

## SUMMATIVE

## Home automation health & security App

Due: Wednesday 14th April 2021

Hand in: Design/planning Doc  
Zip file of root HTML file  
Feedback and Evaluation Doc

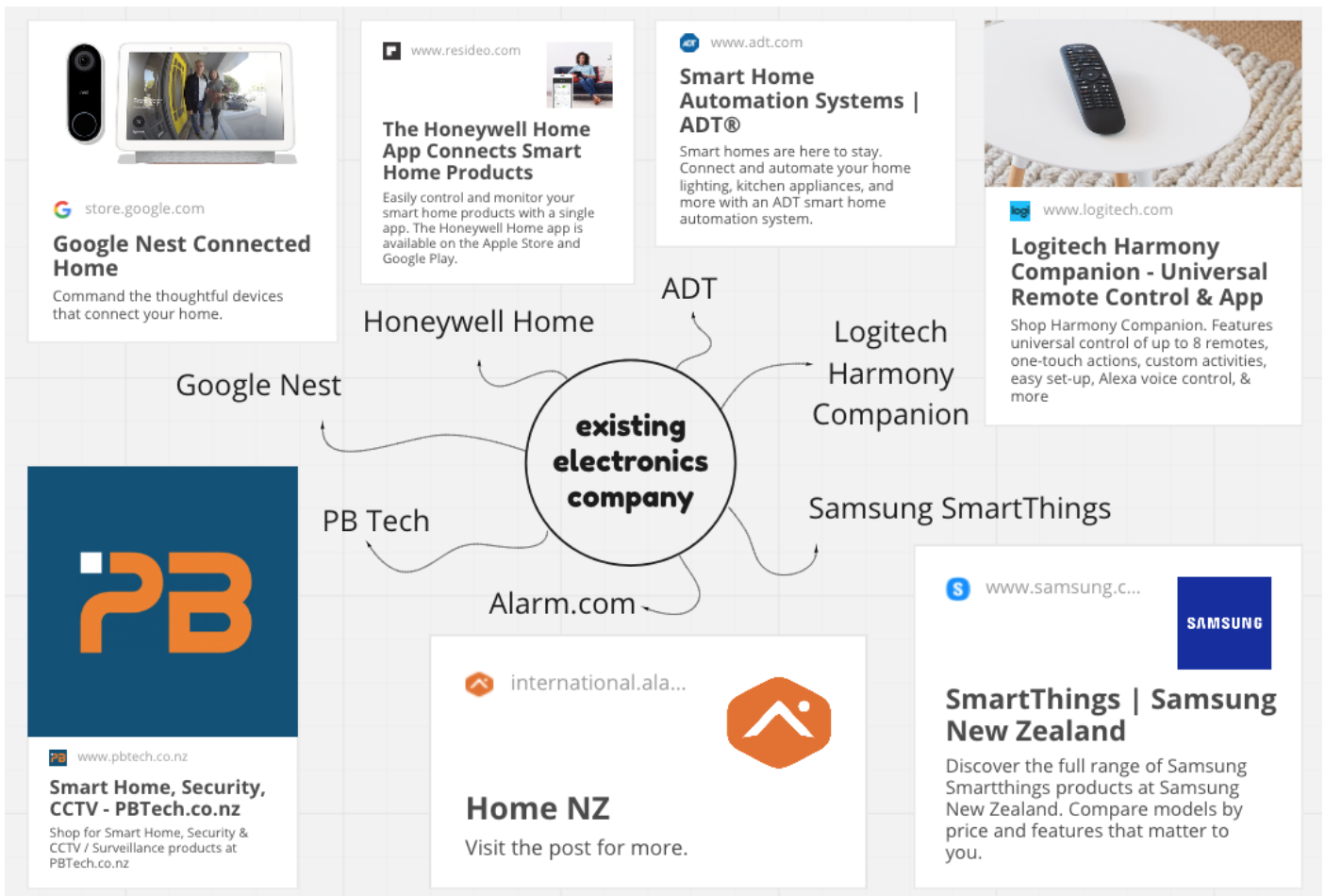
Planning:

		Wednesday 17 March -Brainstorm project ideas -Pitch to Jared	Thursday 18 March UX Research -Project vision/goals -Problem	Friday 19 March UX Research cont. -Objectives
Monday 22 March -Decision on company name	Tuesday 23 March -Design Logo -User testing Logo Feedback	Wednesday 24 March -Logo Development based on feedback	Thursday 25 March -Competitor Analysis -User-testing Survey	Friday 26 March -Target Audience/Persona -Header set
Monday 29 March -Start prototyping -Sketch concepts and wireframes	Tuesday 30 March -Figma low-fi -Usability testing	Wednesday 31 March -Moodboard -Figma Hi-fi	Thursday 1 April -Figma Hi-fi finalised -Usability testing	Friday 2 April -Check in feedback session -Create Atom folders -Begin code
Monday 5 April -Code cont.	Tuesday 6 April	Wednesday 7 April	Thursday 8 April	Friday 9 April
Monday 12 April -Finalise Code	Tuesday 13 April -Tidy-up and Proofing of code and design doc	Wednesday 14 April -Hand in		

### Summative Assignment Documentation Guide

- ❑ Relevant implications for the Treaty of Waitangi
- ❑ Evidence of Design YooBee Best Practice Visual Principles
- ❑ UX Formative Research
- ❑ Prototype Testing
- ❑ Evidence of SASS
- ❑ Business Strategy in Research Process
- ❑ Usability Testing Results & Discussion
- ❑ CSS Methodology and Screen Shots
- ❑ Group Component Discussion
- ❑ Copyright discussion

## Brainstorm - *Decide on electronics company*



I looked at the current websites of these existing electronics companies to get an idea of the direction I would take for this project. They all offer a good range of Home security and monitoring options via mobile apps using android and iOS. Google Nest was a range of products that stood out to me as I had not heard of it before and I found the products to be very intuitive and ticked the boxes on the type of UI that I want to create.

