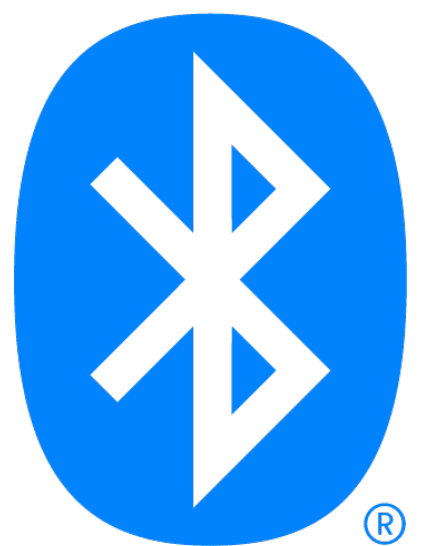
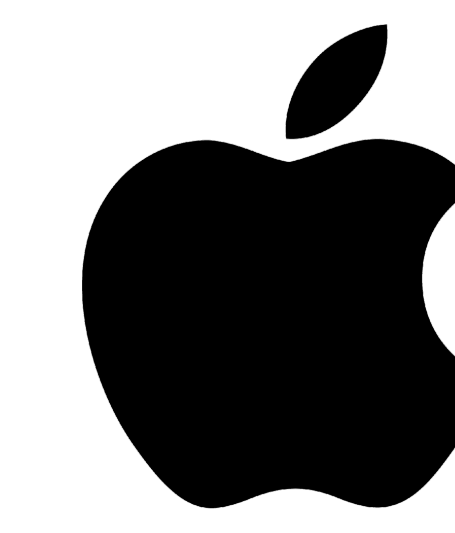


Knight Foundation School of Computing and Information Sciences

Spring 2023 Senior Design Project



PROBLEM

The product owner has requested a mobile application to be paired with a hardware device to measure a user's weight. While the hardware weight scale component is in development, a mobile app with a friendly UI/UX for Apple Watch and iPhone has been refined.

