

# UX Summative '22 - Phoebe Thompson

## Client: Electronic World LTD

### Discovery:

1. Business strategy (premise, stakeholders, requirements)
2. Overview of problem
3. Competitor analysis
4. SWOT
5. User Interviews
6. Surveys
7. Co-creation session

### Analysis:

1. Analyse data findings/trends
2. Three fictional personas
3. Use case
4. Storyboard
5. User flow

### Design:

1. Moodboard
2. Style tile
3. Site map
4. Wireframe (responsive)
5. Lo-fi prototype (responsive)
6. Hi-fi prototype (responsive)
7. Link and screenshots of Figma
8. User test hi-fi

### Final touches:

1. Identify Copyright considerations
2. Recap how the Treaty Of Waitangi was considered

## **Business Strategy**

Electronic World LTD is an Auckland based electronics company, specialising in batteries. They want to launch a new range of electronic products that can be controlled by mobile devices and smart TVs. They have a heavy focus on battery life, and want to give their users helpful information around the battery life and general status of their electronics. The website I will design will give users a heads up on when their electronics need maintenance, replacing, charging, etc. The goal will ultimately be to allow users to have control and updates about their personal devices from anywhere. The success of my work will be determined by how well I can implement my research findings into the design and create the most appropriate and efficient functionality system.

The project requirement is to select an existing electronics company to create a fully responsive website that can be accessed from a smartphone, right up to a Smart TV. The users will be able to control their electronic products from their mobile or fixed home devices, and also receive live updates about the battery life/general health status of their electronics. The website shall be designed and coded in alignment with the necessary research findings I will gather in order to create a successful User Experience.

The people who I presume would take interest in this product/service are home-owners, around 25-45 years of age, and keep very organised lives. The website would be most useful to home-owners, as they are free to install any of their own electronic systems and general home improvements without worrying about landlord requirements, etc. They will probably be those who are old enough to have established their own home, but also in the bracket that they are likely to have a good understanding of technology. They will also likely be of a realistic age to be established in their career and earning enough to afford home improvement systems. The users will be those who may have busy lives, whether that be working long hours or travelling a lot. The website will work to their advantage so they can keep track of their possessions on the go, even when they are away from them. I will assure or disprove my theories during the Discovery stage of my design. My research will convert my hypothesis into conclusive studies that will be implemented into the creation of my Personas, and essentially the design as a whole.

## **Problem**

Electronic World LTD wants to launch a range of electronic products that can be controlled by mobile devices. They need a designer to create a website that allows their users to complete these actions with ease. They need the user to be engaged with the design and feel encouraged to use it regularly.

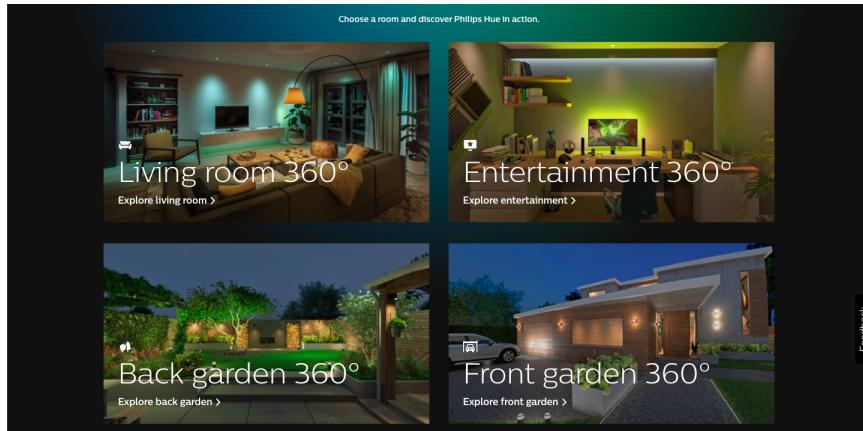
As a company, they want to stand out from their competitors, and they believe their knowledge and focus on maintenance and battery life gives them a unique quality that assists users in the way of looking after their electronics. They need a website that highlights their unique qualities and entices the audience with a pleasurable and memorable experience.

## **Research Objectives**

1. Discover who the target market is, who will take interest in this product.
2. Discover what existing companies are doing and how we can stand out.
3. Analyse what works well and what is lacking in competitors' products and how we can use these considerations as improvements.
4. Discover how sensitivity to cultural beliefs and structures can improve the UX of my design by finding out how to make the site as inclusive as possible.
5. Figure out what people like/don't like to see on a website.

## Competitor Analysis

### Philips Hue:



Choose a room and discover Philips Hue in action.

Living room 360° Explore living room >

Entertainment 360° Explore entertainment >

Back garden 360° Explore back garden >

Front garden 360° Explore front garden >

Feedback

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**PHILIPS hue** intelligent lighting

Find the right app for the job

Official Philips Hue apps

Philips Hue offers free smart light apps. Each app serves its own purpose, whether you want to control lights in a single room, set automated light routines or sync your lights with music, films or games.



Feedback

What Philips Hue smart lights are you looking for?

-  Starter Kits
-  Bulbs
-  Lightstrips
-  Lamps
-  Accessories

[View all products](#)

Feedback

### Main Points:

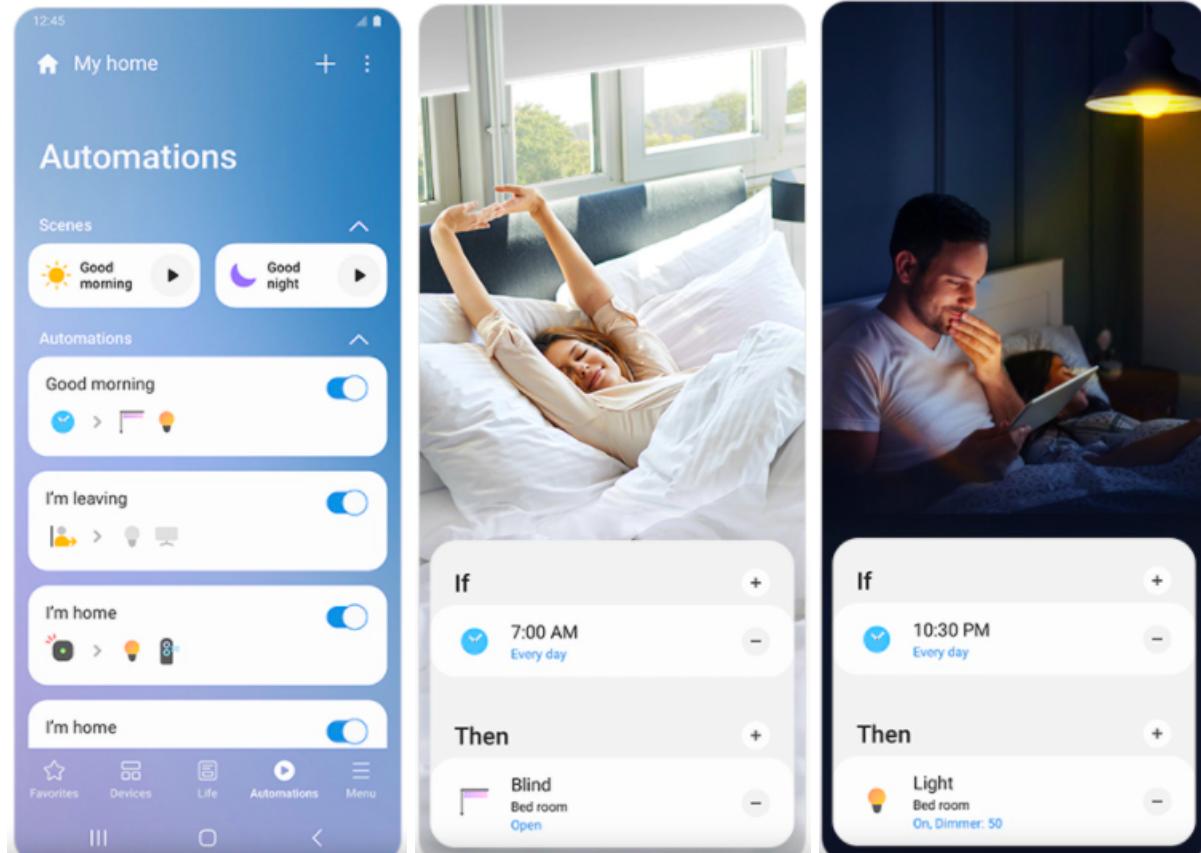
- Four main categories of lighting systems
- Uses different apps for different sub-purposes
- Uses tabs to categorise available products
- Uses email to keep users in the loop

Philips Hue lets their users control their lighting systems from anywhere. Something interesting I found is that their users are required to use four different applications in order to access all of the functions that Hue has to offer. The users may not require all four if they only have one kind of lighting system, but it seems inconvenient for those who want to use more than one function to have to install so many different applications and even physical systems that work with the apps in order to use the functions. I would consider categorising these functions into one website, so that the user does not have to open so many different applications and can navigate through the site internally.

I like that Philips has an email option to send their users updates, etc. This keeps users in the know with new products they may be interested in. The con of this factor is that the users are then required to use yet another application to receive these updates. I find the simple email approach impersonal, and would consider creating a sign up feature that allows the user to create an account, making them feel welcome and giving them a more personalised experience. They can then access all of their electronics from the same account and save the hassle of having so many different apps.

I like that they categorise their lighting systems by location (living room, front/back garden, etc.) as it lets the user find their lights very easily and keeps the site from being overloaded with all of the products at once. I will definitely consider organising my categories in such a way that the user can identify the flow of their task with little thought or chance of confusion.

## Samsung SmartThings:



### Main Points:

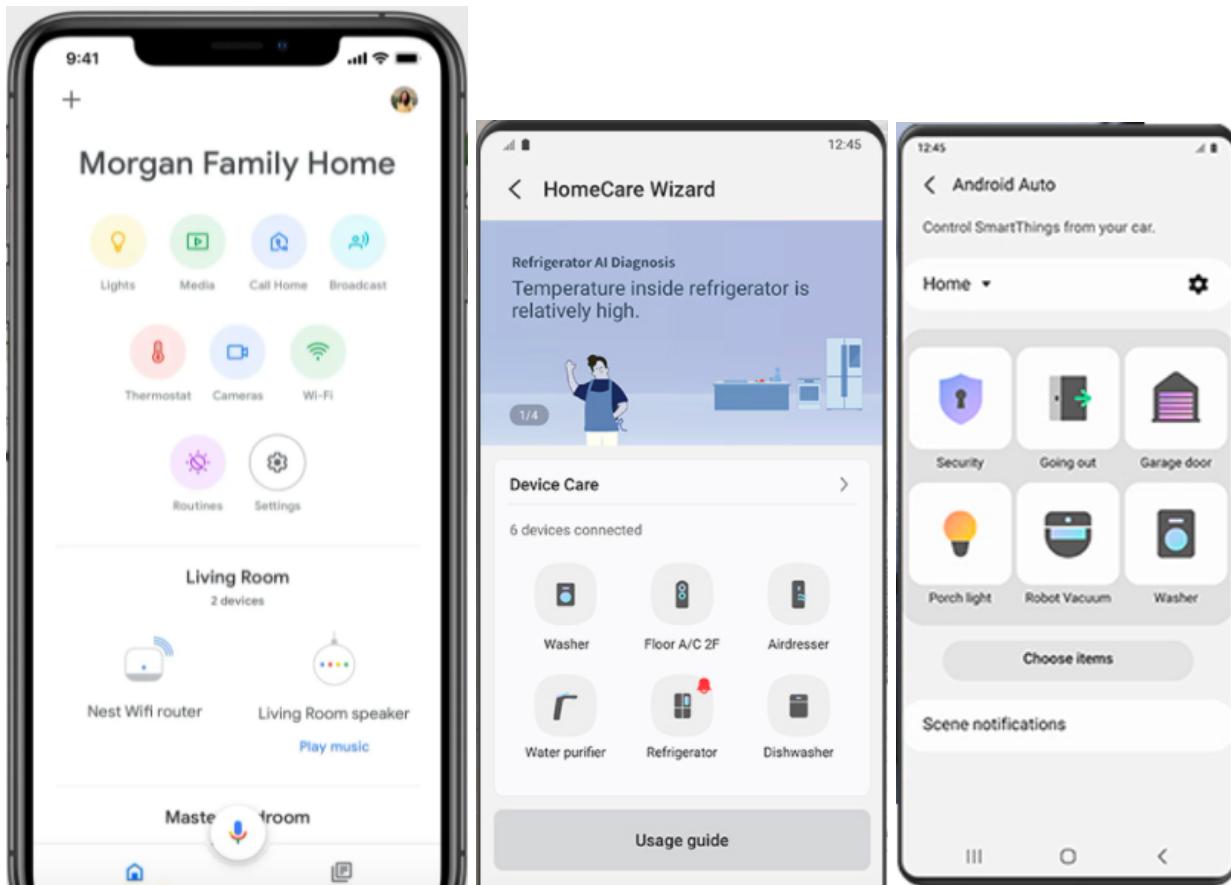
- A lot of icons to represent devices
- Focuses on the morning and evening routines of the user
- Uses tabs to display customised automations & allows a play and pause
- Has a tremendous amount of small buttons and options to click

Samsung's SmartThings app lets their users set up the way their home lighting and devices work in sequence. The customised sequences will play out in alignment with the user's morning and/or evening routines. I find this focus on letting your electronics roll in and out with your routine practical, only in a circumstance in which the user completes the same routine every morning and evening. The ability to turn these preset sequences on and off is a good idea for when things may change, but I find the small icons and long, stacked tabs a difficult way to differentiate between the routines - the only real decipherable factor being the title of the preset.

SmartThings lets their users create their customisations and control which ones will be in action from anywhere. I like the use of casual language in their app to make the user feel more connected and related to the design, but it is less personal than the Google Home app that allows the user to create a home name. The greetings are then personalised and create a sense of family and connection, while also evoking a sense of security that comes from having your own personal hub - like the quality of protection that a house may offer.

Something I found that Philips Hue does better than SmartThings, is that their functions are categorised by location/room around the property. SmartThings may let you create these sequences and display them to you, but they are all sorted together on the same page with no indication as to which sequence belongs to what room.

