Remote Home

Introduction

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Problem

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Remote Home Framework Overall Design

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Remote Home Framework Communication Protocols

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iOS to DDNS Protocol

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Remote Home Communication Overview

DDNS Server

Request

iOS Client

Connects/Controls

Register

Base Station 1
27.168.15.10

Device 1

Device 2

Base Station 2
45.66.122.4

Device 3

Base Station 3
102.55.71.69

Device 4

Device 5

Base Station 4
200.100.155.41

Device 6

Device 7
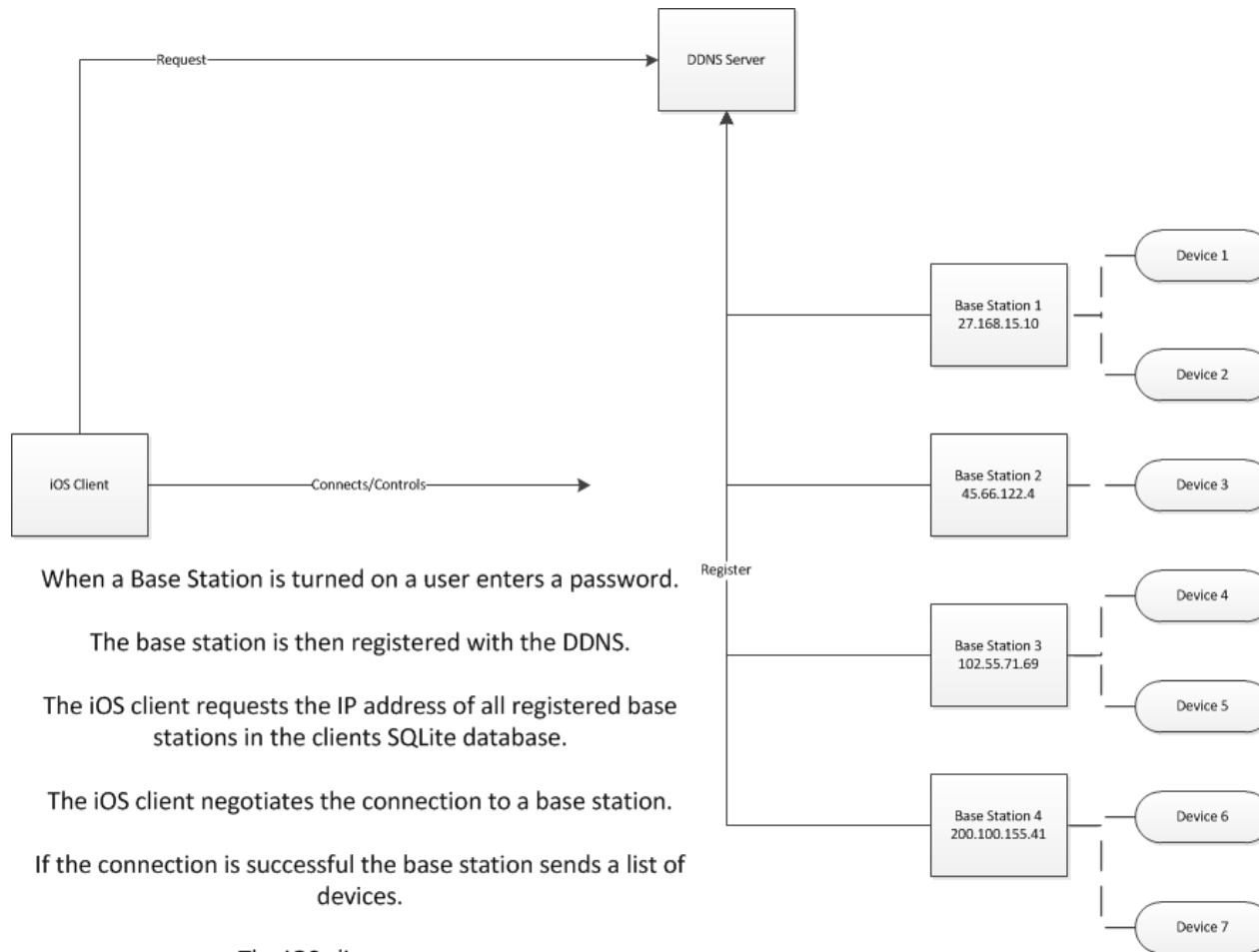
When a Base Station is turned on a user enters a password.

