

## Prototype 4

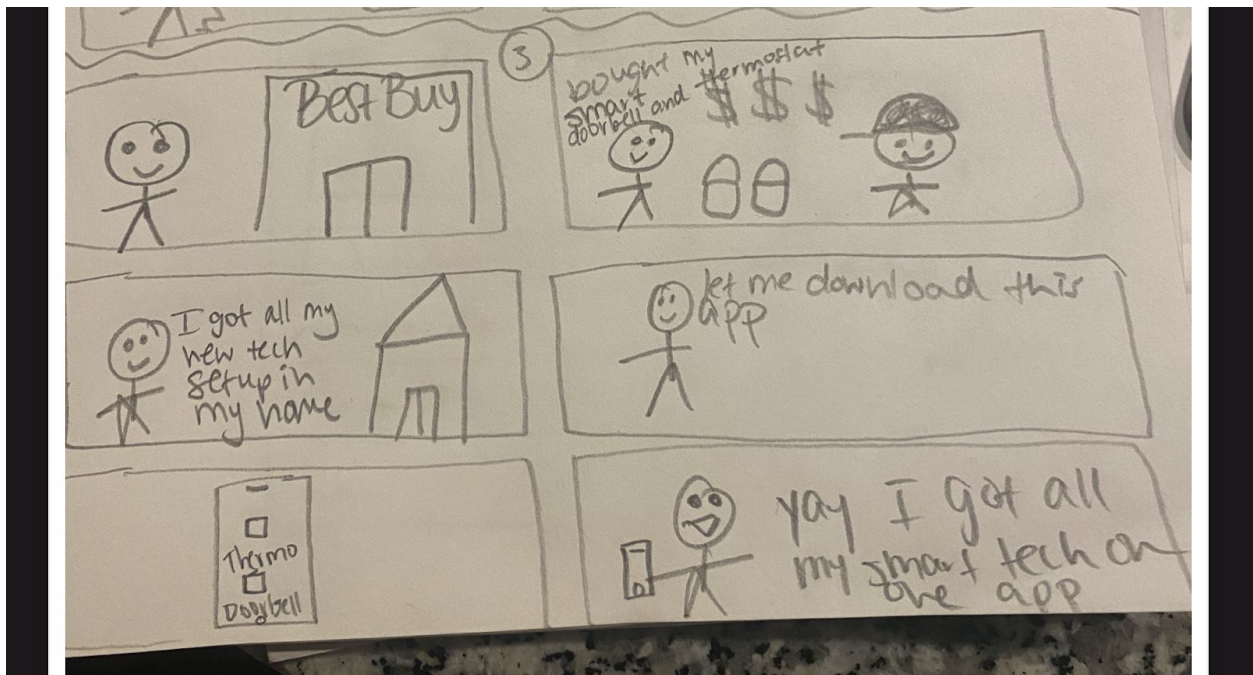
Function #2: Thermostat

Video Link: <https://youtu.be/hnT3DnD9gAw>

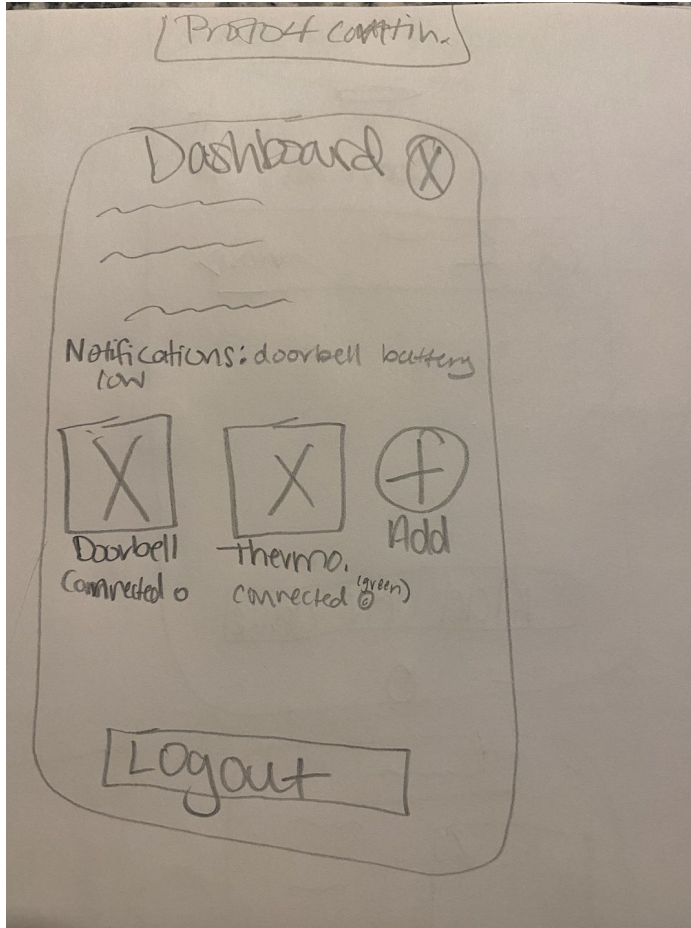
### Function 1

**Brief Description:** The user is on a dashboard on their mobile device that tells them the devices they have connected in their home and they can select more detail and get notifications about those devices.