After looking into copyright obligations as a student I have decided to take the idea of Google Nest but create a new brand that is based off of it. This will include a new logo and UI app but will share similar design attributes.

## Product research - *Google Nest*

At Google Nest, we make products that are beautiful, helpful and easy to use. The Nest app is no exception.

Control your Nest thermostat, arm and disarm your Nest Secure alarm system, see your home with Nest Cam and receive an alert if Nest Protect goes off – all in one place. And receive notifications on your Android phone or tablet.

Nest uses sensors, algorithms and the location of your phone to do the right thing automatically, turning off the heating and turning on the camera when you leave. Forgotten to set the alarm? It will notice, and send you a Remind me alert.



Nest Learning Thermostat and Nest Thermostat E  
*Thermostats that program themselves to help you save energy.*

*Available in Canada, United States (except Puerto Rico), Belgium, Canada, France, Ireland, Italy, Netherlands, Spain, United Kingdom.*

Nest Secure alarm system  
*Available in United States (except Puerto Rico)*

Nest Protect  
*The smoke and carbon monoxide alarm that thinks and speaks, and alerts your phone.*

*Available in Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States (except Puerto Rico)*

Nest Cam IQ Indoor and Outdoor, Nest Cam Indoor, Nest Cam Outdoor and Dropcam  
*The security cameras that let you see your home on your phone, inside and out.*

*Available in Austria, Belgium, Canada, France, Germany, Ireland, Italy, Netherlands, Spain, United Kingdom, Sweden, Denmark, Finland, Switzerland, United States (except Puerto Rico)*

Nest Hello  
*Know who's knocking.*

*Available in Canada, United Kingdom, Ireland, France, Belgium, Netherlands, Germany, Austria, Spain, Italy, Sweden, Denmark, Finland, Switzerland, United States (except Puerto Rico)*

Nest x Yale Lock  
*The lock for a more secure connected home.*  
*Available in Canada, United States (except Puerto Rico)*

- Change the temperature while on the train or from the sofa using your phone.
- See how much energy you've used and why.
- View and edit your schedule.
- Receive extreme temperature alerts before your home gets too cold.

- Arm and disarm your home remotely from the app.
- Receive a Remind me alert if you've gone out and forgotten to set the alarm.
- Receive a security alert on your phone telling you what triggered the alarm – a door or window opening, or someone entering a room.

- Receive an alert if Nest Protect senses smoke or carbon monoxide. (Requires Wi-Fi and a working Internet connection.)
- Silence an alarm from your phone with App Silence (Nest Protect 2nd generation only.)
- See the status of your batteries, sensors and Wi-Fi connection.
- Run a Safety Check-Up to test all your alarms at once (Nest Protect 2nd generation only.)
- See your Safety History so that you know when alerts happened and why.

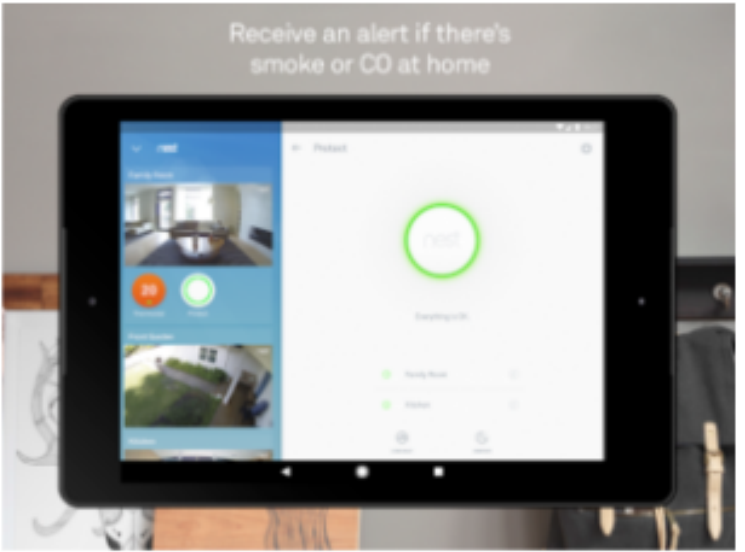
- Receive alerts when there's activity and respond to get someone's attention.
- See what you've missed with snapshots of the past three hours.
- Check in 24/7 with crisp 1080p HD video (Nest Cam and Dropcam Pro only).
- Receive person alerts (or familiar face alerts with Nest Cam IQ) and up to 30 days of video history when you subscribe to Nest Aware. (Subscription service sold separately.)

- 24/7 video streaming means that you'll never miss a moment.
- Designed to show you everything at your doorstep – people head to toe or parcels on the ground.
- Can tell the difference between a person and something else.
- Notifies you about visitors, even if they don't ring the bell.
- HD Talk and Listen lets you have a seamless conversation with someone at your door.
- When you can't answer the door, quick responses let you reply to visitors with pre-recorded audio messages.

