

Table of Contents

Uralstech.UGemini	5
EnumExtensions	7
GeminiAuthMethod	8
GeminiContentType	9
GeminiContentTypeExtensions	13
GeminiManager	15
GeminiRequestMetadata	25
IAppendableData<T>	26
IGeminiDeleteRequest	27
IGeminiGetRequest	28
IGeminiMultiPartPostRequest	29
IGeminiPatchRequest	30
IGeminiPostRequest	32
IGeminiRequest	34
IGeminiStreamablePostRequest<TResponse>	36
Uralstech.UGemini.Exceptions	38
GeminiOAuthException	39
GeminiRequestException	41
GeminiResponseParsingException	44
Uralstech.UGemini.FileAPI	47
GeminiFile	48
GeminiFileDeleteRequest	53
GeminiFileGetRequest	56
GeminiFileListRequest	59
GeminiFileListResponse	62
GeminiFileState	63
GeminiFileUploadMetaData	64
GeminiFileUploadRequest	66
GeminiFileUploadResponse	71
GeminiFileVideoMetaData	72
Uralstech.UGemini.JsonConverters	73
GeminiLongArrayToStringArrayJsonConverter	74
GeminiLongToStringJsonConverter	76
GeminiModelIdStringConverter	78
GeminiSecondsToTimeSpanJsonConverter	80
Uralstech.UGemini.Models	82
GeminiFieldMaskGenerator	83
GeminiModel	86

GeminiModelGetRequest	94
GeminiModelId	97
GeminiModelListRequest	101
GeminiModelListResponse	105
Uralstech.UGemini.Models.Caching	106
GeminiCachedContent	107
GeminiCachedContentCreateRequest	110
GeminiCachedContentCreationData	114
GeminiCachedContentDeleteRequest	117
GeminiCachedContentGetRequest	120
GeminiCachedContentListRequest	123
GeminiCachedContentListResponse	127
GeminiCachedContentPatchData	128
GeminiCachedContentPatchRequest	130
GeminiCachedContentUsageMetadata	134
Uralstech.UGemini.Models.Content	135
GeminiContent	136
GeminiContentBlob	141
GeminiContentPart	143
GeminiFileData	147
GeminiRole	149
UnityExtensions	150
Uralstech.UGemini.Models.Content.Attribution	152
GeminiAttributionSourceId	153
GeminiGroundingAttribution	154
GeminiGroundingPassageId	155
GeminiSemanticRetrieverChunk	156
Uralstech.UGemini.Models.Content.Citation	158
GeminiCitationMetadata	159
GeminiCitationSource	160
Uralstech.UGemini.Models.CountTokens	162
GeminiTokenCountRequest	163
GeminiTokenCountResponse	167
Uralstech.UGemini.Models.Embedding	169
GeminiBatchEmbedContentRequest	170
GeminiBatchEmbedContentResponse	174
GeminiContentEmbedding	175
GeminiEmbedContentRequest	176
GeminiEmbedContentResponse	181
GeminiEmbedTaskType	182

Uralstech.UGemini.Models.Generation	184
GeminiGenerationConfiguration	185
GeminiResponseType	191
Uralstech.UGemini.Models.Generation.Candidate	192
GeminiCandidate	193
GeminiFinishReason	197
GeminiLogprobsCandidate	199
GeminiLogprobsResult	201
GeminiPromptFeedback	202
GeminiTopLogprobsCandidates	204
GeminiUsageMetadata	205
Uralstech.UGemini.Models.Generation.Chat	208
GeminiChatRequest	209
GeminiChatResponse	217
Uralstech.UGemini.Models.Generation.QuestionAnswering	220
GeminiAnswerRequest	221
GeminiAnswerResponse	227
GeminiAnswerStyle	229
Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding	230
GeminiGroundingPassage	231
GeminiGroundingPassages	232
Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever	233
GeminiMetadataCondition	234
GeminiMetadataConditionOperator	236
GeminiMetadataFilter	238
GeminiSemanticRetrieverConfig	240
Uralstech.UGemini.Models.Generation.Safety	242
GeminiBlockReason	243
GeminiHarmProbability	244
GeminiSafetyHarmBlockThreshold	245
GeminiSafetyHarmCategory	246
GeminiSafetyRating	248
GeminiSafetySettings	250
Uralstech.UGemini.Models.Generation.Schema	252
GeminiSchema	253
GeminiSchemaDateFormat	257
GeminiSchemaDataType	259
Uralstech.UGemini.Models.Generation.Tools	260
GeminiFunctionCall	261
GeminiFunctionResponse	263