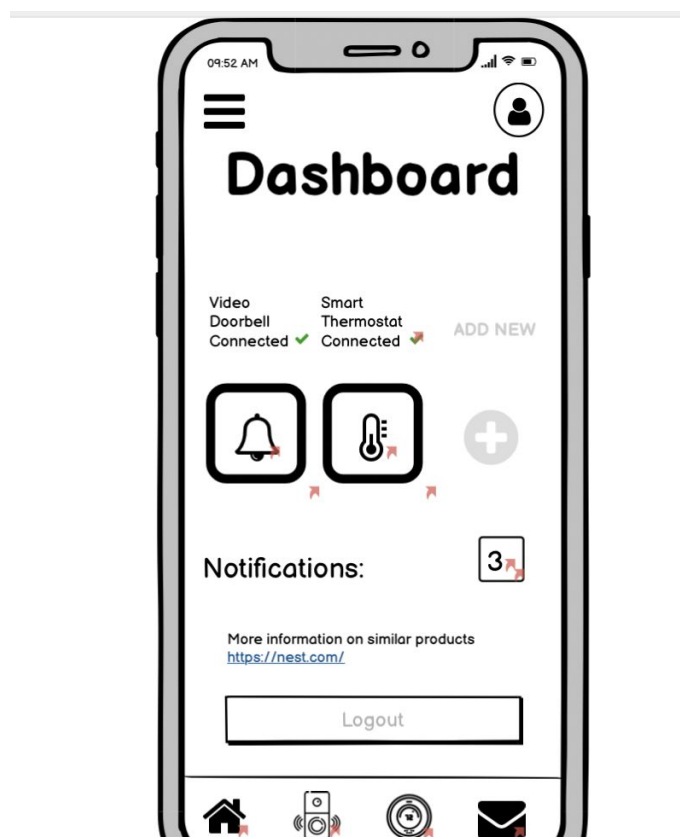
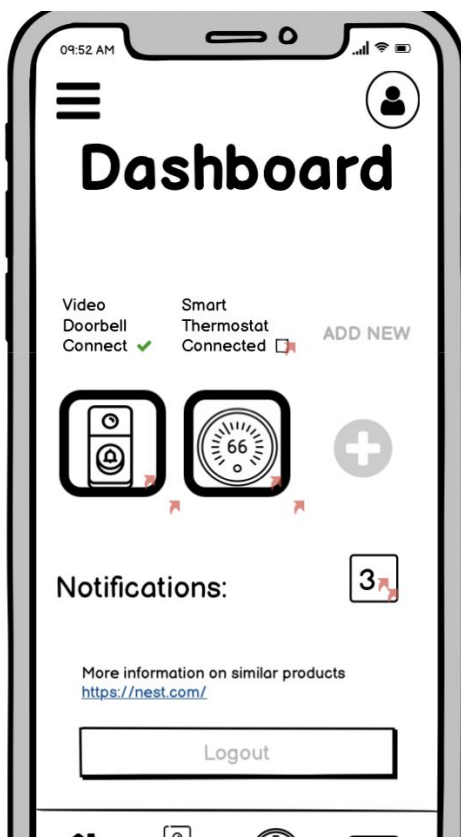
**Storyboard:** A user has purchased these two new smart home technologies and wants to find a way to access them all from their phone. They download this app where they are able to access their home technology and interact with it, along with adding new devices.

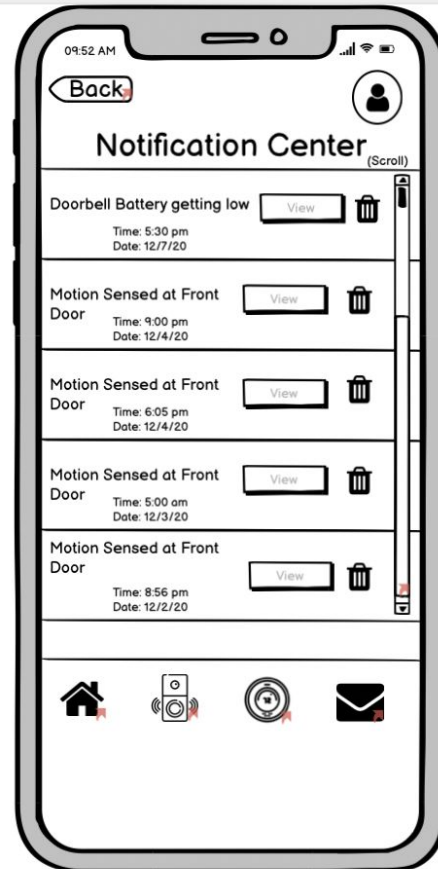
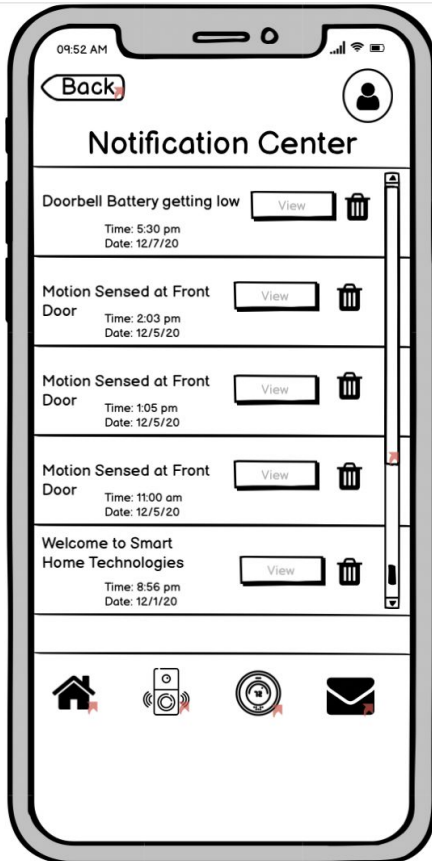


