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# COMP 3008 Assignment 3

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## Part 1: Interview

The interview topic I chose was smart speakers. The goal was to gain insight into how users got introduced to smart speaker technology, how they use the technology and its effects on their daily life, and any issues or concerns they may have with smart speakers. To begin this interview, the participants were given a brief introduction to the topic and were told the following questions would be asked in order to gain more insight into their perception of smart speakers and their interactions with them.

### Questions Given to Participants:

- What were your main reasons for purchasing a smart speaker?
- What were some of your concerns before purchasing a smart speaker?
- In what ways have you used the device and have you utilized the features more or less than you anticipated?
- How did the smart speaker change your daily routine?
- If you could change anything about the smart speaker, what would it be?
- What were some highlights of the setup process and what would you change?

### Summary

Participant 1's main uses of the device was to control his bedroom lights (turn them on / off, dim the lights, change the colour) as well as occasionally doing simple tasks like asking what the weather is, or using it as a normal speaker. He seemed to have no problem understanding how the device worked, the features it offered, and intended to extend his use of the smart speaker in the future with third-party compatible devices (smart TV, compatible gaming consoles, smart plugs). Some of

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the concerns Participant 1 had with the smart speaker was the process of setting it up with other compatible devices and making sure they were all properly connected to Alexa. He has previously run into problems after any network changes and the tedious task of setting up all the devices up separately.

Participant 2's main uses of the device was somewhat similar to participant 1's but one step further. He used the smart speaker for all the same things (lights, alarm, simple questions, etc) but also has other compatible devices that give him more use out of the smart speaker. Such as a fire stick that allows him to control the TV functions, as well as play movies / TV shows. Some of the concerns he had with the speaker were problems with the mic and the speaker. He believes the Alexa device could have improved mics to pick up his voice better when there is background noise. In addition to this, participant 2 suggested that improved speaker quality on the smart speaker would lead to him using the device more as just a speaker in order to play music and other content. In addition to both of these things participant 2 also had issues with device setup.

### Common Themes or Trends

Looking at the responses from both participants, it became clear that they both had very similar experiences and understandings of the system. Some main insights would be the general use of the smart speaker and the main issues they faced. It can be seen that both participants rarely used the device to ask questions they want answers to, but instead mainly used them for controlling other devices with their voice. Both viewed the smart speaker as a tool to make their life easier in making things that once required physical and manual action is now automatic. Although both have slightly different uses for their smart speaker (one participant had many more compatible devices) both participants believe the device has lived up to their expectation and are very happy with their purchase. Some of the concerns the participants had with the smart speaker involved the setup, the mic (tuning out background noise better), and the speaker (louder, sharper audio). As the mic and sound / volume of the speaker will undoubtedly be improved with future hardware updates of the speaker, the real area of concern seemed to be over the setup process with third party compatible devices. This seems like an area that smart speakers and compatible device manufactures can improve upon. There were no perceived

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misconceptions about the devices, how they worked, or their capabilities. This would be a welcome observation from the manufacturing company as it can be argued that these particular consumers have a clear understanding of their product.

### **Conducting and Analyzing the Interview:**

When conducting the interview it went along mostly as I expected, the participants were given an introduction into the topic of the interview and the insights I was hoping to gain. We then began the interview process while using an automatic transcript service (otter.ai) to capture all of the audio and create a transcript. The questions created seem to have been open-ended enough to prompt more detailed answers. Despite this when looking to gain a little bit more information from the participant it proved challenging to come up with probes to encourage more detail naturally. Another related challenge would be having to come up with questions and probes that do not bias the participant in any way or show any of my biases. But overall it was a pretty smooth process. In terms of analyzing the interview, it was pretty straight forward as both participants had the same view points for the most part.

## **Part 2: Requirements Representation**

### **a) New Software Project**

The new project will be done in relation to the website [point2homes.com](https://point2homes.com). When looking for homes, users often have to search through multiple different sites and check them frequently for new listings. This new project aims to solve the many problems that come with this. By developing an application that not only has point2homes' current functionality of pooling together listings but also with an even expanded arsenal of listings. This would aim to solve many of the problems people have while searching for a rental or a home to purchase, as well as being a great option for people to do their search on the go. With everything in one place, this new service will be called **Home Central**.

