



# SkyScraper

A Weather Companion  
for iOS

by Preston Scott

# Goal

**Create the most simple, clear, and elegant weather app possible.**

# Use Cases

What's the temperature? 🧐☀️ in three hours? 😄☀️ in three days? 😱🔥

Is it going to rain while I'm walking the dog? 🐕☔

Or during my kid's soccer game tonight? ⚽☔

Second thought, can I just see a radar map of the rain? 🌐

By the way, what's the weather at my sister's house? 🏠

And at the beach next week? 🏖️

# Technical Details

## Incorporated iOS Concepts

- UITableView
- UIScrollView
- UINavigationController
- UISplitViewController
- CoreLocation
- MapKit
- MKTileOverlay
- UserDefaults
- NSCoder
- NSURLSession

## Development Details

- Designed and developed by Preston Scott
- Written in Swift from the ground up
- Significant usage of protocol oriented patterns
- Forecast provided by DarkSky API
- Radar provided by Weather Decision Technologies API

# Start Screen

Settings

Locations

Cupertino, CA

Clear at 8:33 AM



0% precipitation chance in next hour

46°

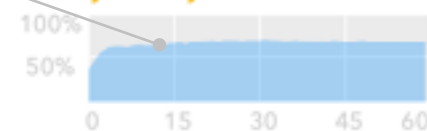
Feels like: 46°

Dewpoint: 38°

Humidity: 75%

Portland, OR

Mostly Cloudy at 8:33 AM



72% precipitation chance in next hour

41°

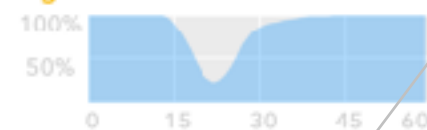
Feels like: 40°

Dewpoint: 38°

Humidity: 88%

Columbus, OH

Light Rain at 11:33 AM



100% precipitation chance in next hour

53°

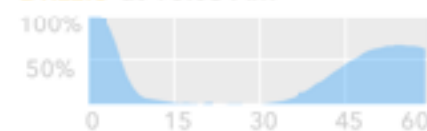
Feels like: 52°

Dewpoint: 40°

Humidity: 63%

Huntsville, AL

Drizzle at 10:33 AM



100% precipitation chance in next hour

66°

Feels like: 66°

Dewpoint: 57°

Humidity: 73%

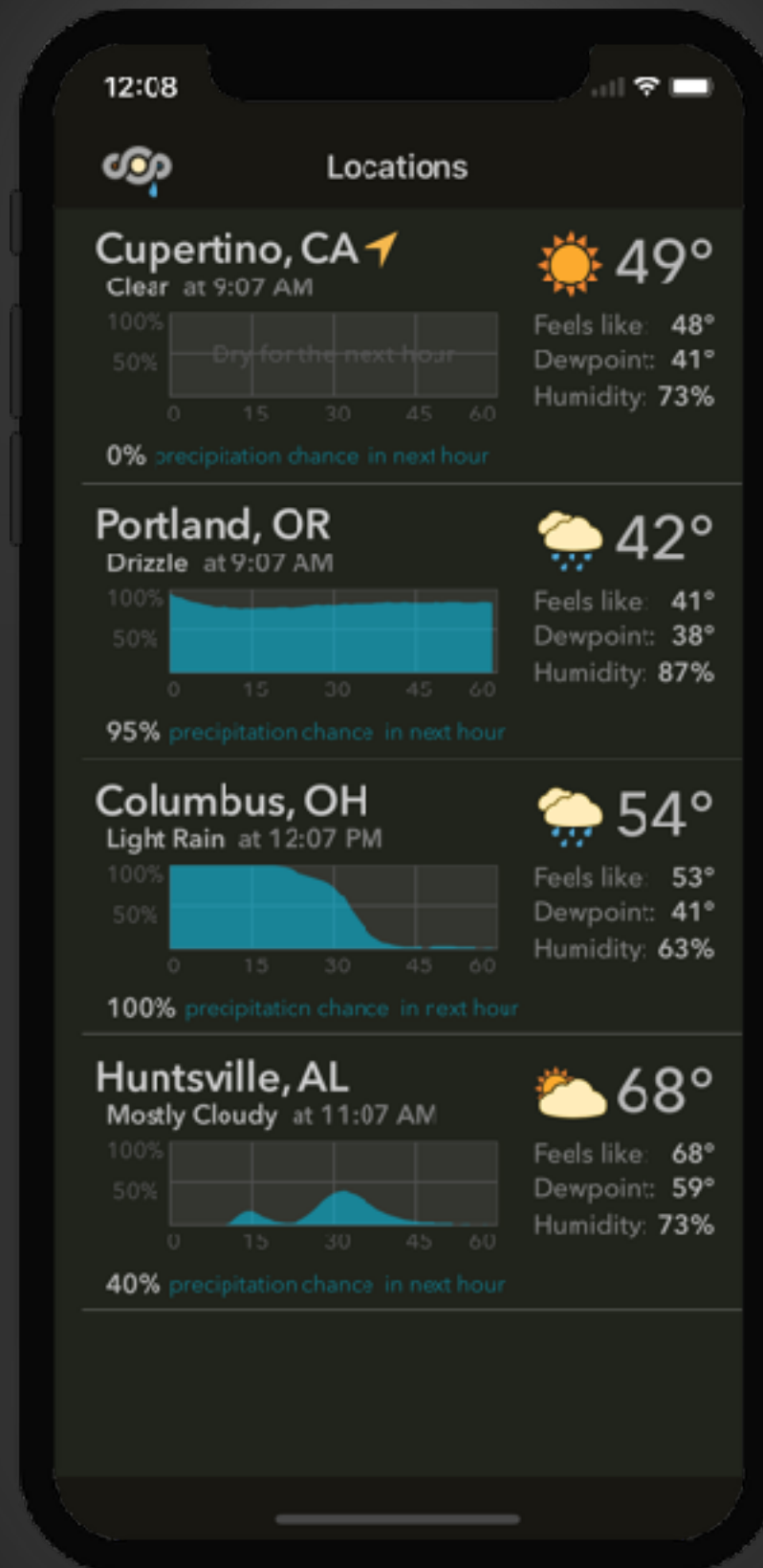
Location information from CoreLocation used to autofill first cell

Other locations are manually entered by user (up to 10)

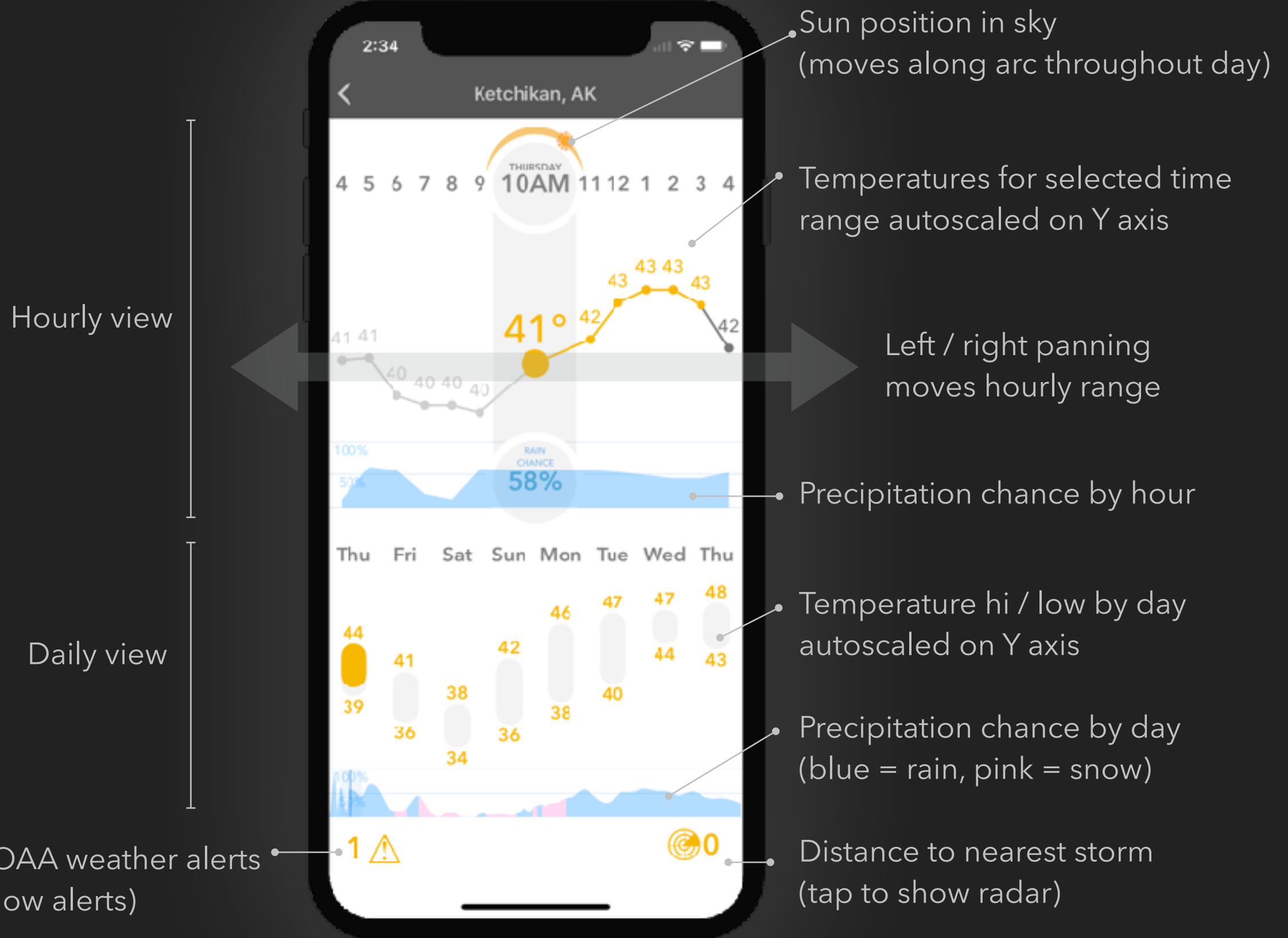
Current weather information for each location