The base station is then registered with the DDNS.

The iOS client requests the IP address of all registered base stations in the clients SQLite database.

The iOS client negotiates the connection to a base station.

If the connection is successful the base station sends a list of devices.

The iOS client can now
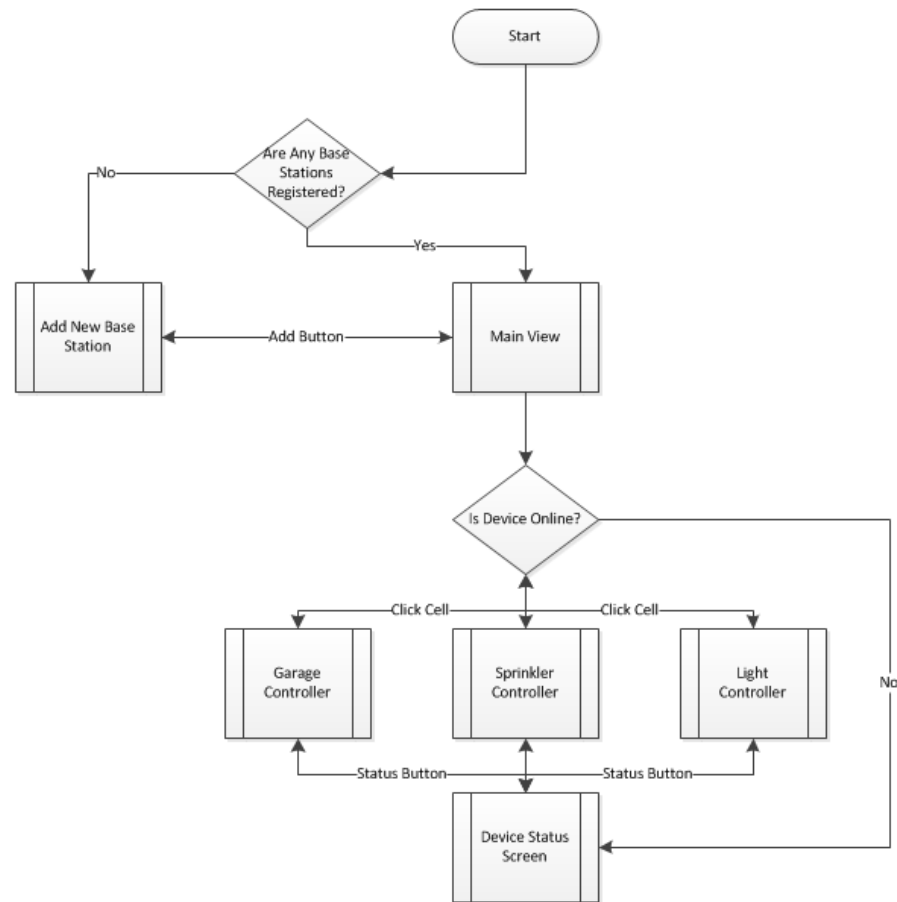control a device connected to the base station

Remote Home Framework User Stories

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Remote Home Framework Overview

Remote Home (iOS) Program Flow

Start

Are Any Base Stations Registered?

No → Add New Base Station

Yes → Main View

Add Button

Is Device Online?