### Google Home:



### Main Points:

- Colours used to separate categories are doubled up
- Design is inconsistent in appearance across different devices
- Every category on the page is represented by a small icon and tiny text
- All of the products/electronics are displayed in that one same group

The Google Home app lets their users control their home devices from anywhere, but also complete actions such as making calls to the house locating the nearest WiFi router. Something I noticed instantly was that the devices/actions are all clustered together on the home page with no categorisation. They have each been colour coded, but the same colours are used more than once which will easily create confusion - especially considering the amount of devices in one view. I find the comparison to the way that Philips Hue organised their devices makes Google Home the inferior option. What Google Home has done that makes their experience more efficient is having one app for all of the users products/electronics, rather than having them install four different applications in order to complete their tasks.

Like SmartThings, Google Home lets their users create customisable routines amongst their devices, but Google Home has generated no emphasis on this function. The lack of Hierarchy in the Google Homes app seems to be the main issue that I can point out in my comparisons and take into consideration for my own design.

### **Conclusive decisions based off of Competitor Analysis:**

- Icons are very helpful, but should not be overused
- Categorisation is an important tool for organisation
- Hierarchy and coordination are essential, especially for pages with more information
- Labelling products and functions correctly goes a long way
- It is most convenient to keep everything in the one app/site to avoid confusion and streamline the entire experience

### **User Interviews**

**Questions:**

1. What is your age?
2. If you are comfortable telling me so, what is your gender?
3. What area do you live in?
4. What device do you use most often?
5. Would you consider this device to be practical to use to control the settings of your home lighting systems? Why/Why not?
6. If you own multiple devices, do you tend to switch between which one you're using often?
7. Tell me your opinions about home electronics that can be controlled by your personal device...
8. What do you think about being able to control the lighting in your home from your bed or couch?
9. Do you have any favourite apps/platforms, and what do you enjoy about using them?
10. How comfortable do you feel around your home when you are alone, particularly at night?
11. What comes to mind when you think about a pleasant environment to wake up in?
12. Tell me about the ways you unwind in the evenings when you get home...

**Interview Responses:**

First Interviewee Name:	Isabella
What is your age?	19 years old
If you are comfortable telling me so, what is your gender?	Female
What area of NZ do you live in?	Wellington
What device do you use most often?	Phone
Would you consider this device to be practical to use to control the settings of your home lighting systems? Why/Why not?	I do, because you can carry your phone to use anywhere in or out the house and I take it with me whenever I go out.

If you own multiple devices, do you tend to switch between which one you're using often?	Yes, I switch between my phone, tablet and TV because I watch Tiktoks and stuff on my phone and do digital art on my tablet, and then I use my TV for gaming.
Tell me your opinions about home electronics that can be controlled by your personal device...	It's cool because you don't really have to move from your spot to turn anything on or off.
What do you think about being able to control the lighting in your home from your bed or couch?	I love that idea, I always get so comfy in my bed and I have to get up and go downstairs to look after the cats a lot and it would be so comforting if the lights were already on when I got down, but I hate leaving them on because it wastes power.
Do you have any favourite apps/platforms, and what do you enjoy about using them?	I use a lot of social media platforms and online forum sites. I like to keep engaged with what's going on around me. I also get too bored watching, like, a whole movie or something so I like Tiktok and Instagram because there's always something short and funny to watch.
How comfortable do you feel around your home when you are alone, particularly at night?	It's alright, but there's been a lot of break-ins around my area lately so it's kind of scary walking around the house when it's dark - especially on the stairs.
What comes to mind when you think about a pleasant environment to wake up in?	I like to wake up in the afternoons and listen to some music. I'll usually make myself some coffee or tea and then go back to bed to join live gaming with my online friends.
Tell me about the ways you unwind in the evenings when you get home...	I like spending time with my mum when we both get home. We spend most of the time in the lounge watching a lot of crime shows together and playing board games, too.

Second Interviewee Name:	Barry
What is your age?	54 years old
If you are comfortable telling me so, what is your gender?	Male
What area of NZ do you live in?	Wellington
What device do you use most often?	Phone and iPad
Would you consider this device to be practical to use to control the settings of your home lighting systems? Why/Why not?	They'd both be good because I take both of them out with me every day. I use my iPad to read ebooks on my break and every night before bed, too.
If you own multiple devices, do you tend to switch between which one you're using often?	Yes, I mainly go between my phone, iPad and TV.
Tell me your opinions about home electronics that can be controlled by your personal device...	I do think it's cool and I'd really enjoy it, personally - as long as these kinds of things don't make us lazier as a society.
What do you think about being able to control the lighting in your home from your bed or couch?	I already have my lightswitch next to my bed, it would be cool to be able to dim my lounge lights from my phone though.
Do you have any favourite apps/platforms, and what do you enjoy about using them?	I use Facebook a lot, and I watch a lot of shows on my Apple TV. I don't really like Facebook, but my friends and family are on there so it keeps me in touch. I'm also interested in reading political articles, and there are a lot of conversations to watch happen on Facebook.
How comfortable do you feel around your home when you are alone, particularly at night?	Very comfortable.
What comes to mind when you think about a pleasant environment to wake up in?	I really hate getting dressed in the winter time when it's so cold and dark in the mornings, so the opposite of that is nice.
Tell me about the ways you unwind in the	I always do my Stuff quiz in the evening,

evenings when you get home...	make dinner, pour myself a wine and watch my TV shows. I like to play guitar when I'm motivated as well.
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Third Interviewee Name:	Matt
What is your age?	34 years old
If you are comfortable telling me so, what is your gender?	Male
What area of NZ do you live in?	Wellington
What device do you use most often?	Work computer and my phone
Would you consider this device to be practical to use to control the settings of your home lighting systems? Why/Why not?	Not so much my computer because I'm not always at my desk, but my phone is pretty much always at my side, so that would be handy.
If you own multiple devices, do you tend to switch between which one you're using often?	Yes, I use my computer during working hours, my TV in the evenings, and my phone just throughout the day.
Tell me your opinions about home electronics that can be controlled by your personal device...	I love that idea. I have a baby and it would be great not to have to leave her alone or worry about what electronics are doing what when I'm taking care of her. I also don't really like getting out of my office chair constantly to control everything manually.
What do you think about being able to control the lighting in your home from your bed or couch?	Great idea, it would just make things easier and again, save me from having to sit my baby down and fuss around with those little things.
Do you have any favourite apps/platforms, and what do you enjoy about using them?	I use Facebook, just to keep in the loop. Other than that I use a lot of computer applications just for work, and I use my Apple TV apps to watch movies.
How comfortable do you feel around your home when you are alone, particularly at	I feel comfortable. I do think about my baby and checking in on her when I put

night?	her to bed and go back to the lounge.
What comes to mind when you think about a pleasant environment to wake up in?	I have one of those robotic beds, so that makes everything better. It's always nice to wake up when it's warm and listen to the morning radio.
Tell me about the ways you unwind in the evenings when you get home...	I spend time with my partner and my daughter, mainly watching TV together and having some dinner before bed.

Fourth Interviewee Name:	Isla
What is your age?	19 years old
If you are comfortable telling me so, what is your gender?	Female
What area of NZ do you live in?	Wellington
What device do you use most often?	Laptop and Phone
Would you consider this device to be practical to use to control the settings of your home lighting systems? Why/Why not?	I do, because everyone carries their phone around, right? I take my laptop everywhere, too, since I'm pretty much always using it to study. The phone is probably better though because I think touch-screen makes everything easier.
If you own multiple devices, do you tend to switch between which one you're using often?	Yes, I switch between my phone and laptop. I text people a lot and make a lot of notes in my calendar on my phone, and study and watch videos on my laptop.
Tell me your opinions about home electronics that can be controlled by your personal device...	It's a cool idea, I think I would mainly like it for security reasons because sometimes I get home late and it's not that safe around lately.
What do you think about being able to control the lighting in your home from your bed or couch?	I'm pretty neutral about it. I wouldn't be desperate to have that option, but it would be pretty nice in the winter so you can tuckle up and not have to move again.
Do you have any favourite	Pinterest! I love getting inspired by new

apps/platforms, and what do you enjoy about using them?	ideas and always finding something beautiful to look at.
How comfortable do you feel around your home when you are alone, particularly at night?	I feel pretty safe because I'm not near any main streets, but we have a few little studios and out-house things around the property and it's kind of scary walking between them when it's dark.
What comes to mind when you think about a pleasant environment to wake up in?	Waking up and listening to some happy music, making a healthy breakfast.
Tell me about the ways you unwind in the evenings when you get home...	I like to watch educational videos and read lots of books to unwind. I go for walks with my family a lot, we're nature people. I also do arty things when I'm in the mood.

## Survey

1. What is your age and comfortability with using technology?
  - 20-30 and comfortable
  - 20-30 and uncomfortable
  - 31-40 and comfortable
  - 31-40 and uncomfortable
  - 41-50 and comfortable
  - 41-50 and uncomfortable
  - 51+ and comfortable
  - 51+ and uncomfortable
2. What device do you use most often?
  - Smartphone
  - iPda/Tablet
  - Laptop (On the go/at work, etc.)
  - Desktop (At home)
3. What are the benefits of using this device to you in your daily life?
4. How often do you think about the need to charge your devices?

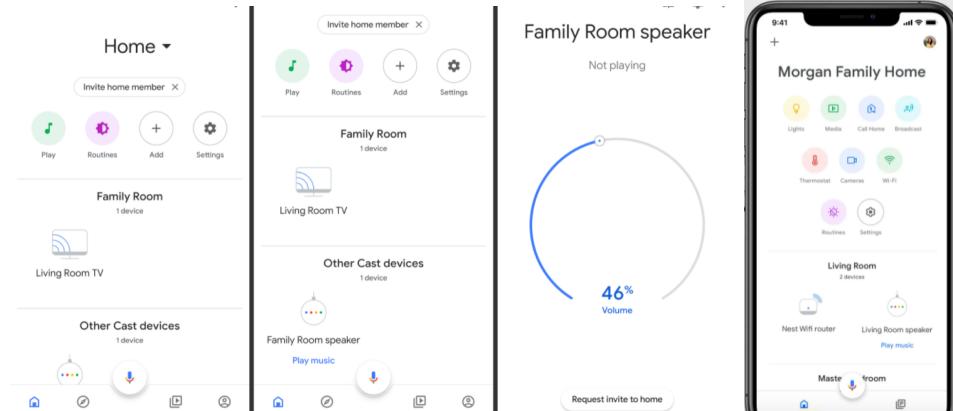
- Multiple times daily
  - Most days
  - Weekly
  - I don't usually
5. Tell me your opinions about home electronics that can be controlled by your personal device...
  6. What do you think about being able to control the lighting in your home from your bed or couch?
  7. What are your thoughts on exterior surveillance systems on homes?
  8. How comfortable do you feel around your home when you are alone, particularly at night?
  9. Tell me about the frustrations you experience when using your lighting and electronics...

### **Survey Results:**

Question:	Most Common Result:	Notation:
What is your age and comfortability with using technology?	20-30 and comfortable 51+ and comfortable	Most of the survey results will come from those age groups, the other most popular answers were comfortable with technology as well.
What device do you use most often?	Smartphone	Most people use their smartphone the most often, the other popular answer was their laptop/mobile computer. This tells me the most important responsive breakpoints to work on.
What are the benefits of using this device to you in your daily life?	<ul style="list-style-type: none"> <li>- Quick</li> <li>- Portable</li> <li>- Everything in one place</li> </ul>	This confirms that people enjoy having efficiency at their fingertips, and don't like having to move between devices and even electronics to complete

		actions.
How often do you think about the need to charge your devices?	Daily/Most days	This tells me that people like to keep track of their devices so that they can always have them available when needed.
Tell me your opinions about home electronics that can be controlled by your personal device...	Most seem to be in favour, but there are concerns about the quality of the system	This tells me that the visual aspects of the design must look trustworthy and of high quality. It also needs to be pleasant and engaging for those who are less encouraged about the idea.
What do you think about being able to control the lighting in your home from your bed or couch?	Most like the idea	This confirms that people don't like to get out of their comfort place to control minor things.
What are your thoughts on exterior surveillance systems on homes?	Most greatly approve	This tells me that it would do good to include this feature in the site.
How comfortable do you feel around your home when you are alone, particularly at night?	Most are quite comfortable	This tells me that my focus around night surveillance options does not need to be emphasised.
Tell me about the frustrations you experience when using your lighting and electronics...	Lighting, battery life, delays, disconnections	This confirms the most important issues I need to make better to help people with in my site.

