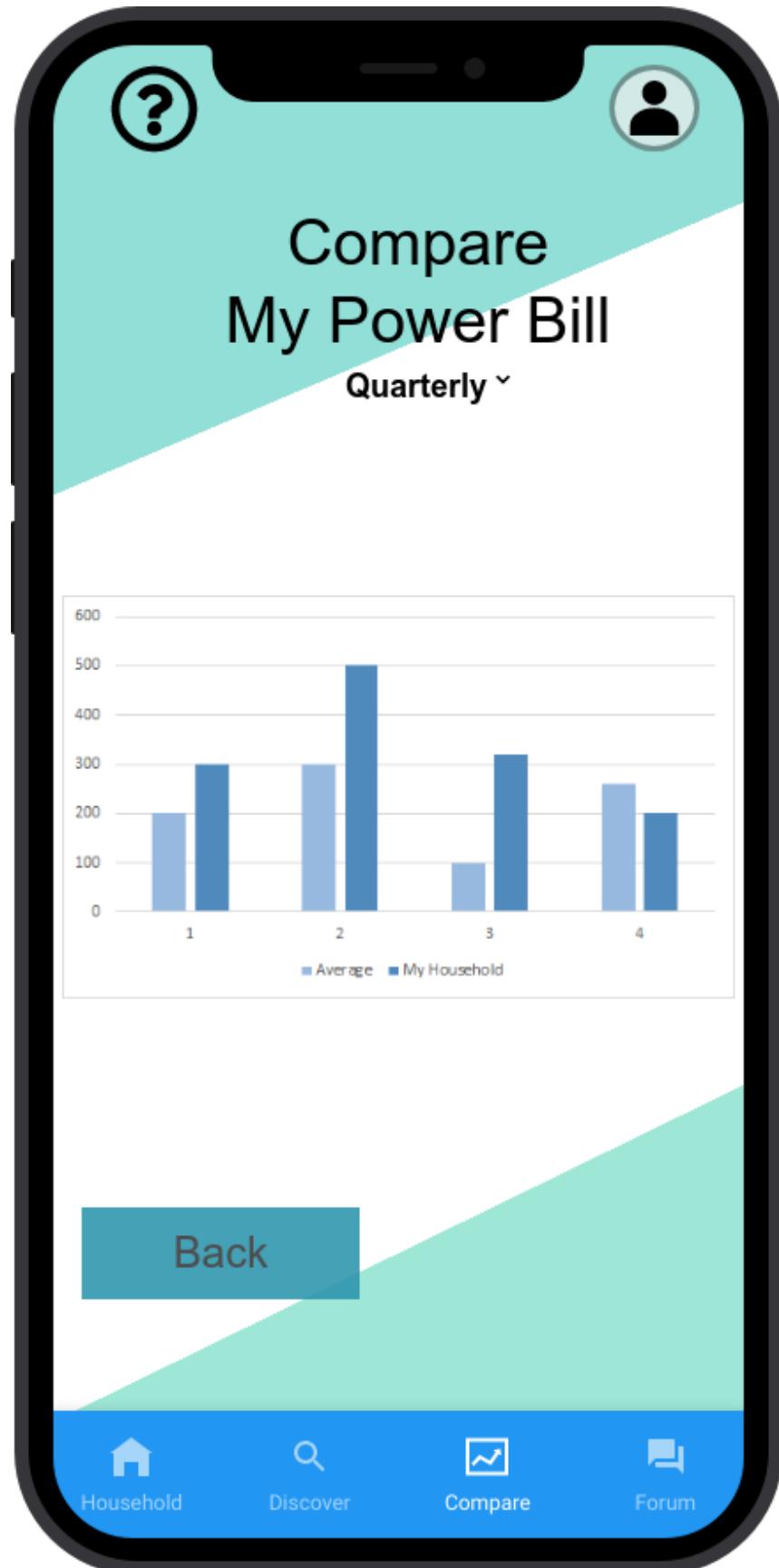
A grey downward arrow button is located below the third row. A horizontal line separates the leaderboard from the "My Position" section. This section shows a single entry:

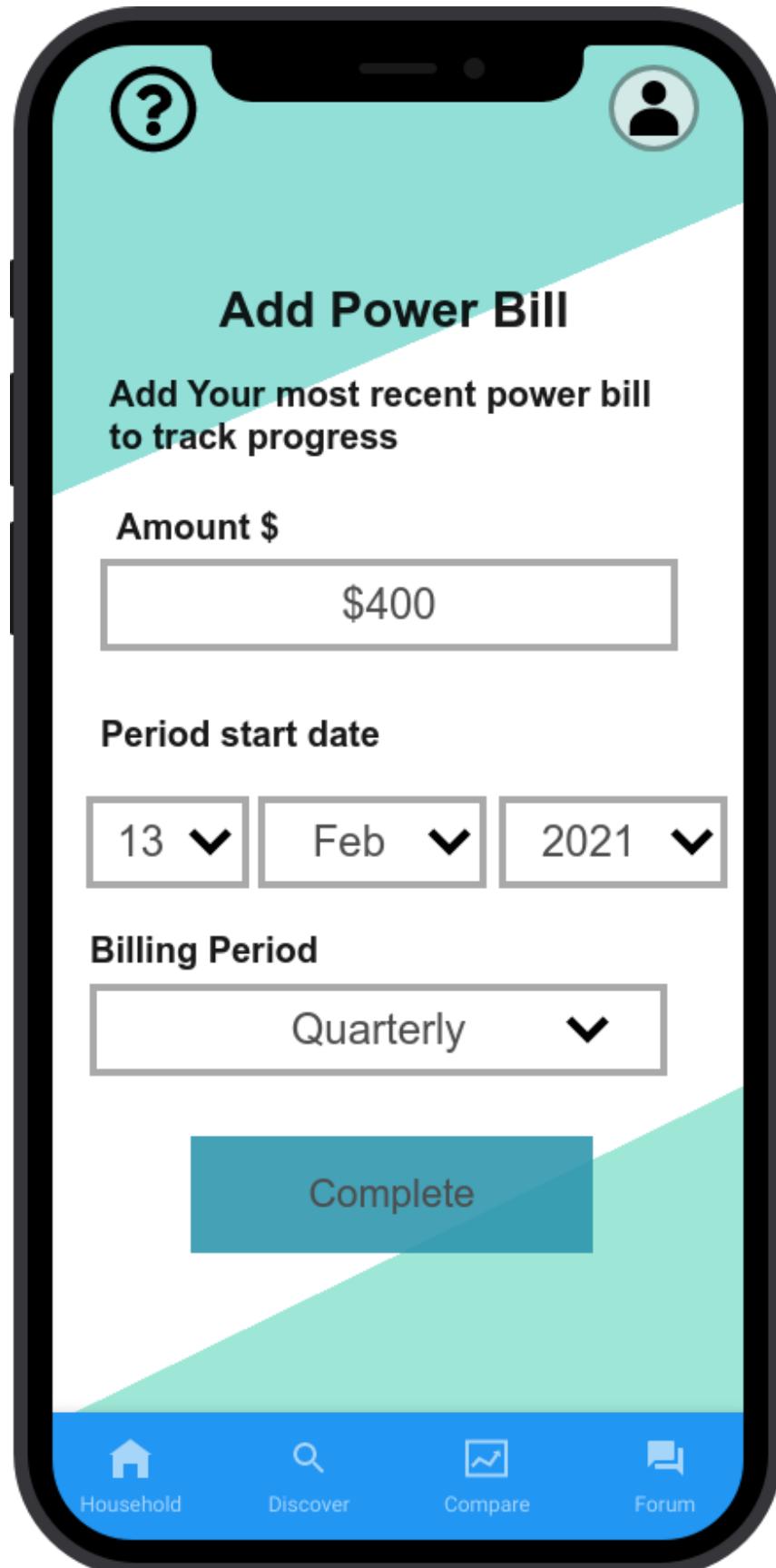
| Rank | Household | Points |
|------|---------------|--------|
| 29 | Awsome_person | 50 |

Below these sections is a chart comparing "My Points" (light blue) and "Average Household Points" (dark blue). The chart has a scale from 0 to 60. The "My Points" bar reaches approximately 45, while the "Average Household Points" bar reaches approximately 55.

At the bottom of the screen is a blue navigation bar with four icons: "Household" (home), "Discover" (magnifying glass), "Compare" (chart), and "Forum" (speech bubble).