Custom graphs show minute-by-minute rain probability for next hour

# Start Screen (Dark Theme)



# Forecast Screen



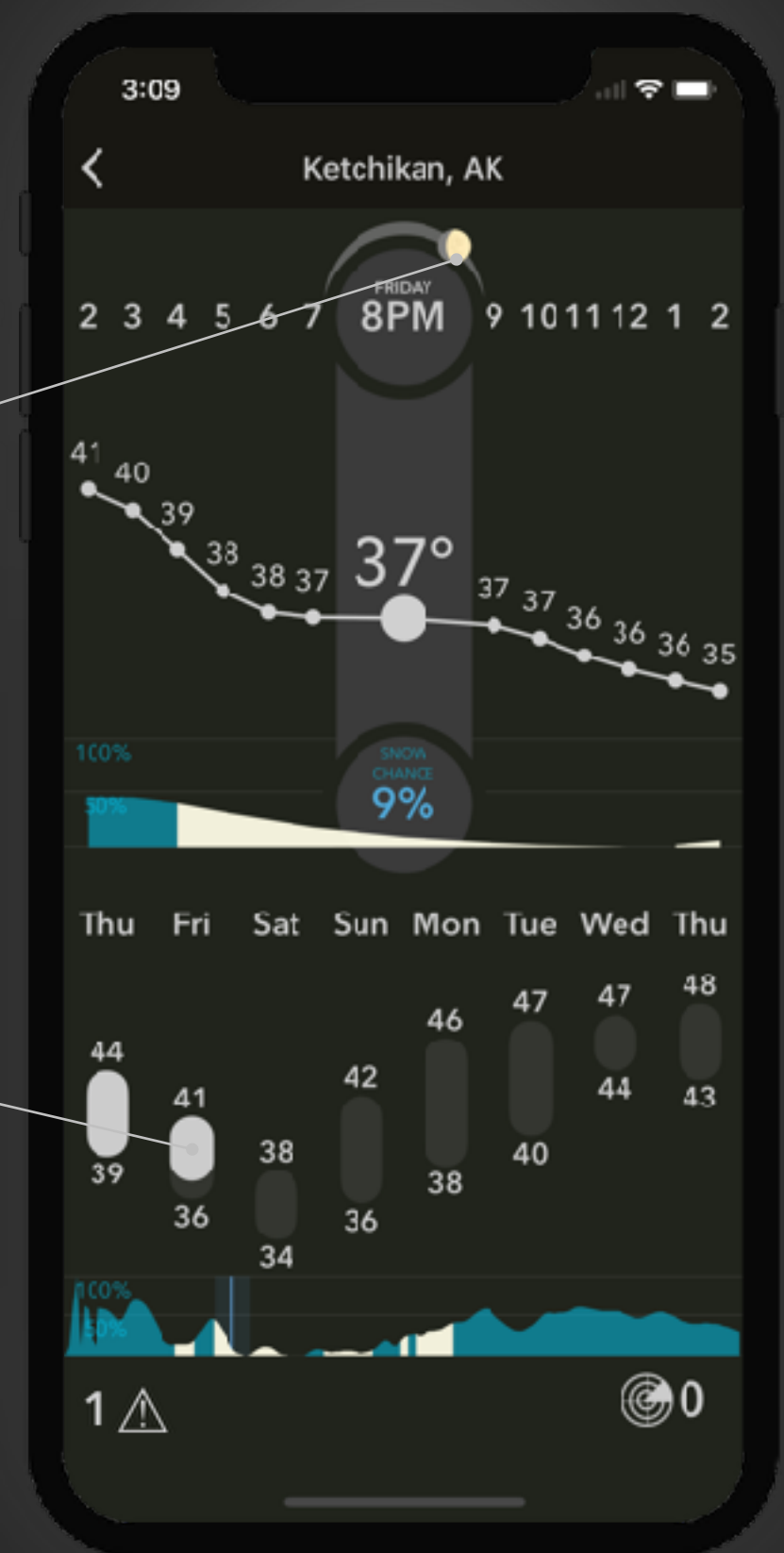
# Forecast Screen (Dark Theme)