Click Cell → Garage Controller

Click Cell → Sprinkler Controller

Light Controller

No

Status Button → Device Status Screen

Status Button

iOS App Prototype

Carrier 🛜   10:17 PM   🔋

‹ Stations   **Add New Station**

Station Name
Enter a custom name for your device

DID
10 character code on device

Password

Register

Carrier 🛜   10:17 PM   🔋

Stations   **+**

My Home   ›
Online

iOS App Prototype
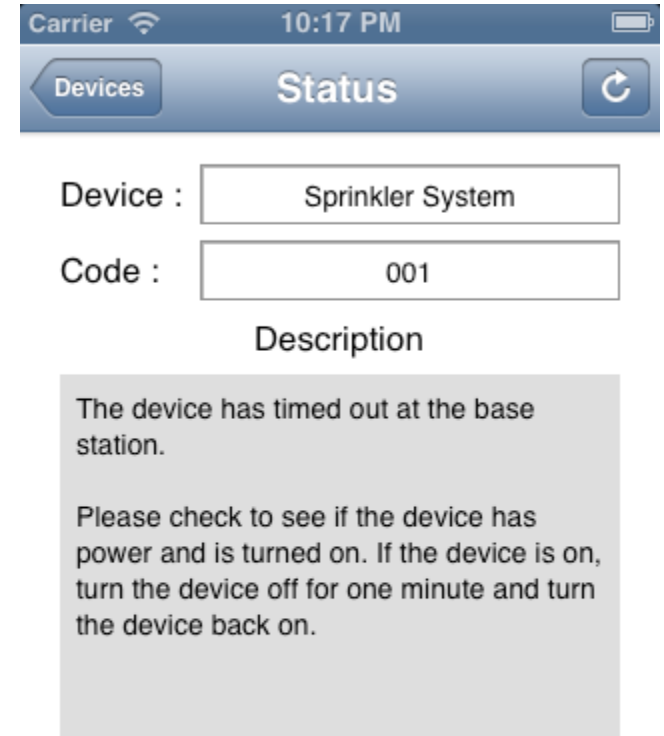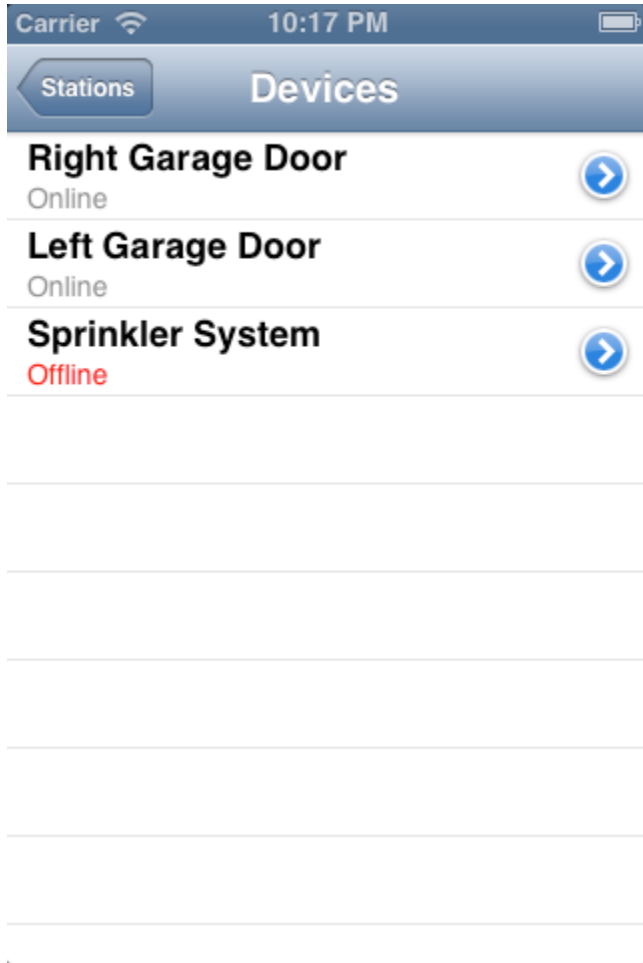
Remote Home Framework Backlog

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Requirements

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Hardware Risks

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Testing

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Testing

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Budget

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Deliverables

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Questions?