## S.W.O.T Analysis App: Google Home



### Strengths:

- Colour coded categories
- Simple nav bar
- Account creation for personalisation

### Weaknesses:

- Incohesive design across different responsive breakpoints
- No account creation for personalisation
- Very small text and icons, this causes accessibility issues
- Very bright design, not ideal for nighttime use
- Devices/electronics are not categorised in groups

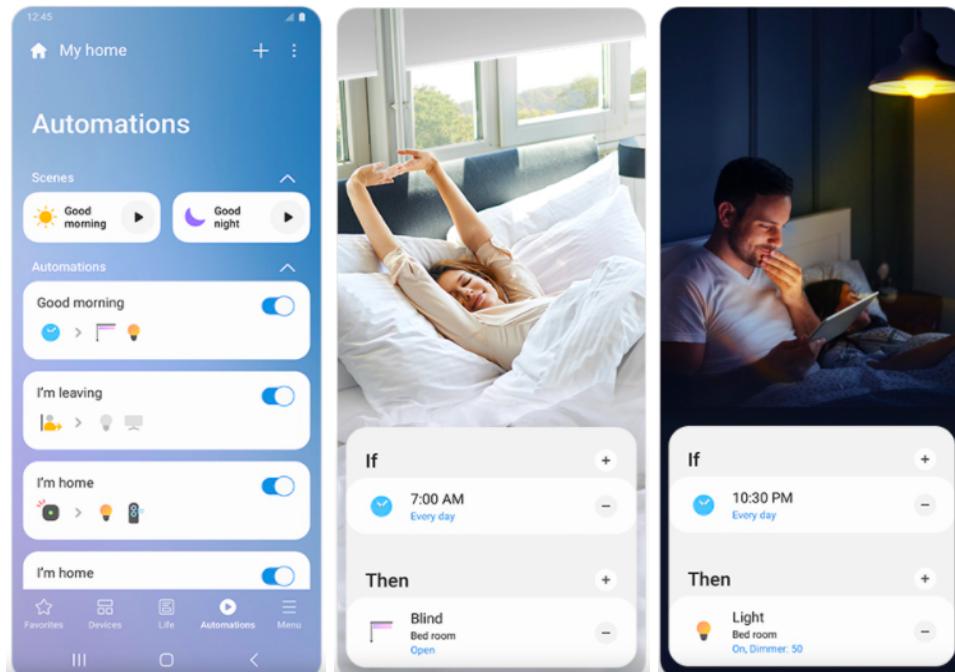
### Opportunities:

- To modernise their app, as the market constantly changes with new trends
- They have the opportunity to organise the content within the app so that there are not so many products in one massive group, and not so many icons would be needed. The use of categories would give their app the opportunity to run with a much smoother experience for the user
- They have the opportunity to use their space more wisely. There is a lot of white space that could be used to make their text and icons bigger so that more users could use the app without straining their eyes on a smaller device, particularly those with visual impairments

### Threats:

- Other companies constantly optimising their own smart-home apps and websites
- Others' apps may prove easier to use, and therefore more convenient
- The design may become outdated too quickly if they do not risk to make adjustments to the standard Google appearance

## App: Samsung SmartThings



### Strengths:

- Tabs used to clearly divide information
- Simple nav bar
- Comforting/emotive imagery

### Weaknesses:

- Out-dated icons on a modern app
- No account creation for personalisation
- Very small text and icons, this causes accessibility issues

### Opportunities:

- They have the opportunity to modernise their app, as the market is constantly changing and bring in new trends
- They have the opportunity to organise the content within the app into rooms of the house/locations around the property
- They have the opportunity to use their space more wisely. There is a lot of white space that could be used to make their text and icons bigger, particularly for those with visual impairments

### Threats:

- Other companies constantly optimising their own smart-home apps and websites
- The design may affect the notion of how good quality the app is, having different styles combined gives it a low quality feel

## **Co-Creation Session:**

### **Co-Creators:**

Molly - Fellow UX/Web Designer

Barry - Limited design experience

### **Summary:**

I met with two others for my Co-Creation Session, one a fellow student and one with very limited design experience. We discussed my design ideas and came up with some conclusive decisions about what works well and what doesn't work well in terms of good UX practices.

These are the main points of focus:

1. The design needs to have clear sectioning of the content to make the categories decipherable from one another.
2. The colour scheme should be gender neutral (according to societal custrctions that undeniably exist - especially for the older users).
3. Focusing on building the Mobile view first is important because the purpose of the design is to allow people to use it anywhere.
4. The prompt to visit Electronic World's site isn't a priority, but instead emphasise the health updates and battery life because people need to know that stuff on-the-go.
5. The colours and any patterns or icons need to be considerate of Maori cultural values, or any other culture.

## Data Analysis:

### Recap Research Goals:

- Discover who the target market is, who will take interest in this product.
- Discover what existing companies are doing and how we can stand out.
- Analyse what works well and what is lacking in competitors' products and how we can use these considerations as improvements.
- Discover how sensitivity to cultural beliefs and structures can improve the UX of my design by finding out how to make the site as inclusive as possible.

### Trends/Commonalities:

Most of the **survey** results came from the 20-30 and 51+ age groups, so I got my results from the two main groups of interest: new home owners and experienced home owners. It was important to get responses from these groups to understand the issues and common positive reactions from the people who would actually be able to use this app (as they are in control of what electronics belong in their homes, without intrusive factors such as landlord rules, etc.)

I found in the **survey** that most people use their smartphone the most often, the second most common answer being their laptop. This indicates to me that the most important responsive breakpoints to work on will be the mobile and desktop versions. During **User Interviews**, I also found that most of my interviewees use their TVs most nights, and own an Apple TV device. This means that along with my **survey** results, I should keep a focus on the larger scale screen types as well.

In my **survey** results, the common reasonings for the superiority of Smartphones included words and phrases such as: "Quick", "Portable", "Everything in one place" This confirms that people enjoy having efficiency at their fingertips, and don't like having to move between devices and even electronics to complete actions. I also found similar opinions in my **User Interviews** that highlight the benefit of having all your tasks ready to complete in one place. In both my **Comparative Analysis** and **S.W.O.T Analysis**, I found that some existing apps from big brands fail to organise their content efficiently. It is a simple solution that I will be implementing to make those words such as "Quick" and "Everything in one place" apply to my user experience.

Another thing I discovered through my **survey** is that people regularly check on the battery life of their devices. This tells me that people like to keep track of their devices so that they can always have them available when they need them. I found in my **Comparative Analysis**, no other major companies have any emphasis on giving their users updates on the life-span/battery life of their electronics. This is something that Electronic World LTD focuses on, and it gives them a great advantage to have these results come back to secure their idea and have me implement it into the design.

The **survey** results show that people have general frustrations around the quality and security of their electronics. These results help me understand the value of a visual design that appears trustworthy, and of high quality. My **S.W.O.T Analysis** also dove into the effect on an app/site's trust when the app appears out-dated. Since some **survey** results came back with less enthused feelings towards the smart-home idea, the design also needs to be pleasant, and engaging for those who are less encouraged about the idea.

Most people in the **survey** were in favour of being able to control your lighting and other electronics from their beds or couches. The common attitude found in my discussions in **User Interviews** confirms that people don't like to get out of their comfort place to control minor things.

Most people in my **survey** claimed to feel relatively safe at night. This means that safety is something that people are feeling generally at ease about, and will not be demanding the site to supply them with an emphasis on their surveillance systems. It was interesting to see some different views in my **User Interviews**, in which the interviewees who were younger than my groups in focus felt more unsafe or wary at nighttime. Taking both stances into consideration, and acknowledging the fact that the younger participants are not homeowners (or even in the general homeowners age brackets), I conclude that the surveillance option will take away from the main focus and not be an important addition to the site's success.

Almost all of the **survey** participants described their frustrations with technology to be based around these aspects: Lighting, battery life, delays, and disconnections. This confirms those factors as the most important issues I need to make better to help people with in my site. In my **User Interviews**, I found that the main things people desire from their applications include: Feeling connected, being informed, and feeling engaged.

## Personas:



ROUTINE			
 Morning Coffee and Yoga	 Work	 Surf Internet	 Read e-book before bed

GOALS AND ASPIRATIONS			
Pay off mortgage by 50	Get promoted at work	Have three children	Renovate her entire house

LIKES	
Reading e-books	Working hard during the day
Relaxing in the evenings	Having a tidy and organised home to come back to

DISLIKES	
Too much screen time	Mess and clutter
Missing out on her wind-down time after work	People who waste food

Name: Kelly Baker  
Age: 30  
Occupation: Biologist  
Location: Wellington

"If you're the smartest person in the room, you're in the wrong room."



Morning walk



Work



Reads news articles



Watch TV before bed

#### GOALS AND ASPIRATIONS

Get his kids through University

Complete home improvements

Maintain Employee of the month status

Improve Wii Sport skills

Name: Mark Smith  
Age: 52

Occupation: Foreign Currency Investor

Location: Auckland

"Small minds are concerned with the extraordinary, great minds with the ordinary."

#### LIKES

His morning strolls to refresh

Home entertainment systems

Reading political debates

Binging crime documentaries in the evenings

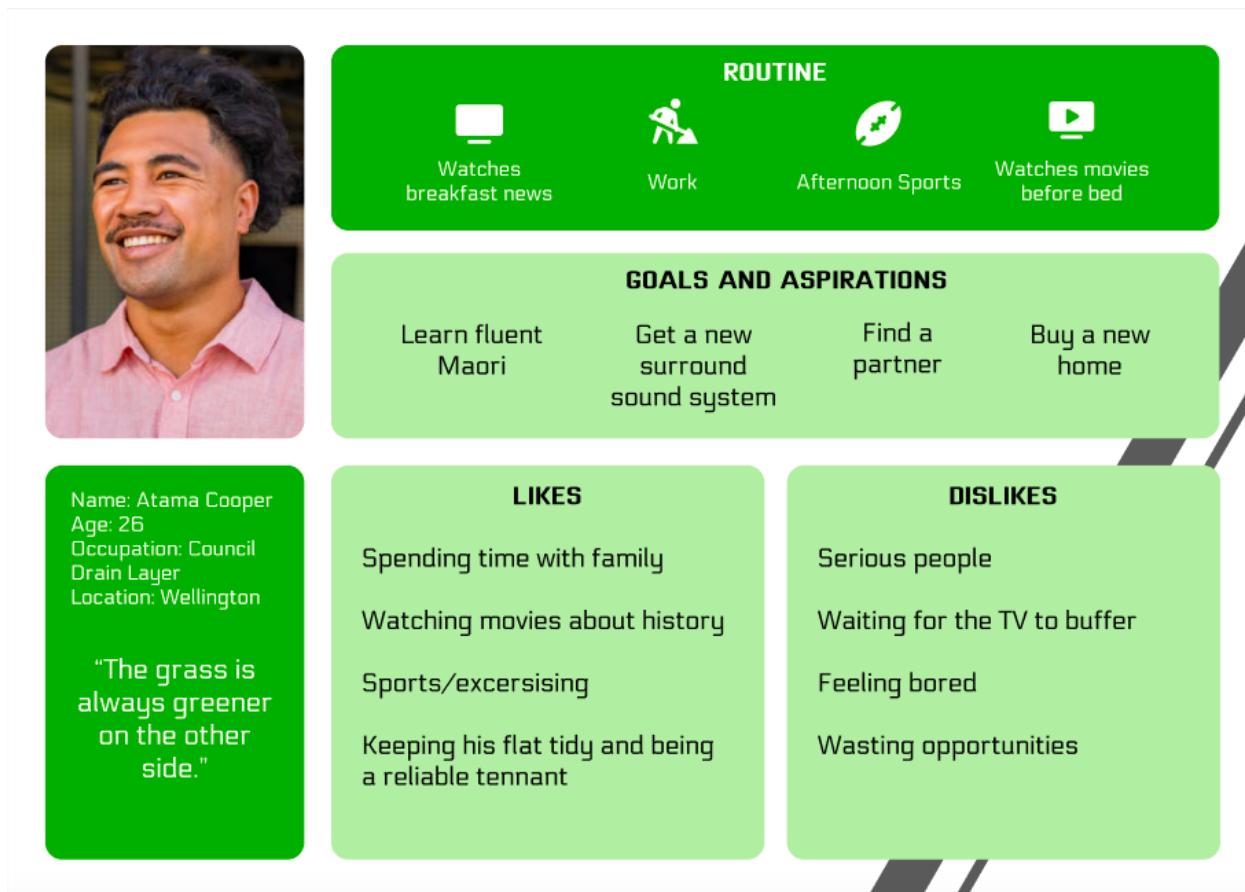
#### DISLIKES

Feeling out of control

Under-achievers

Disorganisation

People who can't hold and intellectual conversation



### Use Case: User wants to dim the lounge lights

1. Begin by launching the site
2. Find the 'Living Room' in categories
3. Select the down lights
4. Use scroll bar to dim lights

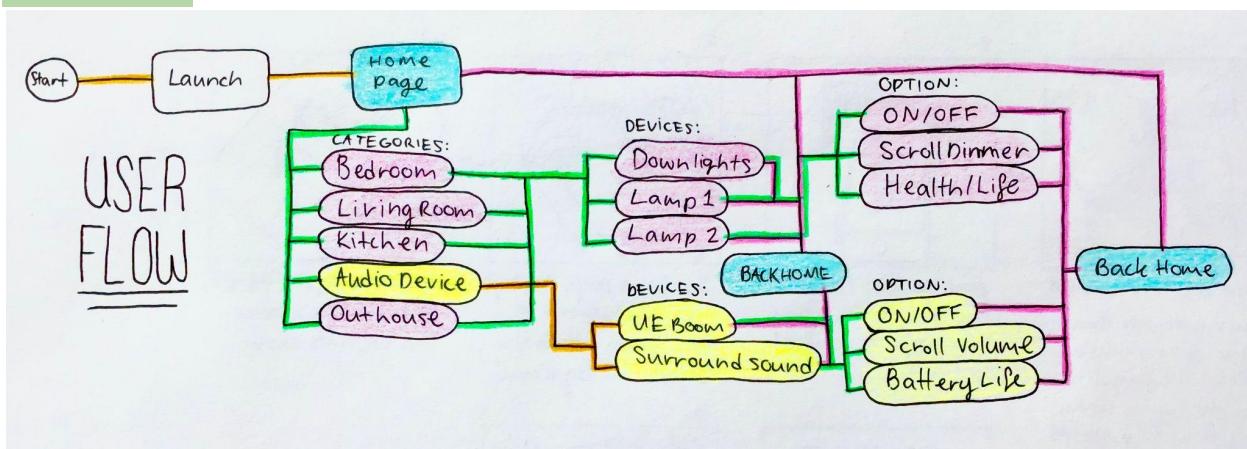
### Use Case: User wants to inspect battery life of their speaker

5. Begin by launching the site
6. Find the 'Audio Devices' in categories
7. Select the UE Boom speaker
8. View battery life

