

**Product Interview Reflection Paper**

**Team:**

Shocking Engineers

**Team Members:**

Lexi Winkle (w996s384)

Shaima Hussien (v625s887)

Peter Mohr (r962d756)

Adrian Schrage (p865j864)

**Date:**

11/7/21

**Introduction:**

The Thermal Temperature Sensor is a device that is to be created to take temperatures of the public accurately and timely. During these times of uncertainty devices like this are in need. The team’s plan is to take a modular device orientated within in an entry way to help consumers control the flow of people based on their temperature. To do this, a key part of development, planning, & implementation is the gathering of information. Recently the team has taken this idea to subjects of matter and interviewed them to gather their opinion and information. To do this we came up with what we thought was the most important questions to ask. First, we would describe our product and what its purpose is. Next, we would start the question asking with what was important to them when it comes to temperature taking and what are their initial concerns. The next question was focused on the consumers expectations. To finish the interview the interviewee was asked how many times they had been screened by a similar temperature taking devices. The following information is the conclusions from the interviews.

**Interview #1:** Electrical Engineer

For this interview I interviewed an electrical engineer who has been working with electrical devices for the past five years. At the beginning of our interview, I introduce to him our project and the design. After that I started our conversation by asking my interviewee what is important to him in a temperature taking device. His answer was about how important the accuracy a temperature taking device must have because the accuracy and precision in devices such as a thermometer are the main factors which determine how well a device like this will do. Second question I asked was what the major or initial concerns he might have with a temperature taking device. My interviewee said that his initial concerns, other than the accuracy, will be about how fast a thermometer can read the temperature of a body and how fast it will inform the user about its readings. The third question was, if my interviewee would purchase this product what his expectations are. He said that he would expect a device that is easy to use, measures temperature and displays a reading rapidly and provides ability to retake a temperature quickly. In the conclusion of our conversation, I asked him how many times he had his temperature taken by a contactless temperature device and the answer was that he has experienced using a non-contact Infrared Thermometer so many times and he is very happy with these kinds of devices.

**Interview #2:** Registered Nurse

Brittany Norris is a Registered Nurse. She currently works at dermatology clinic and her office performs routine temperature screening of patients and visitors. As such, her opinion on our product may provide special insight. She was first given a description of the product and then asked our interview questions.

First, she described that accuracy was very important to her in a temperature measurement device. She also explained that it needs to be able to assess people that are wearing a hat or have some covering over their forehead (As this relates to our contactless measurement system).

Second, she expressed her concerns with such a device. She explained it should register everyone that would pass by such a device. Specifically, if two or more people were to walk by in rapid succession, it should recognize that condition and either measure all temperatures of everyone present (preferably) or provide some alert.

Furthermore, she listed some device expectations. She described that the device should work reliably and quickly. She stated that at the price point of two hundred dollars she would expect the device not to require constant intervention from staff. For example, it should not have to be constantly restarted from some error condition or need supervision. Specifically, she said the device would be most helpful if a staff member did not have to be constantly present to monitor the device.

Finally, Brittany described that over the past year she has had her temperature taken multiple times with contactless systems but in most cases a human supervised the process. She did say the one time where the system was completely automated was the best experience from her point of view. She felt that not having a human observer made the entire experience less anxiety provoking.

**Interview #3:** Lori Gonzales (EmberHope CPO)

I reached out to Lori about conducting a product interview because she is our main point of contact when it comes to partnering with EmberHope for our projects service learning. Lori is a Licensed Clinical Marriage and Family Therapist, who has been with EmberHope since 2002. She has held a variety of leadership roles within the agency in the following programs: Case Management, Foster Care, Clinical Services, and Business Development. Prior to working at EmberHope, Lori provided therapeutic services to youth residing in a residential facility, families referred to family preservation and clients receiving care in a behavioral health hospital. She is currently the Chief Program Officer of EmberHope and oversees foster care, residential and clinical programming in Kansas and Texas. Before I began asking Lori the questions my team and I came up with, I gave her a brief rundown of our product and talked about all the key points.

The first question I asked Lori was “What’s important to you in a temperature taking device?” She replied back with “I think ease and accuracy are they most important things in a temperature taking device.” For the second question I asked, “What are your major or initial concerns with a temperature taking device?” She expressed to me that her main concerns are that if the product requires attachment to the door/foundation to ensure that it doesn’t damage any of their company’s property. Another concern to her is that if people don’t want to participate in getting their temperatures taken then there needs to be an alternative route for them to take without walking underneath/through the view of the thermal camera. The third question is “If you were to purchase such a product, what would be your expectations?” Her expectations would be that, of course, the product works, that it is able to produce consistent results, it’s easy to set up and store if needed. Also, she thinks the product should look nice and that the results are easy to read. She also suggested that if she were to purchase this, she would like a warranty to come with it. To conclude my interview, I asked Lori the fourth and final question which was “How many times have you had your temperature taken by a contactless temperature device?” She replied with “I have not had my temperature taken with a contactless device but many times with the handheld devices.”

**Conclusion:**

The information gathered form these interviews is vital in the production of our product and will be used accordingly. One of the most important ideas emphasized in these interviews is that accuracy and timing is important. To be accurate we must use as many data points as we can and use them in an efficient way. To be timely we must communicate between devices efficiently and know our components capabilities. In the framework of accuracy, it must also be able to adjust to different scenarios: people with hats, multiple people, etc. It is important to be able to direct users in a streamline way to make use easy.

Considering the fact that majority of our competitors have devices in the price range of 1000’s of dollars and our device is to be affordable, we must focus on functionality of the device. It is expressed by these interviewees that the devices must be independent and easy to work with. Someone with little knowledge of the device or subject should be able to operate with ease.

The end of the interviews consisted of what seemed like a simple question but the answers were extremely important in expressing the need for accurate, efficient, streamline temperature screening devices.