- Instead of sharing keys, assign passcodes in the Nest app to people you trust.
- Receive an alert when someone locks or unlocks the door.
- With Home/Away Assist and Auto-lock, your door can lock itself when you leave.

Some features require a working Internet connection, Wi-Fi and/or Bluetooth.

[https://play.google.com/store/apps/details?id=com.nest.android&hl=en\\_NZ&gl=US](https://play.google.com/store/apps/details?id=com.nest.android&hl=en_NZ&gl=US)



## Product research - *New brand name brainstorm*

<b>Den</b> noun: den; plural noun: dens 1. a wild mammal's hidden home; a lair.	<b>Eyrie</b> noun: eyrie; plural noun: eyries; noun: aerie; plural noun: aeries 1. a large nest of an eagle or other bird of prey, built high in a tree or on a cliff.
RoostSafe DenTemp ThermoDen EyrieGlow DenPlug ShackPlug U-Away U-Shack U-Rein Home Run RunAbode FortReady	<div style="text-align: center;"> <b>NEW electronics company name</b> </div> <b>shack</b> noun 1. a roughly built hut or cabin
<b>Roost</b> intransitive verb. 1 : to settle down for rest or sleep : perch. 2 : to settle oneself as if on a roost. transitive verb. : to supply a roost for or put to roost. 1. a place where birds regularly settle or congregate to rest at night, or where bats congregate to rest in the day.	

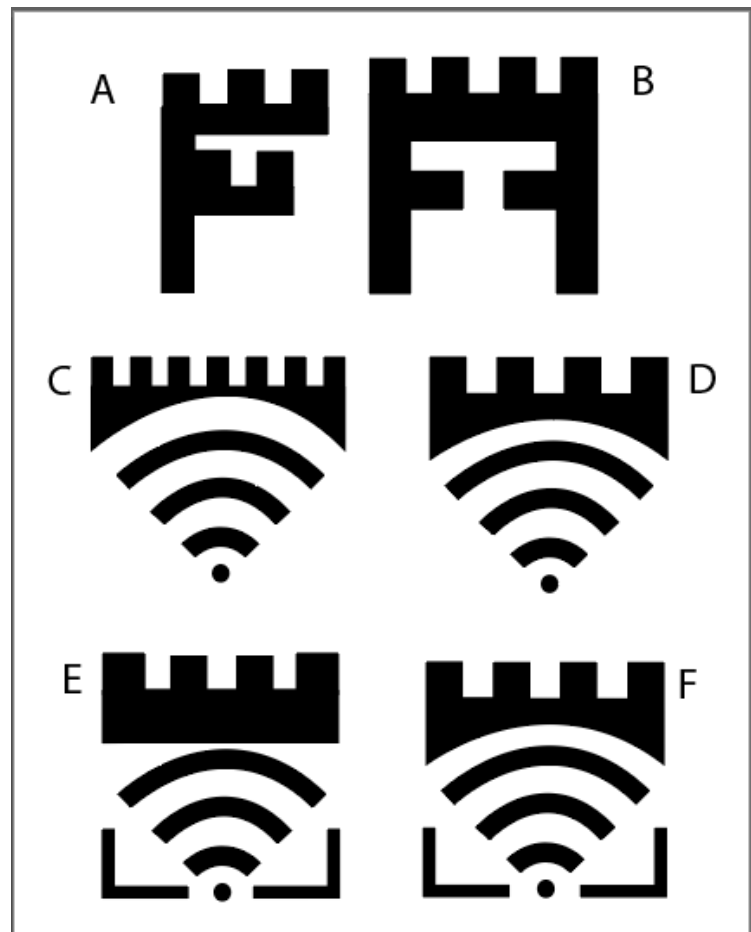
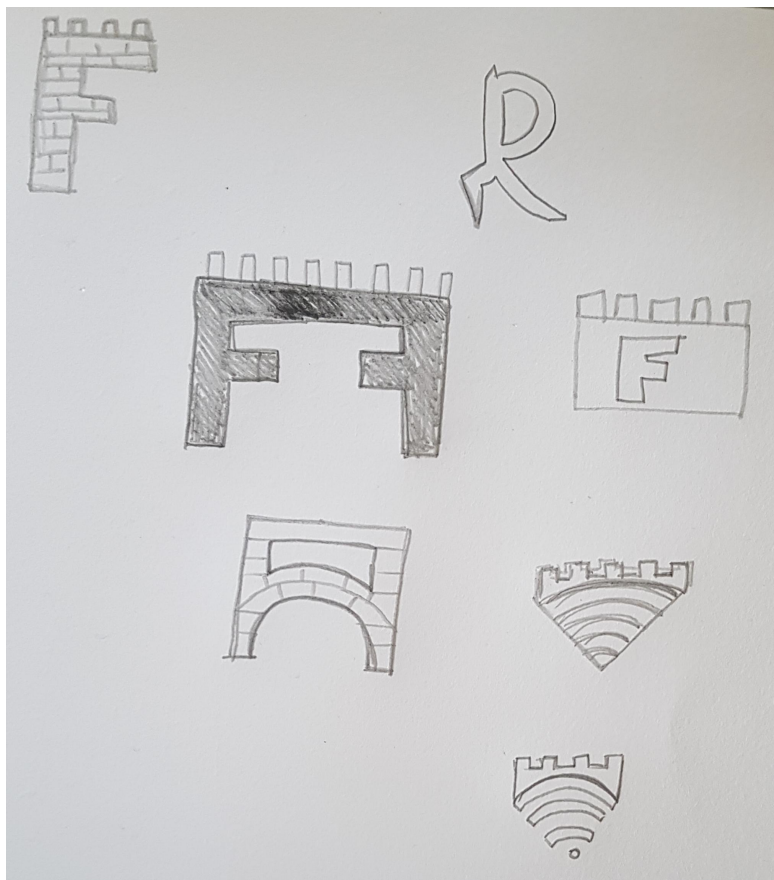
I conducted a brainstorm to help me to determine a new name for the heating app that I am going to create. I like the simplistic design of the products that Google Nest supplies and how clean their branding is. I took the name "Nest" and researched synonyms that relate to other types of housing.