Discover

Suggestions

Solar motor--Free energy motor
129k 29k +

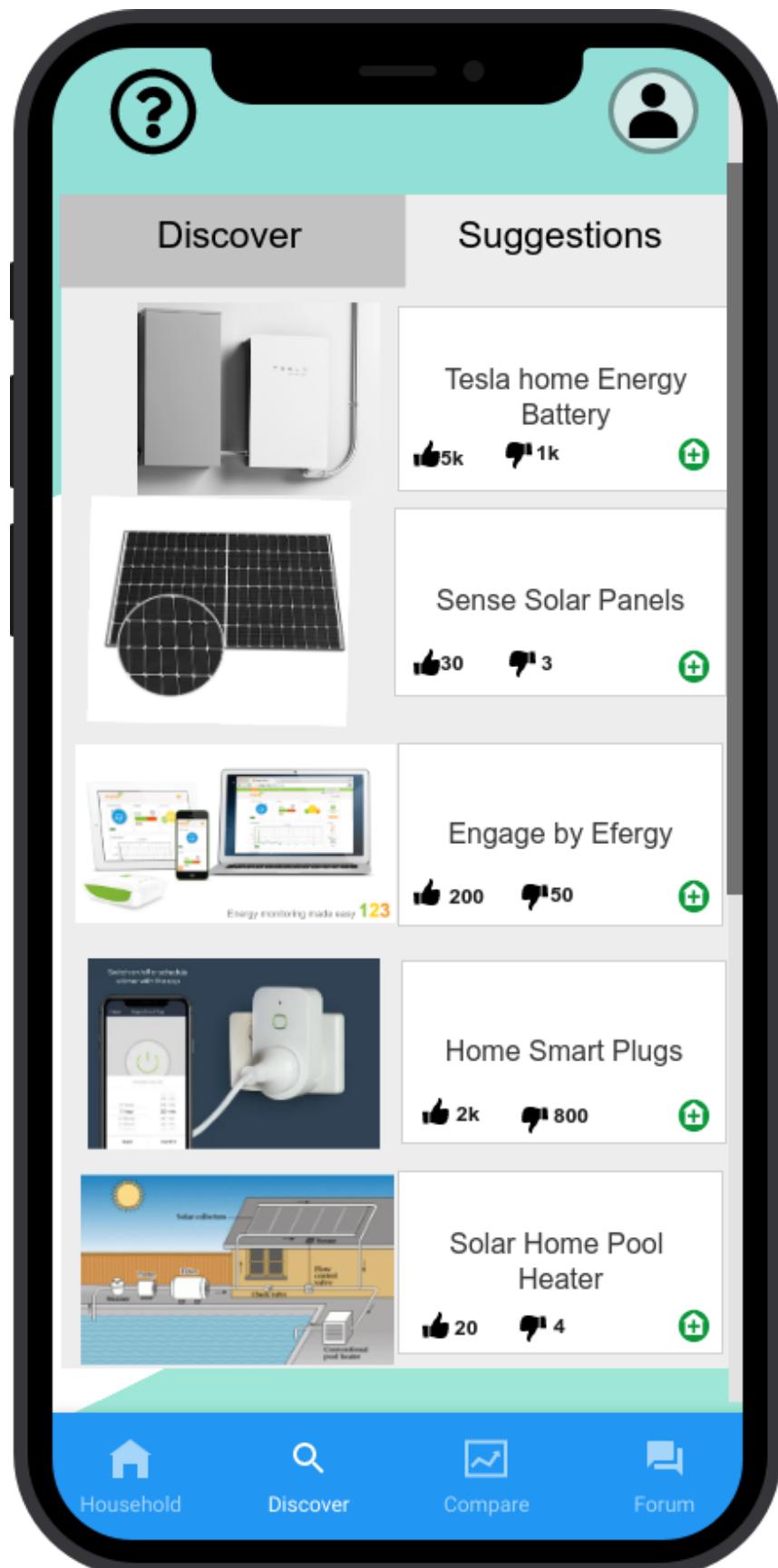
7 ubalivable energy devices
19k 1k +

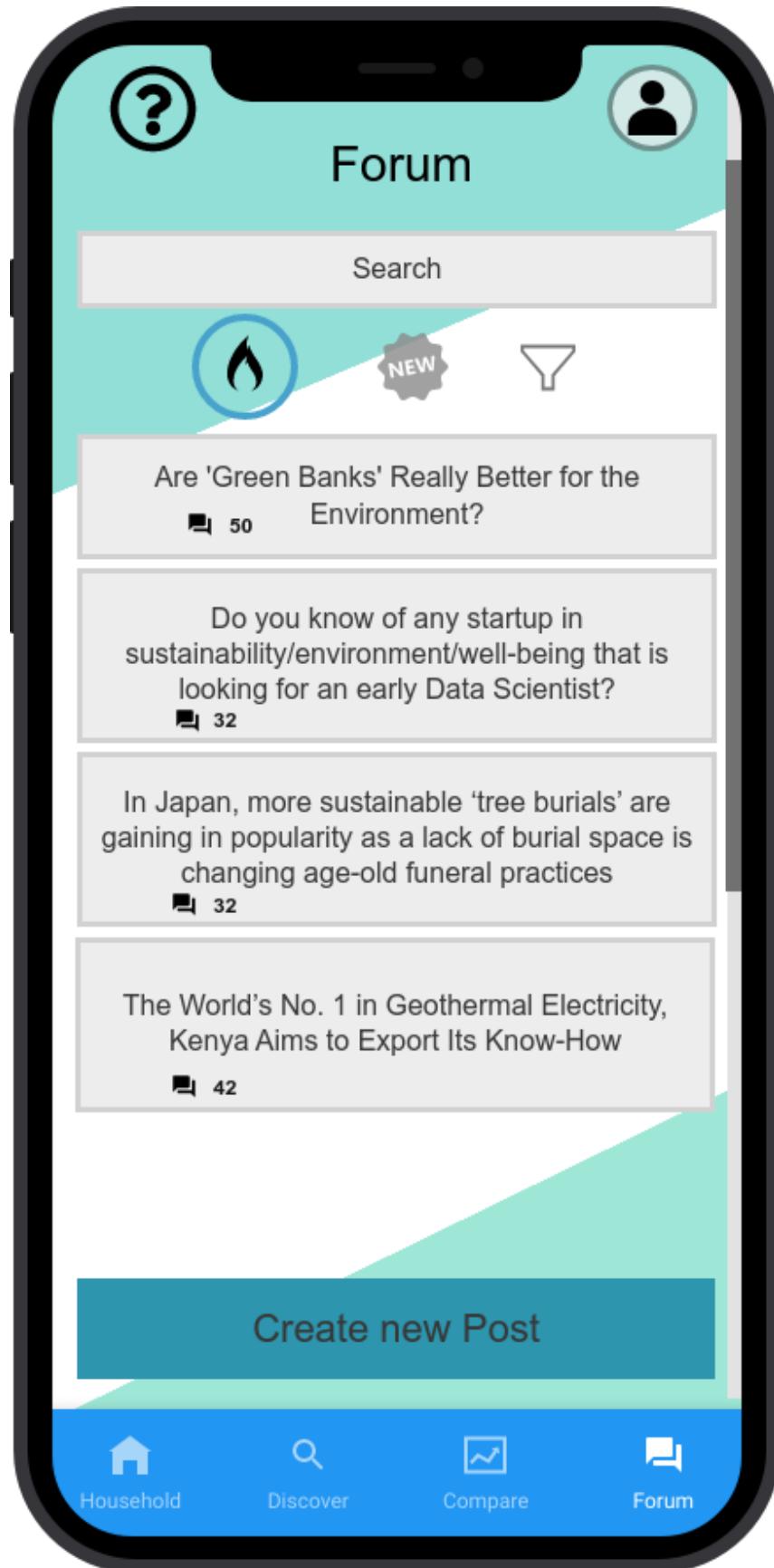
Backyard Aquaponics Farming
109k 19k +

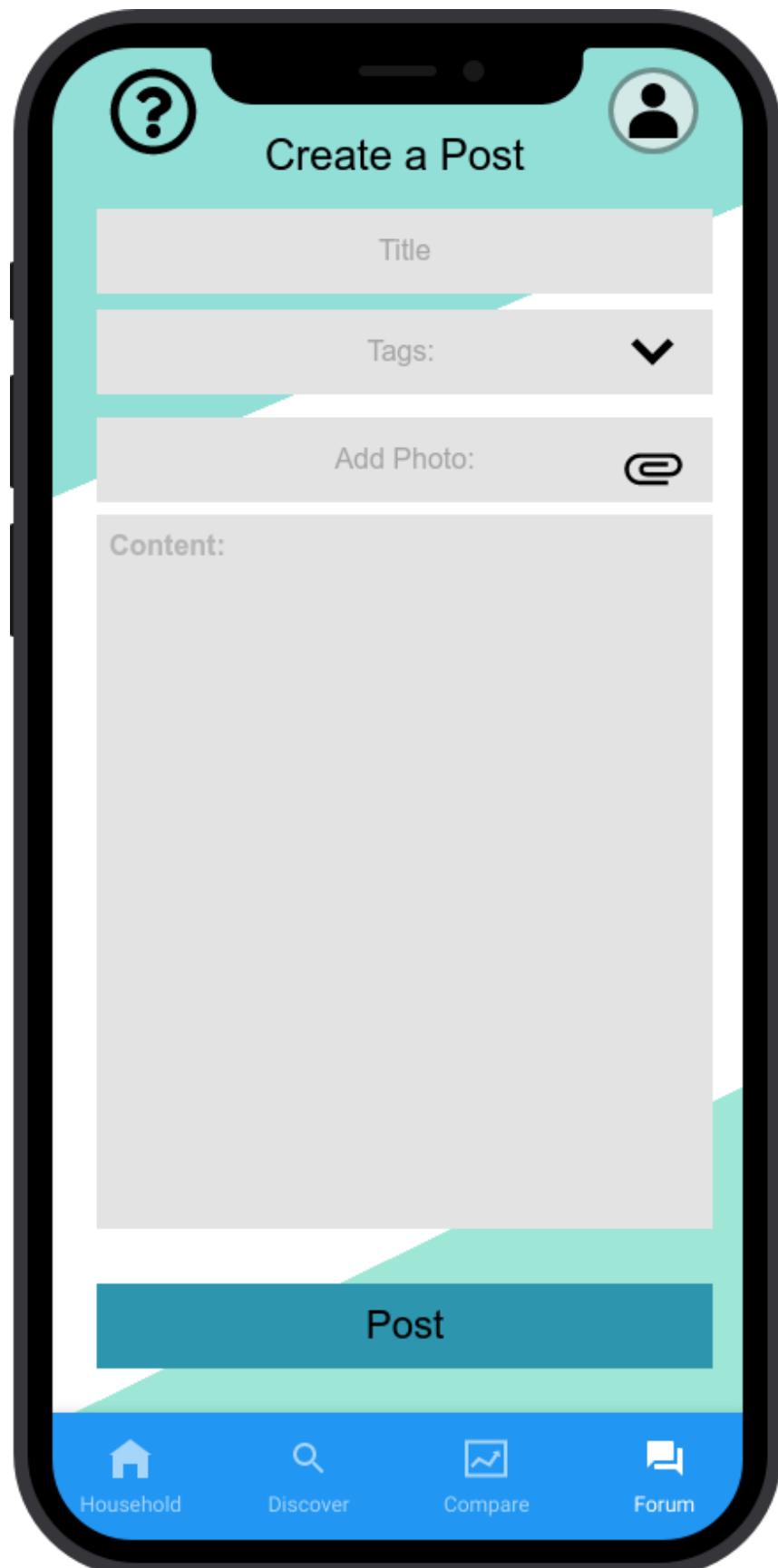
The Biggest Lie About Renewable Energy
60k 9k +

