## UGemini 1.2.3

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# **Chapter 1**

# **Namespace Index**

## 1.1 Package List

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# **Chapter 2**

# **Hierarchical Index**

## 2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

| Exception  |
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| Uralstech.UGemini.Exceptions.GeminiRequestException                    |
| Uralstech.UGemini.Chat.GeminiAttributionSourceId                       |
| Uralstech.UGemini.Chat.GeminiCitationMetadata                          |
| Uralstech.UGemini.Chat.GeminiCitationSource                            |
| Uralstech.UGemini.GeminiContentBlob                                    |
| Uralstech.UGemini.FileAPI.GeminiFile                                   |
| Uralstech.UGemini.GeminiFileData                                       |
| Uralstech.UGemini.FileAPI.GeminiFileListResponse                       |
| Uralstech.UGemini.FileAPI.GeminiFileUploadMetaData                     |
| Uralstech.UGemini.FileAPI.GeminiFileUploadResponse                     |
| Uralstech.UGemini.FileAPI.GeminiFileVideoMetaData                      |
| Uralstech.UGemini.Tools.GeminiFunctionCall                             |
| Uralstech.UGemini.Tools.Declaration.GeminiFunctionCallingConfiguration |
| Uralstech.UGemini.Tools.Declaration.GeminiFunctionDeclaration          |
| Uralstech.UGemini.Tools.GeminiFunctionResponse                         |
| Uralstech.UGemini.Tools.GeminiFunctionResponseContent                  |
| Uralstech.UGemini.Chat.GeminiGenerationConfiguration                   |
| Uralstech.UGemini.Chat.GeminiGroundingAttribution                      |
| Uralstech.UGemini.Chat.GeminiGroundingPassageId                        |
| Uralstech.UGemini.GeminiRequestMetadata                                |
| Uralstech.UGemini.Chat.GeminiSafetyRating                              |
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| Uralstech.UGemini.Tools.Declaration.GeminiToolConfiguration            |
| Uralstech.UGemini.IAppendableData< T >                                 |
| Uralstech.UGemini.IAppendableData< GeminiCandidate >                   |
| Uralstech.UGemini.Chat.GeminiCandidate                                 |
| Uralstech.UGemini.IAppendableData < GeminiChatResponse >               |
| Uralstech.UGemini.Chat.GeminiChatResponse                              |

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| MonoBehaviour  |                |
| $\label{eq:constraint} Ural steech. UGe mini. Utils. Singleton. Singleton < T > \dots \dots$ |                |
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# **Chapter 3**

# **Class Index**

## 3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

| Uralstech.UGemini.Chat.GeminiAttributionSourceId  |    |
|---|----|
| Identifier for the source contributing to this attribution                                      | 19 |
| Uralstech.UGemini.Chat.GeminiCandidate  |    |
| A response candidate generated from the model   | 19 |
| Uralstech.UGemini.Chat.GeminiChatRequest  |    |
| Request to generate a response from the model   | 21 |
| Uralstech.UGemini.Chat.GeminiChatResponse   |    |
| Response from the model supporting multiple candidates  | 24 |
| Uralstech.UGemini.Chat.GeminiCitationMetadata   |    |
| A collection of source attributions for a piece of content                                      | 25 |
| Uralstech.UGemini.Chat.GeminiCitationSource   |    |
| A citation to a source for a portion of a specific response                                     | 26 |
| Uralstech.UGemini.GeminiContent   |    |
| The base structured datatype containing multi-part content of a message                         | 27 |
| Uralstech.UGemini.GeminiContentBlob   |    |
| Raw media bytes   | 29 |
| Uralstech.UGemini.GeminiContentPart   |    |
| A datatype containing media that is part of a multi-part Content message. Must only contain one |    |
| field at a time   | 30 |
| Uralstech.UGemini.FileAPI.GeminiFile  |    |
| Metadata for a file uploaded to the File API  | 32 |
| Uralstech.UGemini.GeminiFileData  |    |
| URI based data  | 33 |
| Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest   |    |
| Requests the deletion of a file   | 34 |
| Uralstech.UGemini.FileAPI.GeminiFileGetRequest  |    |
| Requests metadata for an existing file. Return type is GeminiFile                               | 36 |
| Uralstech.UGemini.FileAPI.GeminiFileListRequest   |    |
| Requests metadata for all existing files. Return type is GeminiFileListResponse                 | 37 |
| Uralstech.UGemini.FileAPI.GeminiFileListResponse  |    |
| The response for a GeminiFileListRequest call   | 39 |
| Uralstech.UGemini.FileAPI.GeminiFileUploadMetaData  |    |
| Metadata for a GeminiFile to be uploaded  | 39 |
| Uralstech.UGemini.FileAPI.GeminiFileUploadRequest   |    |
| Uploads a file to the Gemini File API. Response type is GeminiFileUploadResponse                | 40 |

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| Metadata for a video GeminiFile   | 43 |
| Uralstech.UGemini.Tools.GeminiFunctionCall  |    |
| A predicted FunctionCall returned from the model that contains a string representing the          |    |
| FunctionDeclaration.name with the arguments and their values                                      | 43 |
| Uralstech.UGemini.Tools.Declaration.GeminiFunctionCallingConfiguration                            |    |
| Configuration for specifying function calling behavior  | 44 |
| Uralstech.UGemini.Tools.Declaration.GeminiFunctionDeclaration                                     |    |
| Structured representation of a function declaration as defined by the OpenAPI 3.03 specification. |    |
| Included in this declaration are the function name and parameters. This FunctionDeclaration is    |    |
| a   |    |
| representation of a block of code that can be used as a Tool by the model and executed by the     |    |
| client  | 45 |
| Uralstech.UGemini.Tools.GeminiFunctionResponse  |    |
| The result output from a GeminiFunctionCall that contains a string representing the               |    |
| Declaration.GeminiFunctionDeclaration.Name and a structured JSON object containing any            |    |
| output from the function is used as context to the model. This should contain the result of a     |    |
| GeminiFunctionCall made based on model prediction   | 46 |
| Uralstech.UGemini.Tools.GeminiFunctionResponseContent   |    |
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## **Chapter 4**

# **Namespace Documentation**

## 4.1 Uralstech Namespace Reference

### 4.2 Uralstech. UGemini Namespace Reference

### Classes

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Extensions for Enum type objects.

class GeminiContent

The base structured datatype containing multi-part content of a message.

class GeminiContentBlob

Raw media bytes.

· class GeminiContentPart

A datatype containing media that is part of a multi-part Content message. Must only contain one field at a time.

· class GeminiFileData

URI based data.

· class GeminiManager

The class for accessing the Gemini API!

class GeminiRequestMetadata

Metadata about a computation request.

• interface IAppendableData

An interface for data that is to be appended to at runtime.

interface IGeminiDeleteRequest

All Gemini API DELETE requests must inherit from this interface.

interface IGeminiGetRequest

All Gemini API GET requests must inherit from this interface.

• interface IGeminiMultiPartPostRequest

All Gemini API POST requests with multi-part data must inherit from this interface.

interface IGeminiPostRequest

All Gemini API POST requests must inherit from this interface.

interface IGeminiRequest

All Gemini API requests must inherit from this interface.

interface IGeminiStreamablePostRequest

All streamed Gemini API POST requests must inherit from this interface.

class UnityExtensions

Extensions for Unity types.

### **Enumerations**

```
enum GeminiContentType {
 ImagePNG, ImageJPEG, ImageHEIC, ImageHEIF,
 ImageWebP, AudioWAV, AudioMP3, AudioAIFF,
 AudioAAC, AudioOGG, AudioFLAC, VideoMP4,
 VideoMPEG, VideoMOV, VideoAVI, VideoXFLV,
 VideoMPG, VideoWebM, VideoWMV, Video3GPP,
 TextPlain, TextHTML, TextCSS, TextJavaScript,
 TextXTypeScript, TextCSV, TextMarkdown, TextXPython,
 TextXML, TextRTF, ApplicationXJavaScript, ApplicationXTypeScript,
 ApplicationXPython, ApplicationJSON, ApplicationRTF }
     Enum for the types of content able to be fed to the Gemini API.
• enum GeminiRole { Unspecified , User , Assistant , ToolResponse }
     The role of a Gemini content creator.

    enum GeminiSafetyHarmCategory {

 Unspecified, Derogatory, Toxicity, Violence,
 Sexual, Medical, Dangerous, Harassment,
 HateSpeech , SexuallyExplicit , DangerousContent }
     The category of a rating.
```

### 4.2.1 Enumeration Type Documentation

### 4.2.1.1 GeminiContentType

```
enum Uralstech.UGemini.GeminiContentType
```

Enum for the types of content able to be fed to the Gemini API.

### **Enumerator**

| ImagePNG A PNG image.  ImageJPEG A JPEG image.  ImageHEIC A HEIC image.  ImageWebP A WebP image.  AudioWAV WAV encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoMPG MPG encoded video.  VideoMPG MPG encoded video.  VideoMPG MPG encoded video. |
|--|
| ImageHEIC A HEIC image.  ImageHEIF A HEIF image.  ImageWebP A WebP image.  AudioWAV WAV encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| ImageHEIF A HEIF image.  ImageWebP A WebP image.  AudioWAV WAV encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| ImageWebP A WebP image.  AudioWAV WAV encoded audio.  AudioMP3 MP3 encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| AudioWAV WAV encoded audio.  AudioMP3 MP3 encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| AudioMP3 MP3 encoded audio.  AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| AudioAIFF AIFF encoded audio.  AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| AudioAAC AAC encoded audio.  AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| AudioOGG OGG encoded audio.  AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| AudioFLAC FLAC encoded audio.  VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| VideoMP4 MP4 encoded video.  VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| VideoMPEG MPEG encoded video.  VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| VideoMOV MOV encoded video.  VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.   |
| VideoAVI AVI encoded video.  VideoXFLV FLV encoded video.  |
| VideoXFLV FLV encoded video.   |
|  |
| VideoMDC MDC anaded video  |
| VideoMPG WPG encoded video.  |
| VideoWebM WebM encoded video.  |
| VideoWMV WMV encoded video.  |
| Video3GPP 3GPP encoded video.  |
| TextPlain (File API) Plain text.   |

### Enumerator

| TextHTML               | (File API) HTML text.                      |
|------------------------|--|
| TextCSS                | (File API) CSS text.                       |
| TextJavaScript         | (File API) JavaScript text.                |
| TextXTypeScript        | (File API) TypeScript text.                |
| TextCSV                | (File API) CSV text.                       |
| TextMarkdown           | (File API) Markdown text.                  |
| TextXPython            | (File API) Python text.                    |
| TextXML                | (File API) XML text.                       |
| TextRTF                | (File API) RTF text.                       |
| ApplicationXJavaScript | (File API) Application JavaScript content. |
| ApplicationXTypeScript | (File API) Application TypeScript content. |
| ApplicationXPython     | (File API) Application Python content.     |
| ApplicationJSON        | (File API) Application JSON content.       |
| ApplicationRTF         | (File API) Application RTF content.        |

### 4.2.1.2 GeminiRole

enum Uralstech.UGemini.GeminiRole

The role of a Gemini content creator.

