AMOS SS22 Project #5 Find my BLE device

Project name	Official name in agreement with industry partner: Find my BLE device Name given by chair: Find my hearing aid
Project mission	The mission of this project is to create an app for WSA by providing the feature of locating BLE devices. The app should be able to detect BLE devices and assign labels to it. In addition it helps tracking the device and navigating to the exact location of the device no matter if in short or long distance. This ensures an overview of all relevant devices at all times.
Industry partner	WSAudiology
Team logo	Find my BLE device
Project summary	Over the past 13 weeks, we have been working on the development of a cross-platform app for both Android and iOS. The app "Find my BLE device" has three functionalities: Devices that emit a bluetooth signal can be detected by our app and displayed on the screen. Users can then save these devices locally in their app and give them an individual name. This forms the basis for our two main functionalities: "Strength Search" and "Map Search". Our "Strength Search" feature allows to display the distance to the BLE device based on the strength of the received bluetooth signal. This is visualized with a blue circle that gets bigger or smaller based on the received bluetooth signal. A conversion of the signal strength into a corresponding meter distance also provides the user with a rough indication of the distance. If no bluetooth signal is received by our app, but the user still wants to locate his BLE device, the "Map Search" feature can be used. This shows the user the last known location on a map where a bluetooth signal was received by our app. The user can then start a navigation to this location in the next step. Once at the destination, the exact location of the lost BLE device can be determined by switching to the "Signal Strength" feature. In this way, our developed app ensures that users know where their essential devices are at all times. In the event of a loss, the device can thus be tracked down quickly and easily.