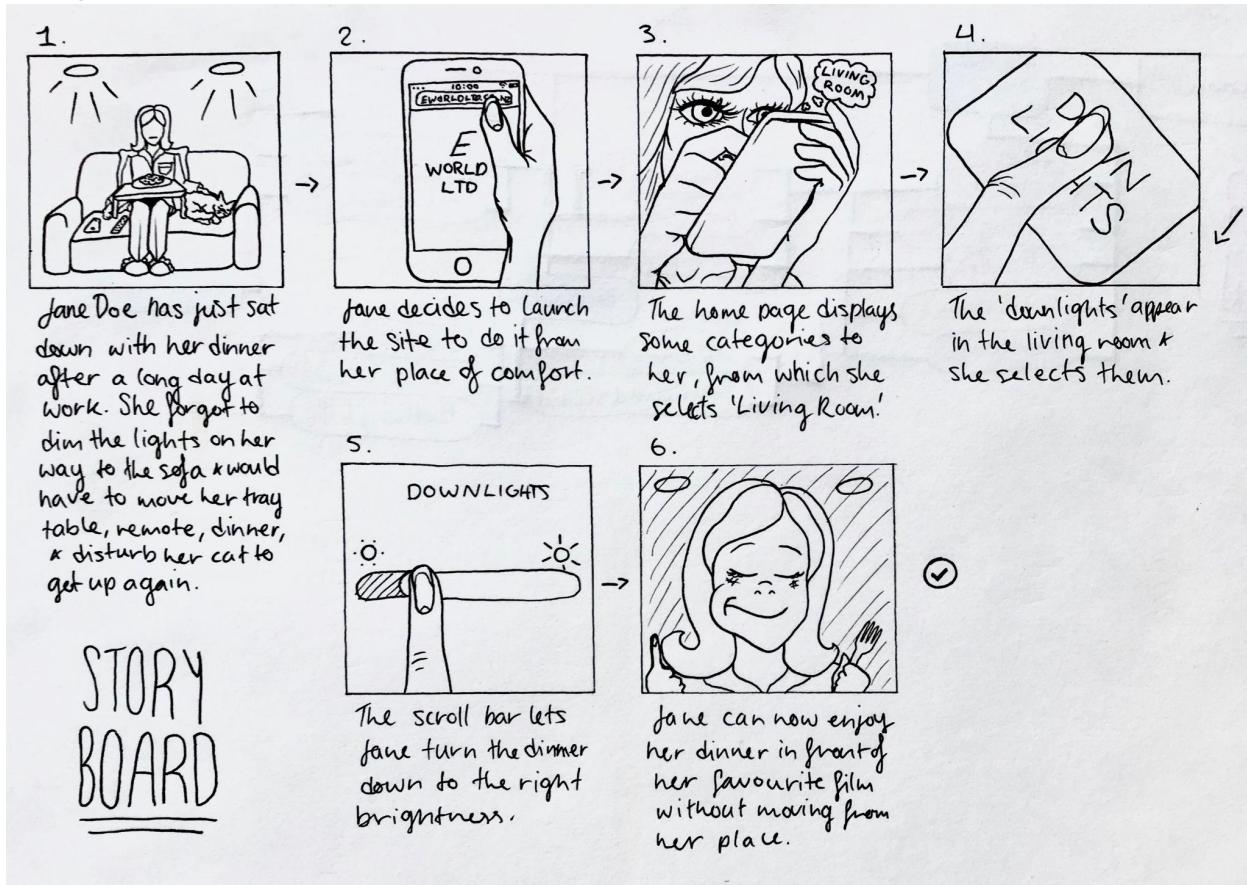
### Use Case: User wants to turn on out-house lights

9. Begin by launching the site
10. Find the 'Out-House' in categories
11. Select the down lights
12. Use 'On' button to activate lights

## User Flow:



## Storyboard:



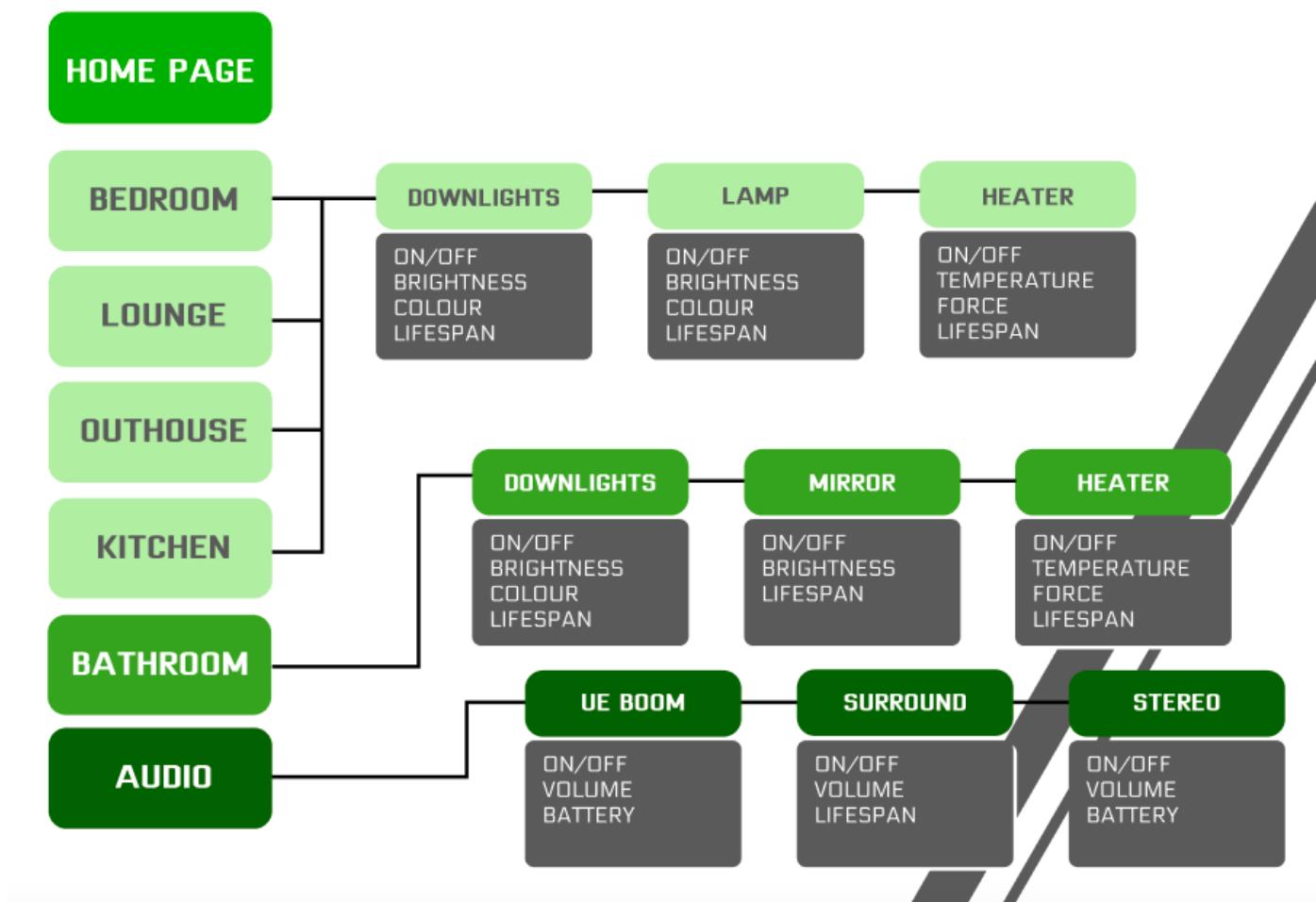
## Moodboard:



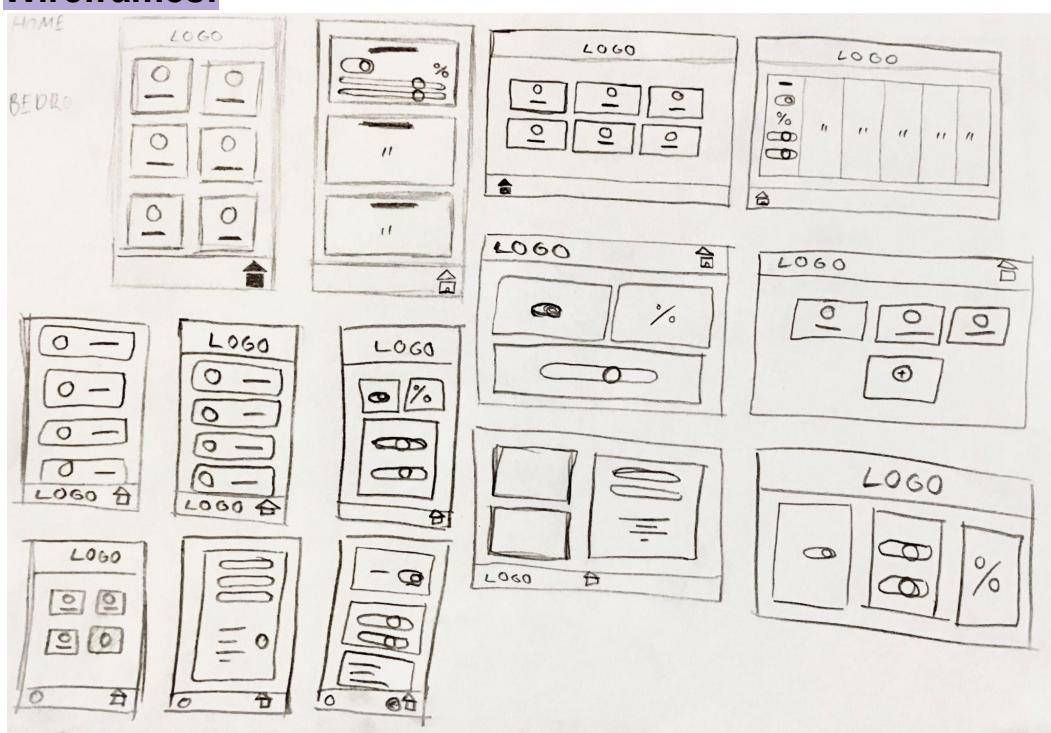
## Style Tile



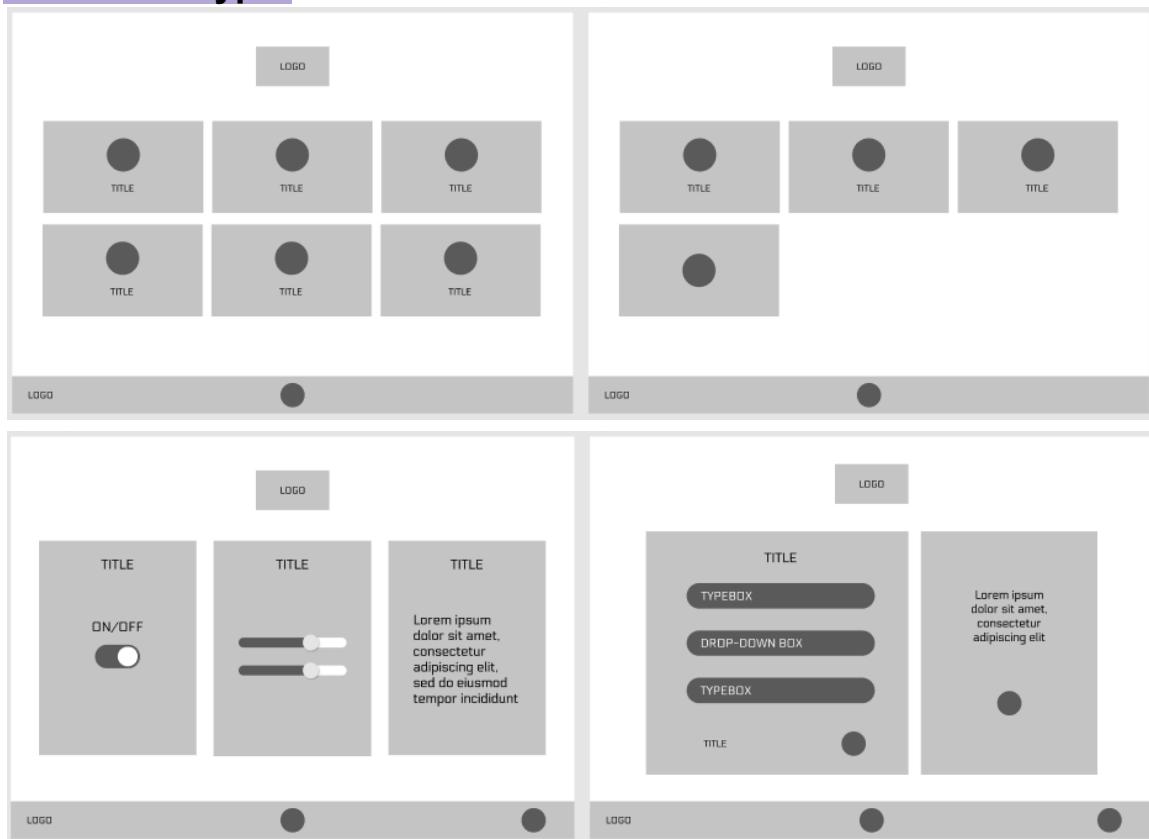
## Site Map:

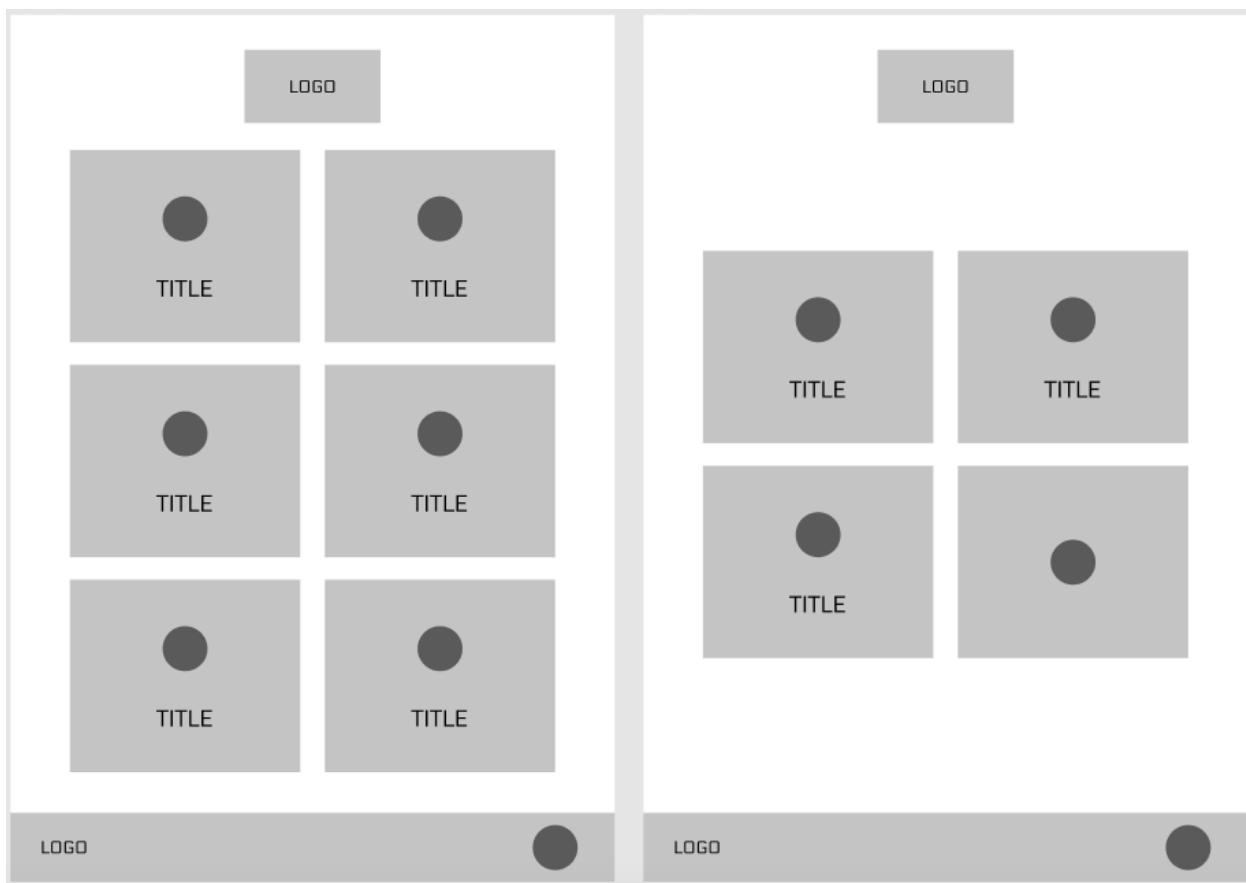
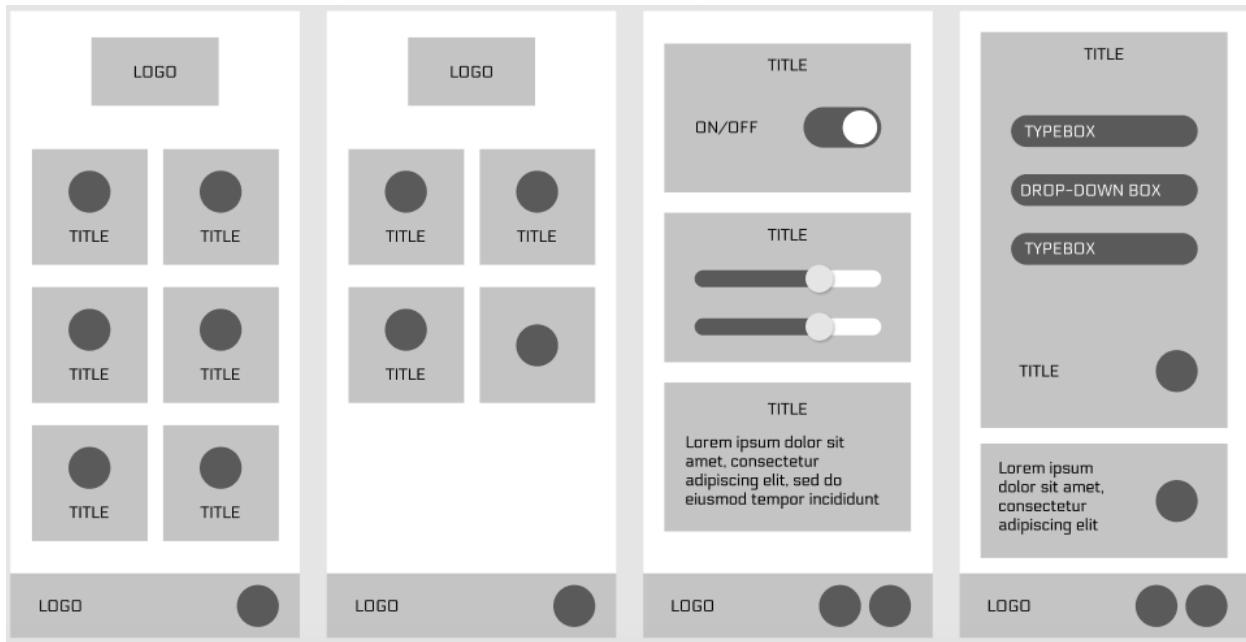


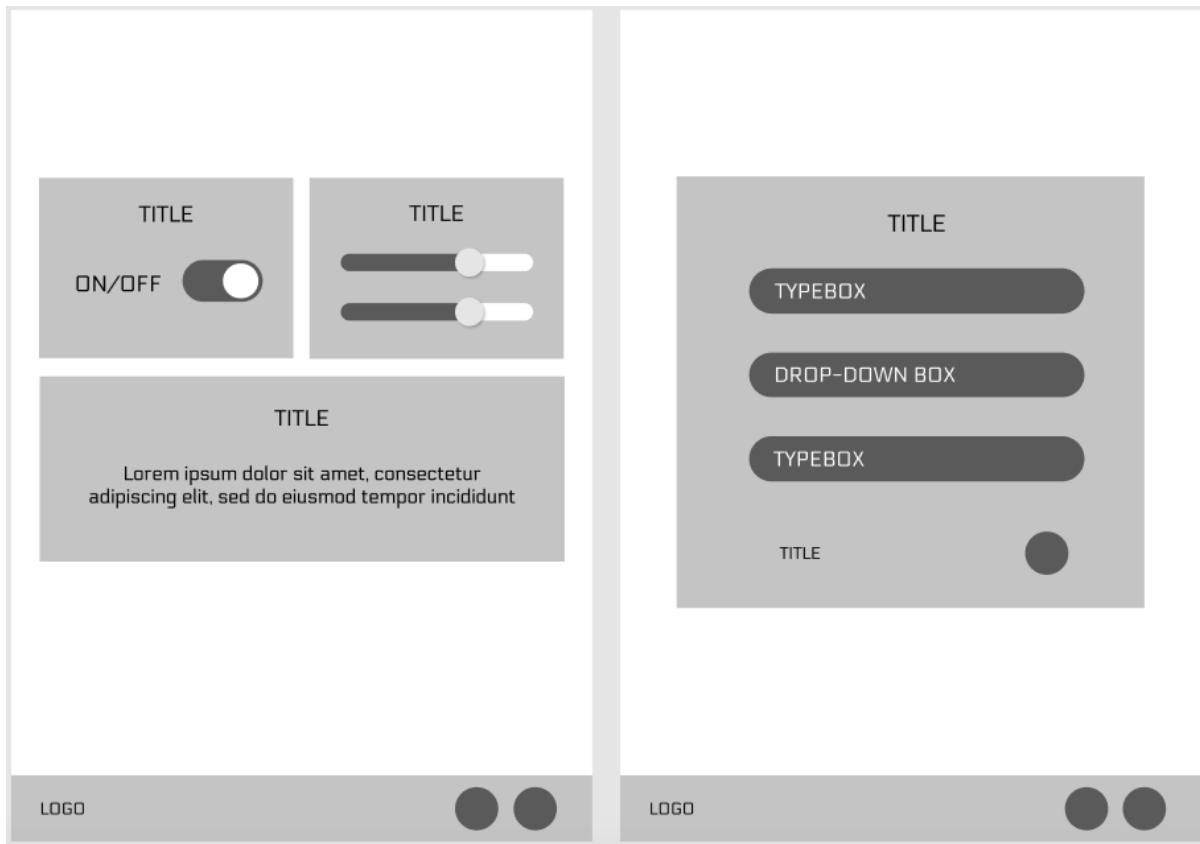
## Wireframes:



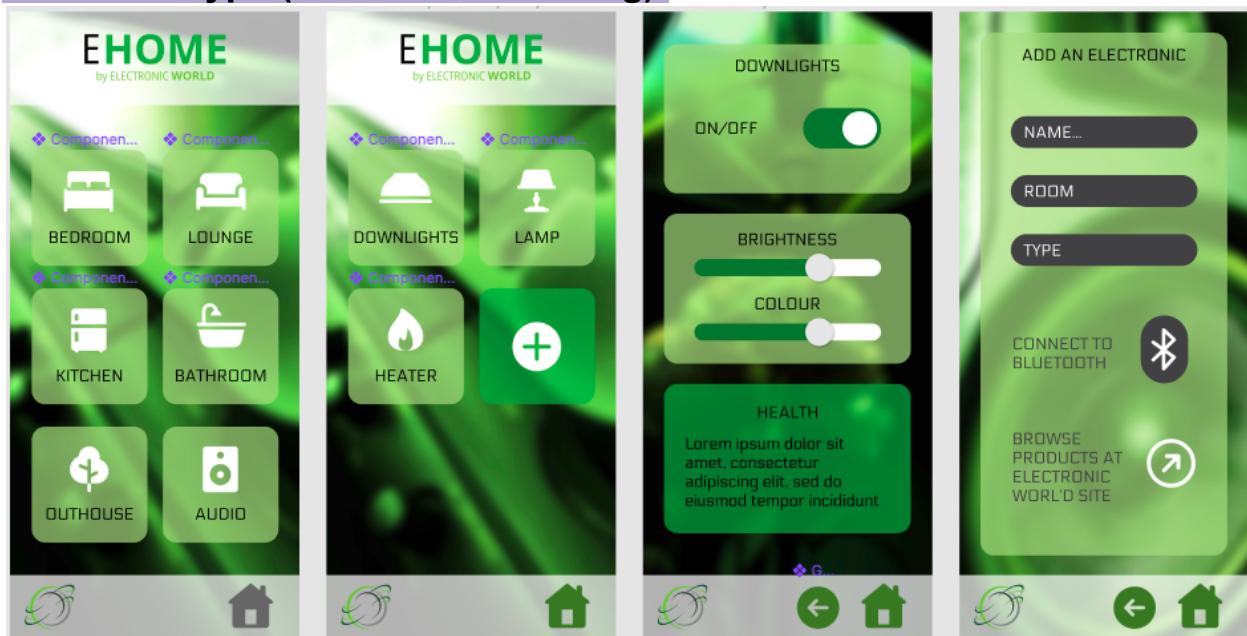
## Lo-Fi Prototype:

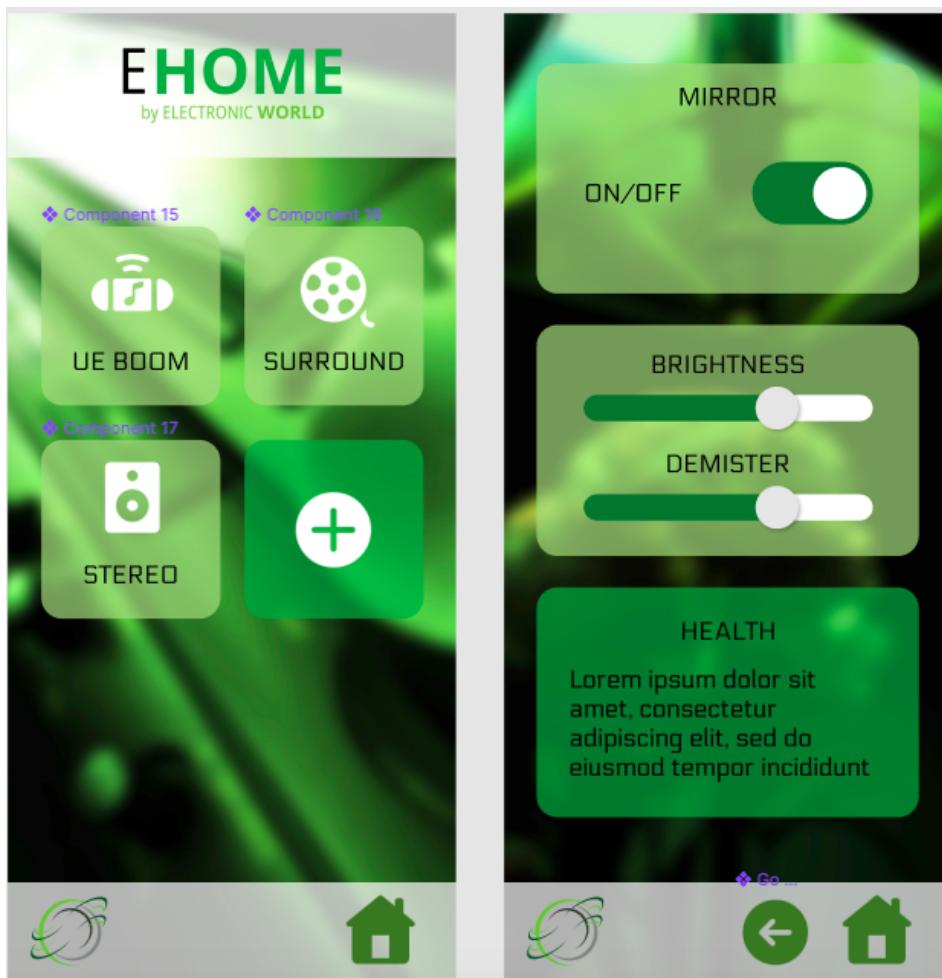
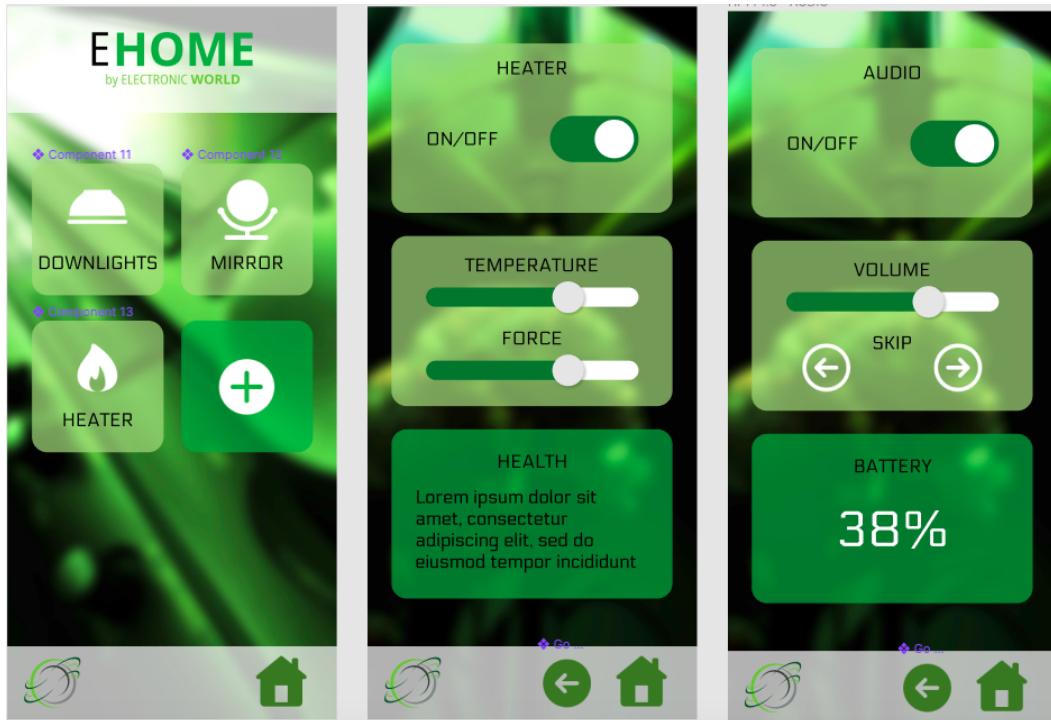


