**4-4 Assignment: UI Design**

Aaron Ciminelli

SNHU

CS-360-T4230 Mobile Architect & Programming 23EW4

Professor Jerome DiMarzio M.S.I.T

March 26, 2023



The application I have chosen to redesign is the Oticon Hearing Aid app. As an Oticon hearing aid user myself, I utilize this app daily. Its design is uncomplicated, and the functions are straightforward. Nevertheless, several enhancements could be made to improve the experience for specific users, such as the elderly and those with tinnitus. For older users, larger fonts, icons, and buttons would make navigation more accessible. The app could offer a broader range of customizable relief sounds for individuals suffering from tinnitus, including nature sounds, white noise, and sound masking.

Oticon takes data security seriously, storing user data on encrypted, secure servers protected by firewalls and adhering to industry standards and data protection regulations. The Oticon ON app leverages Low Energy Capability Bluetooth technology to connect to smart devices, ensuring optimal sound quality and battery life. In addition, it collects data such as personal information and hearing aid usage patterns, enabling audiologists to optimize the user's experience.

Anonymized, aggregated data may be shared with researchers, hearing care professionals, or other third parties to advance hearing aid technology and better understand users' needs. Users can grant audiologists access to their data for personalized care and remote adjustments to their hearing aids.

In redesigning the app, I followed Android's best design practices and adhered to Oticon's policies. The main screen's original colors, black, purple, grey, and white, were altered to be brighter and more visually appealing. In addition, the text, icons, and buttons were enlarged and paired with descriptive labels to ensure easy identification, particularly for older users or those with cognitive or visual impairments.

The information button in the original app provided a brief, unclear explanation of the sound booster. In the redesign, clicking the information button displays a list of icons with their corresponding descriptions. In addition, the sound booster switch now changes color to indicate its status, turning green when on and grey when off.

A link button has been added, enabling users to control both left and right hearing aids simultaneously. This feature does not eliminate the ability to control each ear independently but offers the option for simultaneous manual adjustments.

To prevent confusion when hearing aids disconnect from a smart device, a connection status icon has been added at the bottom of the screen. The icon will appear green when connected and red when disconnected, with an adjacent disconnect or reconnect icon for easier troubleshooting.

Lastly, users can now change their program by clicking on the top screen icons, which will appear raised and larger when selected. Replacing the original P1-P3 labels with images creates a more seamless program-changing experience.

**Resources**

“Bluetooth Hearing Aids.” *Oticon*, https://www.oticon.com/solutions/bluetooth-hearing-aids.

*Canva*, https://www.canva.com/online-whiteboard/.

“Design for Android : Android Developers.” Android Developers, <https://developer.android.com/design>.