I came to the decision of using the word 'Fort' as it enforces the user to feel that their home will be secure and defended while using this product.

Finally, I decided on the name "Fortify Home Monitoring" as it relates to other successful current web products such as Spotify and Shopify.

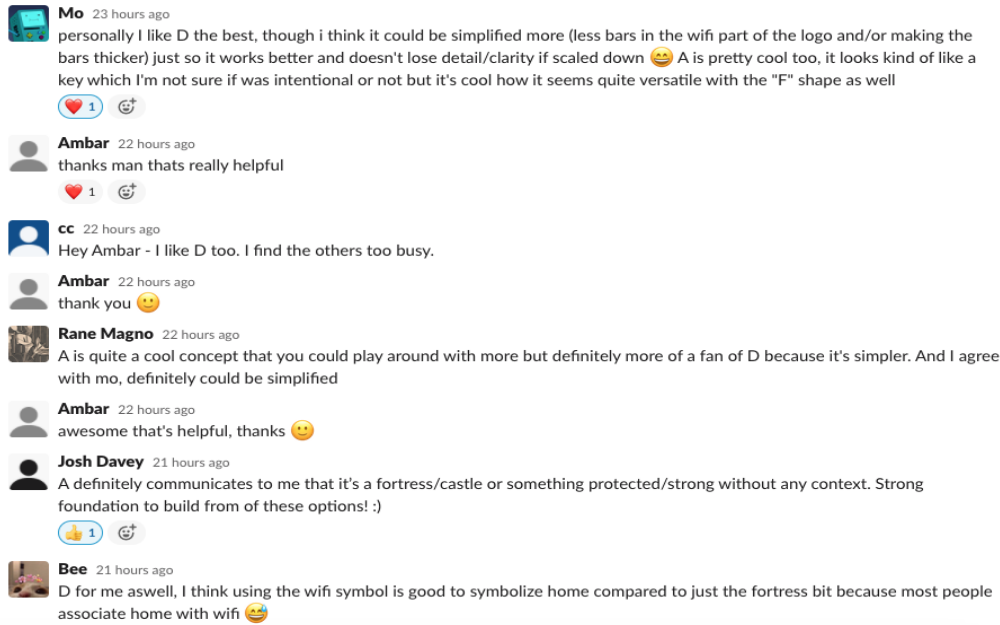
I chose the phrase 'Home Monitoring' as this UI will have multiple options within the home including, security e.g locking/unlocking of windows and doors, camera surveillance, electrical alteration e.g on/off/mood lighting settings, temperature and appliance control ect.