### Enumerator

| Unspecified  | Don't use this.   |
|--------------|---|
| User         | The content was made by the user.                                   |
| Assistant    | The content was made by the model.                                  |
| ToolResponse | The content was made by a function. Only available in the beta API. |

## 4.2.1.3 GeminiSafetyHarmCategory

enum Uralstech.UGemini.GeminiSafetyHarmCategory

The category of a rating.

### Enumerator

| Unspecified      | Category is unspecified.  |
|------------------|---|
| Derogatory       | Negative or harmful comments targeting identity and/or protected attribute.                             |
| Toxicity         | Content that is rude, disrespectful, or profane.  |
| Violence         | Describes scenarios depicting violence against an individual or group, or general descriptions of gore. |
| Sexual           | Contains references to sexual acts or other lewd content.   |
| Medical          | Promotes unchecked medical advice.  |
| Dangerous        | Dangerous content that promotes, facilitates, or encourages harmful acts.                               |
| Harassment       | Harasment content.  |
| HateSpeech       | Hate speech and content.  |
| SexuallyExplicit | Sexually explicit content.  |
| DangerousContent | Dangerous content.  |

## 4.3 Uralstech.UGemini.Chat Namespace Reference

#### Classes

· class GeminiAttributionSourceId

Identifier for the source contributing to this attribution.

· class GeminiCandidate

A response candidate generated from the model.

class GeminiChatRequest

Request to generate a response from the model.

class GeminiChatResponse

Response from the model supporting multiple candidates.

· class GeminiCitationMetadata

A collection of source attributions for a piece of content.

· class GeminiCitationSource

A citation to a source for a portion of a specific response.

class GeminiGenerationConfiguration

Configuration options for model generation and outputs. Not all parameters may be configurable for every model.

· class GeminiGroundingAttribution

Attribution for a source that contributed to an answer.

· class GeminiGroundingPassageId

Identifier for a part within a GroundingPassage.

class GeminiPromptFeedback

A set of the feedback metadata the prompt specified in GeminiChatResponse.Candidates.

class GeminiSafetyRating

Safety rating for a piece of content.

class GeminiSafetySettings

Safety setting, affecting the safety-blocking behavior.

· class GeminiSemanticRetrieverChunk

Identifier for a Chunk retrieved via Semantic Retriever specified in the GenerateAnswerRequest using Semantic←RetrieverConfig.

· class GeminiUsageMetadata

Metadata on the generation request's token usage.

### **Enumerations**

enum GeminiResponseType { Unspecified , PlainText , Json }

The response type for Gemini model responses.

enum GeminiSafetyHarmBlockThreshold {
 Unspecified , LowAndAbove , MediumAndAbove , OnlyHigh ,
 None }

Block at and beyond a specified harm probability.

enum GeminiFinishReason {
 Unspecified , Stop , MaxTokens , Safety ,
 Recitation , Other }

Defines the reason why the model stopped generating tokens.

enum GeminiBlockReason { Unspecified , Safety , Other }

Specifies what was the reason why prompt was blocked.

enum GeminiHarmProbability {
 Unspecified , Negligible , Low , Medium ,
 High }

The probability that a piece of content is harmful.

## 4.3.1 Enumeration Type Documentation

### 4.3.1.1 GeminiBlockReason

enum Uralstech.UGemini.Chat.GeminiBlockReason

Specifies what was the reason why prompt was blocked.

### Enumerator

| Unspecified | Default value. This value is unused.   |
|-------------|--|
| Safety      | Prompt was blocked due to safety reasons. You can inspect                          |
|             | GeminiPromptFeedback.SafetyRatings to understand which safety category blocked it. |
| Other       | Prompt was blocked due to unknown reasons.   |

### 4.3.1.2 GeminiFinishReason

enum Uralstech.UGemini.Chat.GeminiFinishReason

Defines the reason why the model stopped generating tokens.

### Enumerator

| Unspecified | Default value. This value is unused.                                  |
|-------------|---|
| Stop        | Natural stop point of the model or provided stop sequence.            |
| MaxTokens   | The maximum number of tokens as specified in the request was reached. |
| Safety      | The candidate content was flagged for safety reasons.                 |
| Recitation  | The candidate content was flagged for recitation reasons.             |
| Other       | Unknown reason.   |

### 4.3.1.3 GeminiHarmProbability

enum Uralstech.UGemini.Chat.GeminiHarmProbability

The probability that a piece of content is harmful.

The classification system gives the probability of the content being unsafe. This does not indicate the severity of harm for a piece of content.

### Enumerator

| Unspecified | Probability is unspecified.                      |
|-------------|--|
| Negligible  | Content has a negligible chance of being unsafe. |
| Low         | Content has a low chance of being unsafe.        |
| Medium      | Content has a medium chance of being unsafe.     |
| High        | Content has a high chance of being unsafe.       |

### 4.3.1.4 GeminiResponseType

enum Uralstech.UGemini.Chat.GeminiResponseType

The response type for Gemini model responses.

### Enumerator

| Unspecified | Unspecified, don't use.             |
|-------------|-------------------------------------|
| PlainText   | (default) Plain text response type. |
| Json        | JSON response type.                 |

### 4.3.1.5 GeminiSafetyHarmBlockThreshold

enum Uralstech.UGemini.Chat.GeminiSafetyHarmBlockThreshold

Block at and beyond a specified harm probability.

### Enumerator

| Unspecified    | Threshold is unspecified.   |
|----------------|---|
| LowAndAbove    | Content with GeminiHarmProbability.Negligible will be allowed.                      |
| MediumAndAbove | Content with GeminiHarmProbability.Negligible and GeminiHarmProbability.Low will be |
|                | allowed.  |
| OnlyHigh       | Content with GeminiHarmProbability.Negligible, GeminiHarmProbability.Low, and       |
|                | GeminiHarmProbability.Medium will be allowed.                                       |
| None           | All content will be allowed.  |

## 4.4 Uralstech. UGemini. Exceptions Namespace Reference

### Classes

• class GeminiRequestException

Thrown when a Gemini API request fails.

## 4.5 Uralstech.UGemini.FileAPI Namespace Reference

### Classes

· class GeminiFile

Metadata for a file uploaded to the File API.

• class GeminiFileDeleteRequest

Requests the deletion of a file.

· class GeminiFileGetRequest

Requests metadata for an existing file. Return type is GeminiFile.

• class GeminiFileListRequest

Requests metadata for all existing files. Return type is GeminiFileListResponse.

· class GeminiFileListResponse

The response for a GeminiFileListRequest call.

class GeminiFileUploadMetaData

Metadata for a GeminiFile to be uploaded.

• class GeminiFileUploadRequest

Uploads a file to the Gemini File API. Response type is GeminiFileUploadResponse.

• class GeminiFileUploadResponse

Response for a file upload request.

· class GeminiFileVideoMetaData

Metadata for a video GeminiFile.

· class GeminiTimeSpanJsonConverter

Custom JSON converter to convert a time string of a format like "10.334s" to a TimeSpan.

#### **Enumerations**

• enum GeminiFileState { Unspecified , Processing , Active , Failed } States for the lifecycle of a File.

### 4.5.1 Enumeration Type Documentation

### 4.5.1.1 GeminiFileState

```
enum Uralstech.UGemini.FileAPI.GeminiFileState
```

States for the lifecycle of a File.

#### **Enumerator**

| Unspecified | The default value. This value is used if the state is omitted. |
|-------------|--|
| Processing  | File is being processed and cannot be used for inference yet.  |
| Active      | File is processed and available for inference.                 |
| Failed      | File failed processing.  |

## 4.6 Uralstech. UGemini. Schema Namespace Reference

### **Classes**

class GeminiSchema

The Schema object allows the definition of input and output data types. These types can be objects, but also primitives and arrays. Represents a select subset of an OpenAPI 3.0 schema object.

### **Enumerations**

```
    enum GeminiSchemaDataFormat {
        Unspecified , Float , Double , Int ,
        Long , Enum , Base64Bytes , Binary ,
        Date , DateTime }
```

Defines the format of schema data.

enum GeminiSchemaDataType {
 Unspecified , String , Float , Integer ,
 Boolean , Array , Object }

Contains the list of OpenAPI data types as defined by the OpenAPI Specification.

### 4.6.1 Enumeration Type Documentation

### 4.6.1.1 GeminiSchemaDataFormat

enum Uralstech. UGemini. Schema. Gemini Schema Data Format

Defines the format of schema data.

### Enumerator

| Unspecified | Unspecified, don't use.                                  |
|-------------|--|
| Float       | Equivalent to float.                                     |
| Double      | Equivalent to double.                                    |
| Int         | Equivalent to int.                                       |
| Long        | Equivalent to long.                                      |
| Enum        | A string enum value.                                     |
| Base64Bytes | A base64 encoded string of bytes.                        |
| Binary      | A string of "any sequence of octets".                    |
| Date        | Date string as defined by full-date - RFC 3339.          |
| DateTime    | Date and time string as defined by date-time - RFC 3339. |

### 4.6.1.2 GeminiSchemaDataType

enum Uralstech.UGemini.Schema.GeminiSchemaDataType

Contains the list of OpenAPI data types as defined by the OpenAPI Specification.

### **Enumerator**

| Unspecified | Not specified, should not be used. |
|-------------|------------------------------------|
| String      | String type.                       |
| Float       | Number/Float type.                 |
| Integer     | Integer type.                      |
| Boolean     | Boolean type.                      |
| Array       | Array type.                        |
| Object      | Object type.                       |

## 4.7 Uralstech.UGemini.Status Namespace Reference

### **Classes**

· class GeminiStatus

The GeminiStatus type defines a logical error model that is suitable for different programming environments, including REST APIs and RPC APIs. It is used by gRPC.

· class GeminiStatusDetails

An object containing fields of an arbitrary type.

## 4.8 Uralstech.UGemini.TokenCounting Namespace Reference

### Classes

· class GeminiTokenCountRequest

Request to count tokens in given content.

· class GeminiTokenCountResponse

A response from CountTokens.

### 4.9 Uralstech. UGemini. Tools Namespace Reference

#### Classes

· class GeminiFunctionCall

A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaration.name with the arguments and their values.

class GeminiFunctionResponse

The result output from a GeminiFunctionCall that contains a string representing the Declaration.GeminiFunctionDeclaration.Name and a structured JSON object containing any output from the function is used as context to the model. This should contain the result of a GeminiFunctionCall made based on model prediction.

· class GeminiFunctionResponseContent

The response of a Gemini function call. Based on the Protocol Buffer Struct type.

### 4.10 Uralstech. UGemini. Tools. Declaration Namespace Reference

### Classes

· class GeminiFunctionCallingConfiguration

Configuration for specifying function calling behavior.

• class GeminiFunctionDeclaration

Structured representation of a function declaration as defined by the OpenAPI 3.03 specification. Included in this declaration are the function name and parameters. This FunctionDeclaration is a representation of a block of code that can be used as a Tool by the model and executed by the client.

class GeminiTool

Tool details that the model may use to generate response.

class GeminiToolConfiguration

The Tool configuration containing parameters for specifying Tool use in the request.

### **Enumerations**

• enum GeminiFunctionCallingMode { Unspecified , Auto , Any , None }

Defines the execution behavior for function calling by defining the execution mode.

### 4.10.1 Enumeration Type Documentation

### 4.10.1.1 GeminiFunctionCallingMode

enum Uralstech.UGemini.Tools.Declaration.GeminiFunctionCallingMode

Defines the execution behavior for function calling by defining the execution mode.

