GETTING STARTED WITH WEATHER KIT IN iOS

Using Apple’s native weather API in real-world apps

Powered by WeatherKit

By Shubam Gupta

Why Do Apps Need Weather Data?

Many apps need weather:

- Travel apps
- Ride tracking apps
- EV charging apps
- Outdoor sports apps
- Agriculture apps

👉 Weather improves user experience & personalisation.

What is WeatherKit?

WeatherKit is **Apple's official framework** introduced at WWDC 2022

It provides:

- Current weather
- Hourly forecast
- 10-day forecast
- Weather alerts
- Historical data

It powers the native Apple Weather app.

Is It Free?

Included with **Apple Developer Program**

✔️ **500,000 API** calls per month free

❌ **Not unlimited**

💰 Paid tiers available for higher usage

👉 For most mid-size apps, **500k/month** is more than enough.

How WeatherKit Works

Direct iOS App Integration.

iOS App → WeatherKit → Apple Weather Servers

Best for:

- iOS-only apps
- Small-to-medium apps

Step-by-Step Setup

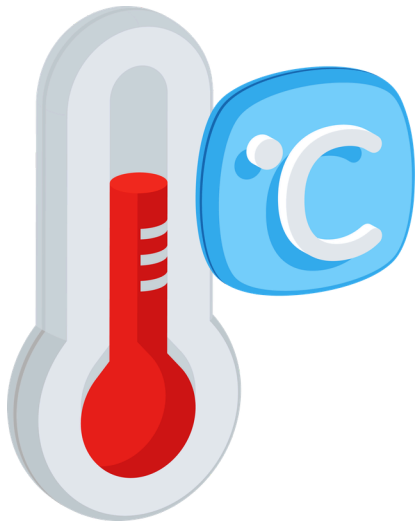
1. Enable WeatherKit Capability
    - **Xcode** → Signing & Capabilities
    - Add **WeatherKit**
2. Import Framework
    - **import WeatherKit**
    - **import CoreLocation**

3.Fetch Weather by Latitude & Longitude

```swift
let service = WeatherService()

let location = CLLocation(
    latitude: 12.9716,
    longitude: 77.5946
)

Task {
    do {
        let weather = try await service.weather(for: location)
        print(weather.currentWeather.temperature)
    } catch {
        print(error)
    }
}
```



👉 **Highlight:**

- Uses async/await
- Native Swift concurrency
- Very clean API

What Data Can You Access?

🌡️ CurrentWeather

- Temperature
- Humidity
- Wind speed
- UV Index

🕒 HourlyForecast

- Hourly temperature
- Precipitation chance

📅 DailyForecast

- High/Low temperature
- Sunrise/Sunset

⚠️ Alerts

- Severe weather warnings

Important Best Practices

This makes your post look strong 💪

✓ Do not call API every minute

✓ Cache responses (weather updates every 10–30 mins usually)

✓ Use CoreLocation carefully (privacy first)

✓ Avoid exposing REST tokens in client apps

✓ Handle API errors properly

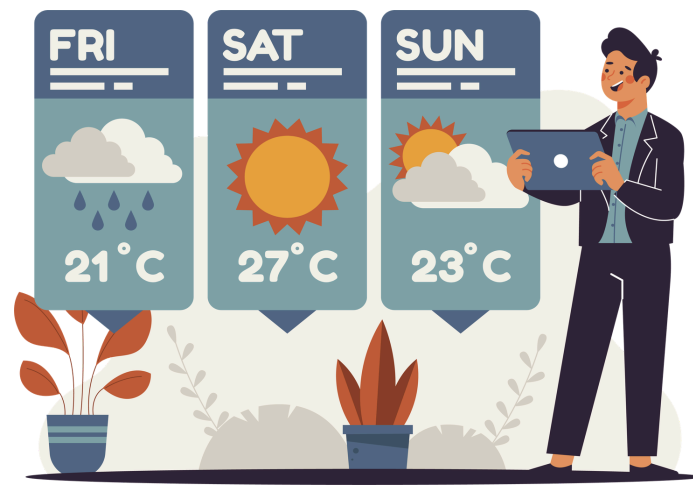
Common Mistakes Beginners Make

❌ Forgetting to enable capability

❌ Not handling location permission

❌ Making too many API calls

❌ Not handling async errors



When Should You Use WeatherKit? - Use it if:

- Your app is iOS-first
- You want Apple ecosystem alignment
- You want privacy-first approach
- You stay under 500k calls/month

THANK YOU!

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