Sustainable City Living on 1/10th of an Acre
29k 2k +

Household Discover Compare Forum

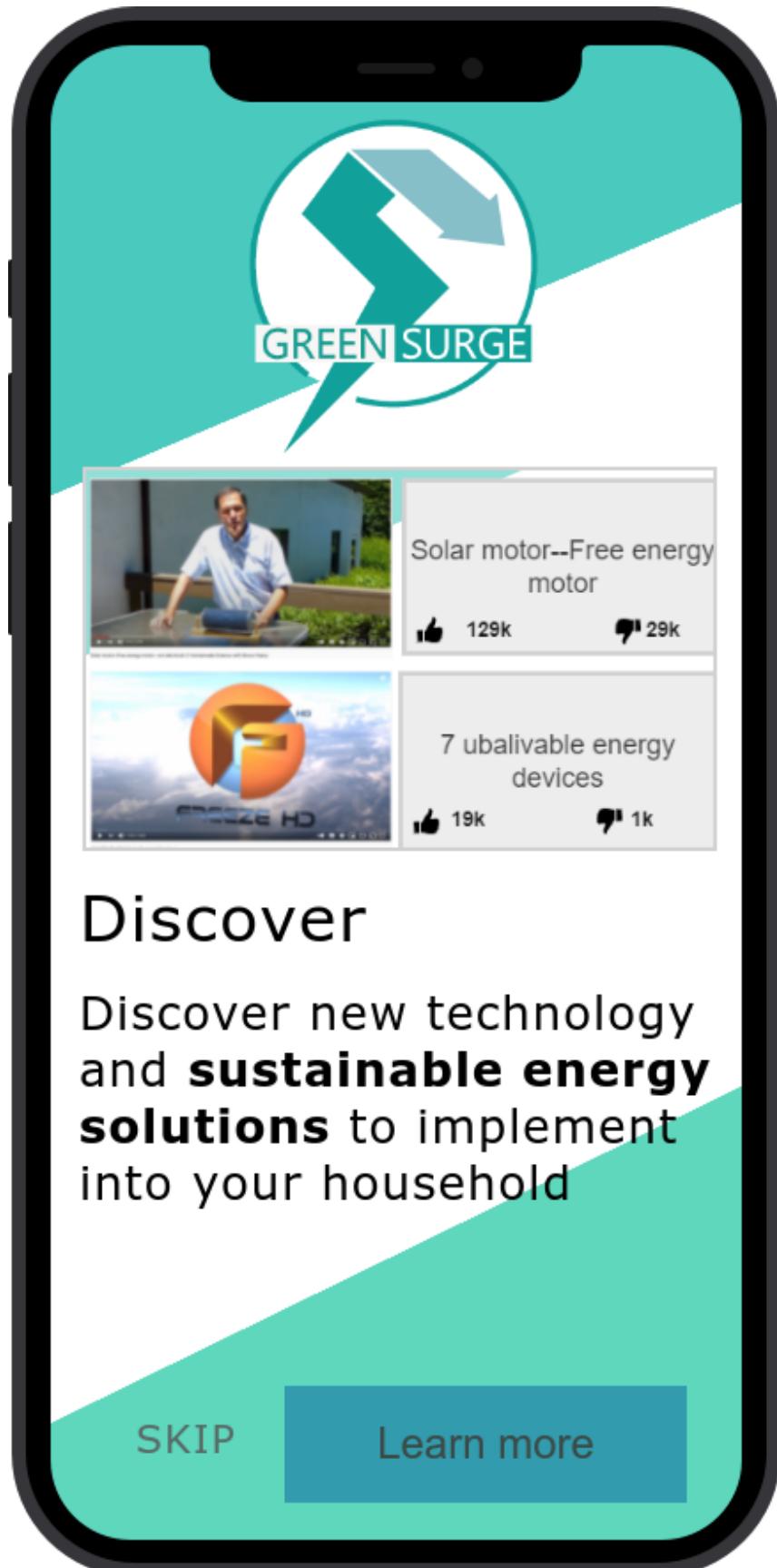


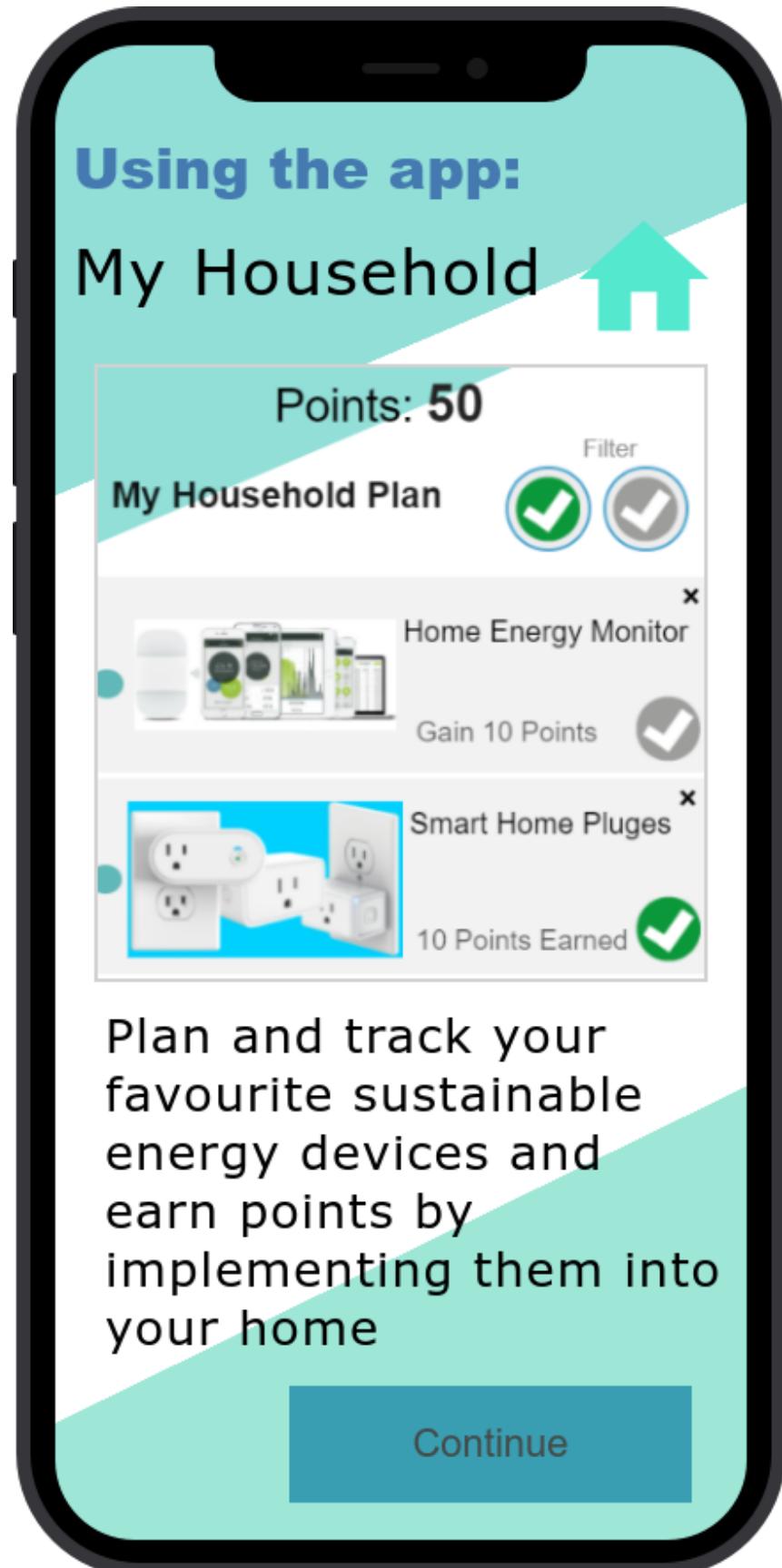


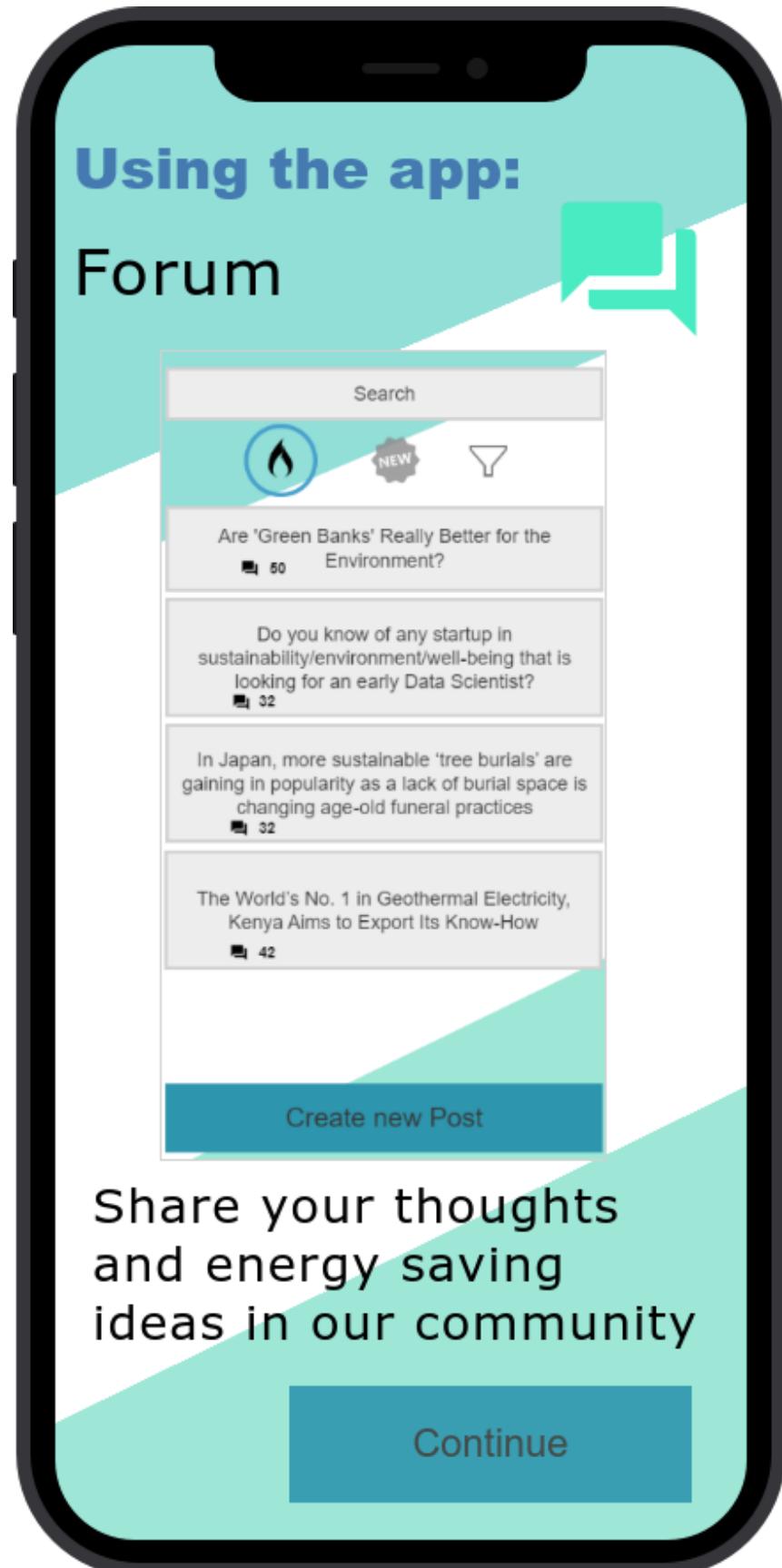