### **Enumerator**

| Unspecified | Unspecified function calling mode. This value should not be used.                                       |
|-------------|---|
| Auto        | Default model behavior, model decides to predict either a function call or a natural language response. |
|             | response.   |
| Any         | Model is constrained to always predicting a function call only. If                                      |
|             | GeminiFunctionCallingConfiguration.AllowedFunctionNames is set, the predicted function call             |
|             | will be limited to any one of GeminiFunctionCallingConfiguration.AllowedFunctionNames, else             |
|             | the predicted function call will be any one of the provided GeminiTool.FunctionDeclarations.            |
| None        | Model will not predict any function call. Model behavior is same as when not passing any                |
|             | function declarations.  |

## 4.11 Uralstech.UGemini.Utils Namespace Reference

## 4.12 Uralstech.UGemini.Utils.Singleton Namespace Reference

### Classes

• class Singleton

Utility class to make inheriting types singletons.

## 4.13 Uralstech.UGemini.Utils.Web Namespace Reference

### **Classes**

• class WebRequestHelper

## **Chapter 5**

## **Class Documentation**

### 5.1 Uralstech.UGemini.Chat.GeminiAttributionSourceld Class Reference

Identifier for the source contributing to this attribution.

### **Public Attributes**

- GeminiGroundingPassageId GroundingPassage
   Identifier for an inline passage.
- GeminiSemanticRetrieverChunk SemanticRetrieverChunk

Identifier for a Chunk fetched via Semantic Retriever.

### 5.1.1 Detailed Description

Identifier for the source contributing to this attribution.

The documentation for this class was generated from the following file:

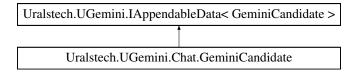
UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Attribution/Gemini

 — AttributionSourceId.cs

### 5.2 Uralstech. UGemini. Chat. Gemini Candidate Class Reference

A response candidate generated from the model.

Inheritance diagram for Uralstech.UGemini.Chat.GeminiCandidate:



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### **Public Member Functions**

void Append (GeminiCandidate data)

### Public Member Functions inherited from Uralstech.UGemini.IAppendableData< GeminiCandidate >

· void Append (T data)

Appends the data to the current IAppendableData<T>.

### **Public Attributes**

• GeminiContent Content

Generated content returned from the model.

· GeminiFinishReason FinishReason

The reason why the model stopped generating tokens.

GeminiSafetyRating[] SafetyRatings

List of ratings for the safety of a response candidate There is at most one rating per category.

• GeminiCitationMetadata CitationMetadata

Citation information for model-generated candidate.

int TokenCount

Token count for this candidate.

· GeminiGroundingAttribution GroundingAttributions

Attribution information for sources that contributed to a grounded answer.

• int Index

Index of the candidate in the list of candidates.

### 5.2.1 Detailed Description

A response candidate generated from the model.

### 5.2.2 Member Data Documentation

### 5.2.2.1 CitationMetadata

GeminiCitationMetadata Uralstech.UGemini.Chat.GeminiCandidate.CitationMetadata

Citation information for model-generated candidate.

This field may be populated with recitation information for any text included in Content.

These are passages that are "recited" from copyrighted material in the foundational LLM's training data.

### 5.2.2.2 GroundingAttributions

 ${\tt GeminiGroundingAttribution}\ \ {\tt Uralstech.UGemini.Chat.GeminiCandidate.GroundingAttributions}$ 

Attribution information for sources that contributed to a grounded answer.

This field is populated for GenerateAnswer calls.

Only available in the beta API.

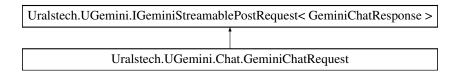
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/GeminiCandidate.cs

### 5.3 Uralstech. UGemini. Chat. Gemini Chat Request Class Reference

Request to generate a response from the model.

Inheritance diagram for Uralstech.UGemini.Chat.GeminiChatRequest:



### **Public Member Functions**

- string **GetEndpointUri** (GeminiRequestMetadata metadata)
- GeminiChatRequest (string model=GeminiManager.Gemini1\_5Flash, bool useBetaApi=false)
   Creates a new GeminiChatRequest.
- string GetUtf8EncodedData ()
- async Task ProcessStreamedData (List < JToken > allEvents, JToken lastEvent)

### **Public Member Functions inherited from**

Uralstech.UGemini.IGeminiStreamablePostRequest< GeminiChatResponse >

Task ProcessStreamedData (List< JToken > allEvents, JToken lastEvent)
 Callback to process Server Sent Events (SSEs).

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### **Public Attributes**

• GeminiContent[] Contents

The content of the current conversation with the model.

• GeminiTool[] Tools = null

A list of Tools the model may use to generate the next response.

• GeminiToolConfiguration ToolConfig = null

Tool configuration for any Tool specified in the request.

• GeminiSafetySettings[] SafetySettings = null

A list of unique GeminiSafetySettings instances for blocking unsafe content.

• GeminiContent SystemInstruction = null

Developer set system instruction. Currently, text only.

• GeminiGenerationConfiguration GenerationConfig = null

Configuration options for model generation and outputs.

string CachedContent = null

The name of the cached content used as context to serve the prediction. Format: cachedContents/{cachedContent}.

· string Model

The model to use.

string ApiVersion

The API version to use.

 $\bullet \ \, \mathsf{Func} \! < \! \mathsf{GeminiChatResponse}, \mathsf{Task} > \mathbf{OnPartialResponseReceived} \\$ 

Callback for receiving streamed responses.

### **Properties**

- string ContentType [get]
- GeminiChatResponse StreamedResponse [get]

The streamed response.

### **Properties inherited from**

Uralstech.UGemini.IGeminiStreamablePostRequest< GeminiChatResponse >

• TResponse StreamedResponse [get]

The response being streamed.

### 5.3.1 Detailed Description

Request to generate a response from the model.

### 5.3.2 Constructor & Destructor Documentation

### 5.3.2.1 GeminiChatRequest()

Creates a new GeminiChatRequest.

#### **Parameters**

| model      | The model to use.                    |
|------------|--------------------------------------|
| useBetaApi | Should the request use the Beta API? |

### 5.3.3 Member Data Documentation

### 5.3.3.1 CachedContent

string Uralstech.UGemini.Chat.GeminiChatRequest.CachedContent = null

The name of the cached content used as context to serve the prediction. Format: cachedContents/{cachedContent}.

Note: only used in explicit caching, where users can have control over caching (e.g. what content to cache) and enjoy guaranteed cost savings.

Only available in the beta API.

### 5.3.3.2 Contents

GeminiContent [] Uralstech.UGemini.Chat.GeminiChatRequest.Contents

The content of the current conversation with the model.

For single-turn queries, this is a single instance. For multi-turn queries, this is a repeated field that contains conversation history + latest request.

### 5.3.3.3 SafetySettings

GeminiSafetySettings [] Uralstech.UGemini.Chat.GeminiChatRequest.SafetySettings = null

A list of unique GeminiSafetySettings instances for blocking unsafe content.

This will be enforced on Contents and GeminiChatResponse.Candidates.

There should not be more than one setting for each GeminiSafetyHarmCategory type. The API will block any contents and responses that fail to meet the thresholds set by these settings. This list overrides the default settings for each GeminiSafetyHarmCategory specified in the SafetySettings. If there is no GeminiSafetySettings for a given GeminiSafetyHarmCategory provided in the list, the API will use the default safety setting for that category. Harm categories GeminiSafetyHarmCategory. HateSpeech, GeminiSafetyHarmCategory. SexuallyExplicit, GeminiSafetyHarmCategory. DangerousContent and GeminiSafetyHarmCategory. Harassment are supported.

### 5.3.3.4 SystemInstruction

GeminiContent Uralstech.UGemini.Chat.GeminiChatRequest.SystemInstruction = null

Developer set system instruction. Currently, text only.

Only available in the beta API.

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### 5.3.3.5 ToolConfig

GeminiToolConfiguration Uralstech.UGemini.Chat.GeminiChatRequest.ToolConfig = null

Tool configuration for any Tool specified in the request.

Only available in the beta API.

### 5.3.3.6 Tools

```
GeminiTool [] Uralstech.UGemini.Chat.GeminiChatRequest.Tools = null
```

A list of Tools the model may use to generate the next response.

A Tool is a piece of code that enables the system to interact with external systems to perform an action, or set of actions.

outside of knowledge and scope of the model. The only supported tool is currently Function.

Only available in the beta API.

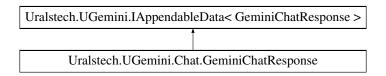
The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatRequest/GeminiChatRequest.cs

## 5.4 Uralstech.UGemini.Chat.GeminiChatResponse Class Reference

Response from the model supporting multiple candidates.

Inheritance diagram for Uralstech. UGemini. Chat. Gemini Chat Response:



### **Public Member Functions**

· void Append (GeminiChatResponse data)

## Public Member Functions inherited from Uralstech.UGemini.IAppendableData< GeminiChatResponse >

void Append (T data)

Appends the data to the current IAppendableData<T>.

### **Public Attributes**

• GeminiCandidate[] Candidates

Candidate responses from the model.

GeminiPromptFeedback
 PromptFeedback

Returns the prompt's feedback related to the content filters.

• GeminiUsageMetadata UsageMetadata

Metadata on the generation requests' token usage.

### **Properties**

GeminiContentPart[] Parts [get]

The parts of the GeminiChatResponse message.

### 5.4.1 Detailed Description

Response from the model supporting multiple candidates.

Note on safety ratings and content filtering. They are reported for both prompt in PromptFeedback and for each candidate in GeminiCandidate.FinishReason and in GeminiCandidate.SafetyRatings. The API contract is that:

- either all requested candidates are returned or no candidates at all
- no candidates are returned only if there was something wrong with the prompt (see PromptFeedback)
- feedback on each candidate is reported on GeminiCandidate.FinishReason and GeminiCandidate.SafetyRatings.

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/GeminiChatResponse.cs

### 5.5 Uralstech.UGemini.Chat.GeminiCitationMetadata Class Reference

A collection of source attributions for a piece of content.

### **Public Attributes**

• GeminiCitationSource[] CitationSources

Citations to sources for a specific response.

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### 5.5.1 Detailed Description

A collection of source attributions for a piece of content.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Citation/GeminiCitation

 Metadata.cs

### 5.6 Uralstech.UGemini.Chat.GeminiCitationSource Class Reference

A citation to a source for a portion of a specific response.

### **Public Attributes**

· int StartIndex

Start of segment of the response that is attributed to this source.

int EndIndex

End of the attributed segment, exclusive.

• string **Uri** 

URI that is attributed as a source for a portion of the text.

• string License

License for the GitHub project that is attributed as a source for segment.

### 5.6.1 Detailed Description

A citation to a source for a portion of a specific response.

### 5.6.2 Member Data Documentation

### 5.6.2.1 StartIndex

int Uralstech.UGemini.Chat.GeminiCitationSource.StartIndex

Start of segment of the response that is attributed to this source.

Index indicates the start of the segment, measured in bytes.

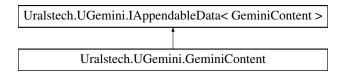
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Citation/GeminiCitation
 — Source.cs

### 5.7 Uralstech.UGemini.GeminiContent Class Reference

The base structured datatype containing multi-part content of a message.