Wireframe:



Prototype:





**Application Description:** I wanted the user to feel and see a simplistic dashboard, where all of their smart home technology and information was presented right in front of them. I have them easy access to click on the devices that they wanted to view in more detail and they were taken to those respective screens. I also gave them the click on a link to see other devices that they may like that they could add or were similar to the technology they already were using. I wanted to give users the ability to connect or disconnect certain devices quick and easy, to save time out of their day. They also had the opportunity to check their notifications page, by clicking the numbered (3) box. Also on the notification page, the user can use the scroll bar to move between two screens.





#### **Design patterns:**

- I used bottom navigation, which gave users the chance to always navigate at the ease and have it readily at their fingertips.

- I used the dashboard because that is the default screen the users are first exposed to, whenever they get through logging in.

**Inspiration:** I got my inspiration from the Google nest home page how they had their devices laid out on a horizontal script. I also got inspiration from the fire alarm system sketch that we did earlier in the semester.

**Fidelity Matrix:** I chose these because the dashboard had a good amount of interactions involved and the information design flows and is displayed on multiple screens.

Content	Very Low Fidelity	Low Fidelity	Medium Fidelity	High Fidelity	Very High Fidelity
Information Design					
Interaction Design					
Visual/ Branding Design					
Editorial Content					

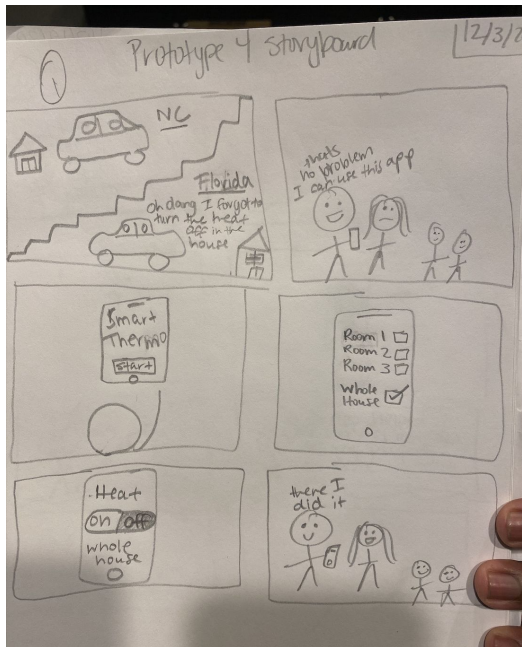
**Self Critique:** I met my goals because I followed my sketch and I was able to integrate the idea I had onto the screen. If I had to change something I would give users the option to add new devices, from a list that I provided and have them see their choices reflected in the application. This is my least successful interaction because it is very simple and the user is given the option to interact with it in 4 ways.

## Function 2

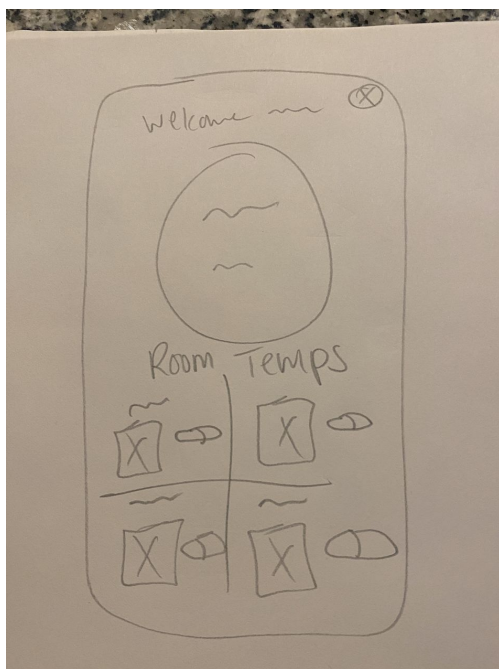
**Brief Description:** The user has selected the smart thermostat app and has the option to change the temperature on a dial, in their house as a whole or individual by rooms. They also can manipulate certain settings.

**Storyboard:** A family of four is traveling from North Carolina to Florida for the holidays and the mom forgot to turn the heater off. The husband tells her that he has an app that can control the temperature and turns the heating off on his phone. The family is able to relax and know that

