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
- NSUserDefaults
- 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
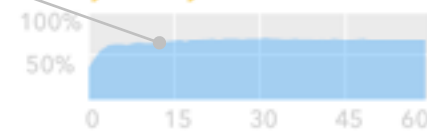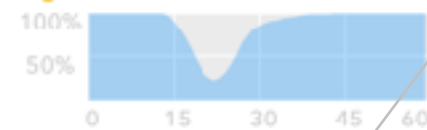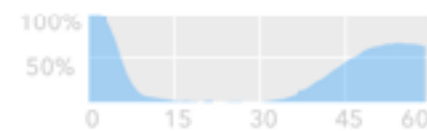
Location information from CoreLocation used to autofill first cell

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

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

Current weather information for each location

Start Screen
(Dark Theme)

Forecast Screen

Sun position in sky
(moves along arc throughout day)

Temperatures for selected time range autoscaled on Y axis

Hourly view

Left / right panning moves hourly range

Precipitation chance by hour

Daily view

Temperature hi / low by day autoscaled on Y axis

Precipitation chance by day
(blue = rain, pink = snow)

Active NOAA weather alerts
(tap to show alerts)

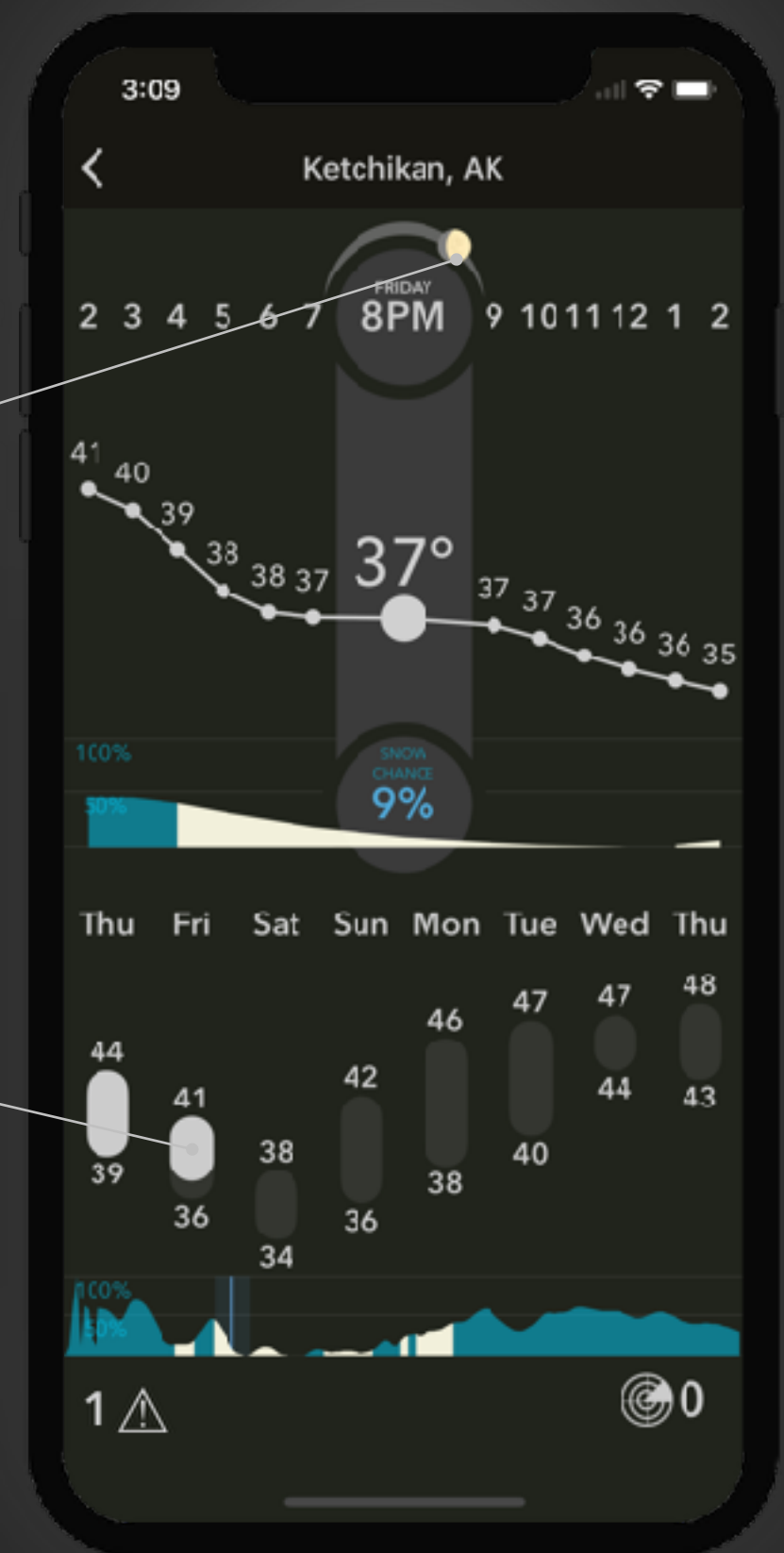Distance to nearest storm
(tap to show radar)