Inheritance diagram for Uralstech. UGemini. GeminiContent:



### **Public Member Functions**

void Append (GeminiContent data)

### Public Member Functions inherited from Uralstech.UGemini.IAppendableData< GeminiContent >

void Append (T data)

Appends the data to the current IAppendableData<T>.

#### **Static Public Member Functions**

- static GeminiContent GetContent (string message, GeminiRole role=GeminiRole.Unspecified)
  - Creates a new GeminiContent from a role and message.
- static GeminiContent GetContent (string message, Texture2D image, GeminiRole role=GeminiRole.Unspecified)
  - Creates a new GeminiContent from a role, message and Texture2D.
- static GeminiContent GetContent (string message, GeminiFile file, GeminiRole role=GeminiRole.Unspecified)
  - Creates a new GeminiContent from a role, message and GeminiFile.
- static GeminiContent GetContent (GeminiFunctionCall functionCall)
  - Creates a new GeminiContent from a GeminiFunctionCall.
- static GeminiContent GetContent (GeminiFunctionResponse functionResponse)

Creates a new GeminiContent from a GeminiFunctionResponse.

### **Public Attributes**

GeminiContentPart[] Parts

Ordered Parts that constitute a single message. Parts may have different MIME types.

• GeminiRole Role

Optional. The producer of the content.

### 5.7.1 Detailed Description

The base structured datatype containing multi-part content of a message.

### 5.7.2 Member Function Documentation

### 5.7.2.1 GetContent() [1/5]

Creates a new GeminiContent from a GeminiFunctionCall.

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### **Parameters**

|--|

### Returns

A new GeminiContent object.

### 5.7.2.2 GetContent() [2/5]

Creates a new GeminiContent from a GeminiFunctionResponse.

### **Parameters**

| functionResponse The function response. |
|---|
|---|

### Returns

A new GeminiContent object.

### 5.7.2.3 GetContent() [3/5]

Creates a new GeminiContent from a role, message and GeminiFile.

### **Parameters**

| role    | The role of the content creator. |
|---------|----------------------------------|
| message | The message.                     |
| file    | The GeminiFile.                  |

### Returns

A new GeminiContent object.

### 5.7.2.4 GetContent() [4/5]

Creates a new GeminiContent from a role and message.

#### **Parameters**

| role    | The role of the content creator. |
|---------|----------------------------------|
| message | The message.                     |

#### Returns

A new GeminiContent object.

## 5.7.2.5 GetContent() [5/5]

Creates a new GeminiContent from a role, message and Texture2D.

#### **Parameters**

| role    | The role of the content creator. |
|---------|----------------------------------|
| message | The message.                     |
| image   | The image texture.               |

### Returns

A new GeminiContent object.

The documentation for this class was generated from the following file:

· UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/Content/GeminiContent.cs

## 5.8 Uralstech. UGemini. GeminiContentBlob Class Reference

Raw media bytes.

#### **Static Public Member Functions**

static GeminiContentBlob GetContentBlob (Texture2D image, bool useJPEG=false)
 Converts the given Texture2D to a GeminiContentBlob.

### **Public Attributes**

GeminiContentType MimeType

The type of the data.

· string Data

The base64 encoded bytes of data.

## 5.8.1 Detailed Description

Raw media bytes.

Text should not be sent as raw bytes, use the GeminiContentPart.Text> field.

#### 5.8.2 Member Function Documentation

#### 5.8.2.1 GetContentBlob()

Converts the given Texture2D to a GeminiContentBlob.

#### **Parameters**

| image   | The Texture2D to use.                       |
|---------|---|
| useJPEG | Should the encoder use JPEG instead of PNG? |

#### Returns

A new GeminiContentBlob object.

#### 5.8.3 Member Data Documentation

#### 5.8.3.1 MimeType

 ${\tt GeminiContentType\ Uralstech.UGemini.GeminiContentBlob.MimeType}$ 

The type of the data.

You can use EnumExtensions. ContentType(string) to convert string values to their GeminiContentType equivalents, like: "image/png". ContentType()

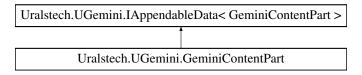
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/Content/GeminiContentBlob.cs

## 5.9 Uralstech. UGemini. Gemini Content Part Class Reference

A datatype containing media that is part of a multi-part Content message. Must only contain one field at a time.

Inheritance diagram for Uralstech.UGemini.GeminiContentPart:



#### **Public Member Functions**

- void Append (GeminiContentPart data)
- · bool IsAppendable (GeminiContentPart data)

Is the data to be appended compatible with the current GeminiContentPart?

## **Public Member Functions inherited from**

Uralstech.UGemini.IAppendableData < GeminiContentPart >

· void Append (T data)

Appends the data to the current IAppendableData<T>.

#### **Public Attributes**

• string Text = null

Inline text.

• GeminiContentBlob InlineData = null

Inline media bytes.

• GeminiFunctionCall FunctionCall = null

A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaratio.name with the arguments and their values.

• GeminiFunctionResponse FunctionResponse = null

The result output of a FunctionCall that contains a string representing the FunctionDeclaration.name and a structured JSON object containing any output from the function is used as context to the model.

• GeminiFileData FileData = null

URI based data.

#### **Properties**

bool IsEmpty [get]

Is there no content stored in this GeminiContentPart?

## 5.9.1 Detailed Description

A datatype containing media that is part of a multi-part Content message. Must only contain one field at a time.

### 5.9.2 Member Function Documentation

#### 5.9.2.1 IsAppendable()

```
bool Uralstech.
UGemini.
GeminiContentPart.
Is<br/>Appendable ( {\tt GeminiContentPart} \ \ data)
```

Is the data to be appended compatible with the current GeminiContentPart?

#### **Parameters**

data The data to be appended.

## 5.9.3 Member Data Documentation

#### 5.9.3.1 FileData

GeminiFileData Uralstech.UGemini.GeminiContentPart.FileData = null

URI based data.

Only available in the beta API.

#### 5.9.3.2 FunctionCall

GeminiFunctionCall Uralstech.UGemini.GeminiContentPart.FunctionCall = null

A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaratio.name with the arguments and their values.

Only available in the beta API.

## 5.9.3.3 FunctionResponse

GeminiFunctionResponse Uralstech.UGemini.GeminiContentPart.FunctionResponse = null

The result output of a FunctionCall that contains a string representing the FunctionDeclaration.name and a structured JSON object containing any output from the function is used as context to the model.

Only available in the beta API.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/Content/GeminiContentPart.cs

## 5.10 Uralstech. UGemini. File API. Gemini File Class Reference

Metadata for a file uploaded to the File API.

#### **Public Attributes**

· string Name

The GeminiFile resource name.

• string **DisplayName** = null

The human-readable display name for the GeminiFile.

string MimeType

MIME type of the file.

· long SizeBytes

Size of the file in bytes.

DateTime CreateTime

The timestamp of when the GeminiFile was created.

• DateTime UpdateTime

The timestamp of when the GeminiFile was last updated.

DateTime ExpirationTime

The timestamp of when the GeminiFile will be deleted. Only set if the GeminiFile is scheduled to expire.

· string Sha256Hash

SHA-256 hash of the uploaded bytes. A base64-encoded string.

• string Uri

The uri of the GeminiFile.

· GeminiFileState State

Processing state of the GeminiFile.

· GeminiStatus Status

Error status if GeminiFile processing failed.

GeminiFileVideoMetaData VideoMetadata

Metadata for a video.

## 5.10.1 Detailed Description

Metadata for a file uploaded to the File API.

## 5.10.2 Member Data Documentation

#### 5.10.2.1 MimeType

 $\verb|string Uralstech.UGemini.FileAPI.GeminiFile.MimeType|\\$ 

MIME type of the file.

You can use EnumExtensions. ContentType(string) to convert string values to their GeminiContentType equivalents, like: "image/png". ContentType()

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/GeminiFile.cs

## 5.11 Uralstech.UGemini.GeminiFileData Class Reference

URI based data.

## **Public Attributes**

• string MimeType = null

The IANA standard MIME type of the source data.

· string FileUri

URI.

## 5.11.1 Detailed Description

URI based data.

## 5.11.2 Member Data Documentation

#### 5.11.2.1 MimeType

```
string Uralstech.UGemini.GeminiFileData.MimeType = null
```

The IANA standard MIME type of the source data.

You can use EnumExtensions.MimeType(GeminiContentType) to convert GeminiContentType values to their string MIME type, like: GeminiContentType.ImagePNG.MimeType()

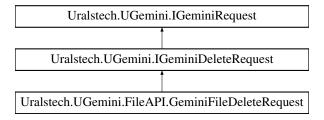
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/GeminiFileData.cs

# 5.12 Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest Class Reference

Requests the deletion of a file.

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest:



#### **Public Member Functions**

• string GetEndpointUri (GeminiRequestMetadata metadata)

Gets the URI to the API endpoint.

#### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |  |
|----------|---|--|
|----------|---|--|

Returns

The URI.

• GeminiFileDeleteRequest (string fileId, bool useBetaApi=true)

Creates a new GeminiFileGetRequest.

#### **Public Attributes**

· string ApiVersion

The API version to use.

· string FileId

The ID of the file to delete.

## 5.12.1 Detailed Description

Requests the deletion of a file.

## 5.12.2 Constructor & Destructor Documentation

#### 5.12.2.1 GeminiFileDeleteRequest()

Creates a new GeminiFileGetRequest.

#### **Parameters**

| fileId     | The ID of the file to delete.        |
|------------|--------------------------------------|
| useBetaApi | Should the request use the Beta API? |

## 5.12.3 Member Function Documentation

#### 5.12.3.1 GetEndpointUri()

Gets the URI to the API endpoint.

#### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |
|----------|---|

#### Returns

The URI.

Implements Uralstech.UGemini.IGeminiRequest.

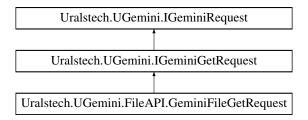
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/SingleRequests/GeminiFile
 — DeleteRequest.cs

## 5.13 Uralstech. UGemini. File API. Gemini File Get Request Class Reference

Requests metadata for an existing file. Return type is GeminiFile.

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileGetRequest:



#### **Public Member Functions**

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

#### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |
|----------|---|
|----------|---|

Returns

The URI.

GeminiFileGetRequest (string fileId, bool useBetaApi=true)
 Creates a new GeminiFileGetRequest.

#### **Public Attributes**

string ApiVersion

The API version to use.

• string FileId

The ID of the file to get.

## 5.13.1 Detailed Description

Requests metadata for an existing file. Return type is GeminiFile.

## 5.13.2 Constructor & Destructor Documentation

## 5.13.2.1 GeminiFileGetRequest()

Creates a new GeminiFileGetRequest.

#### **Parameters**

| fileId     | The ID of the file to get.           |
|------------|--------------------------------------|
| useBetaApi | Should the request use the Beta API? |

#### 5.13.3 Member Function Documentation

## 5.13.3.1 GetEndpointUri()

Gets the URI to the API endpoint.

#### **Parameters**

| metadata The metac | lata of the request to be carried out on the URI. |
|--------------------|---|
|--------------------|---|

## Returns

The URI.

Implements Uralstech. UGemini. IGemini Request.