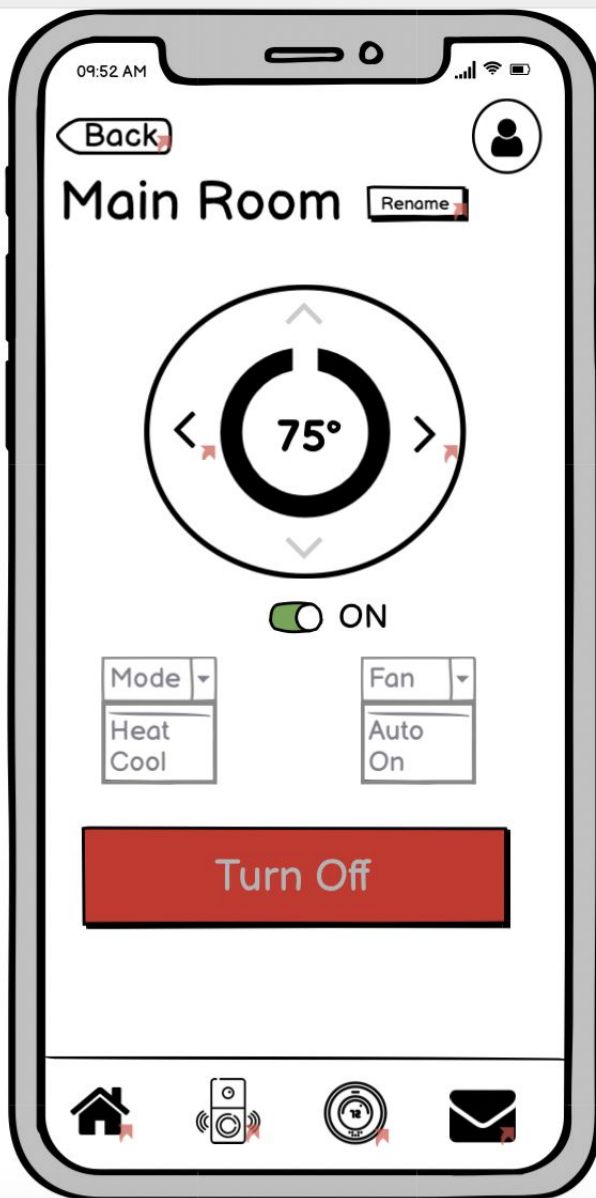
their heater is off and they won't come back to a hot house.



