Structure

SystemLanguageModel.Adapter

Specializes the system language model for custom use cases.

iOS 26.0+ | iPadOS 26.0+ | Mac Catalyst 26.0+ | macOS 26.0+ | visionOS 26.0+

```
struct Adapter
```

Mentioned in

Loading and using a custom adapter with Foundation Models

Overview

Use the base system model for most prompt engineering, guided generation, and tools. If you need to specialize the model, train a custom `Adapter` to alter the system model weights and optimize it for your custom task. Use custom adapters only if you're comfortable training foundation models in Python.

Important

Be sure to re-train the adapter for every new version of the base system model that Apple releases. Adapters consume a large amount of storage space and isn't recommended for most apps.

For more on custom adapters, see Get started with Foundation Models adapter training.

Topics

Creating an adapter

Loading and using a custom adapter with Foundation Models

Specialize the behavior of the system language model by using a custom adapter you train.

`com.apple.developer.foundation-model-adapter`

A Boolean value that indicates whether the app can enable custom adapters for the Foundation Models framework.

`init(fileURL: URL) throws`

Creates an adapter from the file URL.

`init(name: String) throws`

Creates an adapter downloaded from the background assets framework.

Prepare the adapter

`func compile() async throws`

Prepares an adapter before being used with a `LanguageModelSession`. You should call this if your adapter has a draft model.

Getting the metadata

`var creatorDefinedMetadata: [String : Any]`

Values read from the creator defined field of the adapter's metadata.

Removing obsolete adapters

`static func removeObsoleteAdapters() throws`

Remove all obsolete adapters that are no longer compatible with current system models.

Checking compatibility

`static func compatibleAdapterIdentifiers(name: String) -> [String]`

Get all compatible adapter identifiers compatible with current system models.

`static func isCompatible(AssetPack) -> Bool`

Returns a Boolean value that indicates whether an asset pack is an on-device foundation model adapter and is compatible with the system base model version on the runtime device.

Getting the asset error

`enum AssetError`

See Also

Loading the model with an adapter

Loading and using a custom adapter with Foundation Models

Specialize the behavior of the system language model by using a custom adapter you train.

`com.apple.developer.foundation-model-adapter`

A Boolean value that indicates whether the app can enable custom adapters for the Foundation Models framework.

`convenience init(adapter: SystemLanguageModel.Adapter, guardrails: SystemLanguageModel.Guardrails)`

Creates the base version of the model with an adapter.