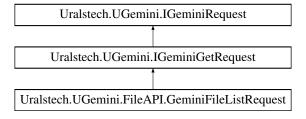
The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/SingleRequests/GeminiFileGet ← Request.cs

## 5.14 Uralstech.UGemini.FileAPI.GeminiFileListRequest Class Reference

Requests metadata for all existing files. Return type is GeminiFileListResponse.

Inheritance diagram for Uralstech. UGemini. File API. Gemini File List Request:



#### **Public Member Functions**

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

#### **Parameters**

metadata The metadata of the request to be carried out on the URI.

Returns

The URI.

• GeminiFileListRequest (bool useBetaApi=true)

Creates a new GeminiFileGetRequest.

#### **Public Attributes**

· string ApiVersion

The API version to use.

• int MaxResponseFiles = 10

Maximum number of Files to return per page. If unspecified, defaults to 10. Maximum pageSize is 100.

string PageToken = string.Empty

A page token from a previous files.list call.

## 5.14.1 Detailed Description

Requests metadata for all existing files. Return type is GeminiFileListResponse.

#### 5.14.2 Constructor & Destructor Documentation

#### 5.14.2.1 GeminiFileListRequest()

```
\label{thm:continuous} \mbox{Uralstech.UGemini.FileAPI.GeminiFileListRequest.GeminiFileListRequest (} \\ \mbox{bool } use \mbox{BetaApi} = \mbox{true})
```

Creates a new GeminiFileGetRequest.

**Parameters** 

#### 5.14.3 Member Function Documentation

## 5.14.3.1 GetEndpointUri()

Gets the URI to the API endpoint.

## **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |
|----------|---|
|----------|---|

#### Returns

The URI.

Implements Uralstech. UGemini. IGemini Request.

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/FileList/GeminiFileListRequest.cs

## 5.15 Uralstech.UGemini.FileAPI.GeminiFileListResponse Class Reference

The response for a GeminiFileListRequest call.

#### **Public Attributes**

• GeminiFile[] Files

The list of files.

string NextPageToken

A token that can be sent as a GeminiFileListRequest.PageToken into a subsequent GeminiFileListRequest call.

## 5.15.1 Detailed Description

The response for a GeminiFileListRequest call.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/FileList/GeminiFileListResponse. ← cs

## 5.16 Uralstech.UGemini.FileAPI.GeminiFileUploadMetaData Class Reference

Metadata for a GeminiFile to be uploaded.

## **Public Attributes**

• string Name = null

The GeminiFileUploadRequest resource name. This does not work right now.

• string **DisplayName** = null

The human-readable display name for the GeminiFileUploadRequest. The display name must be no more than 512 characters in length, including spaces. Example: "Welcome Image".

## 5.16.1 Detailed Description

Metadata for a GeminiFile to be uploaded.

#### 5.16.2 Member Data Documentation

#### 5.16.2.1 Name

string Uralstech.UGemini.FileAPI.GeminiFileUploadMetaData.Name = null

The GeminiFileUploadRequest resource name. This does not work right now.

The ID (name excluding the "files/" prefix) can contain up to 40 characters that are lowercase alphanumeric or dashes (-).

The ID cannot start or end with a dash. If the name is empty on create, a unique name will be generated. Example: files/123-456

The documentation for this class was generated from the following file:

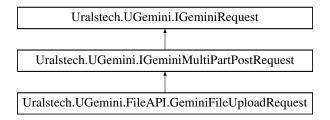
UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/FileUpload/GeminiFileUpload

 MetaData.cs

# 5.17 Uralstech.UGemini.FileAPI.GeminiFileUploadRequest Class Reference

Uploads a file to the Gemini File API. Response type is GeminiFileUploadResponse.

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileUploadRequest:



## **Public Member Functions**

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

#### Parameters

metadata The metadata of the request to be carried out on the URI.

Returns

The URI

• GeminiFileUploadRequest (string contentType, bool useBetaApi=true)

Creates a new GeminiFileUploadRequest.

• string GetUtf8EncodedData (string dataSeperator)

Converts the request object to a UTF-8 encoded multi-part string.

#### **Parameters**

| tor The boundary to seperate each part of the c | ta. |
|---|-----|
|---|-----|

Returns

The string data.

## **Public Attributes**

• GeminiFileUploadMetaData File

Metadata for the GeminiFile to be uploaded.

string MimeType

The IANA standard MIME type of the GeminiFileUploadRequest.

• byte[] RawData

The raw file data to upload.

· string ApiVersion

The API version to use.

## **Properties**

string ContentType [get]

## 5.17.1 Detailed Description

Uploads a file to the Gemini File API. Response type is GeminiFileUploadResponse.

This feature is currently being worked on and is unstable.

## 5.17.2 Constructor & Destructor Documentation

## 5.17.2.1 GeminiFileUploadRequest()

Creates a new GeminiFileUploadRequest.

#### **Parameters**

| contentType | The content type of the data         |
|-------------|--------------------------------------|
| useBetaApi  | Should the request use the Beta API? |

## 5.17.3 Member Function Documentation

## 5.17.3.1 GetEndpointUri()

```
\label{thm:continuity} string \ Uralstech. UGemini. File API. Gemini File Upload Request. Get Endpoint Uri \ ( \\ Gemini Request Metadata \ \textit{metadata})
```

Gets the URI to the API endpoint.

#### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. | ] |
|----------|---|---|
|----------|---|---|

#### Returns

The URI.

Implements Uralstech. UGemini. IGemini Request.

## 5.17.3.2 GetUtf8EncodedData()

```
string Uralstech.
UGemini.
File<br/>API.
Gemini
File<br/>UploadRequest.
GetUtf8EncodedData ( string dataSeperator)
```

Converts the request object to a UTF-8 encoded multi-part string.

#### **Parameters**

| dataSeperator The boundary to seperate eac | h part of the data. |
|--|---------------------|
|--|---------------------|

#### Returns

The string data.

 $Implements\ Ural stech. UGemini. IGemini Multi Part Post Request.$ 

## 5.17.4 Member Data Documentation

### 5.17.4.1 MimeType

 $\verb|string Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.MimeType|\\$ 

The IANA standard MIME type of the GeminiFileUploadRequest.

You can use EnumExtensions.MimeType(GeminiContentType) to convert GeminiContentType values to their string MIME type, like: GeminiContentType.ImagePNG.MimeType()

The documentation for this class was generated from the following file:

# 5.18 Uralstech.UGemini.FileAPI.GeminiFileUploadResponse Class Reference

Response for a file upload request.

#### **Public Attributes**

· GeminiFile File

Metadata for the created file.

## 5.18.1 Detailed Description

Response for a file upload request.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/FileUpload/GeminiFileUpload

Response.cs

# 5.19 Uralstech.UGemini.FileAPI.GeminiFileVideoMetaData Class Reference

Metadata for a video GeminiFile.

#### **Public Attributes**

TimeSpan VideoDuration
 Duration of the video.

## 5.19.1 Detailed Description

Metadata for a video GeminiFile.

The documentation for this class was generated from the following file:

 $\bullet \ \ UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/GeminiFileVideoMetaData.cs$ 

## 5.20 Uralstech.UGemini.Tools.GeminiFunctionCall Class Reference

A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaration.name with the arguments and their values.

#### **Public Member Functions**

• GeminiFunctionResponse GetResponse (JObject responseJson=null)

Creates a GeminiFunctionResponse for this function call.

#### **Public Attributes**

· string Name

The name of the function to call. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.

• JObject Arguments = null

Optional. The function parameters and values in JSON object format.

## 5.20.1 Detailed Description

A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaration.name with the arguments and their values.

#### 5.20.2 Member Function Documentation

#### 5.20.2.1 GetResponse()

Creates a GeminiFunctionResponse for this function call.

#### **Parameters**

| responseJson | The JSON response data. |
|--------------|-------------------------|
|--------------|-------------------------|

#### Returns

A new GeminiFunctionResponse object.

#### 5.20.3 Member Data Documentation

## 5.20.3.1 Arguments

```
JObject Uralstech.UGemini.Tools.GeminiFunctionCall.Arguments = null
```

Optional. The function parameters and values in JSON object format.

See Protocol Buffer Struct.

The documentation for this class was generated from the following file:

 $\bullet \ \ UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/GeminiFunctionCall.cs$ 

# 5.21 Uralstech.UGemini.Tools.Declaration.GeminiFunctionCalling Configuration Class Reference

Configuration for specifying function calling behavior.

#### **Public Attributes**

GeminiFunctionCallingMode Mode = GeminiFunctionCallingMode.Auto

Specifies the mode in which function calling should execute. If unspecified, the default value will be set to AUTO.

string[] AllowedFunctionNames = null

A set of function names that, when provided, limits the functions the model will call.

## 5.21.1 Detailed Description

Configuration for specifying function calling behavior.

#### 5.21.2 Member Data Documentation

#### 5.21.2.1 AllowedFunctionNames

 $string \ [\ ] \ Uralstech. UGemini. Tools. Declaration. GeminiFunction Calling Configuration. Allowed \\ \leftarrow Function Names = null$ 

A set of function names that, when provided, limits the functions the model will call.

This should only be set when Mode is GeminiFunctionCallingMode.Any.

Function names should match [GeminiFunctionDeclaration.Name]. With mode set to GeminiFunctionCallingMode.Any, model will predict a function call from the set of function names provided.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/Declaration/GeminiFunctionCalling
 —
 Configuration.cs

# 5.22 Uralstech.UGemini.Tools.Declaration.GeminiFunctionDeclaration Class Reference

Structured representation of a function declaration as defined by the OpenAPI 3.03 specification. Included in this declaration are the function name and parameters. This FunctionDeclaration is a representation of a block of code that can be used as a Tool by the model and executed by the client.

## **Public Attributes**

· string Name

The name of the function. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.

• string Description

A brief description of the function.

GeminiSchema Parameters = null

Describes the parameters to this function. Reflects the Open API 3.03 Parameter Object string Key: the name of the parameter.

Parameter names are case sensitive.

Schema Value: the Schema defining the type used for the parameter.

## 5.22.1 Detailed Description

Structured representation of a function declaration as defined by the OpenAPI 3.03 specification. Included in this declaration are the function name and parameters. This FunctionDeclaration is a representation of a block of code that can be used as a Tool by the model and executed by the client.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/Declaration/GeminiFunction
 —
 Declaration.cs

## 5.23 Uralstech.UGemini.Tools.GeminiFunctionResponse Class Reference

The result output from a GeminiFunctionCall that contains a string representing the Declaration.GeminiFunctionDeclaration.Name and a structured JSON object containing any output from the function is used as context to the model. This should contain the result of a GeminiFunctionCall made based on model prediction.

#### **Public Attributes**

· string Name

The name of the function to call. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.

• GeminiFunctionResponseContent Response = null

The function response data.

## 5.23.1 Detailed Description

The result output from a GeminiFunctionCall that contains a string representing the Declaration.GeminiFunctionDeclaration.Name and a structured JSON object containing any output from the function is used as context to the model. This should contain the result of a GeminiFunctionCall made based on model prediction.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/GeminiFunctionResponse.cs

## 5.24 Uralstech.UGemini.Tools.GeminiFunctionResponseContent Class Reference

The response of a Gemini function call. Based on the Protocol Buffer Struct type.

### **Public Attributes**

· string Name

The name of the function.

• JObject ResponseData

The actual JSON response data of the function.