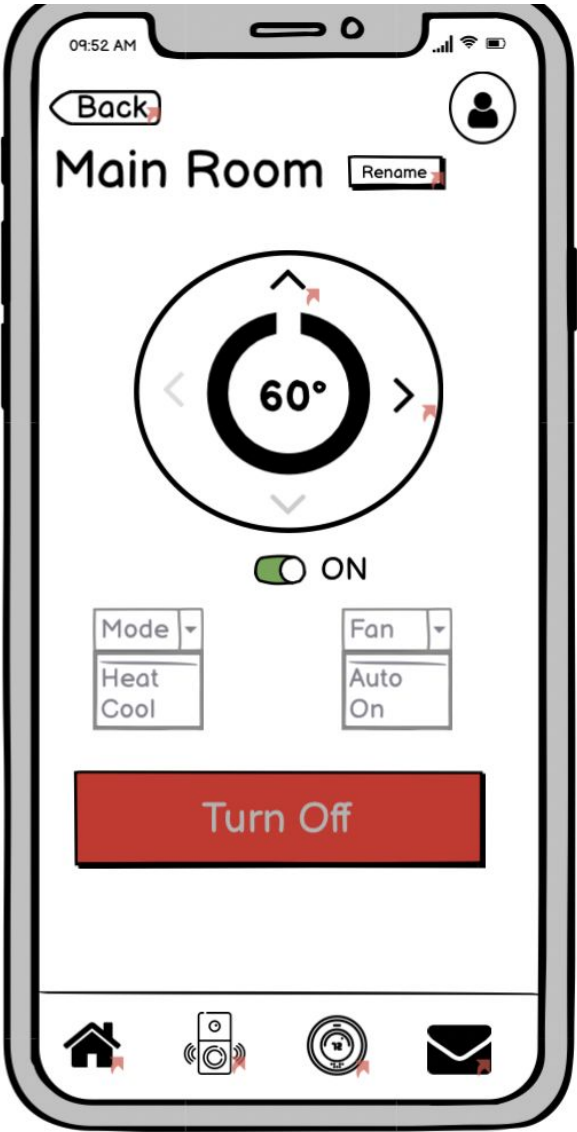
**Wireframe:**

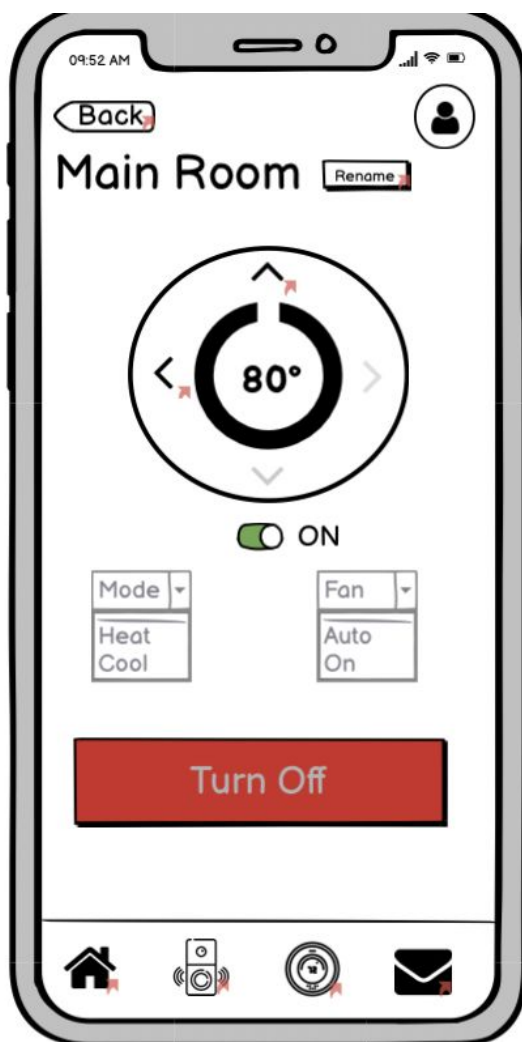


**Prototype:**

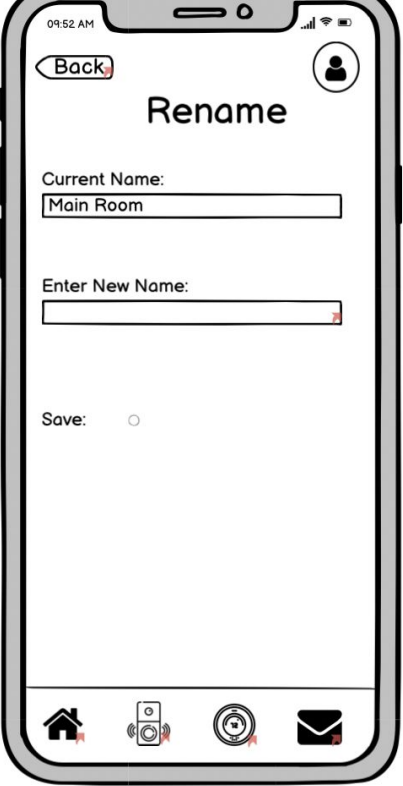


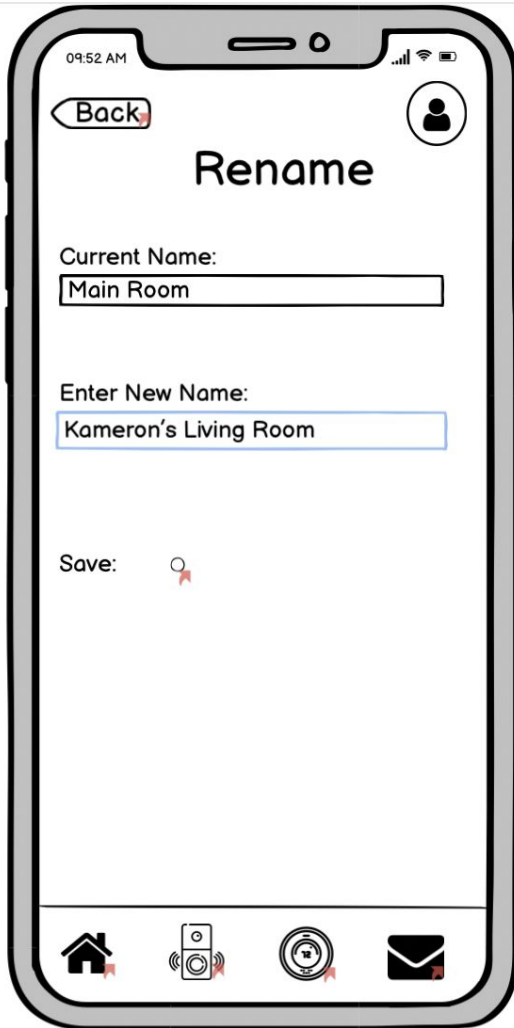




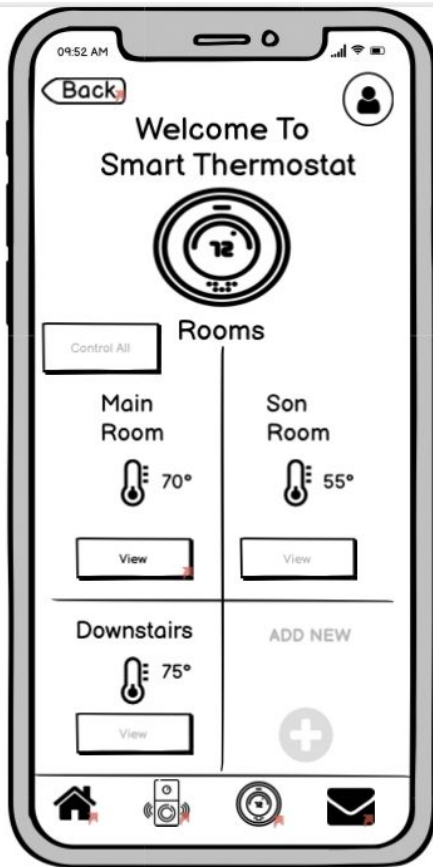












### Application Description:

- I wanted the user to be able to view the temperature for different rooms in the house that they could choose from, but I only gave them the option to interact with the main room
- Once in the main room temperature controls they had the option to press the left or right arrow buttons to change the temperature which would take them to different screens, but after they pressed a button whichever button they pressed would be greyed out on the next screen
- The user also had the option to rename the “main room” to something else they like by using the text box entry and click the radio button to save the changes

### Design patterns:

- I used bottom navigation, which gave users the chance to always navigate at the ease and have it readily at their fingertips.

**Inspiration:** I got inspiration for the look of the advanced thermostat that I have at my own home and how that's touch screen. I tried to imagine what that would look like on a mobile device and I also remembered how I sketched out an alarm system app and thermostat app that I had done at a previous time.

**Fidelity matrix:** There was a good amount of interactions within the thermostat portion and I used a decent amount of images/icons to make the screens engaging. The interactions flowed across multiple screens.