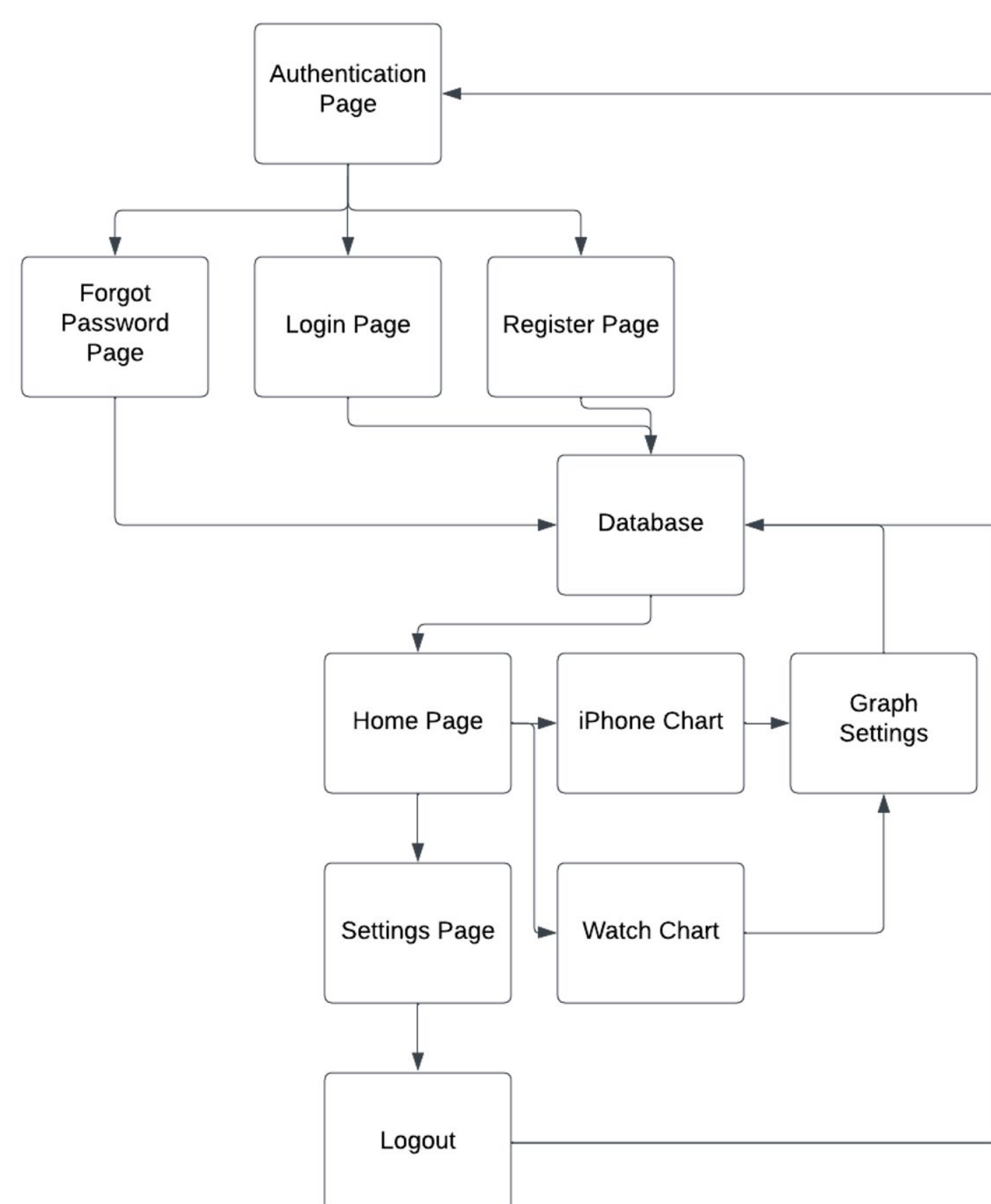
CURRENT SYSTEM

The Current system is composed of two applications, one for Apple Watch and another for iPhone.