## 5.24.1 Detailed Description

The response of a Gemini function call. Based on the Protocol Buffer Struct type.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/GeminiFunctionResponseContent.cs

# 5.25 Uralstech.UGemini.Chat.GeminiGenerationConfiguration Class Reference

Configuration options for model generation and outputs. Not all parameters may be configurable for every model.

#### **Public Attributes**

• string[] StopSequences = null

The set of character sequences (up to 5) that will stop output generation. If specified, the API will stop at the first appearance of a stop sequence. The stop sequence will not be included as part of the response.

• GeminiResponseType ResponseMimeType = GeminiResponseType.Unspecified

Output response type of the generated candidate text.

GeminiSchema ResponseSchema = null

Output response schema of the generated candidate text when response mime type can have schema.

• int CandidateCount = 1

Number of generated responses to return.

• int MaxOutputTokens = -1

The maximum number of tokens to include in a candidate.

• float Temperature = -1f

Controls the randomness of the output. Values can range from 0.0 - 2.0.

float TopP = -1f

The maximum cumulative probability of tokens to consider when sampling.

• int TopK = -1

The maximum number of tokens to consider when sampling.

## 5.25.1 Detailed Description

Configuration options for model generation and outputs. Not all parameters may be configurable for every model.

## 5.25.2 Member Data Documentation

#### 5.25.2.1 CandidateCount

int Uralstech.UGemini.Chat.GeminiGenerationConfiguration.CandidateCount = 1

Number of generated responses to return.

Currently, this value can only be set to 1. If unset, this will default to 1.

## 5.25.2.2 ResponseMimeType

GeminiResponseType Uralstech.UGemini.Chat.GeminiGenerationConfiguration.ResponseMimeType =
GeminiResponseType.Unspecified

Output response type of the generated candidate text.

Only available in the beta API.

#### 5.25.2.3 ResponseSchema

GeminiSchema Uralstech.UGemini.Chat.GeminiGenerationConfiguration.ResponseSchema = null

Output response schema of the generated candidate text when response mime type can have schema.

If set, a compatible GeminiResponseType must also be set. Compatible types: GeminiResponseType.Json 

∴ Schema for JSON response.

Only available in the beta API.

#### 5.25.2.4 TopK

int Uralstech.UGemini.Chat.GeminiGenerationConfiguration.TopK = -1

The maximum number of tokens to consider when sampling.

Models use nucleus sampling or combined Top-k and nucleus sampling. Top-k sampling considers the set of topK most

probable tokens. Models running with nucleus sampling don't allow topK setting.

## 5.25.2.5 TopP

 ${\tt float \ Uralstech. UGemini. Chat. Gemini Generation Configuration. Top {\tt P \ = -1} f}$ 

The maximum cumulative probability of tokens to consider when sampling.

The model uses combined Top-k and nucleus sampling.

Tokens are sorted based on their assigned probabilities so that only the most likely tokens are considered. Top-k sampling directly limits the maximum number of tokens to consider, while Nucleus sampling limits number of tokens based on the cumulative probability.

The documentation for this class was generated from the following file:

## 5.26 Uralstech.UGemini.Chat.GeminiGroundingAttribution Class Reference

Attribution for a source that contributed to an answer.

#### **Public Attributes**

· GeminiAttributionSourceId SourceId

Identifier for the source contributing to this attribution.

GeminiContent Content

Grounding source content that makes up this attribution.

## 5.26.1 Detailed Description

Attribution for a source that contributed to an answer.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Attribution/Gemini
 GroundingAttribution.cs

## 5.27 Uralstech.UGemini.Chat.GeminiGroundingPassageld Class Reference

Identifier for a part within a GroundingPassage.

#### **Public Attributes**

· string PassageId

ID of the passage matching the GenerateAnswerRequest's GeminiAttributionSourceId.GroundingPassage.

• int PartIndex

 $Index\ of\ the\ part\ within\ the\ Generate Answer Request's\ Gemini Attribution Source Id. Grounding Passage.$ 

## 5.27.1 Detailed Description

Identifier for a part within a GroundingPassage.

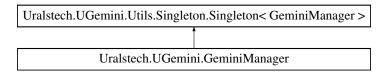
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Attribution/Gemini
 GroundingPassageId.cs

## 5.28 Uralstech. UGemini. Gemini Manager Class Reference

The class for accessing the Gemini API!

Inheritance diagram for Uralstech. UGemini. Gemini Manager:



## **Public Types**

enum RequestEndPoint { Chat , CountTokens }

The request endpoint.

#### **Public Member Functions**

void SetApiKey (string apiKey)

Sets the Gemini API key.

async Task< TResponse > Request< TResponse > (IGeminiPostRequest request)

Computes a request on the Gemini API.

async Task< TResponse > Request< TResponse > (IGeminiMultiPartPostRequest request)

Computes a request on the Gemini API.

async Task < TResponse > Request < TResponse > (IGeminiGetRequest request)

Computes a request on the Gemini API.

async Task Request (IGeminiDeleteRequest request)

Computes a request on the Gemini API.

async Task< TResponse > Compute< TRequest, TResponse > (TRequest request, RequestEndPoint end-point, string model=Gemini1 5Flash, bool useBeta=false)

Computes a request in the Gemini API.

#### Static Public Attributes

• const string **Gemini1\_0ProVision** = "gemini-pro-vision"

```
Note: Gemini 1.0 Pro Vision is deprecated. Use 1.5 Flash or 1.5 Pro instead.
```

Gemini 1.0 Pro Vision is a performance-optimized multimodal model that can perform visual-related tasks. For example, 1.0 Pro Vision can generate image descriptions, identify objects present in images, provide

information about places or objects present in images, and more.

Supports image, video and text input.

• const string **Gemini1\_0Pro** = "gemini-1.0-pro"

Gemini 1.0 Pro is an NLP model that handles tasks like multi-turn text and code chat, and code generation.

Supports text input.

• const string **Gemini1\_5Pro** = "gemini-1.5-pro"

Gemini 1.5 Pro is a mid-size multimodal model that is optimized for a wide-range of reasoning tasks.

 $1.5\ \text{Pro}$  can process large amounts of data at once, including 2 hours of video, 19 hours of audio,

codebases with 60,000 lines of code, or 2,000 pages of text.

Supports audio, image, video and text input.

• const string Gemini1\_5Flash = "gemini-1.5-flash"

Gemini 1.5 Flash is a fast and versatile multimodal model for scaling across diverse tasks.

Supports audio, image, video and text input.

#### **Additional Inherited Members**

## **Properties inherited from**

Uralstech.UGemini.Utils.Singleton.Singleton< GeminiManager >

```
• static T Instance [get]

The active instance of type T.
```

## 5.28.1 Detailed Description

The class for accessing the Gemini API!

#### 5.28.2 Member Enumeration Documentation

## 5.28.2.1 RequestEndPoint

```
enum Uralstech.UGemini.GeminiManager.RequestEndPoint
```

The request endpoint.

#### Enumerator

| Chat        | The chat endpoint.           |
|-------------|------------------------------|
| CountTokens | The token counting endpoint. |

## 5.28.3 Member Function Documentation

## 5.28.3.1 Compute < TRequest, TResponse >()

Computes a request in the Gemini API.

## **Template Parameters**

| TRequest | The request type (like GeminiChatRequest or GeminiCountRequest).   |
|----------|--|
|          | This should correspond with <i>TResponse</i> , like: GeminiChatRequest with GeminiChatResponse GeminiCountRequest with GeminiCountResponse |

## **Template Parameters**

| TResponse | The response type (like GeminiChatResponse or GeminiCountResponse).                            |  |
|-----------|--|--|
|           | This should correspond with <i>TRequest</i> , like:  GeminiChatRequest with GeminiChatResponse |  |
|           | GeminiCountRequest with GeminiCountResponse  |  |

#### **Parameters**

| request  | The request data.     |
|----------|-----------------------|
| endpoint | The request endpoint. |
| model    | The model to use.     |
| useBeta  | Use the beta API?     |

## Returns

The computed request.

## **Exceptions**

| ArgumentException      | Thrown if unexpected arguments are encountered. |
|------------------------|---|
| GeminiRequestException | Thrown when the API request fails.              |

## 5.28.3.2 Request()

```
async Task Uralstech.
UGemini.
GeminiManager.
Request ( {\tt IGeminiDeleteRequest}\ request)
```

Computes a request on the Gemini API.

## **Parameters**

| request | The request object. |
|---------|---------------------|
|---------|---------------------|

## **Exceptions**

| GeminiRequestException Thrown when the API request fails |
|--|
|--|

## **5.28.3.3** Request< TResponse >() [1/3]

Computes a request on the Gemini API.

## **Template Parameters**

TResponse

The response type. For example, a request of type Chat.GeminiChatRequest corresponds to a response type of Chat.GeminiChatResponse, and a request of type TokenCounting.GeminiTokenCountRequest corresponds to a response of type TokenCounting.GeminiTokenCountResponse.

#### **Parameters**

request The request object.

## **Exceptions**

GeminiRequestException Thrown when the API request fails.

#### 5.28.3.4 Request< TResponse >() [2/3]

Computes a request on the Gemini API.

## **Template Parameters**

TResponse

The response type. For example, a request of type Chat.GeminiChatRequest corresponds to a response type of Chat.GeminiChatResponse, and a request of type TokenCounting.GeminiTokenCountRequest corresponds to a response of type TokenCounting.GeminiTokenCountResponse.

#### **Parameters**

| request | The request object. |
|---------|---------------------|
|---------|---------------------|

#### Returns

The computed response.

#### **Exceptions**

GeminiRequestException Thrown when the API request fails.

## **5.28.3.5** Request< TResponse >() [3/3]

```
\label{eq:async} \verb| Task < TResponse > Uralstech.UGemini.GeminiManager.Request < TResponse > ( \\ IGeminiPostRequest \ request) \\ |
```

Computes a request on the Gemini API.

## **Template Parameters**

| TResponse | The response type. For example, a request of type Chat.GeminiChatRequest corresponds to a |  |
|-----------|---|--|
|           | response type of Chat.GeminiChatResponse, and a request of type                           |  |
|           | TokenCounting.GeminiTokenCountRequest corresponds to a response of type                   |  |
|           | TokenCounting.GeminiTokenCountResponse.   |  |

#### **Parameters**

| request | The request object. |
|---------|---------------------|
|---------|---------------------|

#### Returns

The computed response.

## **Exceptions**

| GeminiRequestException | Thrown when the API request fails. |  |
|------------------------|------------------------------------|--|
|------------------------|------------------------------------|--|

## 5.28.3.6 SetApiKey()

Sets the Gemini API key.

### **Parameters**

| apiKey | The new API key. |
|--------|------------------|

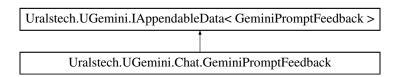
The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Managers/GeminiManager.cs

## 5.29 Uralstech.UGemini.Chat.GeminiPromptFeedback Class Reference

A set of the feedback metadata the prompt specified in GeminiChatResponse.Candidates.

 $Inheritance\ diagram\ for\ Uralstech. UGemini. Chat. GeminiPrompt Feedback:$ 



#### **Public Member Functions**

· void Append (GeminiPromptFeedback data)

#### **Public Member Functions inherited from**

## ${\bf Ural stech. UGemini. IAppendable Data < GeminiPromptFeedback >}$

void Append (T data)

Appends the data to the current IAppendableData<T>.