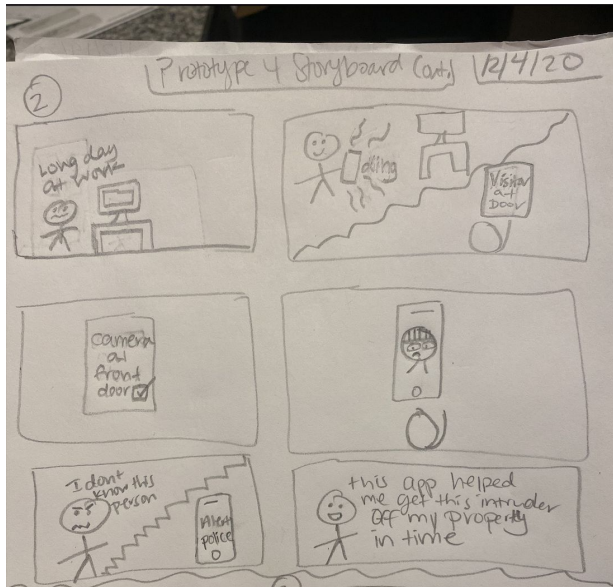
Content	Very Low Fidelity	Low Fidelity	Medium Fidelity	High Fidelity	Very High Fidelity
Information Design					
Interaction Design					
Visual/ Branding Design					
Editorial Content					

**Self critique:** I followed this pretty closely to how I set up my sketches and it did meet my design goals because everything I envisioned the interaction to be, it was. If I could change anything, I would have added a function for the user to be able interact with all of the rooms available in the house or even be able to add more rooms to their list. This is my second most successful because the user is able to interact with a good amount of things and see how the prototype was updated in response to their interactions. There isn't too much functionality or imagery to it, but it covered the main parts of how a smart thermostat app would work.

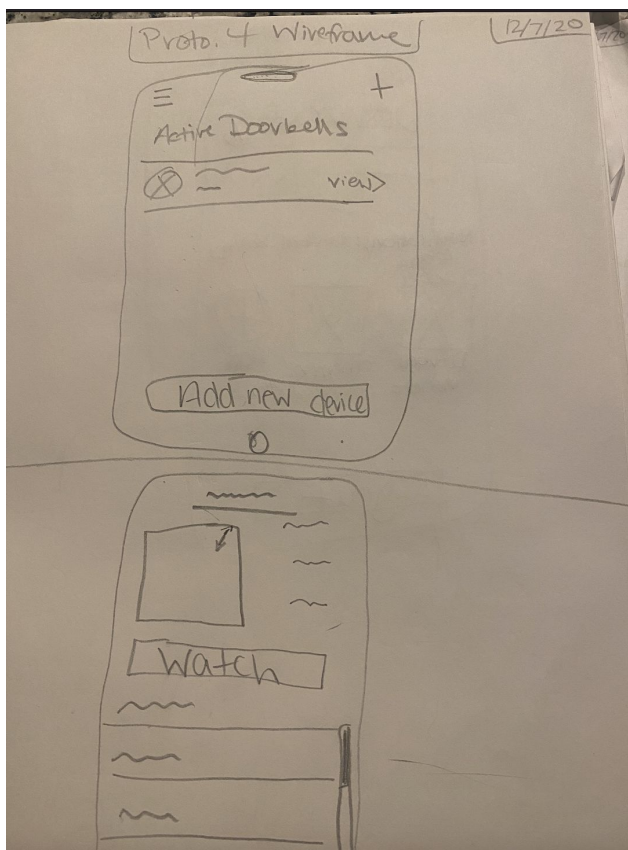
## Function 3

**Brief description:** The user has many options that they can choose to interact with when they select the video doorbell. They can check live video, change settings, review past video, etc.

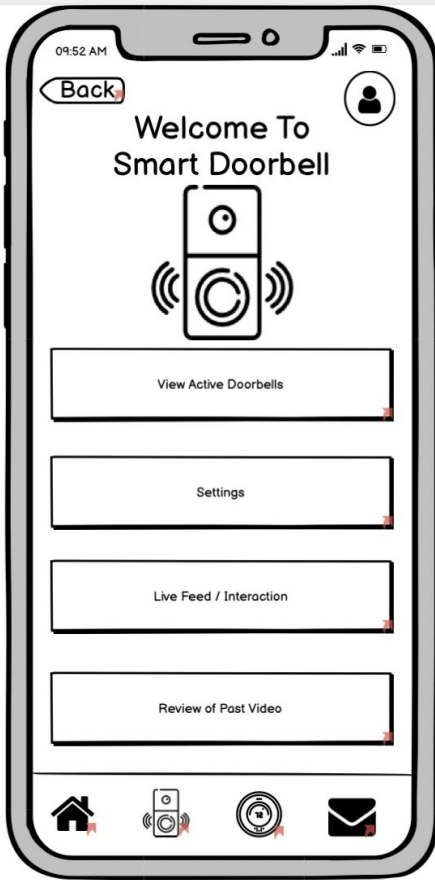
**Storyboard:** A user is at work when he gets a notification on his phone that someone is ringing his doorbell. He looks at the doorbell footage and notices that he has never seen this person before, he keeps looking and notices the person trying to break into his home. He alerts the cops and they arrest the man from breaking into his home and he is thankful to have gotten that doorbell notification.



