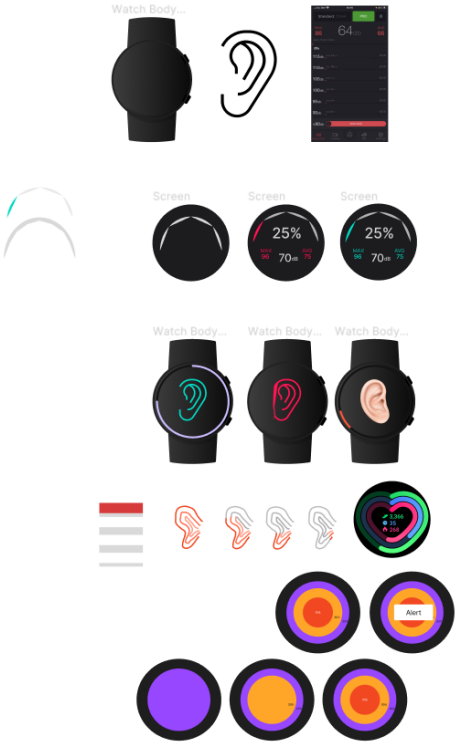
Prototype

Brainstroming and sketching:

My main task was to create a screen for the daily dose and exposure limit on a watch app. I took inspiration from dosimeter screens found in mobile sound level apps and designed something similar to show relevant information in the watch app. The main idea behind this was to let users know if they were being exposed to loud noise more than necessary, that will cause them permenant ear damage. I wanted to inform them that their daily limit of noise exposture. Based on my creativity, I have come up with some sketches that you can see below.

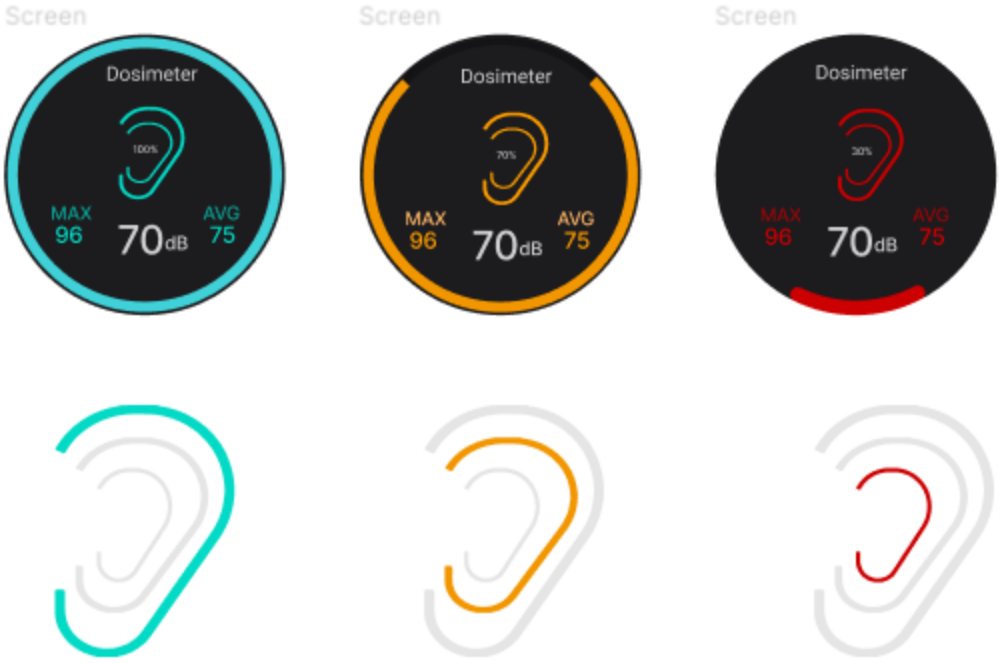


First iteration:

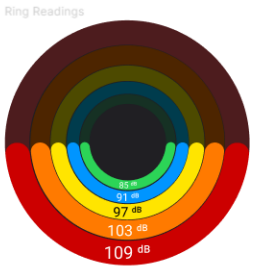
Based on the feedback I received from my group members regarding the sketches above, they suggested designing an "ear" or progress bar and making the screen more engaging. Taking their suggestions into account, I created a new screen shown below.

In this design, I represented the "ear" as a health bar with a percentage that decreases over time. As the percentage decreases, it indicates a negative impact on the users' ears. To visually communicate this, I used different colors. Green represents a good level, orange indicates an okay level, and red signifies a bad level that can potentially cause permanent ear damage. This concept forms the core idea behind the screens presented below.