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## b) Personas

### Jane - Single Working Mother



Jane is a 41 year old mother of two teenagers, Tim (Aged 16), and Brittany (Aged 14). She is very hard working and aims to provide the best life for her children. Because of that, she works 2 jobs (A manager at a bank, and a personal trainer) in addition to caring for them. Due to advancing in her profession, her and her two children have moved to 3 different apartments to accommodate work. Jane now feels like she is in the position to buy her first home. Some things Jane likes to do in her spare time is spend time with her children, read various books, and research new workouts or diets for her personal training clients.



"I want a system that allows me to quickly and accurately check a wide range of listings."

### Interests



### Motivations

- Keeping in touch with family
- Excelling at her career
- Sending her kids to college

### Frustrations

- Not spending enough time with her kids
- Wasting time online
- Missing work deadlines



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## Alex - Post Secondary Student



"I want to finally move out of my parents house closer to school, work and friends"

Alex is a 21 year old male full time student at University. Along with being a student he also works a part time job at his local Wendy's. He spends most of his free time hanging out with his friends or spending time on social media and online. As Alex goes to University in his home town, he still lives at home with his parents. Some things Alex likes to do in his spare time with his friends is skateboard and play basketball. He also enjoys watching tv and movies on Netflix, watching videos on youtube, and spending time on forums such as reddit.

### Motivations

- Graduating University with honours
- Working on his car
- Going out and spending time with friends

### Frustrations

- Having to commute to see friends
- Missing school deadlines
- Not having time to be active

### Interests



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## c) Importance and Impact

### Jane

Jane's persona will be important to the project as this is someone who is on the go often and does not have time to sit and cumulate house listings to compare them. Her persona will have experience with these types of websites as she has previously moved three times. This is someone who will be using the app in spurts and needs previous search results or desired listings readily available. Because of these factors, the design of the project will have to take into account this kind of user as there are many fast-paced and very busy people in everyday life. Thinking about these kinds of users will change how we address the flexibility and efficiency of use of our application.

### Alex

The Alex persona will be important to the project because it will inspire designers to think of a user that is using a system like this for the first time with minimal - no guidance. This user will want an easy to use system that makes all of its options very clear and does not have a very large learning curve. In addition to this, this is someone who has a lot of requirements as to what he's looking for, which may require multiple different design prototypes in order to find an optimal way to display said options and make them easy to use and understand. This persona is someone that's busy but may have the time to do a lengthy search for his desired house.

## d) Scenario

The Holland family all enjoy keeping busy with their various responsibilities during the week and spending time with each other, and other family members on the weekend. There are three family members: Jane (41 years old), Tim (16 years old), Brittany (14 years old). While having their family dinner this past Sunday, Jane informed Tim and Brittany that they would be moving. As they are now old enough to help, Jane has asked them to help her in finding listings for a potential home. Due to the two jobs Jane works during the week, she felt this added help would make the whole house hunting process easier as she does not have much time to search the web for suitable houses during the week. Tim and Brittany are also often on the go as they do various extracurricular activities such as football and soccer respectively. Knowing they want to have many listings to present each other, Jane enters the desired search results (number of bedrooms, bathrooms, price, location, etc.) and saves them on their apps. Because all of the major sites they would normally look on have all been compiled, they can do quick looks in their spare time as well as keep up to date on any new listings. Each night that week they all sat down before bed and discussed the few listings that day and their pros and cons. By Friday evening they have finally found a house they are interested in seeing and plan to see it that weekend.



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## Appendices

### Transcripts:

#### Participant 1:

**Speaker 1**

Okay, so what were your main reasons for purchasing a smart speaker?

**Speaker 2**

What were my main reasons for purchasing a smart speaker?

**Speaker 1**

Yup.

**Speaker 2**

Um, so a few of my house mates had one, and I saw the increased accessibility it provided them. Others may say laziness.

But being able to control a lot of different things in my room from the sound of my voice was a very appealing service.

**Speaker 1**

Okay.

Um, and what were some of your concerns before purchase my speaker.

**Speaker 2**

Just making sure that I picked the right one. I have concerns in regards to the actual purchase of it. Just making sure that I pick the best one for the value of my dollar.

**Speaker 1**

Okay. Um,

nothing in terms of security or anything like that bothered you

**Speaker 2**

No, i mean like if I were to dive more into that

Like security violations right like they're everywhere like if anybody wants to hear anybody doesn't matter whether it's Google or Alexa like they're here, so yeah.

**Speaker 1**

Um, and have you used the devices You're expected.

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**Speaker 2**

Yeah.

**Speaker 1**

Okay, I guess, I mean, more like in what ways have you used the device, and have utilized the features more or less than you anticipated.