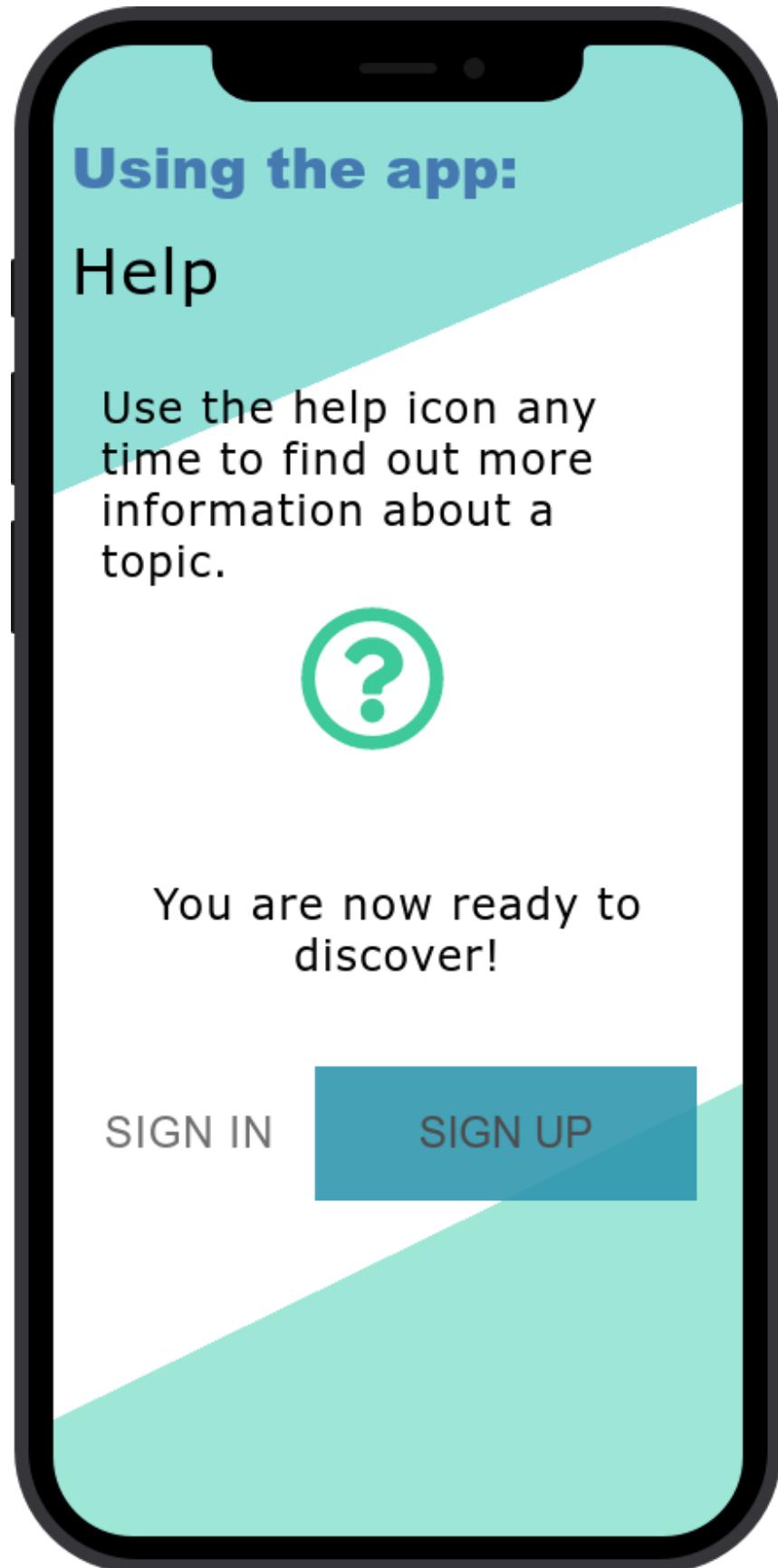
Prototype 4.0

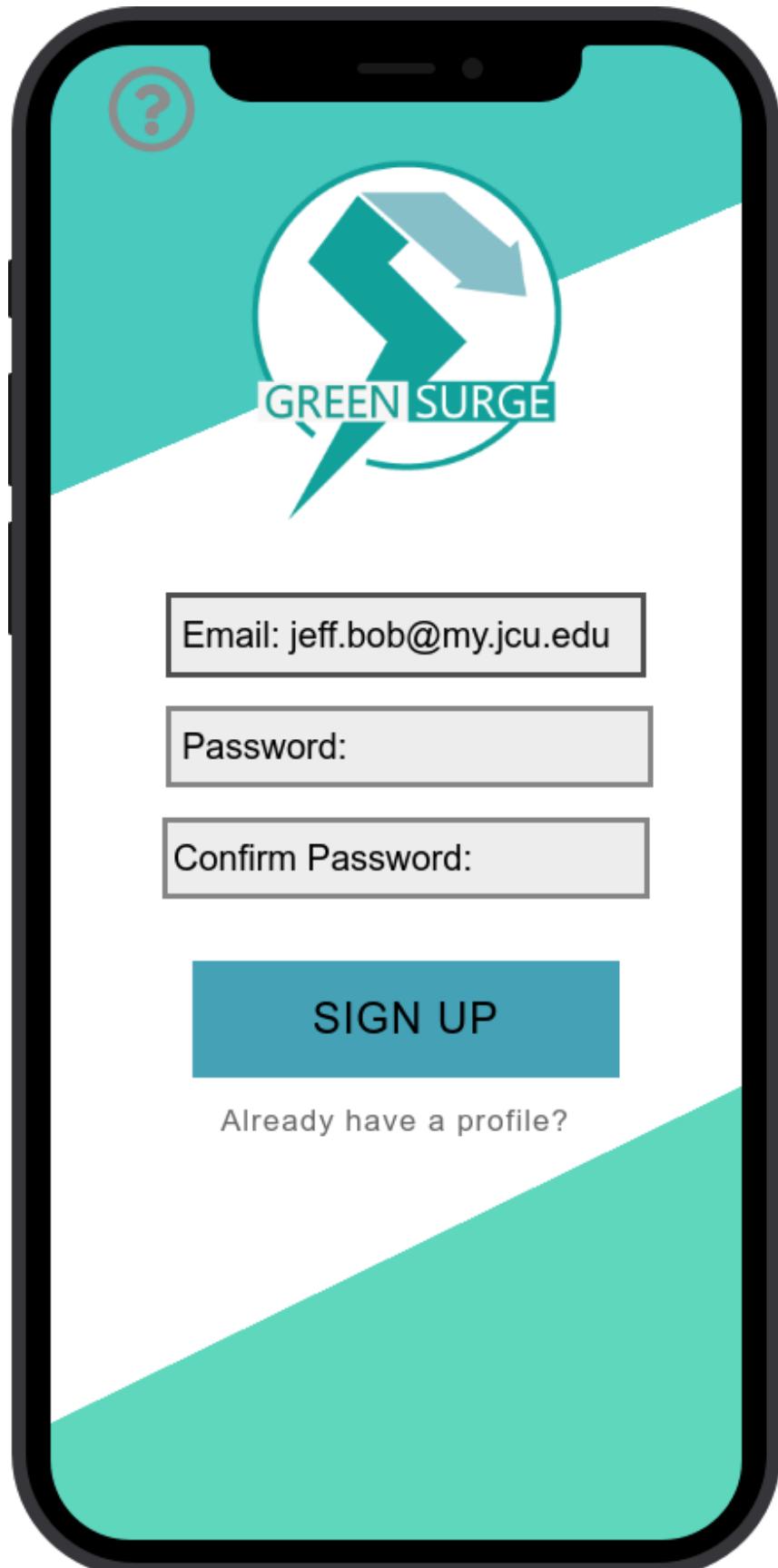
Final

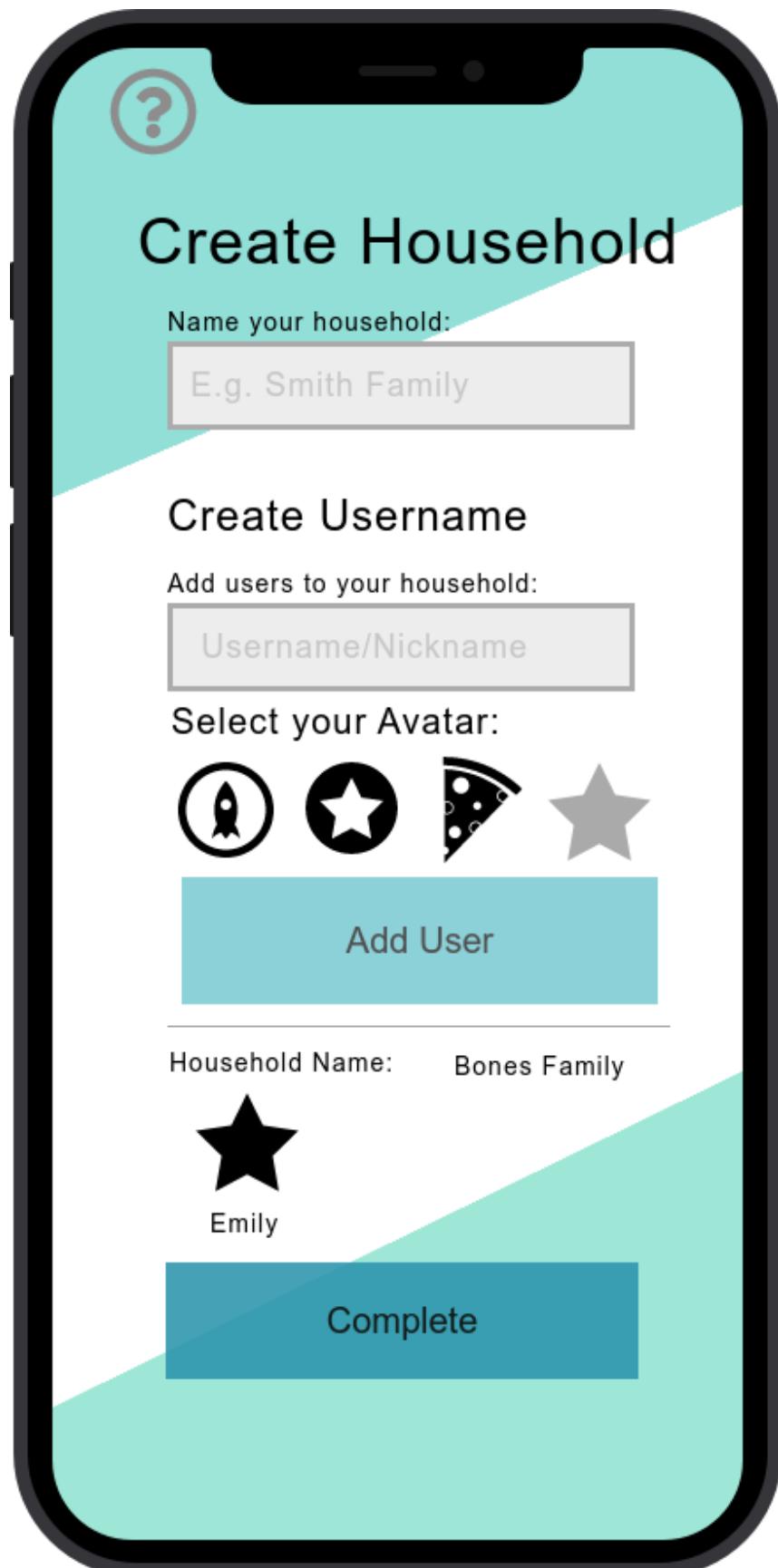












The image shows a smartphone displaying a mobile application interface. The top of the screen features a light blue header bar with rounded corners. In the top-left corner is a question mark icon inside a circle, and in the top-right corner is a star icon inside a circle. The main content area has a white background.