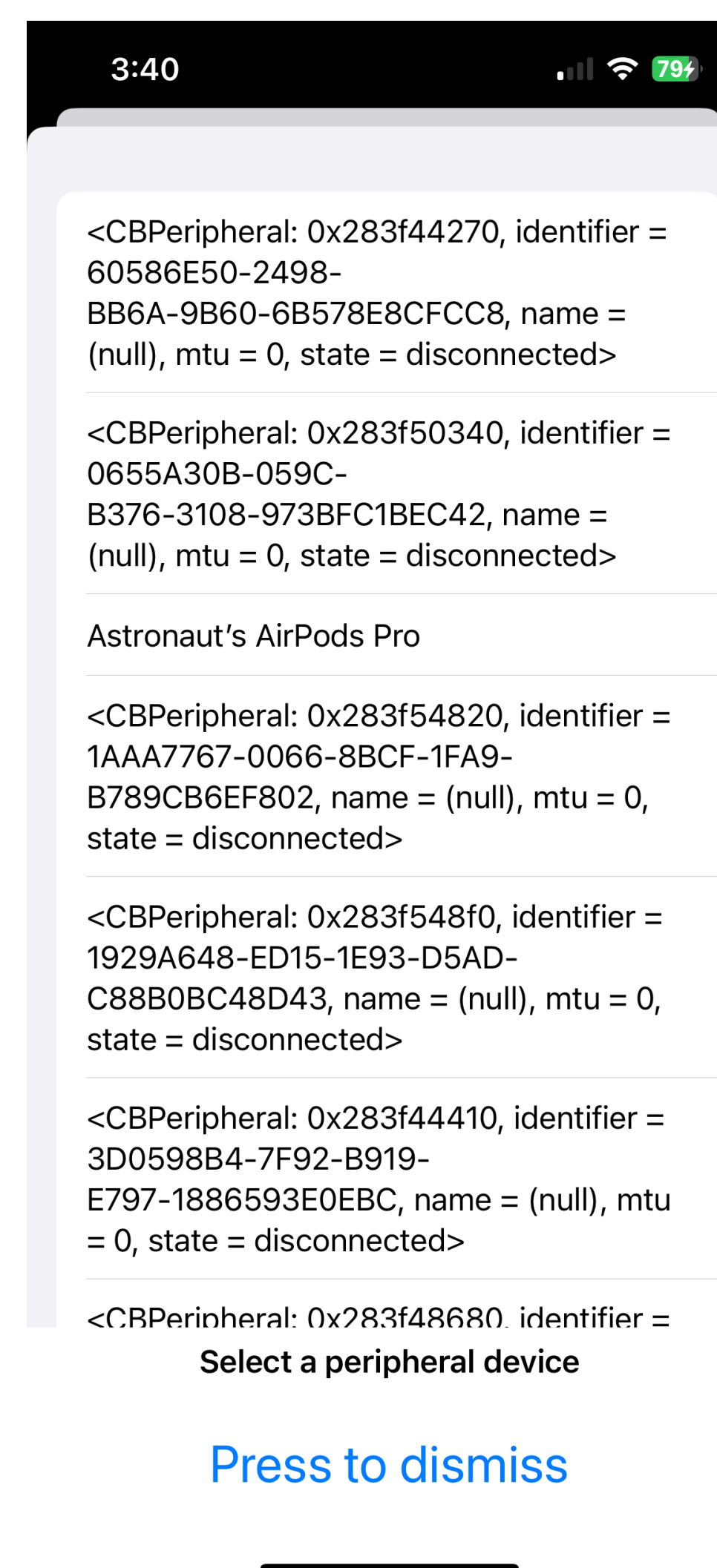
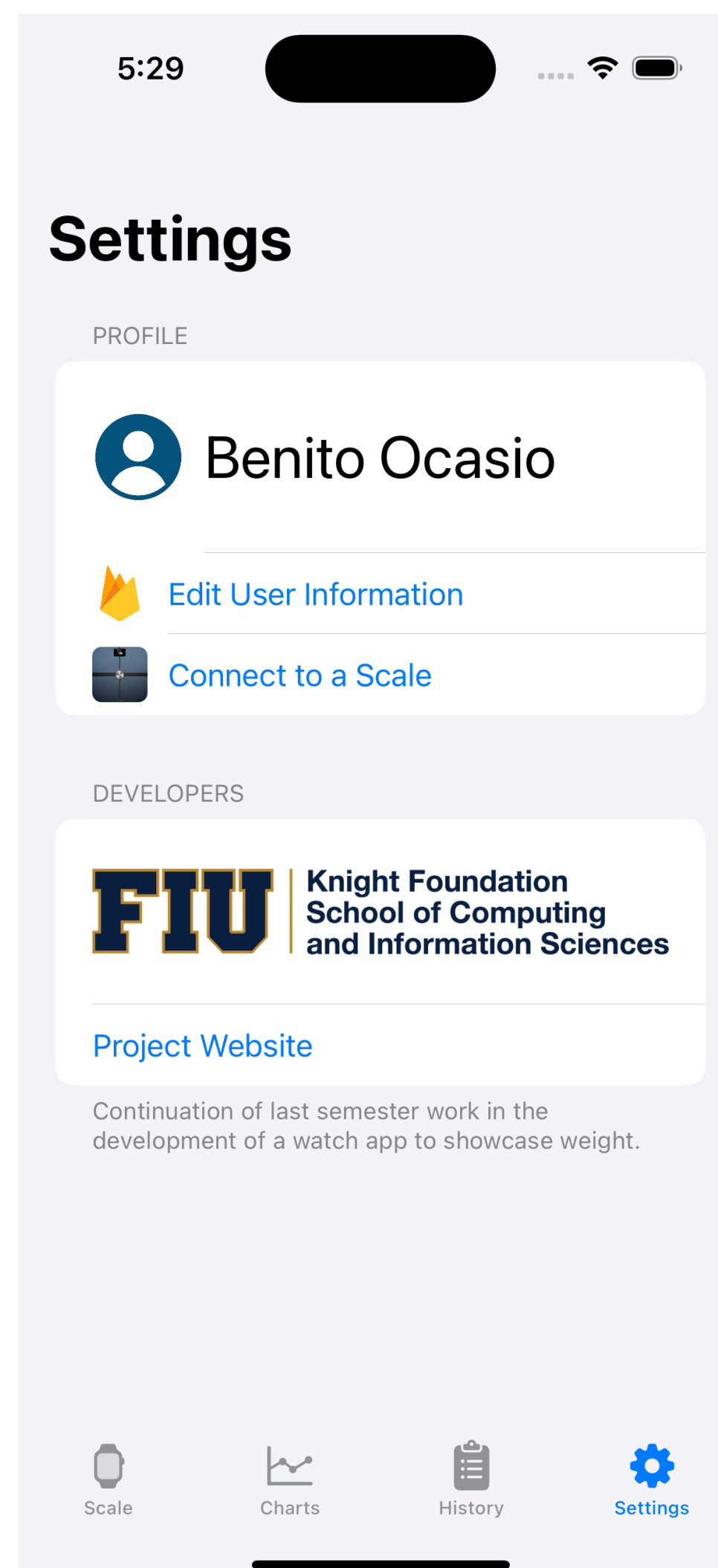
The data displayed is the current weight as well as a graph of weight history.

