Project Overview

A major home automation company had a time-sensitive need for a best-in-breed app that would let their customers manage their smart home thermostat. The client wanted a modern, engaging and intuitive user interface that their customers would enjoy engaging with daily. The project required geofencing, automated scheduling, support on iOS and Android phones, tablets and Apple watch. The smart home thermostat was the foundation for a suite of products to be man-aged from the same app.

The Situation

The client dedicated substantial resources to support the launch of new smart thermostat home product. They needed an app that could give their consumers a great experience when engaging with their home automation product. The client's strength was in their hardware, circuits and home automation. They had strong engineering expertise. However, they lacked sufficient internal developer resources required to ensure a best-in-breed app.

Discovery Phase

During the Discovery phase, Big Nerd Ranch's UI/UX Design, iOS and Android teams collaborated with the client's team to flesh out their goals based on the app's ability to give their customers control of the smart thermostat. To ensure the app could achieve the established goals, it needed the following:

1. Geofencing support so that when their customer is arriving to or leaving from their home, the thermostat could respond appropriately

2. The ability to create automated schedules for the thermostat

3. A digital wiring guide that walks you through the wire up for your thermostat based on the configuration in your house. There were hundreds of unique settings available.

4. An Apple watch app to control the temperature

Project Detail

As the client was developing their new smart thermostat, they chose to partner with Big Nerd Ranch for their mobile app development. In January 2013, the client engaged with Big Nerd Ranch's iOS team then expanded to other teams including Android and Design. Big Nerd Ranch created interactive prototypes for the client's design team, then the project began to take off Spring 2013. Because the client was also going through a corporate rebranding effort, Big Nerd Ranch's Design team worked diligently with the client to offer expert guidance. It was critical that the app accurately represented the client's brand during this initial phase in its lifecycle. Big Nerd Ranch's Design team adapted the experience of the app based on agile and feed-back-driven methods.

During the Discovery, the client indicated they wanted an app that was engineered to take advantage of the hardware work completed by internal teams. The client already had a backend web and server teams in place.

What Did the Client Get?

The Fortune 100 client received best-in-breed, native iOS and Android apps for phones and tablets that allow their customers full control of their smart thermostat. In addition to normal thermostat functions, their customers can also schedule thermostat changes based on time or location. The app supports geo-fencing around their customers' homes so their thermostat can turn on automatically when they arrive at home or go into "away" mode when they leave.

The app was built to operate on the following devices:

- Android Phones + Tablets
- iOS Phones + Tablets
- Apple Watch

Big Nerd Ranch also built Apple Watch support for its release.

Although this app was thermostat-focused, the client discussed goals to add other types of devices to this architecture. This was a "connected home" effort which includes a water leak detector, a second thermostat, and a security camera.

Big Nerd Ranch built an app that included highly customized designs at an extremely high fidelity, both technically and visually,

> Our apps were very design-oriented, customized designs at an extremely high fidelity, both technically and visually. Our app accomodated for many abnormal states in an ecosystem intended to be deployed at scale, all in a modern, focused UI.
> -Zachary Waldowski, iOS Developer at Big Nerd Ranch

The iOS UI was at the very bleeding edge of trends at the time. It was converging on an extremely modern iOS 7 UI mere months after its announcement.