#### **Public Attributes**

• GeminiBlockReason BlockReason

If set, the prompt was blocked and no candidates are returned. Rephrase your prompt.

GeminiSafetyRating[] SafetyRatings

Ratings for safety of the prompt. There is at most one rating per category.

## 5.29.1 Detailed Description

A set of the feedback metadata the prompt specified in GeminiChatResponse.Candidates.

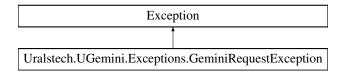
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/GeminiPromptFeedback.cs

# 5.30 Uralstech.UGemini.Exceptions.GeminiRequestException Class Reference

Thrown when a Gemini API request fails.

Inheritance diagram for Uralstech.UGemini.Exceptions.GeminiRequestException:



#### **Public Attributes**

• GeminiManager.RequestEndPoint RequestEndPoint

The endpoint of the failed request.

• Uri RequestEndpoint

The endpoint of the failed request.

• long RequestErrorCode

The response code returned by the request.

• string RequestError

The name of the request's error.

string RequestErrorMessage

The request's error message.

string ApiVersionString

The request's API version as a string.

bool IsBetaApi

Was the request on a beta API?

## 5.30.1 Detailed Description

Thrown when a Gemini API request fails.

The documentation for this class was generated from the following file:

 $\bullet \ \ UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Exceptions/GeminiRequestException.cs$ 

## 5.31 Uralstech. UGemini. Gemini Request Metadata Class Reference

Metadata about a computation request.

#### **Public Attributes**

· bool IsStreaming

Is the request being streamed?

## 5.31.1 Detailed Description

Metadata about a computation request.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/GeminiRequestMetadata.cs

## 5.32 Uralstech. UGemini. Chat. Gemini Safety Rating Class Reference

Safety rating for a piece of content.

#### **Public Attributes**

GeminiSafetyHarmCategory Category

The category for this rating.

GeminiHarmProbability Probability

The probability of harm for this content.

bool Blocked

Was this content blocked because of this rating?

## 5.32.1 Detailed Description

Safety rating for a piece of content.

The safety rating contains the category of harm and the harm probability level in that category for a piece of content is classified for safety across a number of harm categories and the probability of the harm classification is included here.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Safety/GeminiSafety
 — Rating.cs

## 5.33 Uralstech. UGemini. Chat. Gemini Safety Settings Class Reference

Safety setting, affecting the safety-blocking behavior.

#### **Public Attributes**

GeminiSafetyHarmCategory Category

The category for this setting.

• GeminiSafetyHarmBlockThreshold Threshold

Controls the probability threshold at which harm is blocked.

## 5.33.1 Detailed Description

Safety setting, affecting the safety-blocking behavior.

Passing a safety setting for a category changes the allowed probability that content is blocked.

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatRequest/GeminiSafetySettings.cs

## 5.34 Uralstech. UGemini. Schema. Gemini Schema Class Reference

The Schema object allows the definition of input and output data types. These types can be objects, but also primitives and arrays. Represents a select subset of an OpenAPI 3.0 schema object.

#### **Public Attributes**

GeminiSchemaDataType Type

Data type.

GeminiSchemaDataFormat Format = GeminiSchemaDataFormat.Unspecified

The format of the data. This is used only for primitive datatypes.

• string **Description** = null

A brief description of the parameter. This could contain examples of use. Parameter description may be formatted as Markdown

• bool? Nullable = null

Indicates if the value may be null.

• string[] Enum = null

Possible values of the element of GeminiSchemaDataType.String with enum format.

• Dictionary< string, GeminiSchema > Properties = null

The properties of GeminiSchemaDataType.Object.

• string[] Required = null

Required properties of GeminiSchemaDataType.Object.

• GeminiSchema Items = null

Schema of the elements of GeminiSchemaDataType.Array.

## 5.34.1 Detailed Description

The Schema object allows the definition of input and output data types. These types can be objects, but also primitives and arrays. Represents a select subset of an OpenAPI 3.0 schema object.

#### 5.34.2 Member Data Documentation

#### 5.34.2.1 Enum

```
string [] Uralstech.UGemini.Schema.GeminiSchema.Enum = null
```

Possible values of the element of GeminiSchemaDataType.String with enum format.

#### For example we can define an Enum Direction as:

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Schema/GeminiSchema.cs

## 5.35 Uralstech.UGemini.Chat.GeminiSemanticRetrieverChunk Class Reference

Identifier for a Chunk retrieved via Semantic Retriever specified in the GenerateAnswerRequest using Semantic← RetrieverConfig.

#### **Public Attributes**

· string Source

Name of the source matching the request's SemanticRetrieverConfig.source. Example: corpora/123 or corpora/123/documents/abc.

· string Chunk

Name of the Chunk containing the attributed text. Example: corpora/123/documents/abc/chunks/xyz.

## 5.35.1 Detailed Description

Identifier for a Chunk retrieved via Semantic Retriever specified in the GenerateAnswerRequest using Semantic ← RetrieverConfig.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/Attribution/Gemini
 — SemanticRetrieverChunk.cs

## 5.36 Uralstech. UGemini. Status. Gemini Status Class Reference

The GeminiStatus type defines a logical error model that is suitable for different programming environments, including REST APIs and RPC APIs. It is used by gRPC.

## **Public Attributes**

· int Code

The status code, which should be an enum value of google.rpc.Code.

string Message

A developer-facing error message, which should be in English.

• GeminiStatusDetails[] Details

A list of messages that carry the error details. There is a common set of message types for APIs to use.

## 5.36.1 Detailed Description

The GeminiStatus type defines a logical error model that is suitable for different programming environments, including REST APIs and RPC APIs. It is used by gRPC.

Each GeminiStatus message contains three pieces of data: error code, error message, and error details.

## 5.36.2 Member Data Documentation

#### 5.36.2.1 Message

string Uralstech.UGemini.Status.GeminiStatus.Message

A developer-facing error message, which should be in English.

Any user-facing error message should be localized and sent in the google.rpc.Status.details field, or localized by the client.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/Status/GeminiStatus.cs

## 5.37 Uralstech.UGemini.Status.GeminiStatusDetails Class Reference

An object containing fields of an arbitrary type.

#### **Public Attributes**

• string Type

Contains a URI identifying the type.

Dictionary< string, JToken > Data

The actual details of the GeminiStatusDetails object.

## 5.37.1 Detailed Description

An object containing fields of an arbitrary type.

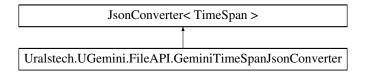
The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Common/Status/GeminiStatusDetails.cs

# 5.38 Uralstech.UGemini.FileAPI.GeminiTimeSpanJsonConverter Class Reference

Custom JSON converter to convert a time string of a format like "10.334s" to a TimeSpan.

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiTimeSpanJsonConverter:



#### **Public Member Functions**

override TimeSpan ReadJson (JsonReader reader, Type objectType, TimeSpan existingValue, bool has

 ExistingValue, JsonSerializer serializer)

• override void WriteJson (JsonWriter writer, TimeSpan value, JsonSerializer serializer)

/>

## 5.38.1 Detailed Description

Custom JSON converter to convert a time string of a format like "10.334s" to a TimeSpan.

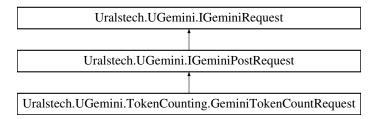
The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/FileAPI/GeminiTimeSpanJsonConverter.cs

## 5.39 Uralstech.UGemini.TokenCounting.GeminiTokenCountRequest Class Reference

Request to count tokens in given content.

Inheritance diagram for Uralstech. UGemini. Token Counting. Gemini Token Count Request:



### **Public Member Functions**

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

**Parameters** 

metadata The metadata of the request to be carried out on the URI.

Returns

The URI.

GeminiTokenCountRequest (string model=GeminiManager.Gemini1 5Flash, bool useBetaApi=false)

Creates a new GeminiTokenCountRequest.

string GetUtf8EncodedData ()

Converts the request object to a UTF-8 encoded string. Returns

The string data.

## **Public Attributes**

• GeminiContent[] Contents = null

The input given to the model as a prompt. This field is ignored when CompleteRequest is set.

• GeminiChatRequest CompleteRequest = null

The overall input given to the model. CountTokens will count prompt, function calling, etc.

string Model

The model to use.

· string ApiVersion

The API version to use.

## **Properties**

• string ContentType [get]

The MIME type of the request content.

## Properties inherited from Uralstech.UGemini.IGeminiPostRequest

## 5.39.1 Detailed Description

Request to count tokens in given content.

#### 5.39.2 Constructor & Destructor Documentation

#### 5.39.2.1 GeminiTokenCountRequest()

Creates a new GeminiTokenCountRequest.

#### **Parameters**

| model      | The model to use.                    |
|------------|--------------------------------------|
| useBetaApi | Should the request use the Beta API? |

## 5.39.3 Member Function Documentation

### 5.39.3.1 GetEndpointUri()

Gets the URI to the API endpoint.

#### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |
|----------|---|
|          |   |

#### Returns

The URI.

Implements Uralstech. UGemini. IGemini Request.

## 5.39.3.2 GetUtf8EncodedData()

 $\verb| string Ural stech. UGemini. To ken Counting. Gemini To ken Count Request. Get Utf8 Encoded Data ()| \\$ 

Converts the request object to a UTF-8 encoded string.

#### Returns

The string data.

Implements Uralstech.UGemini.IGeminiPostRequest.

## 5.39.4 Property Documentation

### 5.39.4.1 ContentType

string Uralstech.UGemini.TokenCounting.GeminiTokenCountRequest.ContentType [get]

The MIME type of the request content.

Implements Uralstech.UGemini.IGeminiPostRequest.

The documentation for this class was generated from the following file:

## 5.40 Uralstech.UGemini.TokenCounting.GeminiTokenCountResponse Class Reference

A response from CountTokens.

## **Public Attributes**

· int TotalTokens

The number of tokens that the model tokenizes the prompt into.

## 5.40.1 Detailed Description

A response from CountTokens.

#### 5.40.2 Member Data Documentation

#### 5.40.2.1 TotalTokens

int Uralstech.UGemini.TokenCounting.GeminiTokenCountResponse.TotalTokens

The number of tokens that the model tokenizes the prompt into.

Always non-negative. When cachedContent is set, this is still the total effective prompt size.l.e.this includes the number of tokens in the cached content.

Cached content is not supported in this package.

The documentation for this class was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/TokenCountResponse/GeminiToken ← CountResponse.cs

## 5.41 Uralstech.UGemini.Tools.Declaration.GeminiTool Class Reference

Tool details that the model may use to generate response.

#### **Public Attributes**

• GeminiFunctionDeclaration[] FunctionDeclarations = null

A list of FunctionDeclarations available to the model that can be used for function calling.

## 5.41.1 Detailed Description

Tool details that the model may use to generate response.

A Tool is a piece of code that enables the system to interact with external systems to perform an action, or set of actions, outside of knowledge and scope of the model.

## 5.41.2 Member Data Documentation

## 5.41.2.1 FunctionDeclarations

GeminiFunctionDeclaration [] Uralstech.UGemini.Tools.Declaration.GeminiTool.FunctionDeclarations
= null

A list of FunctionDeclarations available to the model that can be used for function calling.