## Product research - *Logo Ideation*



## User testing - *Logo development*

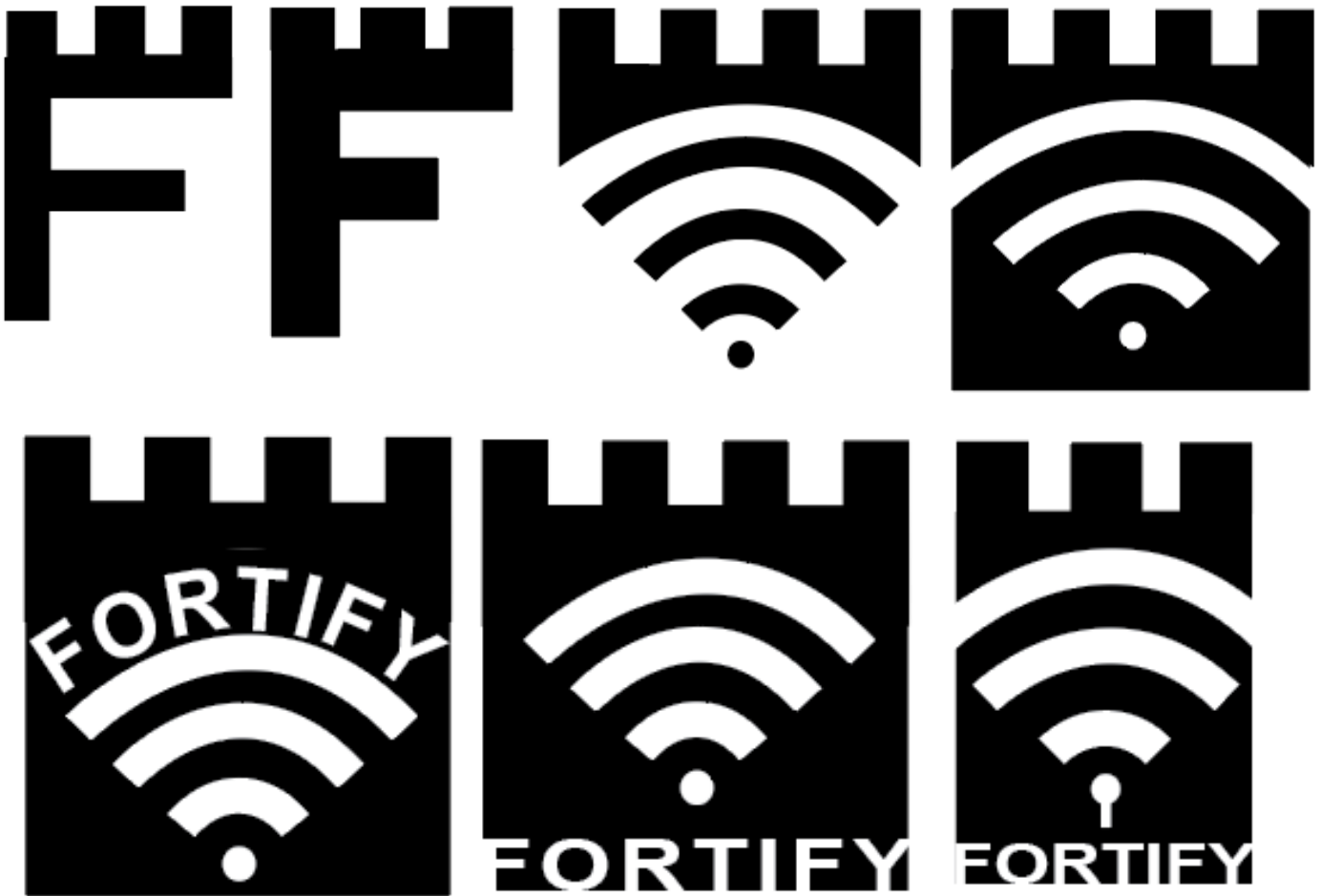




I sent a page of vectored images to my classmates to get a few opinions on the direction that I was heading with the Fortify logo.

Based on their responses, I have chosen to further develop option D as it got a lot of support from my class.

I like the idea of making it more simplified and to play with the positive/negative space within the logo.



Based on the users feedback I played with white space and added in a wordmark onto the logo.

I decided that adding the curved wordmark did not work very well. I thought it made the logo look too busy.

I like the idea of having the wordmark at the very bottom of the logo being stretched right to the edges too to enhance the idea of negative space.

I am unsure about the spacing around the Wifi icon. I feel that it isn't needed.

I played with narrowing the width of the logo to simplify it based on the feedback regarding scaling the logo when needed.

Another classmate offered the option to add a line beneath the wifi icon to resemble a keyhole which i really like.

# UX Research

## *Project vision/goals*

To offer a solution for homeowners who have not yet used *Fortify Home Monitoring* products and services and to bring in new customers.

Give new or existing homeowners the ability to monitor and control a series of connected devices in their home to have more awareness of their home's health and security.

## *Problem*

*Fortify Home Monitoring* is wanting to grow their customer base by releasing a new UI service that uses a series of connected devices (smoke detectors, security e.g locking/unlocking of windows and doors, camera surveillance, electrical alteration e.g on/off/mood lighting settings, temperature and appliance control ect to give customers control of their home.

They believe that not enough homeowners are aware of their home's overall health and security. They think this UI will help their new customers to save more money on heating and maintenance as they will be able to monitor and access all relevant information about their home through wall mounted tablets or from anywhere using their mobile phone.

## *Objectives*

Gain information to confirm what users are wanting or needing in a UI app for a home monitoring service.

Create a UI for *Fortify Home Monitoring* customers to be able to monitor and control a series of connected devices in their home.

Create a consistent, simple and effective design for a new UI including icons, typographic conventions, contrast, repetition, alignment and proximity.