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

Final Product
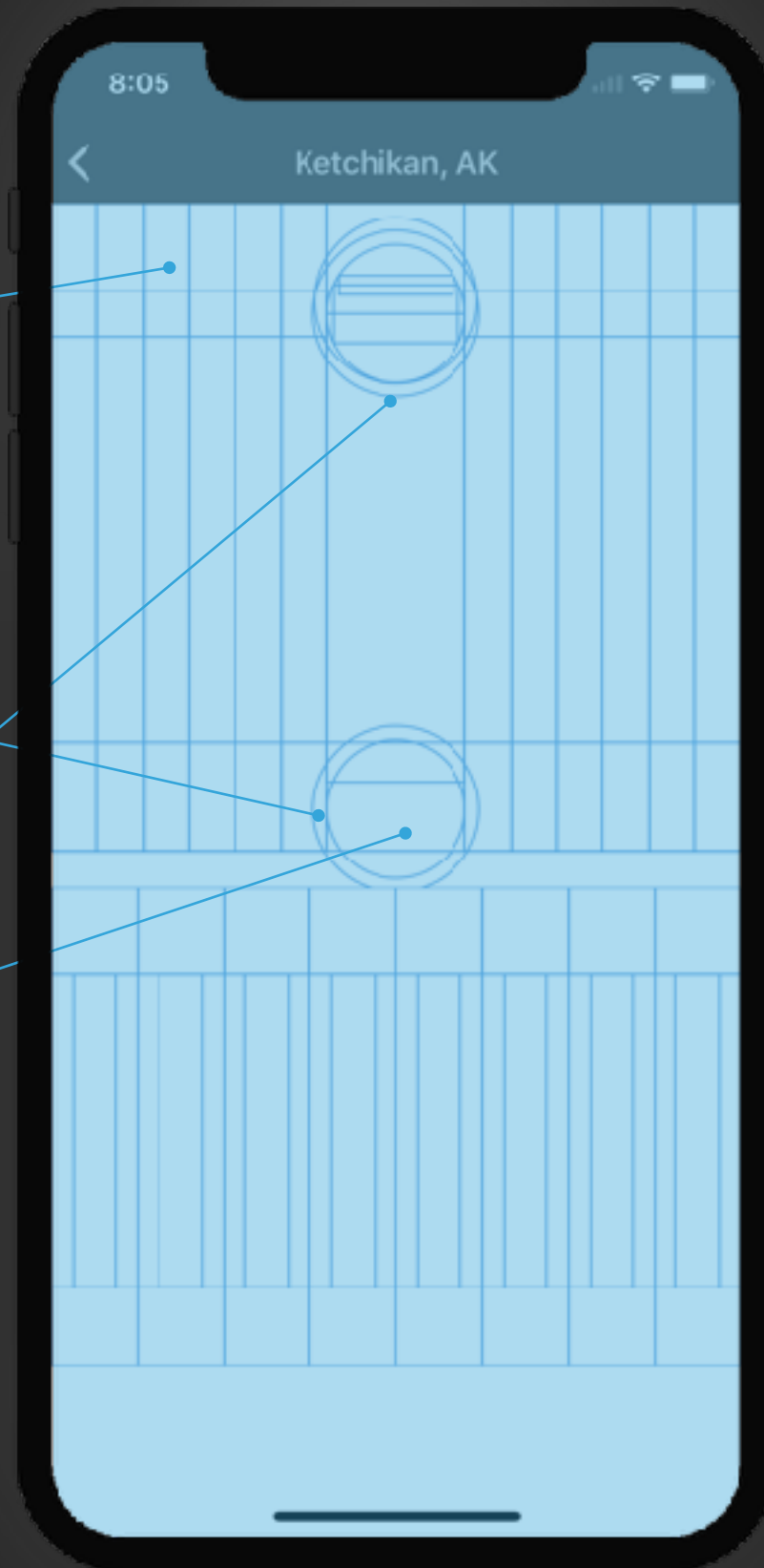
