

# Phase: Discover

## How can valuable gained insights be presented to the end users?

Method → Competitor analysis

### Competitive Analysis



Associated Learning Outcomes:

1. Learning outcome 2: User interaction (execution & validation)
2. Learning outcome 5: Investigative problem solving
3. Learning outcome 7: Goal-oriented interaction

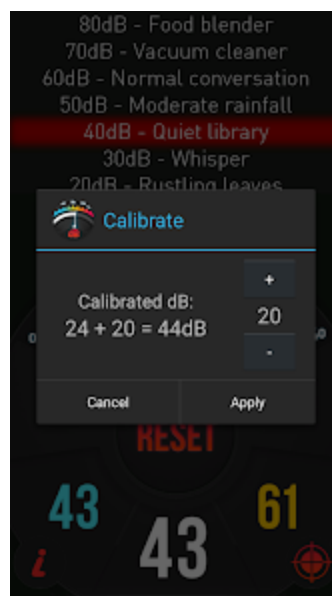
We divided the competitive analysis among team members, where each person chose and examined an app. We conducted two analyses, one for a smartphone app and one for a smartwatch app. Afterwards, we combined our research and analysis, which included looking at the advantages and disadvantages of each app. For the smartphone analysis, I specifically researched and analyzed the Sound Meter HQ PRO and SmarterNoise - Noise Recorder apps.

### **Why is competitive analysis important & how has it helped us?**

The competitive analysis was helpful in understanding what other apps offer and how they tackle similar design challenges. It allowed us to find areas for improvement and discover opportunities to create our own app. When researching the Sound Meter HQ PRO app, I primarily looked at the app's website and information in the app store, and I also tried using the app myself. Based on this information, I was able to identify the app's strengths and weaknesses.

### **The Results**

#### **▼ Sound Meter HQ PRO**



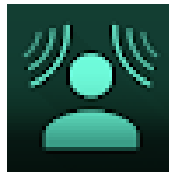
Pros:

1. The display is easy to comprehend, specifically the lowest and highest values.
2. The color scheme is visually pleasing.
3. It's helpful to have a real-life database range for comparison purposes.
4. The inclusion of a level comparison chart is a valuable addition.
5. Displaying large values is good.

Cons:

1. The app shows significant fluctuations even when there are no changes in the environment, with a 20db jump observed.
2. Compared to other apps, it registers about 10db higher.
3. The app's accuracy is limited by the fact that it is installed on a phone.
4. It would be beneficial if the app provided instructions on how to calibrate it.
5. The constant movement of the display is distracting, and it would be better if the screen displayed only the number with minimal motion.

#### ▼ SmarterNoise - Noise recorder



<https://smarternoise.com>

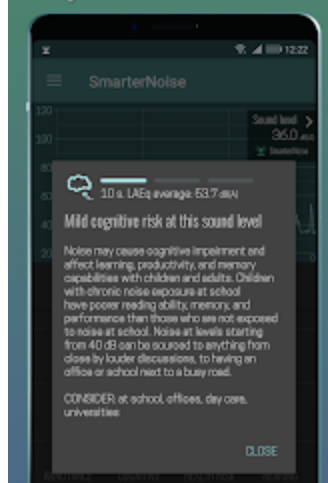
# Ideal for capturing sound and noise



## Record video or audio

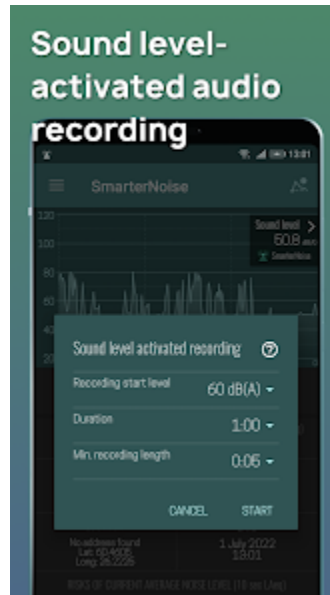


## Learn about noise exposure



## Make long audio recordings with background recording





#### Pros:

1. Properly adjusting the settings such as sensitivity, voice enhancer, and speaker boost, allows the app to effectively capture even the faintest whispering conversations.
2. The app not only records the location's video, but also measures the sound level in decibels, alongside the date, time, and geographical coordinates.
3. The app provides concise information on noise, how to measure it, and how to interpret the readings. It also covers related health risks and limitations of the app.
4. The information presented in the app is based on relevant scientific literature and references particular scientists.
5. Despite being well-structured and aesthetically pleasing, the app is refreshingly easy to use and read.

#### Cons:

1. The app does not save videos as it records them. If you do not wait for the video to process after stopping a recording, you may instantly lose the recording.

2. If your phone's camera switches to sleep mode while you are recording and you wake it up, the recording will be lost.
3. The app's setting may be too low to effectively capture repetitive, spiking, low dB noises.
4. Attempting to record audio only may not be possible as the recording may stop as soon as the screen locks.

## **The Next Steps**

The next steps were to conduct prepare and conduct user interviews.