Household Details

Are you the owner or a renter of the property?

Owner: Renter:

What best describes your dwelling?

House

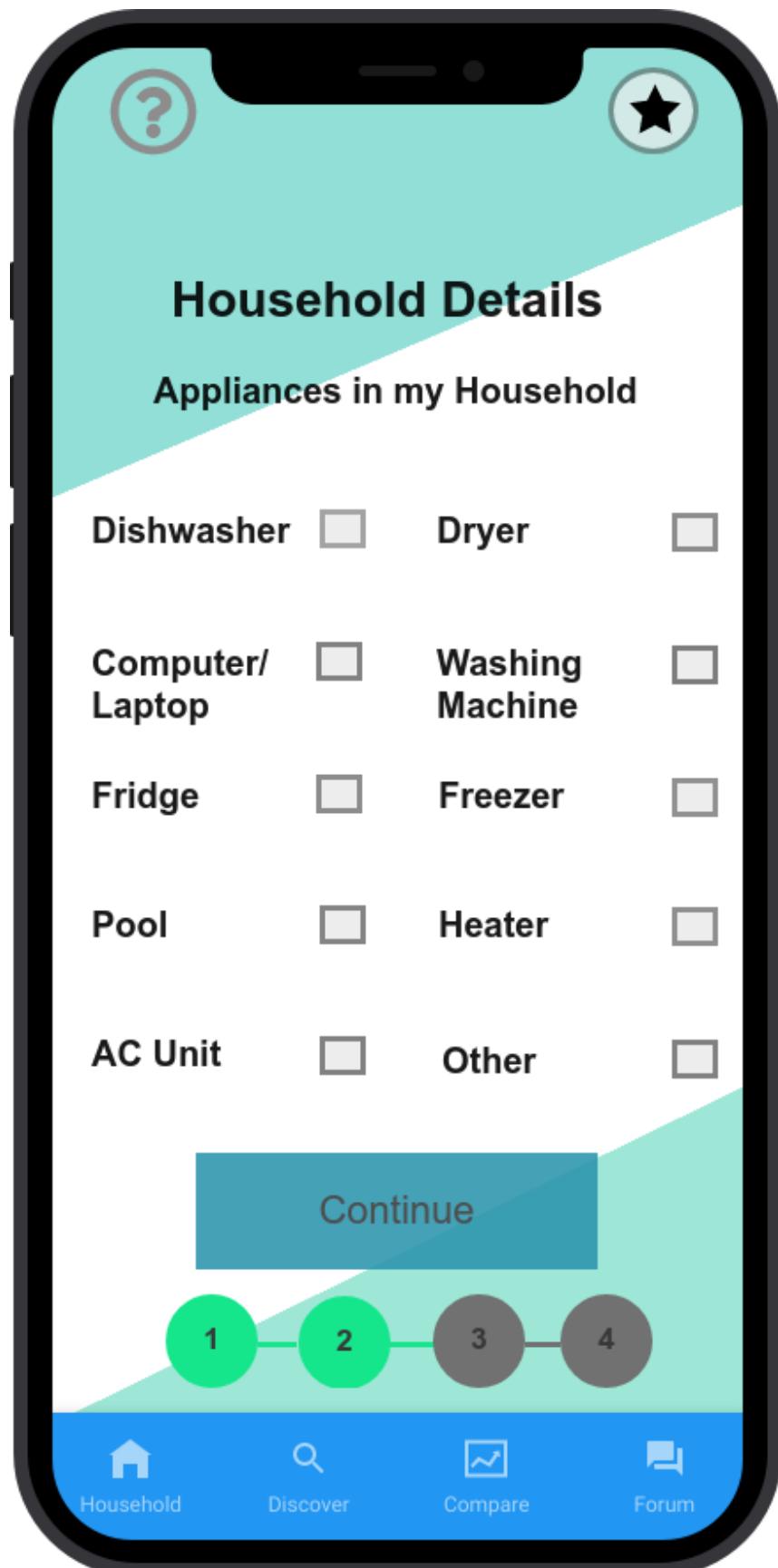
How many people live in the Household?

