Abstract

Apple’s HealthKit tracks a lot of user information that can be useful to doctors (steps, heart rate, weight, etc.). But there is no current way for Doctors to easily extract that information. Our objective is to create an app that pulls data from an Apple Watch via Healthkit and send it to Aprima’s REST API for use in their Electronic Health Records (EHR), a database that doctors can refer to for additional information on their patients.

Results

The App provides patients a interface to easily send health data to their doctors. It gathers information from the user’s Apple Watch and sends it to an EHR via Aprima’s REST API.

User Interface

- Written natively in XML and Swift 2.0

Core Library

- Apple HealthKit Framework
- Pulls user’s stored health data Apple Watch and phone
- Stores new health data

Data Transfer

- Client (app) sends data via JSON formatted messages
- Server (Aprima) parses JSON formatted messages and stores data in EHR

Architecture

Impact

The impact of this project was to get more health information into the hands of healthcare professionals. These devices we wear and bring on a daily basis were able to track important vitals and were often overlooked. Allowing your doctor to be able to see your heart rate and other important vitals gathered between visits can lead to a more accurate health diagnosis. In the end, this project was a simple yet effective way to collect, transmit and talk about your health with your doctor. We also cured cancer using waan puuunch.

Summary

Throughout the semester, the team met weekly to work on the project and update Aprima on our progress. In order to complete the app, we had to familiarize ourselves with swift, github, and Apple’s healthkit framework.

There were a couple difficulties in learning how Apple’s HealthKit worked initially. Specifically how the health data was stored and how it was interpreted took some time to get accustomed to. We were able to learn the inner workings of Swift.

Our objective was met and we were able to successfully build an App that receives data collected from an Apple Watch and send it to Aprima’s EHR database.

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