Sun angle shown in day hours

Moon phase shown in night hours

Ovals fill as top graph is scrolled





# Custom Graphics

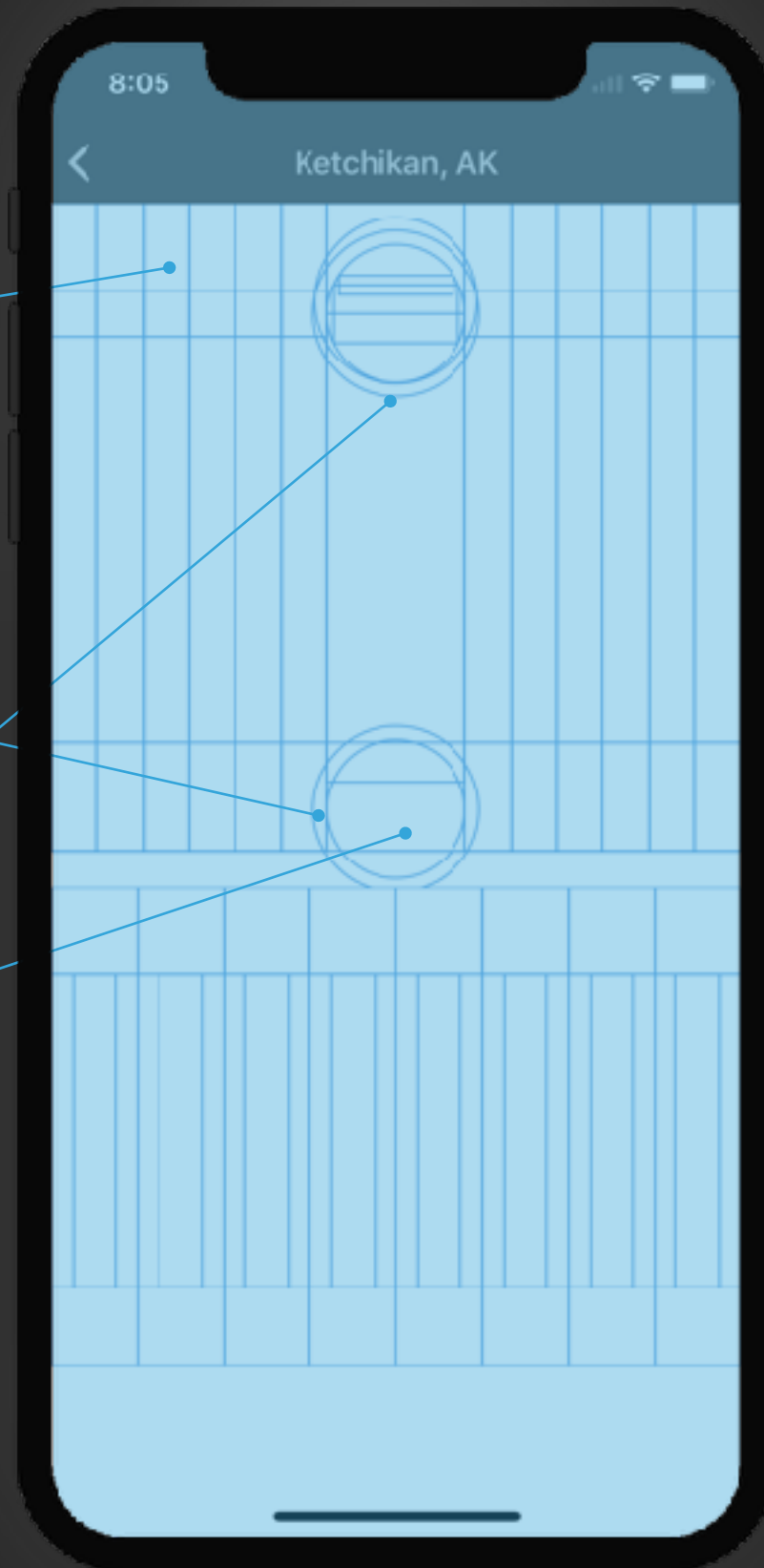