**Speaker 2**

I would definitely say very satisfied I'm very, very happy with the purchase. Um, I do think I will be using it more. Furthermore, I currently have hooked up to, my lights, very basic. Um, whenever im laying in bed if I pass out my lights are on you to get up and walk to the door, now I just like say Alexa turn off the lights lights, and I fall back asleep in 10 seconds again. Another thing as well is when I'm upgrading like my technology for my room like I'm looking at purchasing a new TV. You know new gaming system PlayStation five, maybe like a fire stick or you know like a something to watch like movies on. So, um, all of those i'm even looking at buying a new car radio for my, my truck. And all of those can sync up my Alexa, so I'm driving home. I can while I'm in my truck I could say hey Alexa, turn on my PlayStation five, and it'll be up and booted and ready to go my lights will be on and everything will be ready. Or if I forget to turn everything off if I'm walking out of the room, or if I want to say it into my phone because I have the app, or again with my truck, forget to turn everything off. Hey Alexa shut down, and I can program it to turn every single thing off in my room.

**Speaker 1**

Okay. Um, and how did this smart speaker change your daily routine so do you solely use it for your, the devices in your room or do you ask your questions do you have it tell you your day that kind of thing.

**Speaker 2**

I'd say, I don't really, the only question that I ask it is for the weather. I think in terms like my room is like in the basement so I don't really get a good idea of what the weather will feel like but if im getting ready or if im laying in bed or rolling out of bed, just super quick Hey Alexa, and I get the weather information faster versus if I went on my phone and went to the weather network.ca, which in itself is already super quick. So if I got the Alexa can do that even quicker for me, just another easy accessibility.

**Speaker 1**

So like, do you anticipate using it more once you have more things compatible with it. And that'll change your day and your routine?

**Speaker 2**

Yeah, well like, like the fact that.

Alexa and like Amazon and the whole software itself is growing from compatible with more things versus. Here's our device, and this is the only stuff is compatible with like asset. The company's growing, growing, growing and seeking more ways to involve this device into



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people's daily lives, which again makes it easier for us, but then also in return you do have to make some sacrifices which some people say are privacy and things like that.

**Speaker 1**

Okay.

So, if you could change anything about the smart speaker, what would it be.

**Speaker 2**

So I would change the volume would be a factor for me, because they do include in marketing and like aspects of it and it was another attractive feature for me is I ever want to play music in my room. How to kind of play in the background or. I'm just having a good time, I can turn up the volume but its not an extremely loud speaker. So I would say capitalizing more on the feature of like outside of Hey Alexa, do this for me like a louder speaker volume. Or even like

another good one would be, I guess.

I guess the mic is pretty good sometimes it is a little different in terms like doesn't hear me say or I know like the person on the other side of my wall has an Alexa, and sometimes. He says his loud enough, the mic will pick that up but it won't pick up when i say it sometimes. So focusing more on like, maybe it's like voice recognition. Because I do know when you do setup Alexa, it gives you phrases to say so to recognize your voice. But to be more kind of like cognizant and other surrounding noises and when the Alexa is in effect. I know for example, There's a Google Home and in my living room. And that's not connected to my Alexa, but I have a lot more issues with the Google Home because Hey Google, it doesn't hear me and I have to say like three times until it actually hear me and understands what to say. And even then, with the Alexa, when I encounter problems of setup, for example, when my Wi Fi router changed my whole Alexa system went down, and it was a huge struggle to try and reconnect everything. After I already had setup. So I would say. Another thing I would change is the setup process, maybe having an on Wi Fi routers there's like a WPS WPA button. You click on both devices and they sync up. So maybe there's like a barcode you can scan in your Alexa app and it'll just automatically sync it if it's on the same network. Um, is just easier access to connect certain things because sometimes it's a little difficult to try and figure it out. At first glance.

**Speaker 1**

Okay. Gotcha. Um, and lastly, or some of the highlights of the setup process and what would you change cause I know you talked about that a little bit.

**Speaker 2**

Yeah, so, um, I lights, trying to set up the Alexa on its own, like by itself nothing else, super easy. Um, it gets a little more difficult when you get to compatible third party products, where they have their own setup process versus the Alexa one and you have to find the way in which they both will connect with each other because I know in some, some devices you have to connect it a different way to the Alexa versus other ways right, they do have like an

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app where you just activate it, they call it a skill and you sign in your account and you're set up. **Other ways you get nothing Wi Fi** and then you have to be doing all these different things to try and set it up so i would i would just change honestly maybe like I use your option to sync the Alexa to exterior devices.