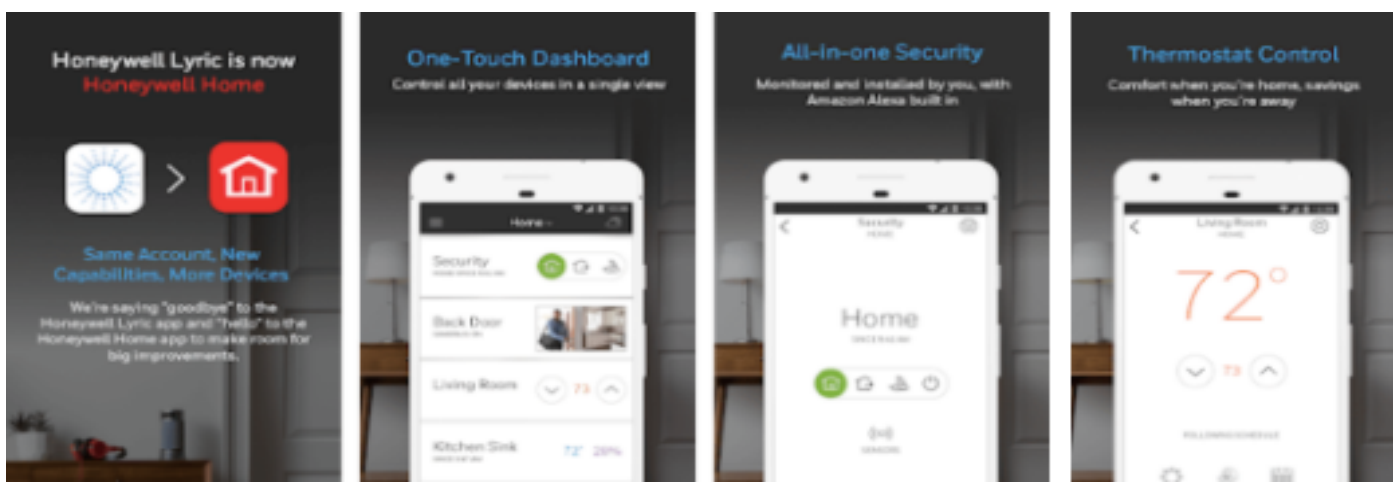
## *Competitor Analysis*

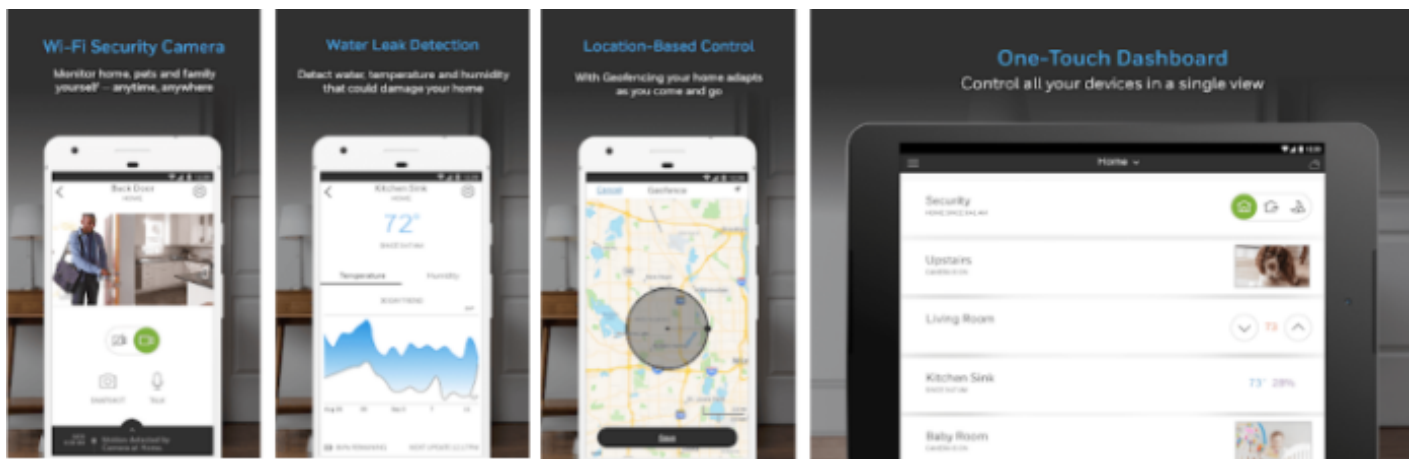


### *Honeywell Home*

Honeywell Home connected products simplify home comfort, security, and awareness by allowing easy control with a single app.

Our heritage and experience in and around the home means you can trust each of our products to perform brilliantly and give you a smarter, more comfortable home.





### Smart Home Security *US only*

This all-in-one security system comes with Amazon Alexa™ built in, and has facial recognition\* coming in 2018 that gives you smart mobile alerts. It's do-it-yourself security made easy, that you install and control yourself, and that grows with your needs.

### D6 Pro Wi-Fi Ductless Controller *US Only*

If your ductless system came with a button-loaded remote control, it's time to replace complexity with simplicity. The D6 Pro Controller works like a thermostat. Set the mode to cool, heat, or auto. Set the temperature you want. And you're done – simple! The Honeywell Home app helps you get the most out of your ductless system. You can schedule temperature changes throughout the day. Or set a geofence that starts warming or cooling your space as you head home. The app alerts you when the room temperature or humidity is too high or low, reminds you when to clean the air filters, and even sets the controller's display brightness.

### T5 & T6 Series Smart Thermostats *US & Europe*

The T5 & T6 Smart Thermostats allow you to take comfort knowing your home temperature will always be just how you like it. They are easy to install and use and conveniently fits in with your lifestyle. The T5 & T6 Smart Thermostat is ENERGY STAR® certified and you can program it based on your schedule, or let it adapt to your life as plans change with geofencing. Control the Smart Thermostats from anywhere simply by using your smartphone or tablet: or integrate into your smart home with Amazon Alexa, Google Assistant and Apple HomeKit support. With Honeywell's Smart Thermostats you can keep life simple while ensuring that you save money on your energy bills.

### C1 Wi-Fi Security Camera

With Honeywell's indoor C1 Wi-Fi Security Camera, you can watch what's happening at home – anytime, anywhere. Versatile and easy to install, it also sends rapid notifications to your smart device if it detects unusual movement or sounds. You can even combine multiple cameras through the same Home app to monitor and secure your whole home yourself.

### C2 Wi-Fi Security Camera

Honeywell's indoor C2 Wi-Fi Security Camera can recognize the difference between a crying baby and a smoke alarm, and sends a notification to your smart device if it hears either. It also lets you watch what's happening at home, anytime, anywhere, and can detect other unusual movements and sounds. Versatile and easy to install, you can combine multiple cameras through the same Home app to keep an eye on your whole home yourself.



**Wi-Fi Water Leak & Freeze Detector** The Wi-Fi Water Leak and Freeze Detector is an early warning system that notifies you on your smartphone when a leak is detected or the temperature drops below a temperature of your choice. You may be able to avoid expensive repairs and loss of treasured items.