## Wireframe

Screen size carefully divided into appropriate sections

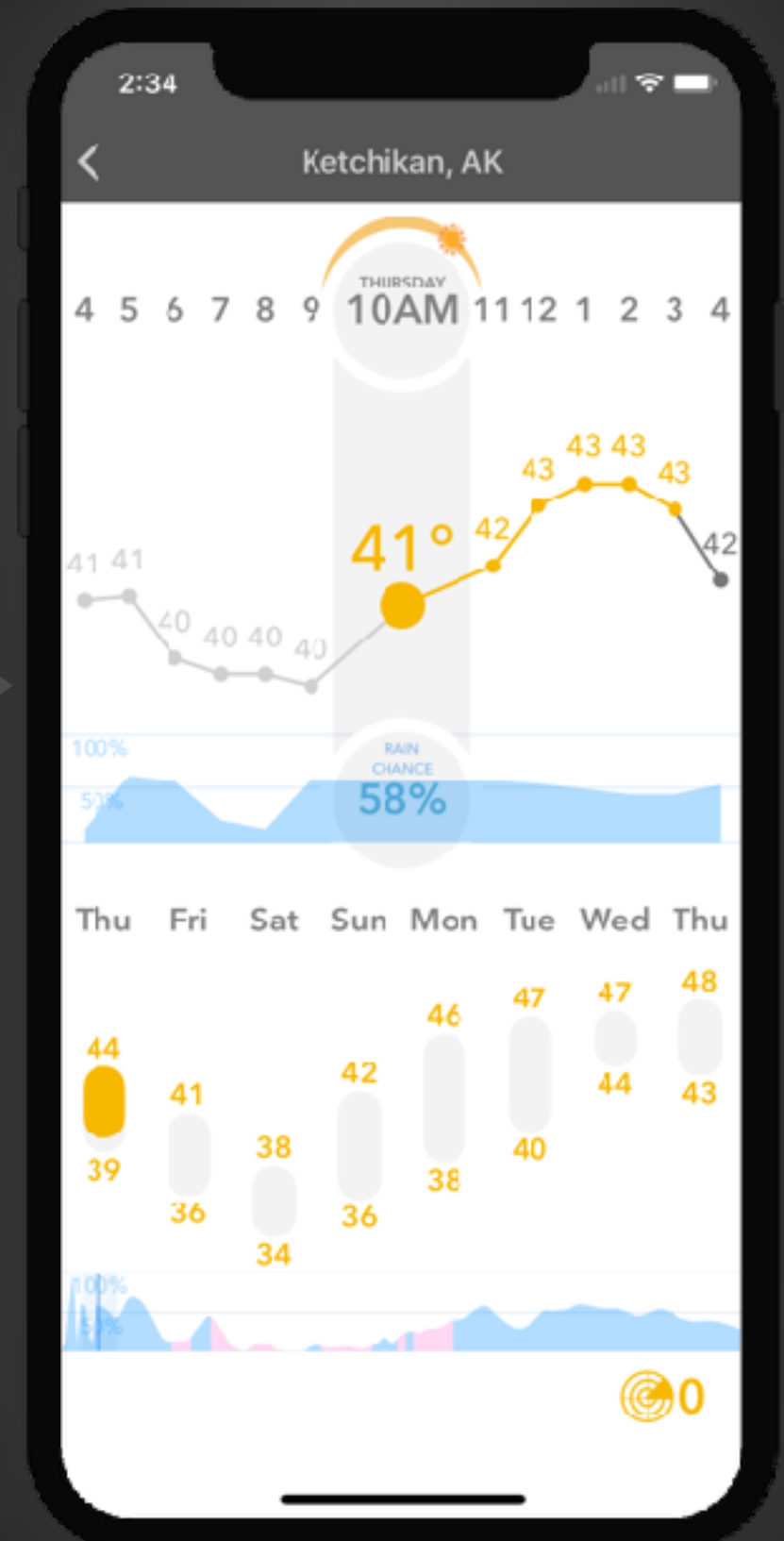
Segments are stored as arrays of CGRects