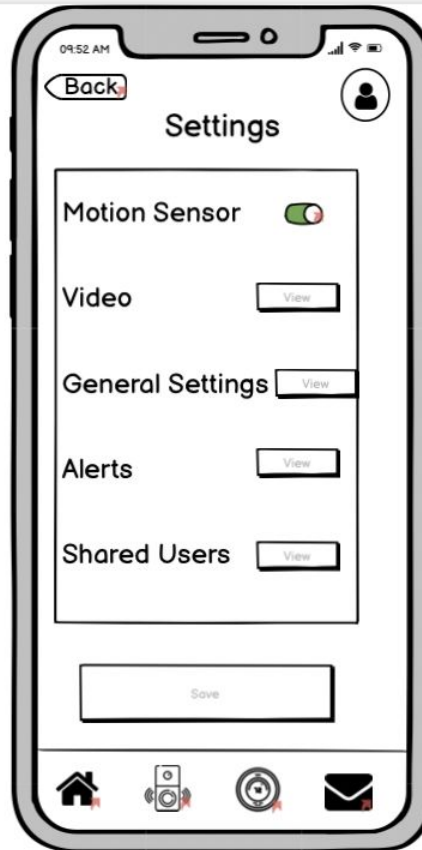
### Wireframe:

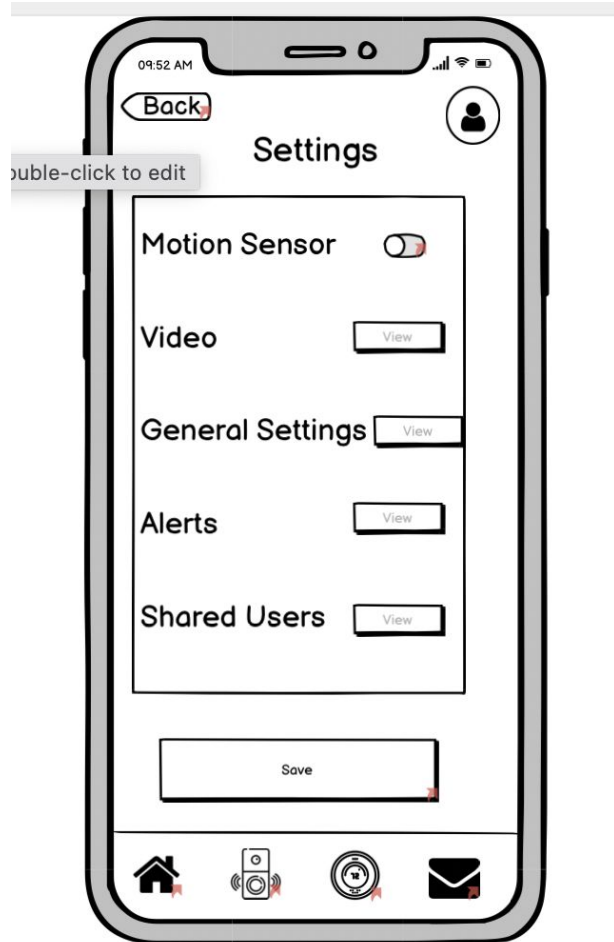


### Prototype:

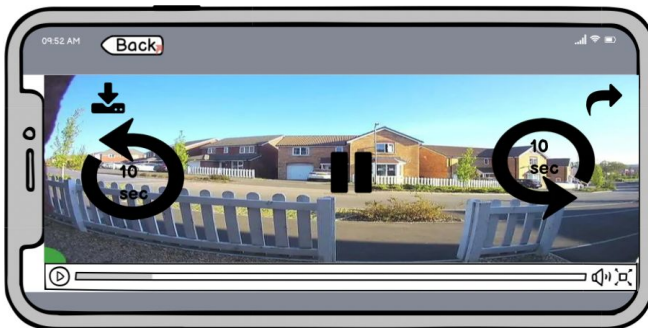
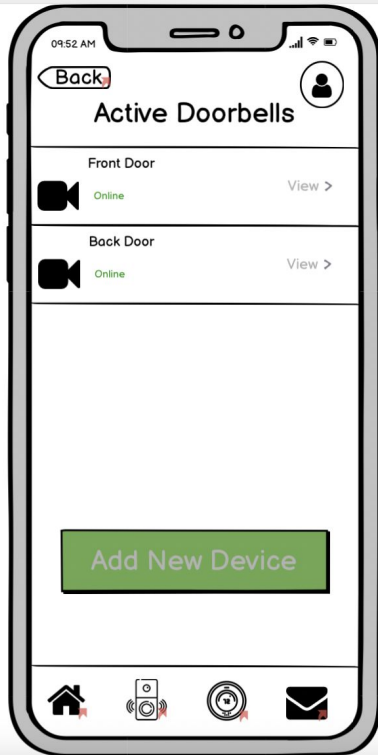








Link   Link Bar   List   Menu   Mer



**Application Description:**





- The user had the option to explore many functions whenever they pressed the doorbell button from the main screen
- When they clicked the view live feed button they would be taken to a screen where they could expand on the video that was playing by clicking the 4 arrows buttons, after that they were taking to landscape mode where touch tools popped up and they could pause, download, share, etc. to the video
- Clicking the view past videos brought them to a screen with a list of previous videos with time stamps and they could scroll up and down on the infinite list to see those videos. I also gave them an option to drag and drop the videos that they don't want to the trash can, but it's not functional.
- Clicking the settings buttons took them to a different screen where they could toggle on/off the feature for motion sensor
- Clicking the active doorbells allows the user to see how many doorbells that they have running and they can see there is an option to add other doorbells to their list

**Design patterns:**

- On the Past Video screen, I included an infinite list and that gave users the ability to swipe up and down on their past video recording. If their doorbell is constantly getting footage, the user is going to want to have a way to easily scroll through those videos.
- On the View live feed screen, I included touch tools whenever they were to expand the live feed video. The way they had more options available just by touching the screen.
- I used bottom navigation, which gave users the chance to always navigate at the ease and have it readily at their fingertips.
- I used buttons which were big, readable, obvious, and extremely easy to use for even the most inexperienced computer users.