Screen size carefully divided into appropriate sections
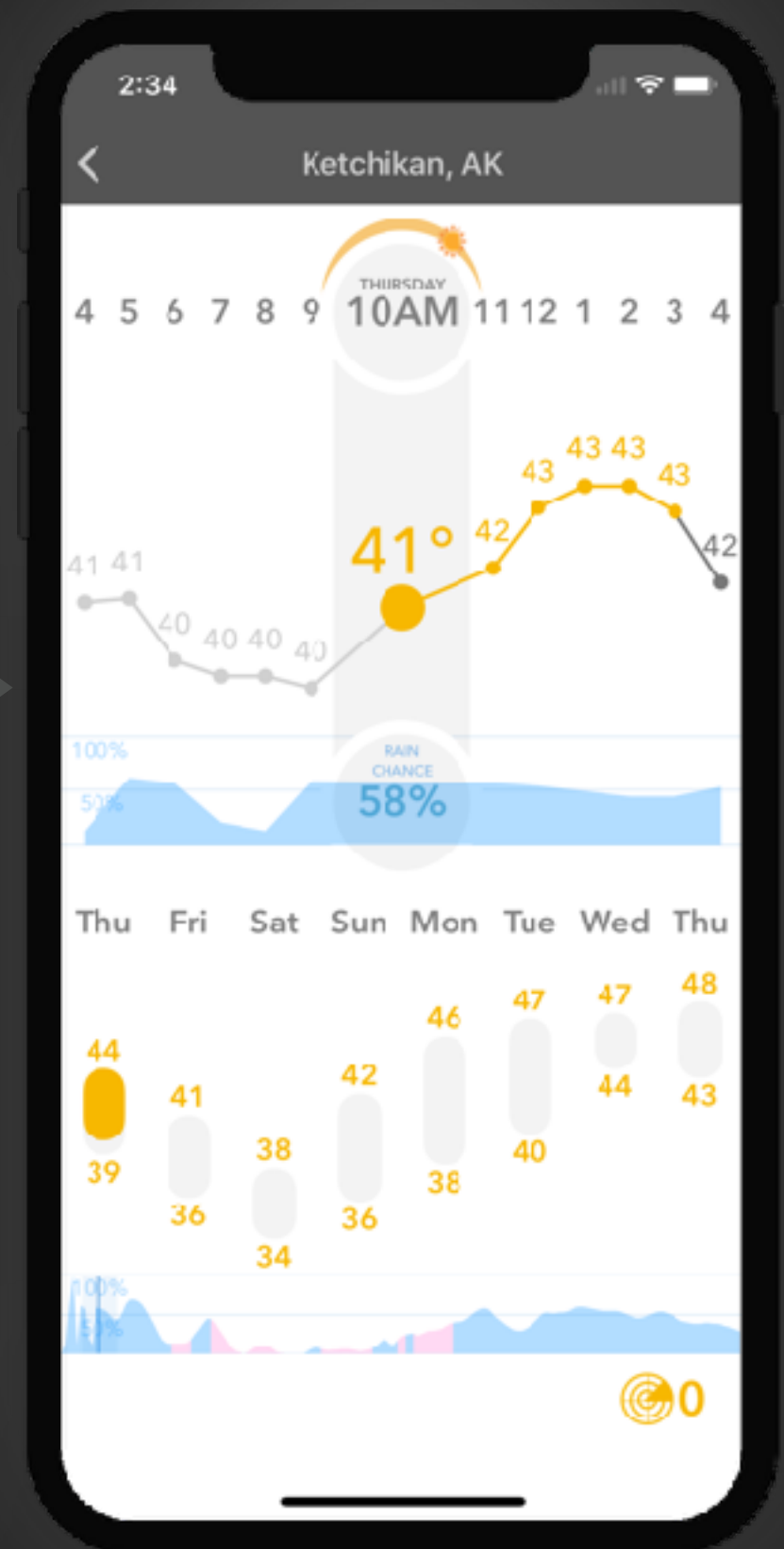
Segments are stored as arrays of CGRects