**Speaker 1**

Okay. Perfect. Thank you.

Transcribed by <https://otter.ai>

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## Participant 2:

### Speaker 1

Okay, so, um, what were your main reasons for purchasing a smart speaker.

### Speaker 2

Well, the reason I got the Google was because it came free and Spotify. Then, I didn't like the Google so I bought an Alexa, and Alexa is a lot better, and way more convenient to use.

### Speaker 1

So, did you kind of just want one, just because everyone else was getting one or did you intend to use specific features or?

### Speaker 2

Mainly I just wanted one to have like there was no really reason well one I wanted I wanted to have lights that I could turn on and off without moving. And then three, like another reasons I found when I was working and I had to be like up at like five in the morning, the Alexa was nice with the lights, because I could just set a morning routine so the lights are automatically turned on and brighter so I found it nice. I kind of wanted it for that reason, but that wasn't the entire reason, partially probably because everyone else had one and then the features would help me in my daily routine.

### Speaker 1

Gotcha, gotcha. And what were some of your concerns before purchasing smart speakers.

### Speaker 2

I don't really have any but like the big thing. Everyone probably thinks is like the speaker is constantly listening it's like is that something you really want to have around you. Yeah, but for me is like I didn't really care.

### Speaker 1

And what were like, some of the things you look for when kind of decided between the two or was it more so just this one wasn't good so I can try this.

### Speaker 2

More so compatibility with other devices. And then, like Alexa has a lot better features and the Google so, and it listens better like when you tell it to do something, it hears you versus a Google they get to yell at it. And then now like it just kind of happened that I got the Amazon TV thing, and it can work with the Amazon Alexa but it wouldn't work with the Google.

### Speaker 1

Um, so in what ways have you used the device and utilize the features it has more or less than you anticipated so have you used it more than you thought you would or less and it what ways?

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**Speaker 2**

I use it more, because I use it like as like a Bluetooth speaker in my room, or just like telling it play music when I'm like doing my room. Use it to control my lights. To turn on and off the TV changed inputs on TV, which I wasn't anticipating that when I got it. And then I use it to like wake me up and start my daily routine.

**Speaker 1**

Okay. And yeah, kind of follow up question, how the smart speaker change your daily routine from like before you had it and now?

**Speaker 2**

I mean easier to wake up in the morning, because like not having to get up and turn on the lights, it's just like, it kind of just like wakes you up better because it has your alarm and then it can like, turn on the lights and make your room gradually get brighter. And I found that was easier to wake up, versus just like an alarm going off and then me turning it off and went back to sleep.

**Speaker 1**

Gotcha, gotcha, um, he didn't change anything about the smart speaker would it be?

**Speaker 2**

So if i could change anything about it?

**Speaker 1**

Yeah.

**Speaker 2**

Um, maybe I found one issue is like configuring the Wi Fi setting. I find that like, sometimes it's hard to navigate through the app and find like the different like Wi Fi settings to like your home location is difficult to change. Um, yeah so just make the app and like the setup in the app, more easy to navigate, because you kind of like have to know what you're looking for, to be able to get there.

**Speaker 1**

And yeah, speaking of the setup. What were some of the highlights and I said some of the negatives voicemail highlights and what parts would you keep the same what parts would you change.

**Speaker 2**

Well I keep the app, obviously, and then with the setup like when you turn it on, you can just go into the app and then you have other devices, they automatically show up there, which is nice. But, um, yeah so if you have the other devices, it'll automatically show up and say like you have a new device that you compare with Alexa, um, and then. Oh, and then yeah the connection between lights and speaker itself, and other devices is a pain to manage. Sometimes they disconnect and its quite a process to individually hook them all back up. It

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would be great if you could just connect them all to Alexa at the start and then if they ever get disconnected you would just have to reconnect Alexa and it would get all the other devices back online.

All right, thank you.

Transcribed by <https://otter.ai>

## Notes

- Both participants used the smart speakers to control the lights in their rooms to avoid physically turning them on or off
- Both participants had similar issues reconnecting devices
- Participant 2 uses their smart speaker considerably more as he has more compatible devices
- Participant 1 aims to use his smart speaker more in the future once he gets more compatible products
- Both are happy with their purchase
- Neither participant is concerned with security
- Both participants believe the smart speaker makes their lives easier
- Both participants seem to have been introduced to a different smart speaker before purchasing the one they have now.
- Participant 2 relies on his Alexa to wake up
- Participant 1 is more likely to ask his device questions than participant 2