Multiple circles (UIBezierPaths) required for feature orbs and arcs

Rects within circles used for labels (lots of math 📐)

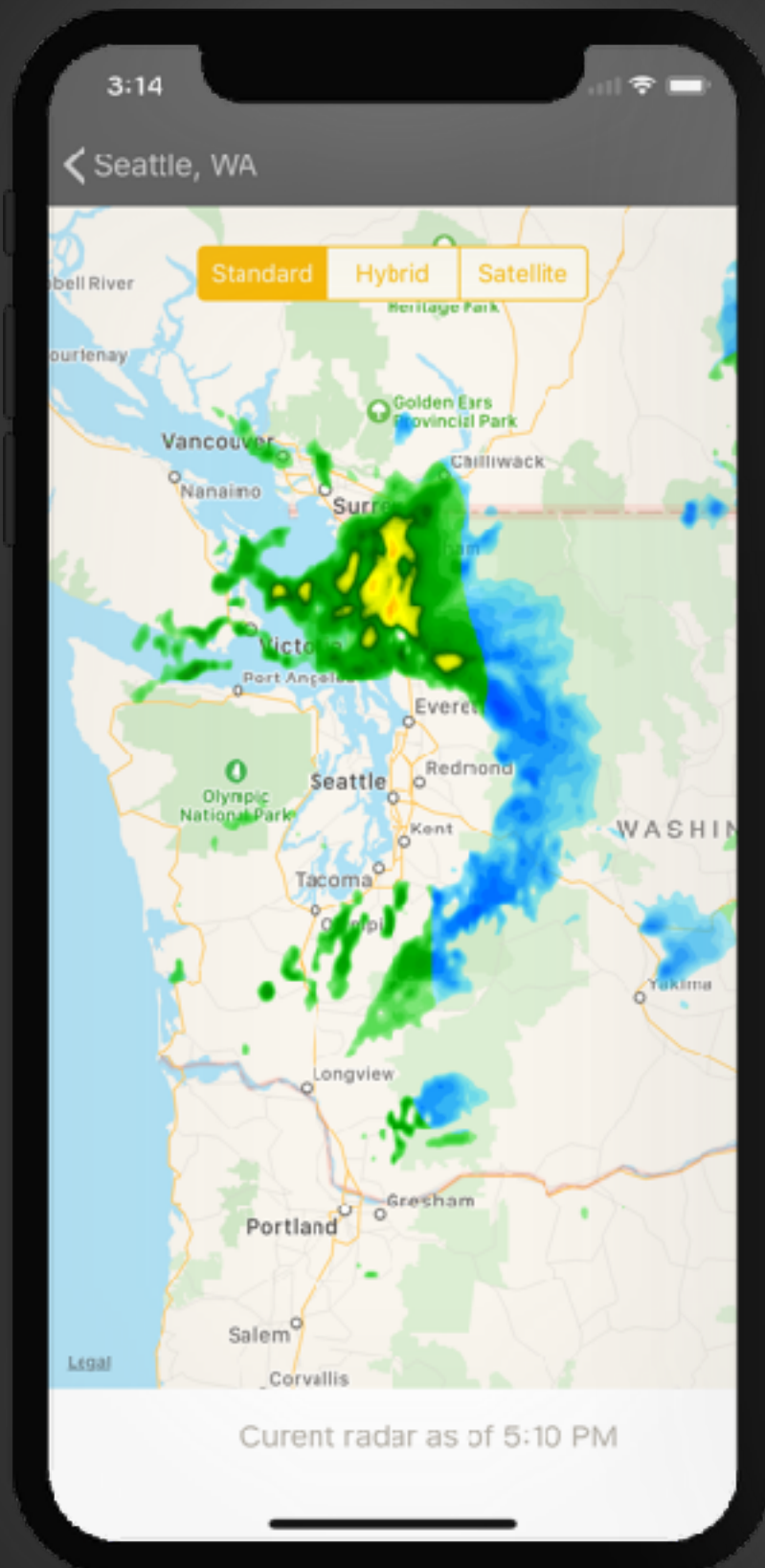


## Final Product



# Ancillary Screens

## Radar



## Weather Alert

3:16

< Back

**High Surf Advisory**

**Time Issued:** 11/30/2017, 3:00 PM

**Expiration Time:** 12/01/2017, 12:00 PM

<https://alerts.weather.gov/cap/wwacapget.php?x=CA1258750CDFC0.HighSurfAdvisory.12587947CA50CA.LOXCFLWLOX.c6acd5c06450a6aa043ea561bee64d53>

...HIGH SURF EXPECTED FOR WEST TO NORTHWEST FACING BEACHES ACROSS THE CENTRAL COAST THIS EVENING THROUGH FRIDAY MORNING... LARGE AND LONG PERIOD NORTHWEST SWELL ACROSS THE COASTAL WATERS WILL CREATE HIGH SURF ON THE CENTRAL COAST THROUGH EARLY FRIDAY... WITH ELEVATED SURF AND DANGEROUS RIP CURRENTS ON WEST FACING BEACHES FROM POINT CONCEPTION THROUGH VENTURA COUNTY. LARGE BREAKING WAVES ARE POSSIBLE NEAR THE ENTRANCE TO MORRIS BAY HARBOR. ...HIGH SURF