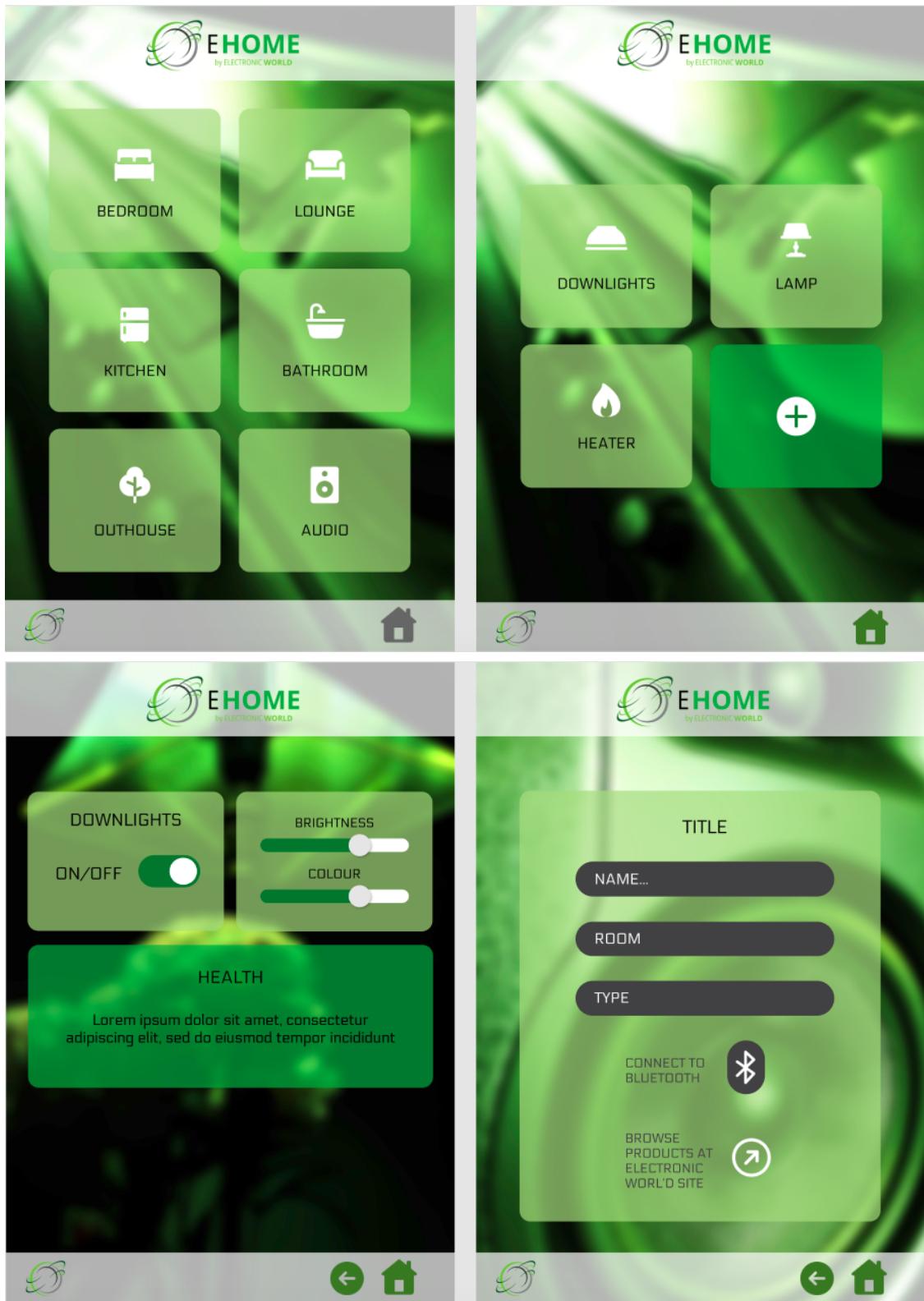


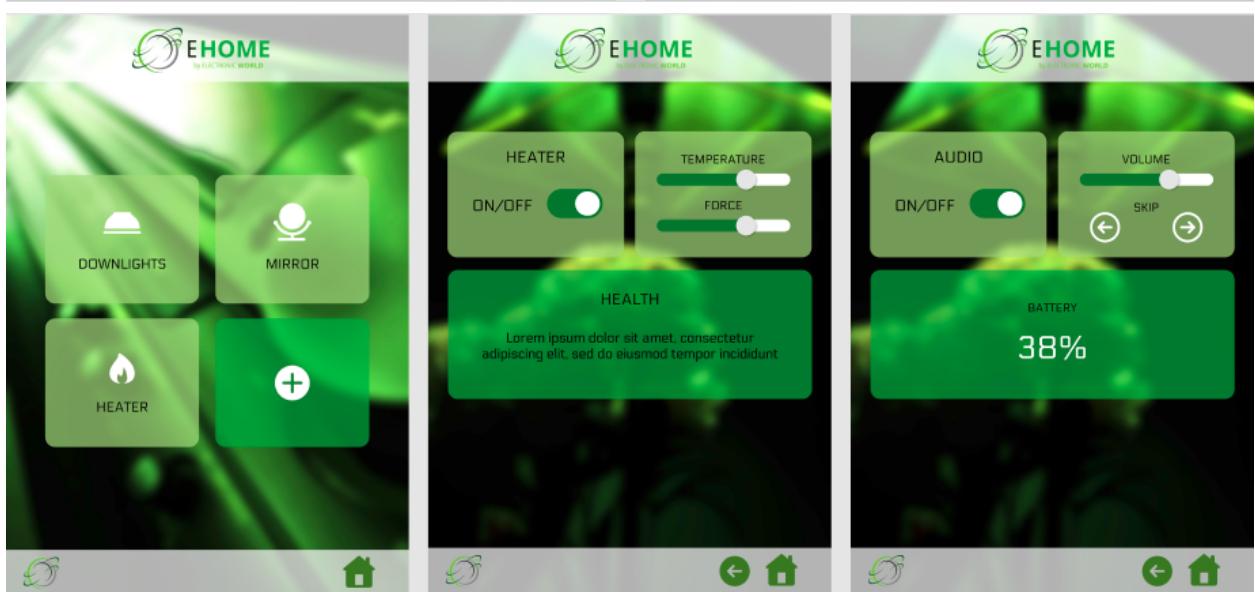
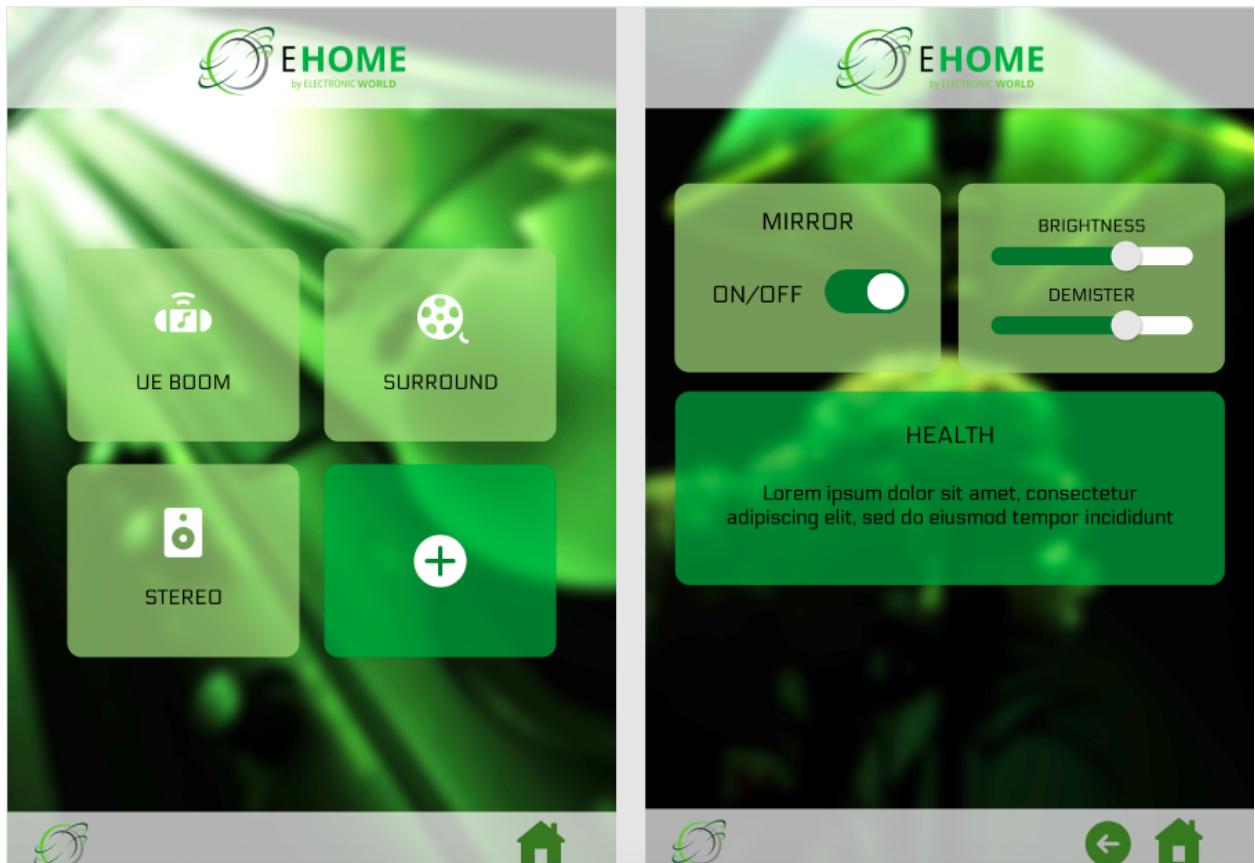


## Hi-Fi Prototype (Before User Testing):











BEDROOM



LOUNGE



KITCHEN



BATHROOM



OUTHOUSE



AUDIO



DOWNLIGHTS



LAMP



HEATER





## DLIGHTS

## ON/OFF



## BRIGHTNESS



## COLOUR



## HEALTH

Lore ipsum  
dolor sit amet,  
consectetur  
adipiscing elit,  
sed do eiusmod  
tempor incididunt



## EHOME

by ELECTRONIC WORLD

## TITLE

NAME...

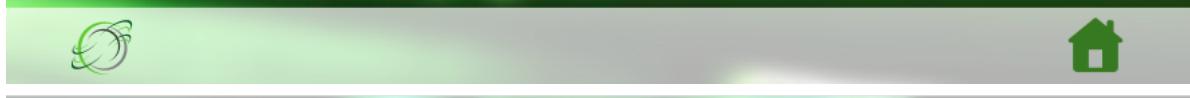
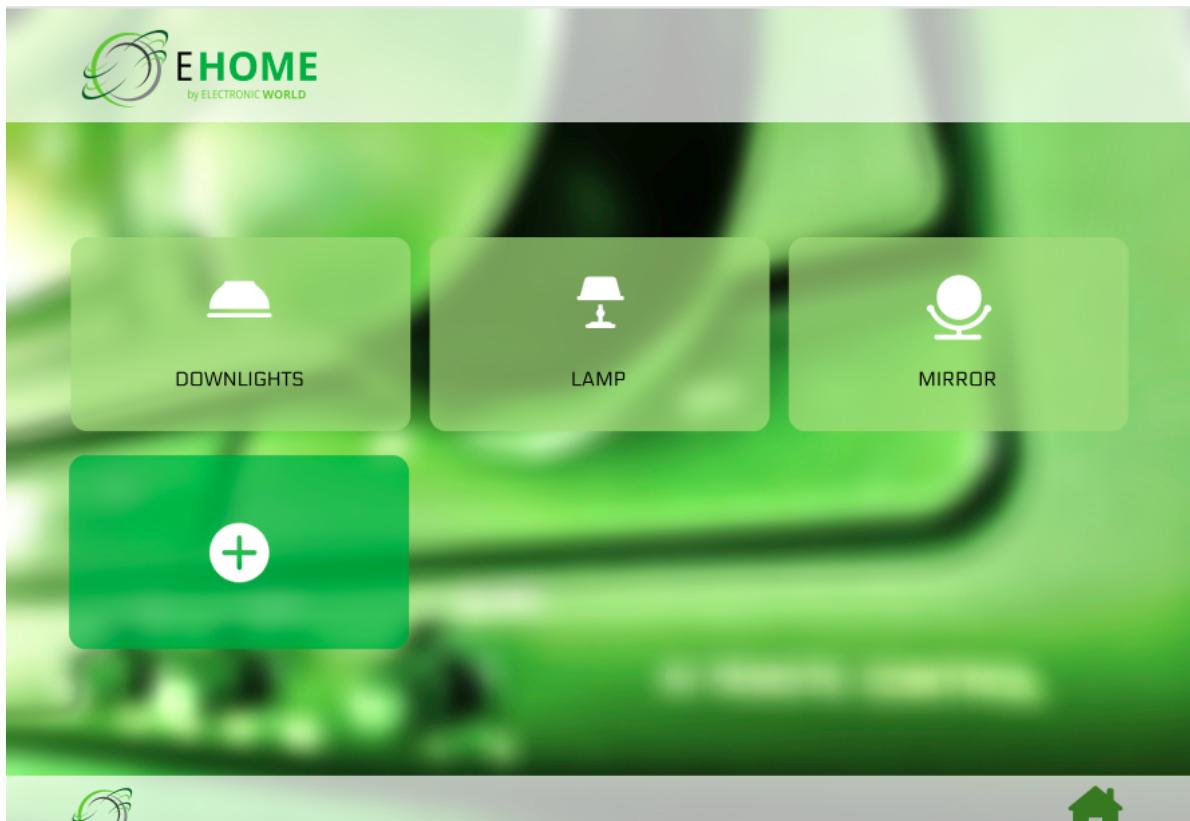
ROOM...