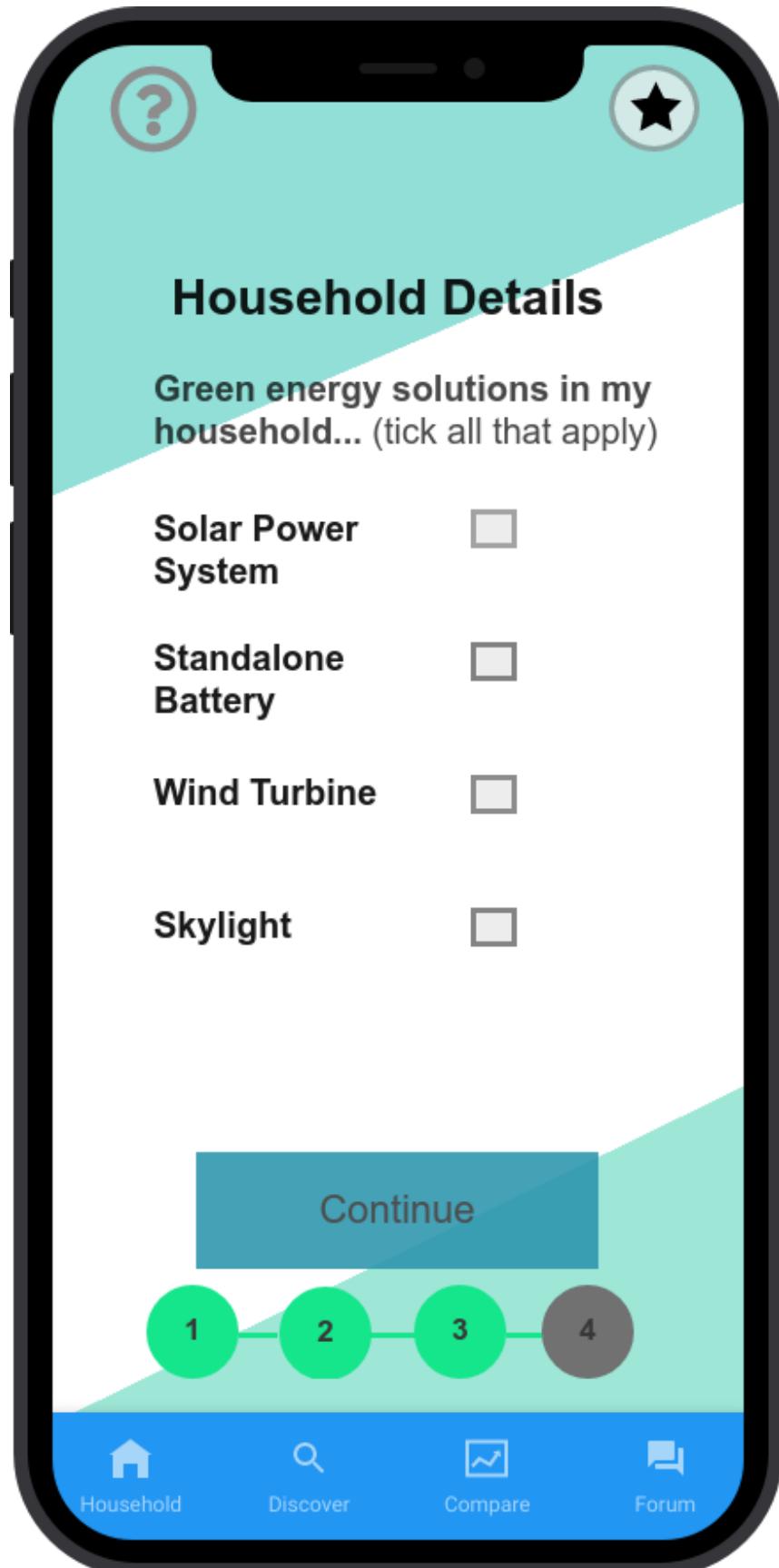
3

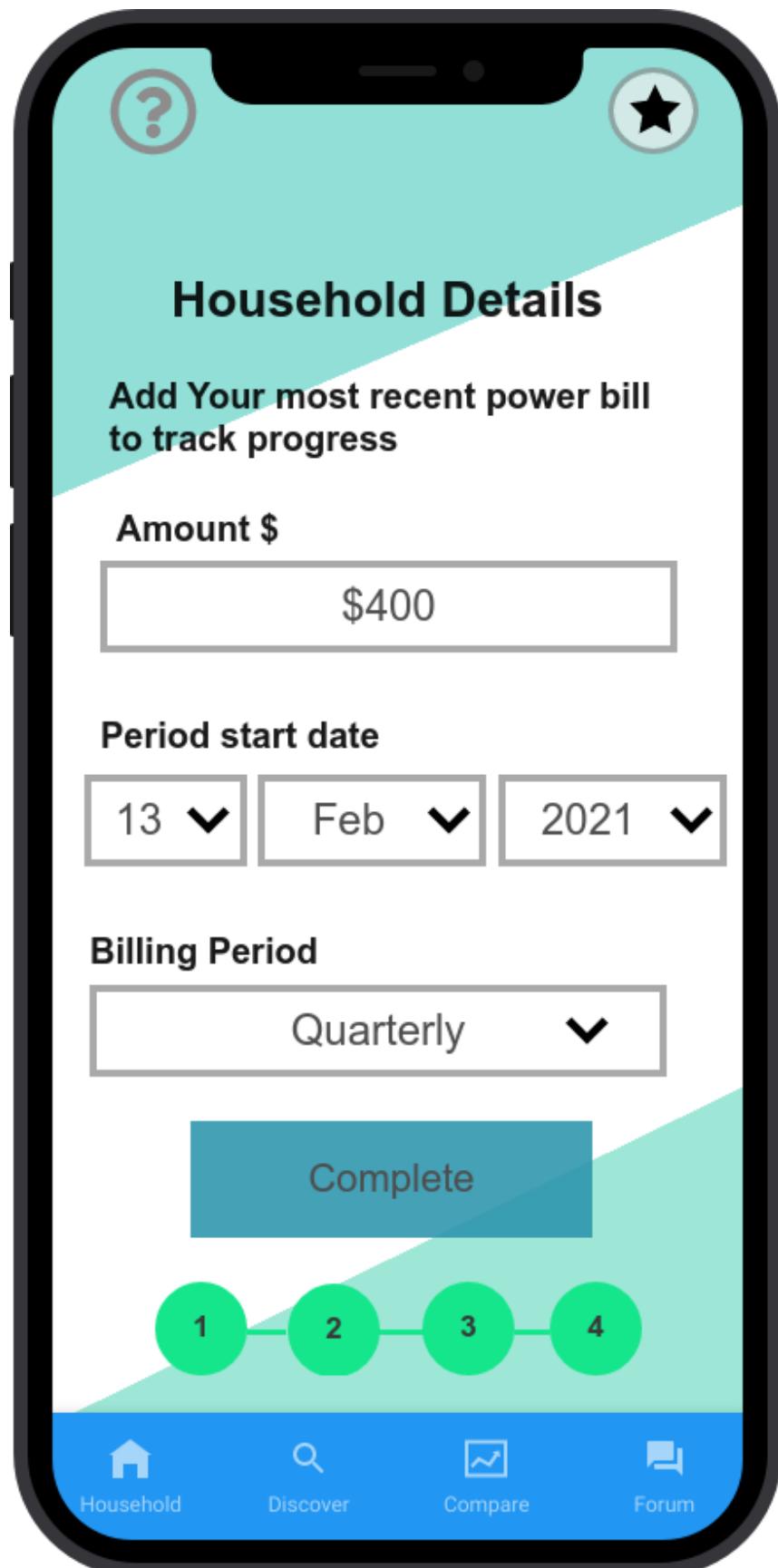
Continue

1 2 3 4

Household Discover Compare Forum







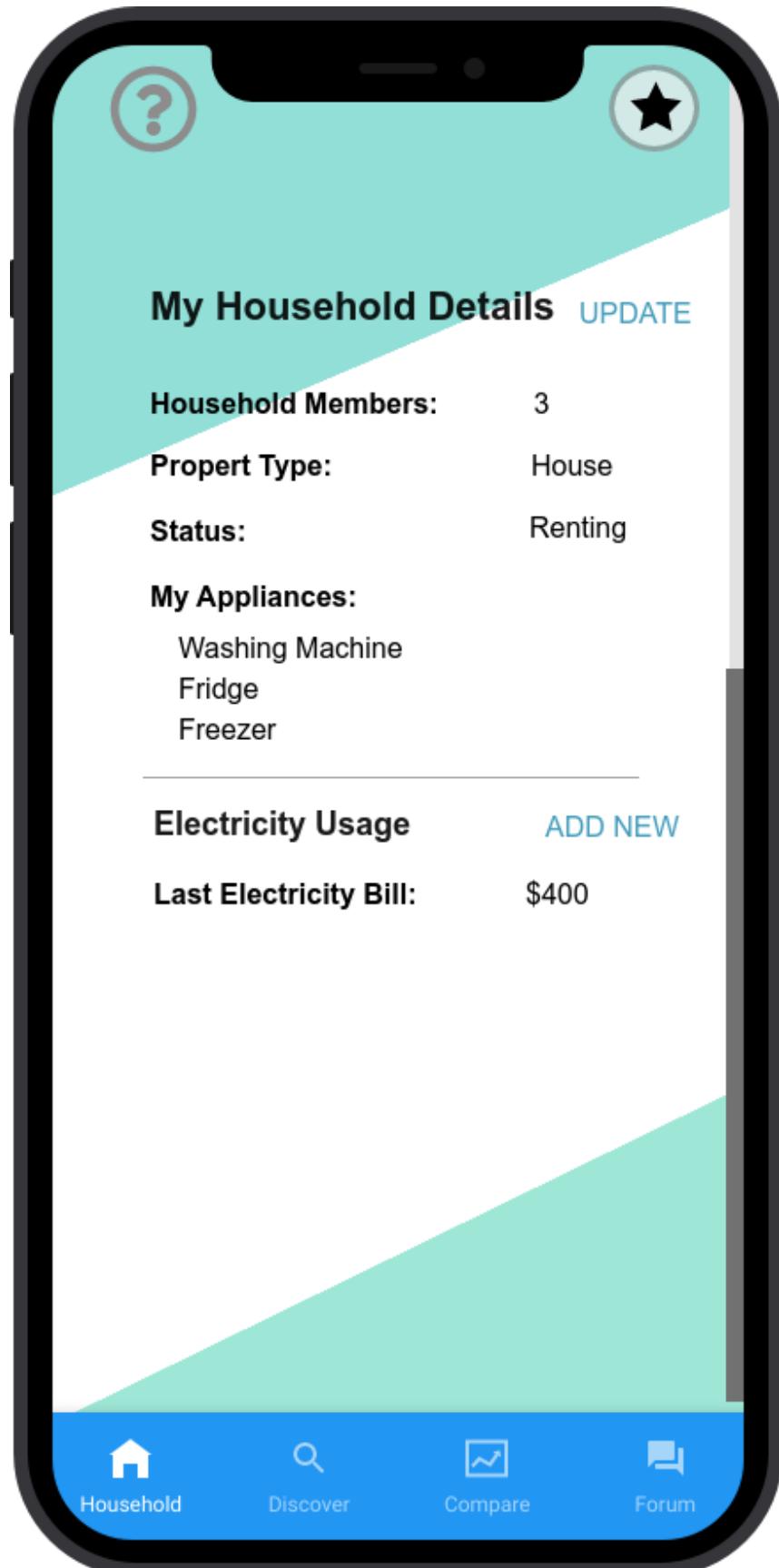


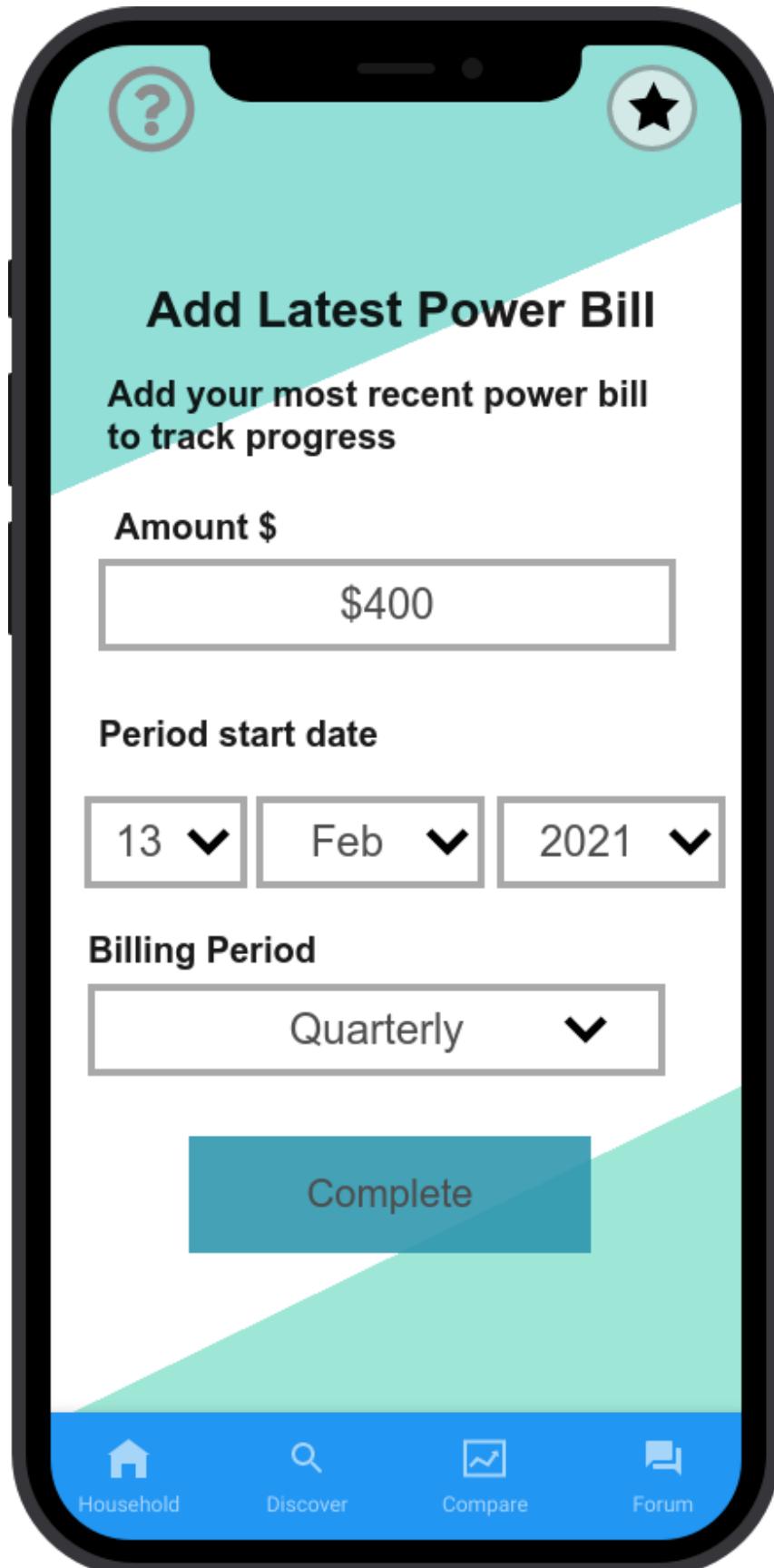


The image shows a smartphone displaying the 'My Household' app. The top navigation bar includes a question mark icon, a star icon, and a 'Filter' button with two circular checkboxes (one green with a checkmark, one grey). The main title 'My Household' is at the top, followed by 'Points: 50'. Below this, a section titled 'My Household Plan' lists three items:

- Home Energy Monitor**: An image of a white device with a screen and several sensors. Below it is a green circular button with a checkmark and the text 'Gain 10 Points'.
- Smart Home Plugs**: An image of several white smart plugs. Below it is a green circular button with a checkmark and the text '10 Points Earned'.
- Tesla Home Battery**: An image of a white rectangular battery unit. Below it is a green circular button with a checkmark and the text '40 Points Earned'.

At the bottom, there's a section for 'My Household Details' with an 'UPDATE' link. It shows 'Household Members: 3'. The bottom navigation bar has four tabs: 'Household' (selected), 'Discover', 'Compare', and 'Forum'.