The model or system does not execute the function. Instead the defined function may be returned as a [GeminiFunctionCall][GeminiContent.GeminiContentPart.FunctionCall] with arguments to the client side for execution. The model may decide to call a subset of these functions by populating [GeminiFunctionCall][GeminiContent.GeminiContentPart.FunctionCall] in the response.

The next conversation turn may contain a [GeminiFunctionResponse][GeminiContent.GeminiContentPart.FunctionResponse] with the [GeminiContent.Role] GeminiRole.ToolResponse generation context for the next model turn.

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Tools/Declaration/GeminiTool.cs

# 5.42 Uralstech.UGemini.Tools.Declaration.GeminiToolConfiguration Class Reference

The Tool configuration containing parameters for specifying Tool use in the request.

#### **Static Public Member Functions**

static GeminiToolConfiguration GetConfiguration (GeminiFunctionCallingMode callingMode, string[] allowedFunctions=null)

Creates a new GeminiToolConfiguration.

## **Public Attributes**

 GeminiFunctionCallingConfiguration FunctionCallingConfig = null Function calling config.

# 5.42.1 Detailed Description

The Tool configuration containing parameters for specifying Tool use in the request.

#### 5.42.2 Member Function Documentation

#### 5.42.2.1 GetConfiguration()

Creates a new GeminiToolConfiguration.

#### **Parameters**

| callingMode      | Specifies the mode in which function calling should execute.                           |
|------------------|--|
| allowedFunctions | A set of function names that, when provided, limits the functions the model will call. |

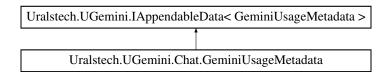
#### Returns

The documentation for this class was generated from the following file:

# 5.43 Uralstech. UGemini. Chat. Gemini Usage Metadata Class Reference

Metadata on the generation request's token usage.

Inheritance diagram for Uralstech.UGemini.Chat.GeminiUsageMetadata:



#### **Public Member Functions**

void Append (GeminiUsageMetadata data)

# Public Member Functions inherited from Uralstech.UGemini.IAppendableData < GeminiUsageMetadata >

· void Append (T data)

Appends the data to the current IAppendableData<T>.

#### **Public Attributes**

int PromptTokenCount

Number of tokens in the prompt. When cachedContent is set, this is still the total effective prompt size. I.e. this includes the number of tokens in the cached content.

• int CachedContentTokenCount

Number of tokens in the cached part of the prompt, i.e. in the cached content.

· int CandidatesTokenCount

Total number of tokens across the generated candidates.

• int TotalTokenCount

Total token count for the generation request (prompt + candidates).

## 5.43.1 Detailed Description

Metadata on the generation request's token usage.

## 5.43.2 Member Data Documentation

# 5.43.2.1 PromptTokenCount

 $\verb|int Uralstech.UGemini.Chat.GeminiUsageMetadata.PromptTokenCount|\\$ 

Number of tokens in the prompt. When cachedContent is set, this is still the total effective prompt size. I.e. this includes the number of tokens in the cached content.

Cached content is not supported in this package.

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/ChatResponse/GeminiUsageMetadata.cs

# 5.44 Uralstech.UGemini.IAppendableData< T > Interface Template Reference

An interface for data that is to be appended to at runtime.

#### **Public Member Functions**

· void Append (T data)

Appends the data to the current IAppendableData<T>.

# 5.44.1 Detailed Description

An interface for data that is to be appended to at runtime.

**Template Parameters** 

The type that can be appended to the IAppendableData<T>.

## 5.44.2 Member Function Documentation

#### 5.44.2.1 Append()

```
void Uralstech.UGemini.IAppendableData< T >.Append ( T data)
```

Appends the data to the current IAppendableData<T>.

#### **Parameters**

data The data to append.

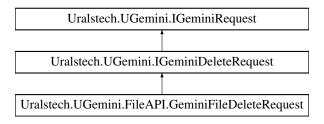
The documentation for this interface was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Interfaces/IAppendableData.cs

# 5.45 Uralstech.UGemini.IGeminiDeleteRequest Interface Reference

All Gemini API DELETE requests must inherit from this interface.

Inheritance diagram for Uralstech. UGemini. IGemini Delete Request:



#### **Additional Inherited Members**

# Public Member Functions inherited from Uralstech. UGemini. IGeminiRequest

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

# 5.45.1 Detailed Description

All Gemini API DELETE requests must inherit from this interface.

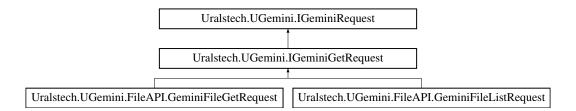
The documentation for this interface was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/IGeminiDeleteRequest.cs

# 5.46 Uralstech. UGemini. IGeminiGet Request Interface Reference

All Gemini API GET requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiGetRequest:



#### **Additional Inherited Members**

## Public Member Functions inherited from Uralstech. UGemini. IGeminiRequest

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

# 5.46.1 Detailed Description

All Gemini API GET requests must inherit from this interface.

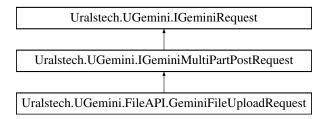
The documentation for this interface was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/IGeminiGetRequest.cs

# 5.47 Uralstech.UGemini.IGeminiMultiPartPostRequest Interface Reference

All Gemini API POST requests with multi-part data must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiMultiPartPostRequest:



#### **Public Member Functions**

string GetUtf8EncodedData (string dataSeperator)
 Converts the request object to a UTF-8 encoded multi-part string.

## Public Member Functions inherited from Uralstech. UGemini. IGeminiRequest

string GetEndpointUri (GeminiRequestMetadata metadata)
 Gets the URI to the API endpoint.

# 5.47.1 Detailed Description

All Gemini API POST requests with multi-part data must inherit from this interface.

#### 5.47.2 Member Function Documentation

#### 5.47.2.1 GetUtf8EncodedData()

```
\label{thm:condense} string \ Uralstech. UGemini. IGeminiMultiPartPostRequest. GetUtf8 Encoded Data \ ( string \ dataSeperator)
```

Converts the request object to a UTF-8 encoded multi-part string.

#### **Parameters**

| dataSeperator | The boundary to seperate each part of the data. |
|---------------|---|

#### Returns

The string data.

Implemented in Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.

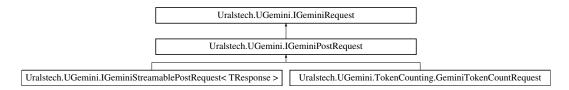
The documentation for this interface was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/IGeminiMultiPartPostRequest.cs

# 5.48 Uralstech. UGemini. IGeminiPostRequest Interface Reference

All Gemini API POST requests must inherit from this interface.

Inheritance diagram for Uralstech. UGemini. IGeminiPostRequest:



#### **Public Member Functions**

• string GetUtf8EncodedData ()

Converts the request object to a UTF-8 encoded string.

# Public Member Functions inherited from Uralstech. UGemini. IGeminiRequest

• string GetEndpointUri (GeminiRequestMetadata metadata)

Gets the URI to the API endpoint.

## **Properties**

• string ContentType [get]

The MIME type of the request content.

# 5.48.1 Detailed Description

All Gemini API POST requests must inherit from this interface.

# 5.48.2 Member Function Documentation

#### 5.48.2.1 GetUtf8EncodedData()

 $\verb|string Uralstech.UGemini.IGeminiPostRequest.GetUtf8EncodedData ()|\\$ 

Converts the request object to a UTF-8 encoded string.

## Returns

The string data.

Implemented in Uralstech.UGemini.TokenCounting.GeminiTokenCountRequest.

## 5.48.3 Property Documentation

#### 5.48.3.1 ContentType

```
string Uralstech.UGemini.IGeminiPostRequest.ContentType [get]
```

The MIME type of the request content.

Implemented in Uralstech.UGemini.TokenCounting.GeminiTokenCountRequest.

The documentation for this interface was generated from the following file:

UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/IGeminiPostRequest.cs

# 5.49 Uralstech. UGemini. IGemini Request Interface Reference

All Gemini API requests must inherit from this interface.

Inheritance diagram for Uralstech. UGemini. IGeminiRequest:



#### **Public Member Functions**

• string GetEndpointUri (GeminiRequestMetadata metadata)

Gets the URI to the API endpoint.

# 5.49.1 Detailed Description

All Gemini API requests must inherit from this interface.

## 5.49.2 Member Function Documentation

## 5.49.2.1 GetEndpointUri()

Gets the URI to the API endpoint.

### **Parameters**

| metadata | The metadata of the request to be carried out on the URI. |
|----------|---|

### Returns

The URI.

Implemented in Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest, Uralstech.UGemini.FileAPI.GeminiFileGetRequest, Uralstech.UGemini.FileAPI.GeminiFileListRequest, Uralstech.UGemini.FileAPI.GeminiFileUploadRequest, and Uralstech.UGemini.TokenCounting.GeminiTokenCountRequest.

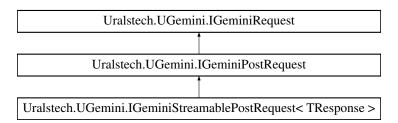
The documentation for this interface was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Requests/IGeminiRequest.cs

# 5.50 Uralstech.UGemini.IGeminiStreamablePostRequest< TResponse > Interface Template Reference

All streamed Gemini API POST requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiStreamablePostRequest< TResponse >:



#### **Public Member Functions**

Task ProcessStreamedData (List < JToken > allEvents, JToken lastEvent)
 Callback to process Server Sent Events (SSEs).

# Public Member Functions inherited from Uralstech.UGemini.IGeminiPostRequest

string GetUtf8EncodedData ()
 Converts the request object to a UTF-8 encoded string.

# Public Member Functions inherited from Uralstech. UGemini. IGeminiRequest

• string GetEndpointUri (GeminiRequestMetadata metadata)

Gets the URI to the API endpoint.

#### **Properties**

• TResponse **StreamedResponse** [get] The response being streamed.

# Properties inherited from Uralstech.UGemini.IGeminiPostRequest

string ContentType [get]
 The MIME type of the request content.

# 5.50.1 Detailed Description

All streamed Gemini API POST requests must inherit from this interface.

## **Template Parameters**

| TResponse | The streamed response type. |
|-----------|-----------------------------|
|-----------|-----------------------------|

**Type Constraints** 

TResponse: IAppendableData<TResponse>

#### 5.50.2 Member Function Documentation

## 5.50.2.1 ProcessStreamedData()

Callback to process Server Sent Events (SSEs).

#### **Parameters**

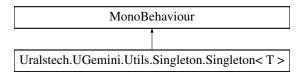
| allEvents | All previously sent SSEs. |
|-----------|---------------------------|
| lastEvent | The latest SSE.           |

The documentation for this interface was generated from the following file:

# 5.51 Uralstech.UGemini.Utils.Singleton.Singleton< T > Class Template Reference

Utility class to make inheriting types singletons.

Inheritance diagram for Uralstech.UGemini.Utils.Singleton.Singleton< T >:



## **Properties**

• static T Instance [get]

The active instance of type T.

# 5.51.1 Detailed Description

Utility class to make inheriting types singletons.

**Template Parameters** 

| T The | type to be | e made a | singleton. |
|-------|------------|----------|------------|
|-------|------------|----------|------------|

**Type Constraints** 

# T: Component

The documentation for this class was generated from the following file:

• UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Utils/Singleton.cs

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