ADVISORY REMAINS IN EFFECT UNTIL 9 AM PST FRIDAY... \* SURF... SURF IS EXPECTED TO AVERAGE 12 TO 16 FEET TODAY... WITH LOCAL SETS TO 18 FEET... HIGHEST ON WEST AND NORTHWEST FACING BEACHES. SURF IS EXPECTED TO SLOWLY SUBSIDE TONIGHT... DROPPING BELOW HIGH SURF CRITERIA BY MID MORNING FRIDAY. \* IMPACTS... LARGE POWERFUL AND DAMAGING WAVES WITH STRONG CURRENTS WILL CREATE A RISK OF DROWNING. SNEAKER WAVES CAN SUDDENLY OVERRUN PREVIOUSLY DRY BEACHES AND JETTIES. THERE WILL ALSO BE A HIGH RISK OF LIFE-THREATENING RIP CURRENTS. FLOODING OF LOW LYING BEACH PARKING LOTS IS POSSIBLE WITH THE HIGH

## Settings

3:17

< Settings

THEMES

Default ✓

Dark Theme

PLACES

San Francisco, CA

Arroyo Grande, CA

Ketchikan, AK

Durham, NC

Seattle, WA

+ Add New Place

UNITS

US (Fahrenheit, miles, mph) ✓

Canada (Celsius, km, km/h)

UK (Celsius, miles, mph)

SI (Celsius, km, m/s)

**View the full demo at:**

**<https://youtu.be/QgBgVfoo3xQ>**

Thank you