

Xcode 16 Highlights

Transform your ideas into code with predictive code completion and faster previews. Supercharge your builds with explicit modules. Get deeper insight into your app's performance with improved diagnostics. And easily write tests with the new Swift Testing framework.

Predictive code completion

- The new coding model is specifically trained for Swift and Apple SDKs.
- The model runs locally on your Mac, keeps your code private, and even works when you're offline.
- Xcode automatically downloads and updates the model with the latest SDK and language changes.

Swift Assist

Swift Assist* can answer your coding questions using natural language, and help with tasks like experimenting with new APIs.

- Swift Assist knows Apple's latest SDKs and Swift language features.
- It runs in the cloud and is built with privacy and security in mind.
- Your code is never stored on the server, and Apple doesn't use it for training machine learning models.

*Swift Assist is coming later this year.

Swift Testing

- Expressive APIs help you write tests easily and test results are inline with your code, so you can easily see where a test failed.
- Tags enable you to selectively run tests based on specified criteria.
- Macros like `#expect` let you capture complex expressions and provide rich, detailed output when a test fails.
- Parameterization lets you easily run the same test over a series of values.

Additional features

- A single view of your backtraces shows relevant code from all stack frames together.
- Access a new flame graph of your profiling data in Instruments.
- Enhancements to string catalogs assist with localization.
- Explicitly built modules improve build performance and reliability.