TYPE...

CONNECT TO  
BLUETOOTH

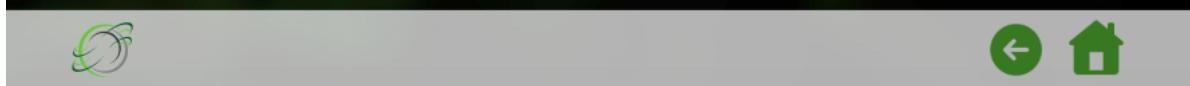
BROWSE  
PRODUCTS AT  
ELECTRONIC  
WORL'D SITE





The middle section of the interface shows three detailed control panels:

- TITLE**: Contains an ON/OFF switch with a toggle button.
- TEMPERATURE**: Contains two sliders labeled TEMPERATURE and FORCE.
- HEALTH**: Displays a block of placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt".





TITLE

ON/OFF



VOLUME



BATTERY

38%



UE BOOM

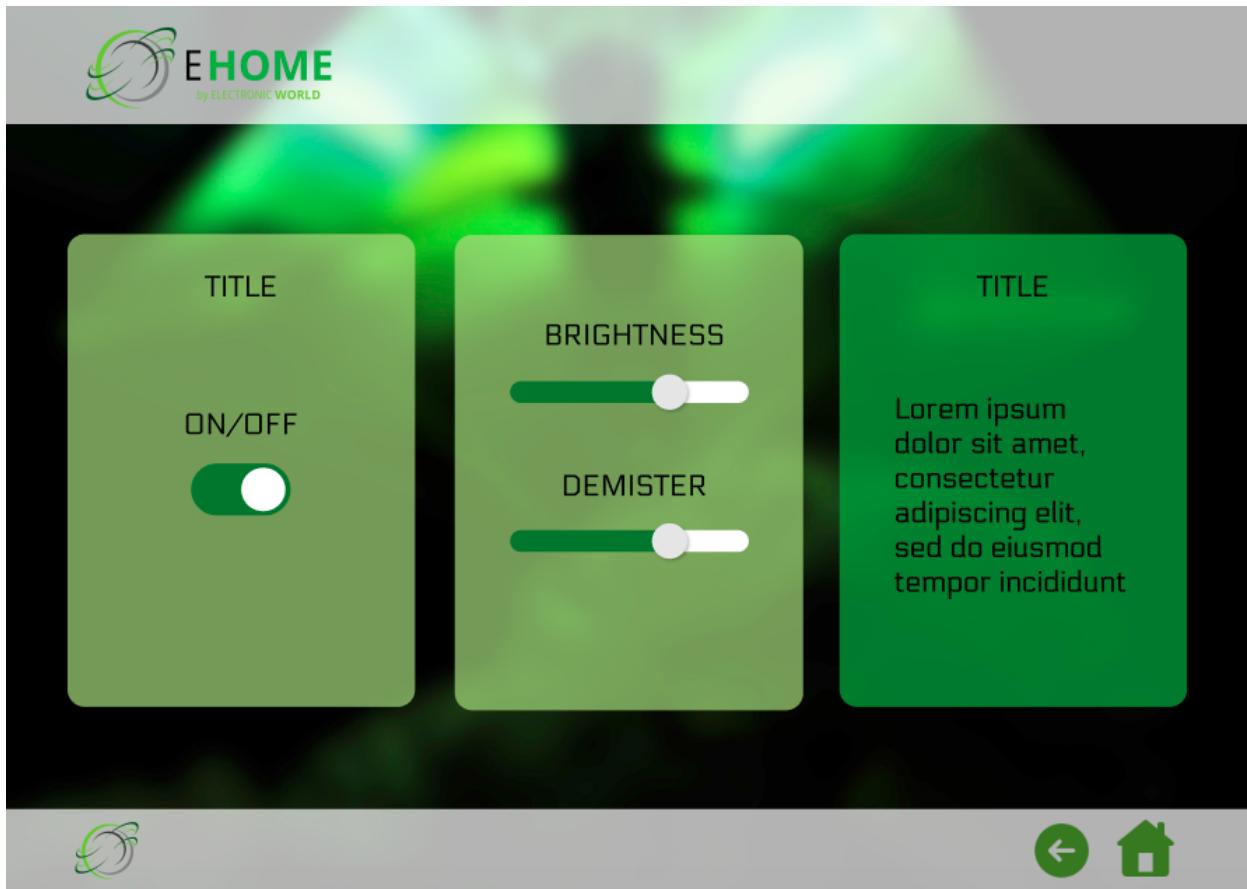


SURROUND



STEREO





## User Testing (Figma Hi-Fi):

### User Testing Questions/Instructions:

1. Turn on the Bedroom Downlights
2. Check the battery percentage on the UE Boom
3. Turn up the heater temperature in the Outhouse
4. Give a name to a new device you want to add in any room
5. Visit Electronic World's website
6. Turn up the force of the Bathroom Mirror

First User Tester Name:	Barry
Turn on the Bedroom Downlights	<ul style="list-style-type: none"> <li>- Clicked on bedroom (icon)</li> <li>- Clicked on downlights (icon)</li> <li>- Clicked on switch</li> </ul>
Check the battery percentage on the UE Boom	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Audio (icon)</li> <li>- Clicked on UE Boom (text)</li> <li>- Identified battery percentage</li> </ul>
Turn up the heater temperature in the Outhouse	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Outhouse (text)</li> <li>- Clicked on Heater (text)</li> <li>- dragged range slider up</li> </ul>
Give a name to a new device you want to add in any room	<ul style="list-style-type: none"> <li>- Clicked on corner Home icon</li> <li>- Clicked on Lounge (text)</li> <li>- Clicked on Add (icon)</li> <li>- Clicked on Type-box</li> <li>- Held spacebar to remove dummy text</li> <li>- Typed in a name</li> </ul>
Visit Electronic World's website	<ul style="list-style-type: none"> <li>- Hovered around for a moment</li> <li>- Read text and found prompt</li> <li>- Clicked the arrow icon</li> </ul>
Turn up the force of the Bathroom Mirror Demister	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked Bathroom (text)</li> <li>- Clicked Mirror (text)</li> <li>- dragged range slider up</li> </ul>
Feedback:	<ul style="list-style-type: none"> <li>- Give clickable text an underline or something to suggest it can be clicked and make it different from the other titles that don't lead to anything.</li> <li>- Give the Add button a title too to make it more clear about where it leads to.</li> <li>- Make the Options pages the same layout on the Tablet as they are on the Mobile because there's too much empty space underneath it.</li> </ul>

First User Tester Name:	Isabella
Turn on the Bedroom Downlights	<ul style="list-style-type: none"> <li>- Clicked on bedroom (text)</li> <li>- Clicked on downlights (text)</li> <li>- Clicked on switch</li> </ul>
Check the battery percentage on the UE Boom	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Audio (text)</li> <li>- Clicked on UE Boom (text)</li> <li>- Asked if the charge was the right thing to be looking at</li> </ul>
Turn up the heater temperature in the Outhouse	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Outhouse (text)</li> <li>- Clicked on Heater (text)</li> <li>- dragged range slider up</li> </ul>
Give a name to a new device you want to add in any room	<ul style="list-style-type: none"> <li>- Clicked on corner Back icon</li> <li>- Clicked on Add (icon)</li> <li>- Clicked on Type-box</li> <li>- Highlighted and deleted dummy text</li> <li>- Typed in a name</li> </ul>
Visit Electronic World's website	<ul style="list-style-type: none"> <li>- Read text and found prompt</li> <li>- Clicked the arrow icon</li> </ul>
Turn up the force of the Bathroom Mirror Demister	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked Bathroom (text)</li> <li>- Clicked Mirror (text)</li> <li>- Hovered for a moment while reading titles</li> <li>- dragged range slider up</li> </ul>
Feedback:	<ul style="list-style-type: none"> <li>- Make the green on the switch and sliders brighter, not crucial just for visual appeal.</li> <li>- Give the Add button a title too so it's clear what it does.</li> <li>- Make the device name titles bigger than the subheadings so they stand out more.</li> <li>- Give the Bathroom and Speakers' pages a different background to make it more interesting.</li> </ul>

First User Tester Name:	Isla
Turn on the Bedroom Downlights	<ul style="list-style-type: none"> <li>- Clicked on bedroom (icon)</li> <li>- Clicked on downlights (icon)</li> <li>- Clicked on switch</li> </ul>
Check the battery percentage on the UE Boom	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Audio (icon)</li> <li>- Clicked on UE Boom (icon)</li> <li>- Identified battery percentage</li> </ul>
Turn up the heater temperature in the Outhouse	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked on Outhouse (text)</li> <li>- Clicked on Heater (text)</li> <li>- dragged range slider up</li> </ul>
Give a name to a new device you want to add in any room	<ul style="list-style-type: none"> <li>- Clicked on corner Home icon</li> <li>- Clicked on Bedroom (icon)</li> <li>- Clicked on Add (icon)</li> <li>- Clicked on Type-box</li> <li>- Pressed backspace to remove dummy text</li> <li>- Typed in a name</li> </ul>
Visit Electronic World's website	<ul style="list-style-type: none"> <li>- Clicked on corner Back icon</li> <li>- Hovered for a second before going back into Add page</li> <li>- Read text and found prompt</li> <li>- Clicked the arrow icon</li> </ul>
Turn up the force of the Bathroom Mirror Demister	<ul style="list-style-type: none"> <li>- Clicked corner Home icon</li> <li>- Clicked Bathroom (icon)</li> <li>- Clicked Mirror (icon)</li> <li>- dragged range slider up</li> </ul>
Feedback:	<ul style="list-style-type: none"> <li>- Make the icons inside the buttons bigger on the Tablet and Desktop.</li> <li>- Make the device titles and the battery percentage thicker/bolder because the titles look the same as the subheadings and the percentage looks too thin in such a big space.</li> <li>- Remove the header on the same Tablet and Laptop pages as the Mobile ones, they make it look as though it takes you Home.</li> </ul>

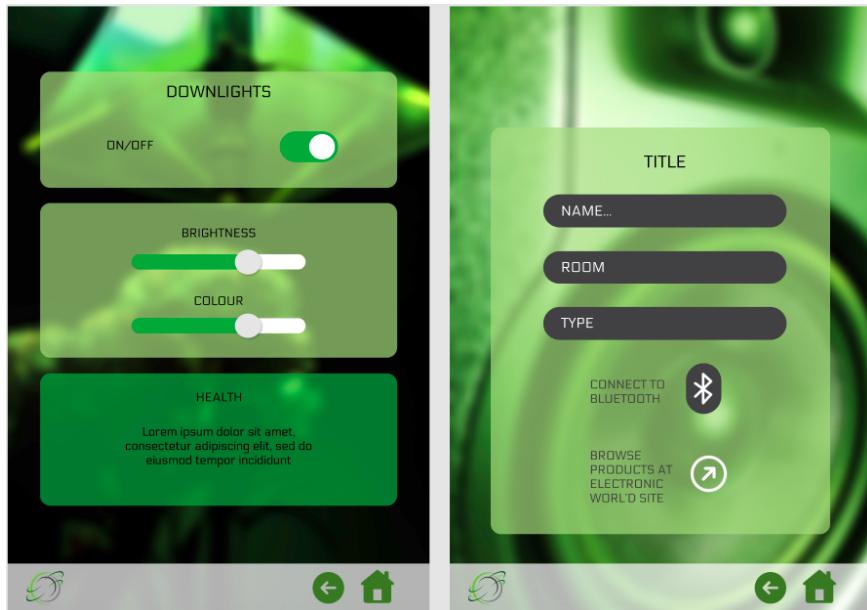
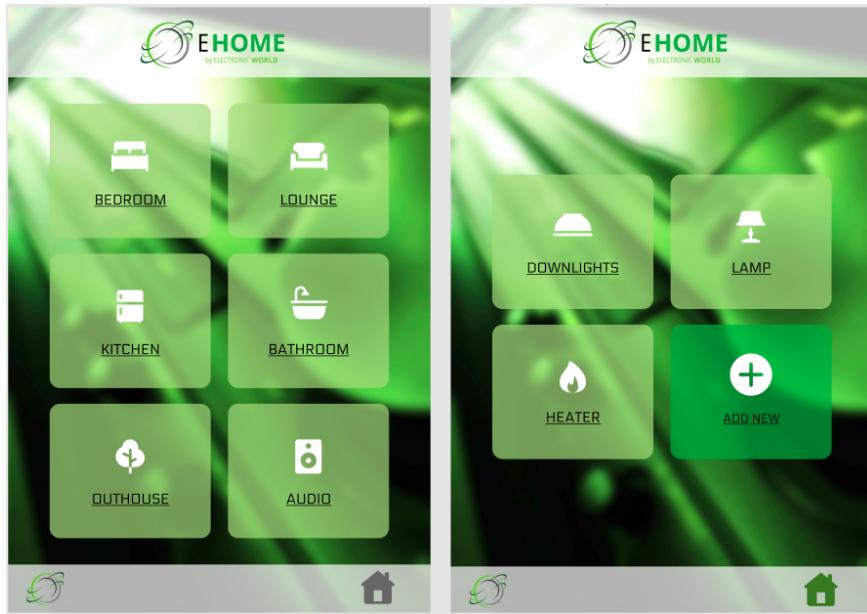
	<ul style="list-style-type: none"><li>- Centre the top logo on the Laptop view because it looks clickable on the left.</li></ul>
--	--