**Round™ Smart Thermostat**  
*US Only*

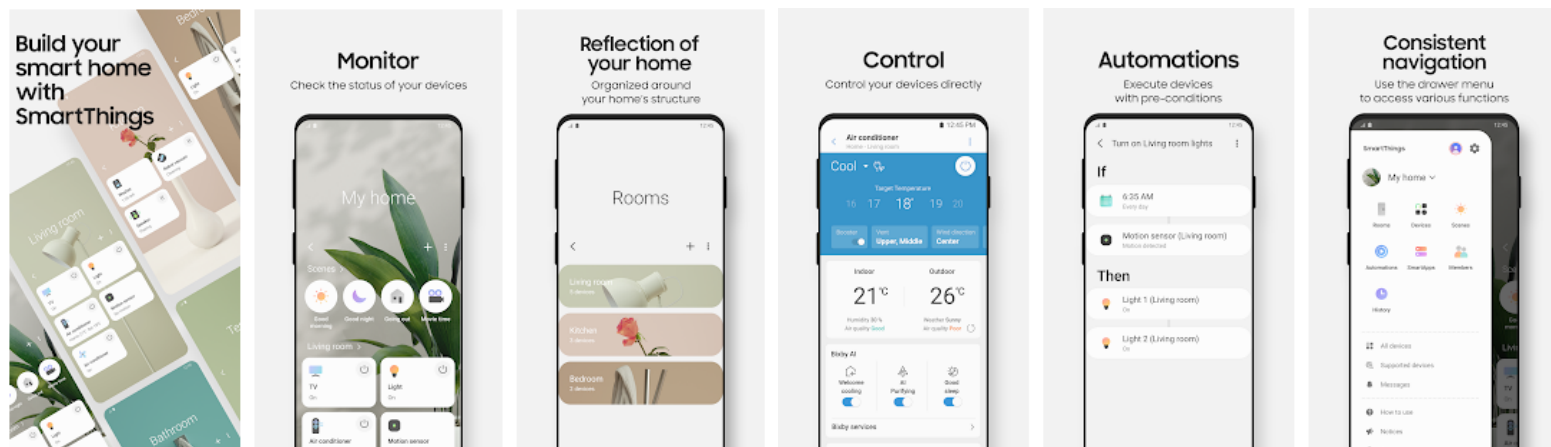
A thermostat that adapts to your life. You can control the Round Smart Thermostat from anywhere, or let it manage your comfort and savings automatically, so there's no learning curve, no rigid scheduling — just comfort when you're home, and energy savings when you're away.

<https://play.google.com/store/apps/details?id=com.honeywell.android.lyric&hl=en>



### SmartThings

With SmartThings, you can connect and control multiple devices quicker and easier. No matter where you are, you can monitor and control smart devices, home appliances (refrigerator, wine cellar, washer, dryer, oven range, dishwasher, cooktop, robot vacuum, air conditioner, air purifier and etc.), TVs, and speakers registered on the server.



#### Key features

- Remotely control and check the status of devices registered through a Wi-Fi AP.
- Group multiple devices into a Mode and control them simultaneously.
- Configure your device settings, including the time and operating conditions, and operate them automatically.
- Invite others to a location where devices are registered to enable shared control.
- The notification feature allows you to receive status information about your device.

SmartThings is optimized for Samsung smartphones

Some features may not be available in all countries. Some features may be limited when used with other vendors' smartphones

#### App requirements

*Some mobile devices may not be supported.*

RAM size : 2GB over

Galaxy : Smart View to support screen mirroring

## App permissions

*The following permissions are required for the app. You can use the app without optional permissions, but some functions may be limited.*

Location: Find nearby devices using Bluetooth or BLE.

Automate actions using GPS.

(GPS is optional.)

Camera: Scan QR codes.

Contacts: Verify user information that will be delivered while transferring files.

Microphone: Used to provide voice control function using microphone.

Storage: Save and use plugins and app data, and transfer content and files via the app.