**Inspiration:** I got inspiration from how the ring app was set up and my friend was able to give me some ideas on how their camera app was set up.

**Fidelity matrix:** There was a use of real images from doorbell footage and there was a ton of interaction involved, across multiple screens.

Content	Very Low Fidelity	Low Fidelity	Medium Fidelity	High Fidelity	Very High Fidelity
Information Design					
Interaction Design					
Visual/ Branding Design					
Editorial Content					

**Self critique:** I think that my design goals were definitely met and I expanded from my sketches because I added a lot more components to the prototype. The user is able to do a lot more interactions and I promoted more engagement, then what I originally had in mind. If I could change anything then, I would have definitely added a feature where the user could do more interactions on the settings screen. This is my most successful app because it has a lot of functionality to it and I included real images. I also think it's successful because I was able to use an idea that I had and expand more and more beyond that original idea.

## Wizard Of Oz

**Person 1:** I started things off by giving them a simple task of connecting the smart thermostat started by giving my user a task of going to the video doorbell portion and then going to the live video feed page. They started by clicking the doorbell icon and being taken to the doorbell options, they found the “live video feed” button with ease. I next told them to find a way to download video footage that they were watching. They looked at the list of options that I tried to press the “save” button, but I told them that's not what I meant. I want them to actually download the live footage. They were confused for a sec and pressed the back button to go back to the main doorbell screen. They viewed the options and asked me to repeat my task. I repeated the task putting emphasis on the live video footage. They went back to the live video screen and looked at the video player. They happened to hover the mouse over the 4 arrows to expand the video and were taken to another screen, where they recognized the download button I was talking about. They pressed it and I told them that it wouldn't actually download the video. I told them that they handled it the same way I would have handled it because that was a tedious unimportant task. I gave them one more task which consisted of them finding the temperature for the main room in their house and switching it to 80 degrees. They went back to the dashboard by pressing the home back on the bottom navigation and clicked on the thermostat icon. They navigated the screen and clicked the view button under the main room section. They looked over the next screen and

pressed the right arrow, seeing that the temperature had changed. After doing that I told them to roam the app in any way they see fit. They pressed the back button and noticed that the Main Room's temperature was still at 75 degrees. They told me that I could have made it so that the user's choice in temperature would have been reflected back when they went back to the temperature's main screen. The first thing that they did was press the doorbell icon on the bottom navigation bar and clicked the view previous recordings button. After doing that they were curious to see what they could do in settings and went to that screen where they pressed the on and off button. After that they pressed the home button and went back to the dashboard and were done. They gave me positive feedback and told me that I could have add a tiny bit more features on the doorbell screen, with actually allowing the use to drag and drop delete videos.

**Revision:** I needed to make a screen that would have reflected whatever temperature the user had decided to choose when they were changing the temperature in the main room, and pressed the back button. I would actually made drag and drop recorded videos actually interactive.

**Person 2:** Instead of letting this person roam the website at their leisure, I gave them task after task.

- (Task 1) Connect your phone to the thermostat: They were able to complete that with ease and in a matter of seconds.
- (Task 2) Look at how many notifications you have: They struggled with figuring this out a bit because they were able to see how many new notifications that they had, but didn't know to see all of the notifications. I gave them a hint that they had to click on something in the notifications area and they clicked on the number 3 button. When they got there I told them to scroll down their first ever notification using the side bar and then scroll back up, which they were able to complete pretty easily
- (Task 3) Go to the doorbell and find live video feed: They completed that with ease by pressing the back button from the notifications page, and clicking on the doorbell icon. They were able to see the live video taking place
- (Task 4) Go to the temperature screen and change the temperature to 80 in the main room: They pressed the back button again instead of using the bottom navigation, but after they pressed the back button the first time then they click the home button in the bottom navigation. They followed the correct steps to get to the main room's temperature and looked it over, pressing the right arrow button to change it to 80 degrees
- (Task 5) Go back to the dashboard and find past video footage from December 2nd: They used the back button feature again and followed the steps by pressing on the past footage button and looking over the time stamps. They didn't see the date and then moved the mouse to the swipe down arrows and pressed that.

They looked over the time stamps again until they found the specific date and hovered the mouse that date.

- (Task 6) Go to the thermostat screen and then go back to the dashboard, all without using the back buttons on the doorbell screens: They completed that with ease once more using just the bottom navigation buttons in the correct order
- (Task 7) Find a way to turn the motion sensor off for the doorbell system: They seemed to immediately know what I was talking about and clicked the settings button and clicked the toggle button to turn it off and pressed the save button.

**Revision:** I could have made clearer indications for the user to click on the number 3 button whenever they wanted to check their notifications or actually labeled what the icons on the bottom navigation bar were.