The iPhone component will allow for connection with Bluetooth peripherals, as when the weight scale is completed.

SYSTEM DESIGN



SCREENSHOTS



Apple Watch Weight App

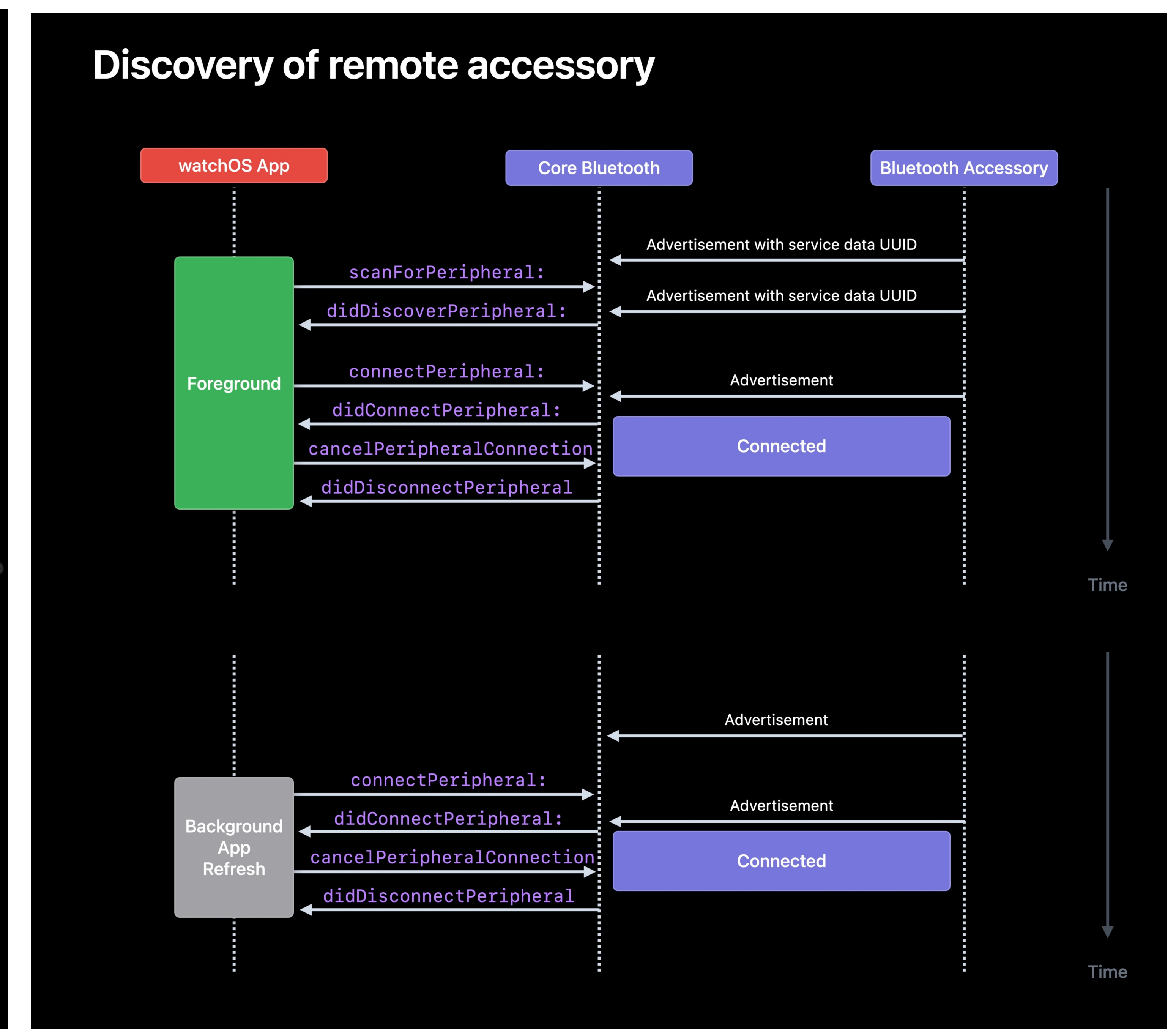
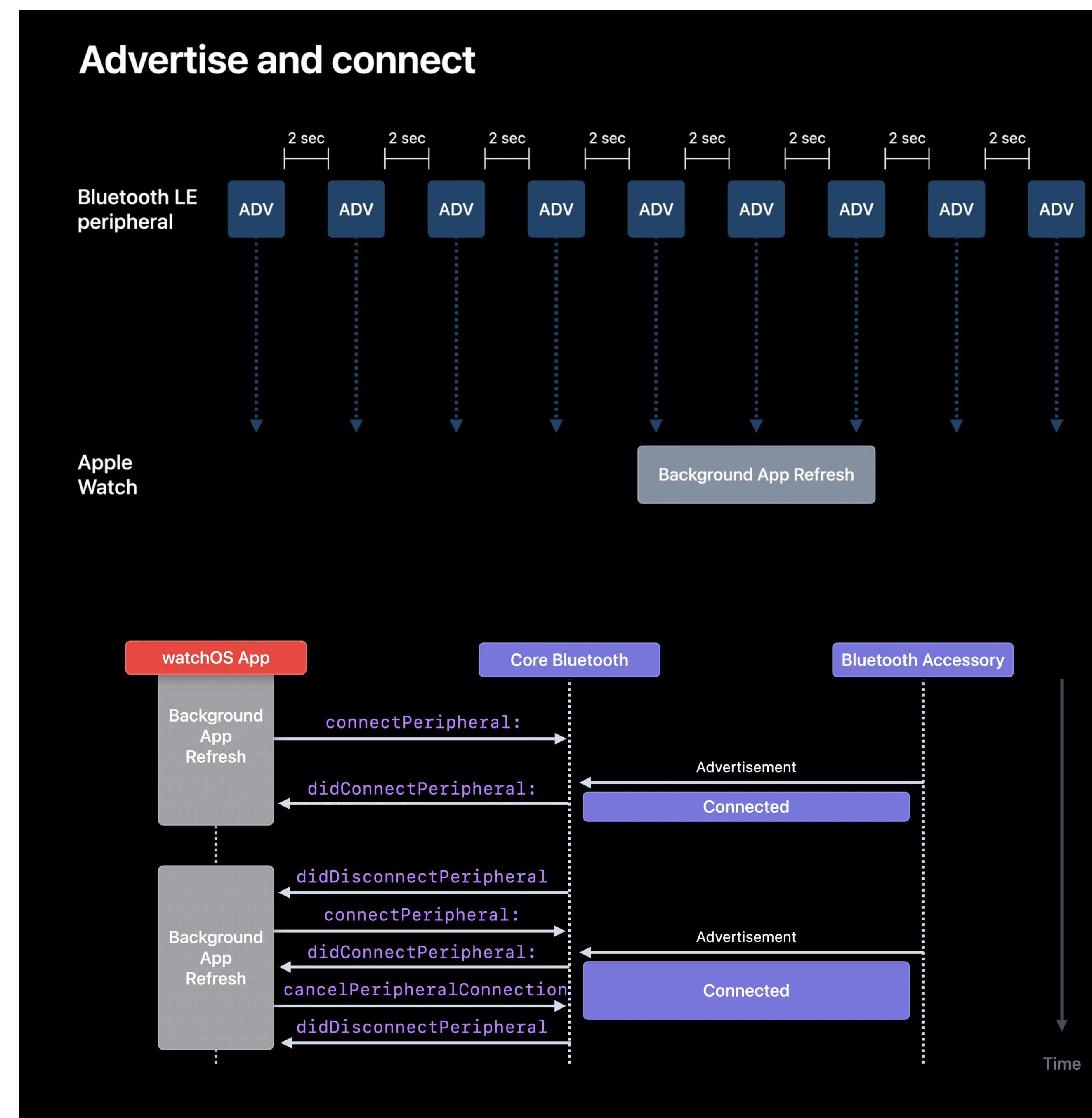
OBJECT FLOW

The apple watch can advertise that it is ready to receive a signal. The two object actors are the *apple watch*, and the *hardware weight scale*.

Once the object actors have established a connection, they can follow apple's Bluetooth core protocol

SUMMARY

While the hardware weight scale component is in development, two Bluetooth protocols can be used for this application. One whereby connections are established via background or foreground processes. The product owner may decide which software implantation is best for their hardware component in future development continuation.



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