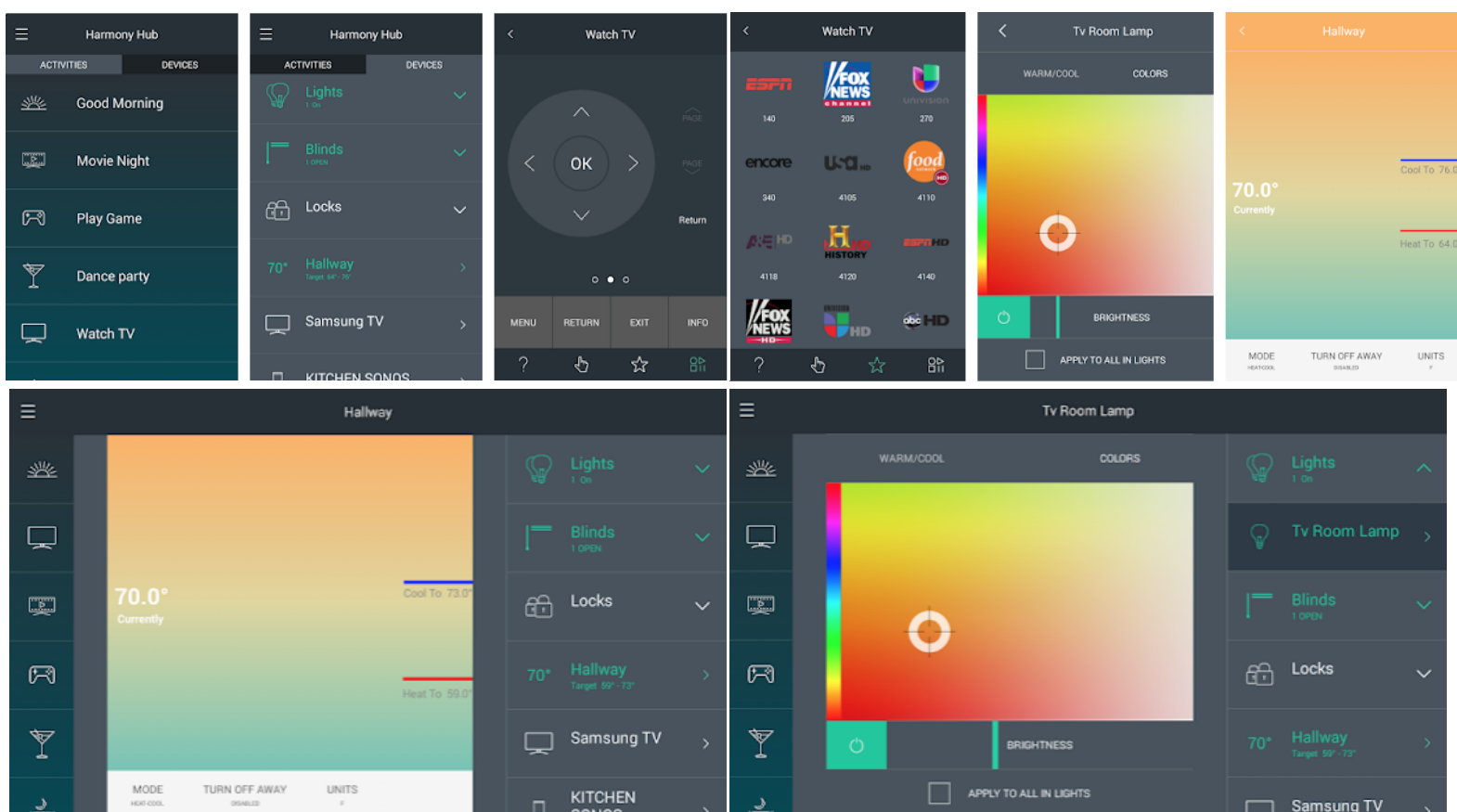
Phone: Check for app updates, identify the user's country, and transfer content and files via the app.

<https://play.google.com/store/apps/details?id=com.samsung.android.oneconnect&hl=en>



## Logitech Harmony Companion

Harmony Companion gives you convenient control over your home entertainment and smart home devices. Its streamlined button layout and full number pad make it a breeze to flip between content and devices. Plus, with the Harmony App, you can program your favorite channels, create multi-device Activities, and enjoy control when you're away from home. Chaos. Meet Harmony Companion.



## Harmony app

Turn your smartphone or tablet into a universal remote (iOS/Android™ only).

Change channels and volume, set up to 50 channel favorites, or trigger multi-device Activities, even when you're away from home.

## Unlimited Activities

Lower the blinds, dim the lights, fire-up the TV for movie night—all with a tap of the finger. With Harmony Activities you can enjoy single-touch automation to trigger limitless experiences. Harmony automatically suggests everyday Activities or you can have fun creating as many as you can dream up. Tap “Good Night” to lock the door and turn out the lights, then fall into a deep and tranquil sleep.

## More entertainment for the asking

Control your entire home entertainment experience without lifting a finger. With Harmony and Amazon Alexa or Google Home, you can enjoy easy, hands-free control of all the things you love. Turn on your TV, change channels, control volume, or start an Activity like “Good Morning” to play a favorite music playlist, raise the blinds, set the lights, and warm the house temperature.

## System requirements

### Internet access

- Wi-Fi: Supports 802.11g/n, WPA Personal, WPA2-AES and 64/128-bit WEP encryption

### For mobile setup and control

- Harmony App: Download from the App Store or Google Play™
- iOS: iPhone 4S or later, iPad (3rd generation or later), iPad Mini, iPod touch (5th generation or later) device with iOS 8.0 or later
- Android: Wi-Fi enabled smartphone with Android 4.2 or later
- Bluetooth Smart technology-enabled iOS or Android device
- A supported mobile device is required for setup and control of some home automation devices.

<https://www.logitech.com/en-nz/products/harmony/harmony-companion.915-000265.html>

## Competitor Analysis

### Strengths

- *SmartThings* app offers very clean designs using simple layouts and white space.
- *HoneyWell Home* and *Logitech Harmony Companion* come with Amazon Alexa™.
- *Logitech Harmony Companion* is also compatible with Google Home.
- *Logitech Harmony Companion* offers a wider range of TV channel options.

### Weaknesses

- *Logitech Harmony Companion* dark design reminds me too much of a TV remote.
- *HoneyWell Home* app design is quite plain and not very eye-catching. It shows minimal colour.

## ❑ User-testing

- Survey regarding home app functions

## ❑ User-testing

- Card sorting regarding colour association

What colours can be associated with home heating/ security/ home entertainment ect

- Card sorting to categorise functions of a standard Home monitoring UI  
cool/warm = home heating ect

## ❑ Target Audience/Persona