Multiple circles (UIBezierPaths) required for feature orbs and arcs

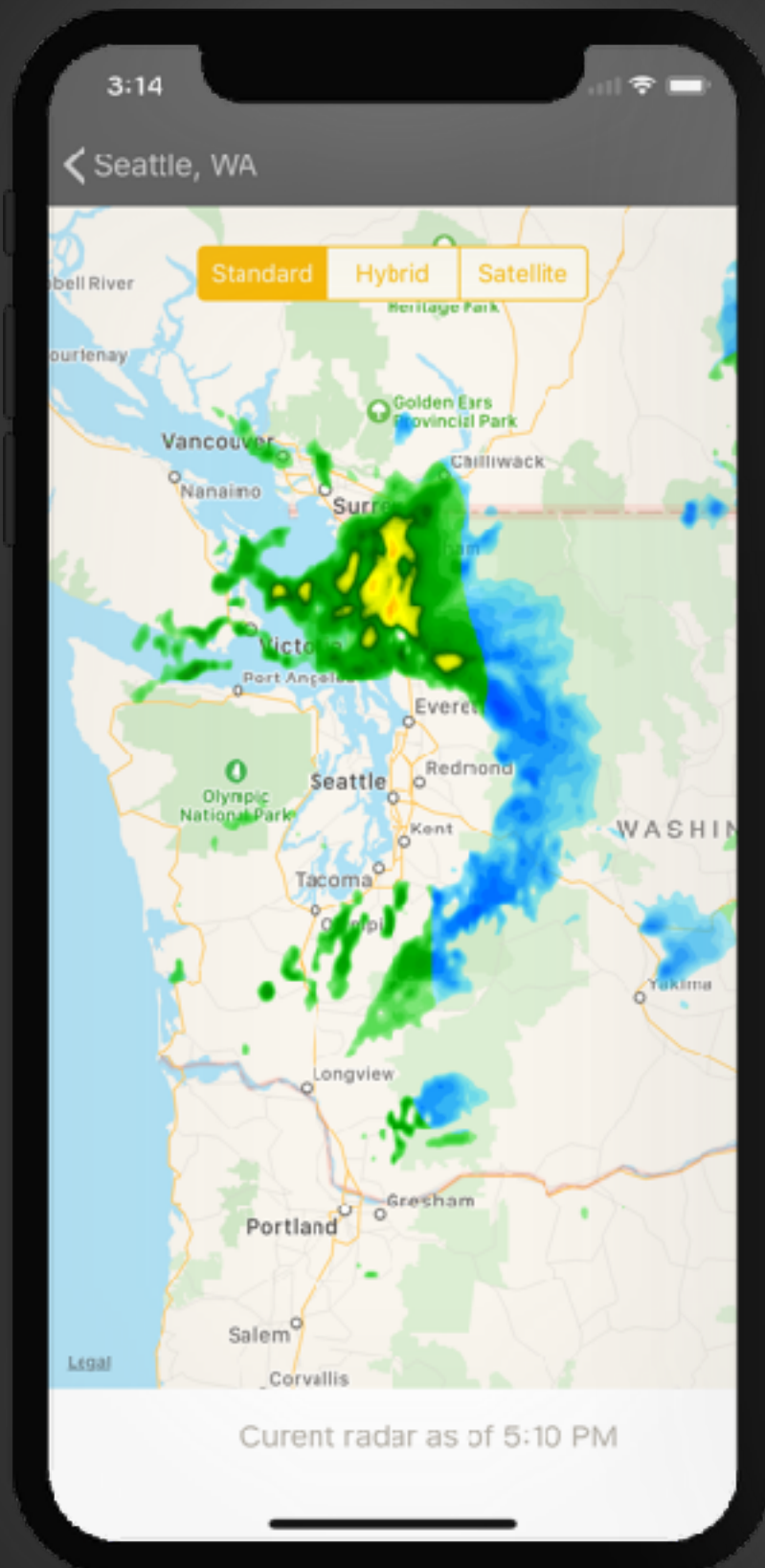Rects within circles used for labels (lots of math 📐)

Ancillary Screens

Radar

‹ Seattle, WA

Standard | Hybrid | Satellite

Current radar as of 5:10 PM

Weather Alert

‹ 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.LOXCFWLOX.c6acdbc06450a
eaa043ea561bee64d53

...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 MORRO 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

‹ 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