Following this, I began working on the screen that displays the exposure limit, while my teammate, Tanmay, started working on the screen shown below.



Second iteration:

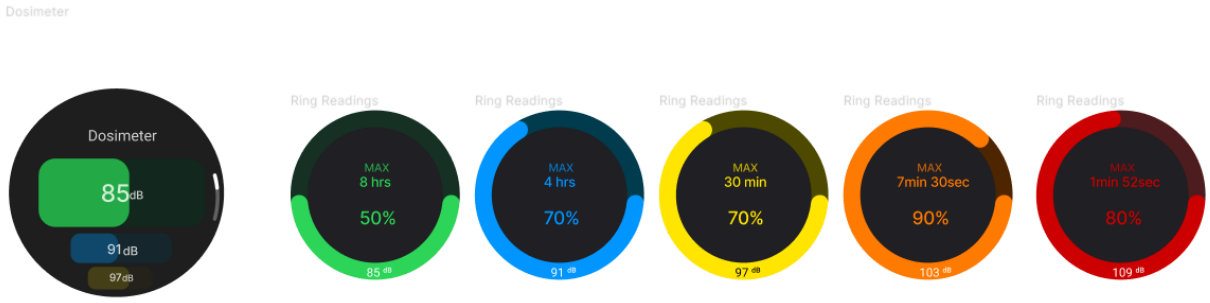


Tanmay provided me with the initial screen on the top left, which displayed the exposure limits. My main goal was to create a screen that would show users how long they could be exposed to a specific level of noise in terms of time. I came up with different possibilities and eventually settled on a design where each decibel level had its own screen. I took inspiration from the Wear OS design system, which uses a scrolling screen to display ongoing activities.

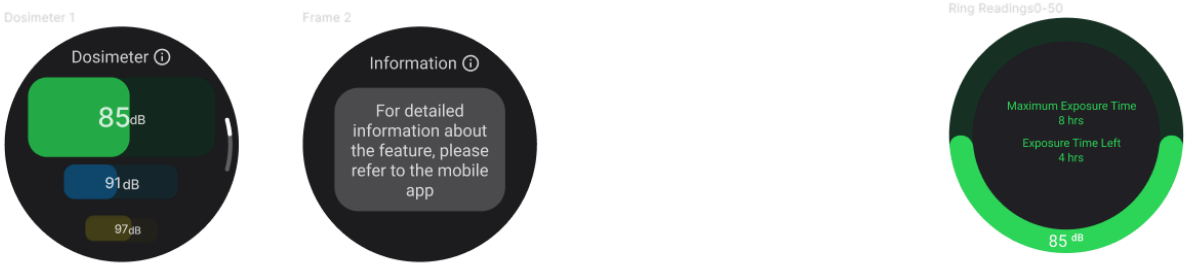
In my design, the main button on the screen serves as a button and a health bar simultaneously. It indicates how long users have been exposed to a particular decibel level. When users click on a specific decibel level button, they are taken to a different screen that provides more detailed information about how long they can safely be exposed to that level of noise.

I presented this design to the stakeholder, but received feedback that the maximum hours and percentages were confusing. The stakeholder was unsure about the usefulness of this screen for users, but he said this screen might be very useful to the experts. Taking this feedback into account, I made the necessary changes for my next iteration.

https://developer.android.com/design/ui/wear/guides/behaviors-and-patterns/ongoing-activities



Third iteration:

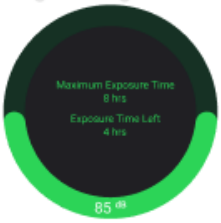


Based on the feedback from the previous version which can be found in the end of paragraph above, I made some improvements. I added an additional information button that, when clicked, opens an information tab. In this tab, users can find necessary information about dB levels, exposure time, and limits. On the specific dB level screen, I removed the percentages because they were not clear. Instead, I added the maximum exposure time that users could be exposed to and the remaining time they can still be exposed to at that specific sound level. I validated these changes with my group members, and they found it clear and easier to understand. Additionally, I made some interactions to the screens. The next step is to test it with users to gather their feedback.

Dosimeter 1

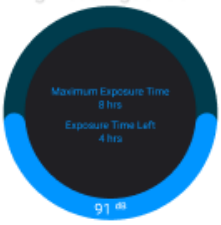
Frame 2

Ring Readings0-50



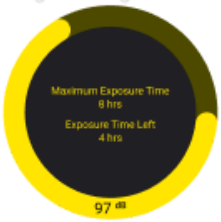
Dosimeter 2

Ring Readings0-50



Dosimeter 3

Ring Readings



Dosimeter 4

Ring Readings

Dosimeter 5

Ring Readings