## User Testing Summary:

- give clickable text an underline to make it different from un-clickable titles
- make dark green on switch and slider brighter
- give add button a title too
- make device name title slightly bigger
- change mirror background to a mirror
- change audio background to a speaker
- make battery number thicker/bolder
- make options page same as phone on tablet, too much empty space at the bottom
- make category/option icons bigger on laptop
- get rid of header on tablet and laptop as on the mobile pages
- centre the content more on laptop, it's too spread out
- centre the header logo on laptop, having it left makes it look clickable

## Hi-Fi Prototype (After adjustments from User Testing):







BEDROOM



LOUNGE



KITCHEN



BATHROOM



OUTHOUSE



AUDIO



DOWNLIGHTS



LAMP

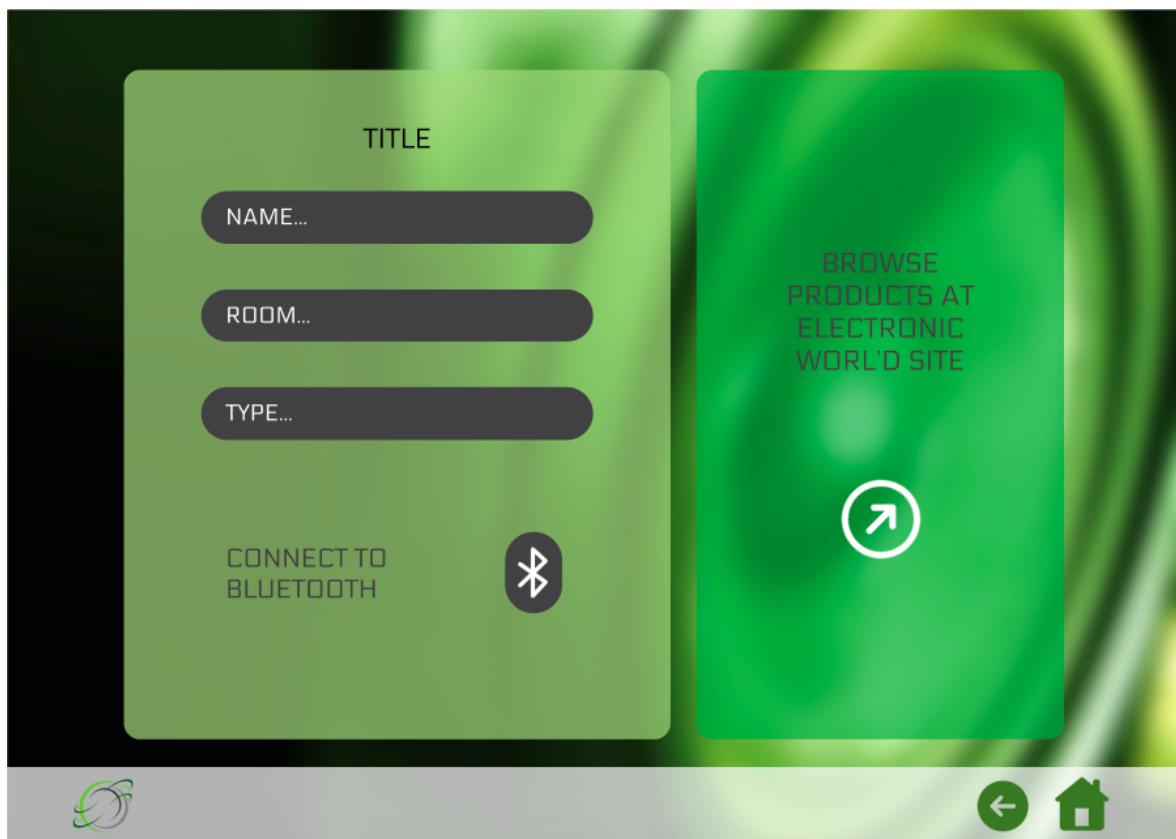
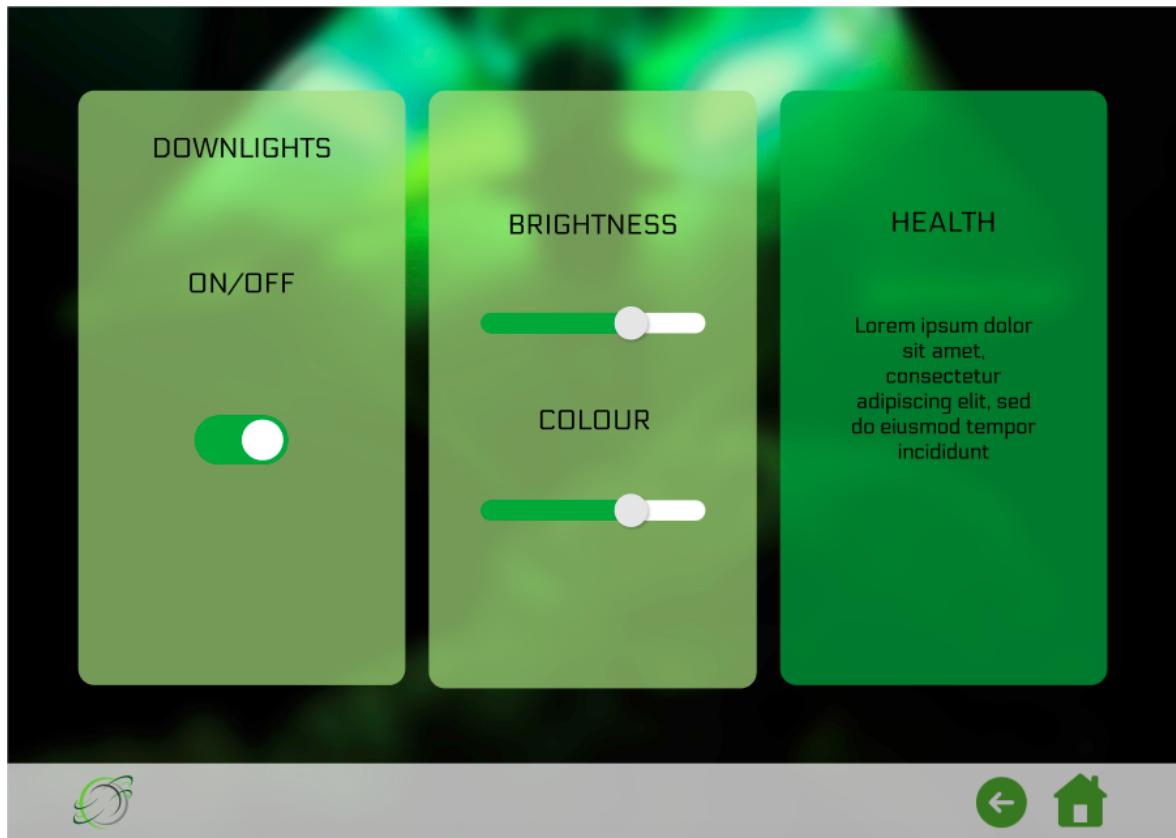


HEATER



ADD NEW







DOWNLIGHTS



LAMP



MIRROR



ADD NEW



UE BOOM



SURROUND

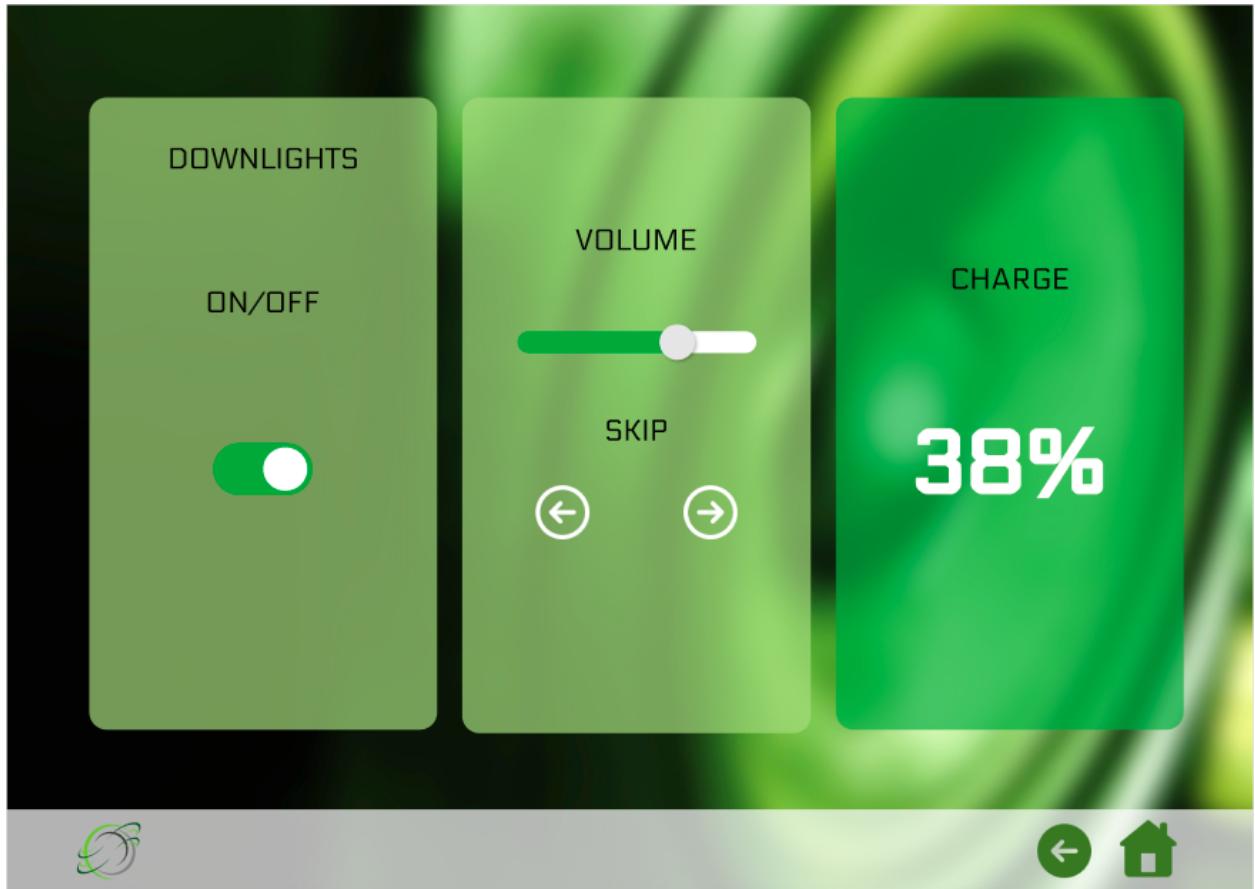


STEREO



ADD NEW





### **Figma Link:**

<https://www.figma.com/file/la04b9xHPMxgFIVZ6dixuO/Untitled?node-id=0%3A1>

### **Copyright Considerations:**

My website is copyright free. I ensured, throughout the process, that all the content of the site was either made by myself, is copyright free, or belongs to Electronic World LTD.

I made almost all of my own icons in Adobe Illustrator to avoid taking anyone else's work. The home, plus, and arrow icons are not my own, but are imported from Bootstrap, which allows the royalty-free, commercial use of their icons.

All background images are both photographed and edited by myself, so I have not breached any copyright rule regarding another party's photography.

Electronic World LTD had only very low quality versions of their logo available, so I recreated them in Adobe Illustrator and made additional versions specific to the E-Home site. If Electronic World were a real client to me, it would be in their control to make contact with the designer of the logo and/or settle the copyright terms.

Since my site is designed specifically for Electronic World LTD and includes their logo, they would then take it into their own action to upload the site to a host if I were to pass my files on to them.

Original logos in best available form vs my recreations:



**ELECTRONIC WORLD**  
Electronics Online Shop



**E HOME**  
by ELECTRONIC WORLD

## **Te Tiriti o Waitangi Considerations:**

**Te Tautoko Whanau:** Family is very important within Maori culture, and even extends from biological family to the community as a whole. I am going to design a website that can be accessed from any home or mobile device to allow the whole family to have access. My topic is based around a home, and I will be taking into consideration aspects such as the language used for the younger ones and the font sizes and general visibility for the older ones, so that all members of the household can enjoy the site. I will ask people from different stages in life (parents and older children) to complete my user testing and interviews to broaden my idea of the wants and needs of different members of a general family home. Maori value of sharing and supporting the whole family.

**Te Parongo / Whakapapatanga:** Maori highly value the importance of Communication and keeping everyone informed. In correlation to my client's values and goal, my design will incorporate live updates on the user's electronics. These are details that demonstrate the importance of keeping the customer informed.

**Kaitiakitanga:** Maori are very conscious of our place on earth in relation to our environment. The culture values the relationship between man and nature. Maori culture signifies our role as guardians to the land and values the importance of looking after our environment. My website will promote the importance of maintenance for people's electronics, thus lengthening their lifespans and reducing unnecessary waste. Using excess power does not demonstrate this value, therefore my site will encourage the user to adjust their electronics as they need them, rather than leaving things on for convenience, etc.

**Tino Rangatiratanga:** In Maori culture, the right or ability to obtain autonomy is of high value. This principle mainly focuses on the strength of maintaining the freedom to express Maori culture as a whole, but also relates to the freedom of individuals. My website works alongside the user's autonomy, allowing them the complete freedom to control their devices from anywhere.

## **Colours in Maori Culture:**

Black, white and red are the most significant colours in Maori culture. Black represents “The Realm of Potential Being”, and the darkness in time from which all life emerged. It is a representative of the hope that comes from the unknown. Red is a symbol of power, nobility and divinity. It signifies the strength of coming into being, and represents the process of transitioning from the realm into existence. White represents the final stage of being, arriving into the light.

In order to avoid using these colours in a way that may offend any user, I decided to stay away from the use of Black and Red, as red wasn't part of my colour palette anyway and the black has been reduced to a calmer, deep grey to represent the metallic side of electronics and give the site a tangible feel.

## **Presentation:**

[https://docs.google.com/presentation/d/1Exa-FTVSI2U8OKQ3P0P37RpLZI2Rok\\_G56\\_3QZjdhhY/edit?usp=sharing](https://docs.google.com/presentation/d/1Exa-FTVSI2U8OKQ3P0P37RpLZI2Rok_G56_3QZjdhhY/edit?usp=sharing)