The image shows a smartphone displaying a mobile application interface. The top of the screen features a light blue header with a question mark icon on the left and a star icon on the right. The main title "Compare My Household" is centered in bold black text. Below the title, a section titled "Local Leaderboard" includes a downward arrow icon. A table lists the top three households with their respective ranks and points:

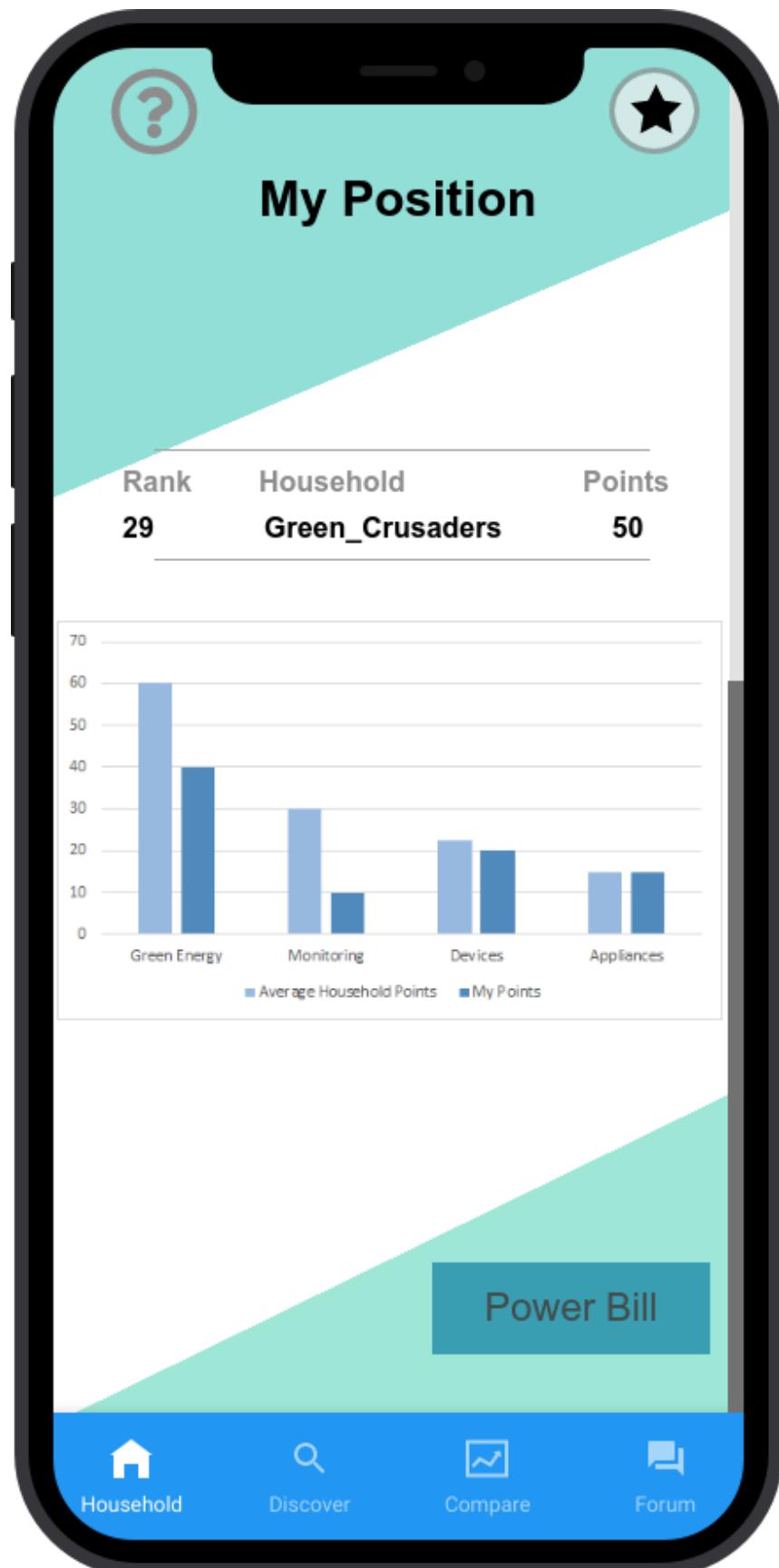
| Rank | Household | Points |
|------|---------------|--------|
| 1 | Pumpkin Gang | 105 |
| 2 | Saint Nicolas | 95 |
| 3 | Tickled_pink | 82 |

Below the leaderboards is a section titled "My Position" with a downward arrow icon. It shows a single entry:

| Rank | Household | Points |
|------|-----------------|--------|
| 29 | Green_Crusaders | 50 |

At the bottom of the screen is a bar chart comparing "My Points" (represented by a teal bar) and "Average Household Points" (represented by a blue bar). The y-axis ranges from 20 to 70. The chart shows that the user's household has significantly more points than the average household.

The bottom navigation bar contains four items: "Household" (with a house icon), "Discover" (with a magnifying glass icon), "Compare" (with a line graph icon), and "Forum" (with a speech bubble icon).





Discover Suggestions

Solar motor--Free energy motor
129k 29k +

7 ubalivable energy devices
19k 1k +

Backyard Aquaponics Farming
109k 19k +

The Biggest Lie About Renewable Energy
60k 9k +

Sustainable City Living on 1/10th of an Acre
29k 2k +

Household Discover Compare Forum