GeminiFunctionResponseContent	265
Uralstech.UGemini.Models.Generation.Tools.CodeExecution	266
GeminiCodeExecutionLanguage	267
GeminiCodeExecutionOutcome	268
GeminiCodeExecutionResult	269
GeminiExecutableCode	271
Uralstech.UGemini.Models.Generation.Tools.Declaration	273
GeminiCodeExecution	274
GeminiFunctionCallingConfiguration	275
GeminiFunctionCallingMode	277
GeminiFunctionDeclaration	278
GeminiTool	280
GeminiToolConfiguration	282
Uralstech.UGemini.Models.Tuning	284
GeminInitialTuningTask	286
GeminiTunedModel	287
GeminiTunedModelCreateRequest	292
GeminiTunedModelCreateResponse	296
GeminiTunedModelCreationData	297
GeminiTunedModelCreationOperationMetadata	301
GeminiTunedModelDeleteRequest	303
GeminiTunedModelGetRequest	306
GeminiTunedModelListFilter	309
GeminiTunedModelListRequest	310
GeminiTunedModelListResponse	314
GeminiTunedModelPatchData	315
GeminiTunedModelPatchRequest	319
GeminiTunedModelSource	323
GeminiTunedModelState	325
GeminiTunedModelTransferOwnershipRequest	326
GeminiTuningDataset	330
GeminiTuningExample	331
GeminiTuningExamples	332
GeminiTuningHyperparameters	333
GeminiTuningSnapshot	335
GeminiTuningTask	337
Uralstech.UGemini.Utils.Web	339
WebRequestHelper	340

Namespace Uralstech.UGemini

Classes

[EnumExtensions](#)

Extensions for [Enum](#) type objects.

[GeminiContentTypeExtensions](#)

Extensions for [GeminiContentType](#).

[GeminiManager](#)

The class for accessing the Gemini API!

[GeminiRequestMetadata](#)

Metadata about a computation request.

Interfaces

[IAppendableData<T>](#)

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

[IGeminiDeleteRequest](#)

All Gemini API DELETE requests must inherit from this interface.

[IGeminiGetRequest](#)

All Gemini API GET requests must inherit from this interface.

[IGeminiMultiPartPostRequest](#)

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

[IGeminiPatchRequest](#)

All Gemini API PATCH requests must inherit from this interface.

[IGeminiPostRequest](#)

All Gemini API POST requests must inherit from this interface.

[IGeminiRequest](#)

All Gemini API requests must inherit from this interface.

[IGeminiStreamablePostRequest<TResponse>](#)

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

Enums

[GeminiAuthMethod](#)

The preferred authentication method to use with the Gemini API.

[GeminiContentType](#)

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

Class EnumExtensions

Namespace: [Uralstech.UGemini](#)

Extensions for [Enum](#) type objects.

```
public static class EnumExtensions
```

Inheritance

[object](#) ← EnumExtensions

Methods

EnumMemberValue(Enum)

Converts an [Enum](#) to the value defined in its [EnumMemberAttribute](#).

```
public static string EnumMemberValue(this Enum enumValue)
```

Parameters

`enumValue` [Enum](#)

The enum value.

Returns

[string](#)

The value.

Exceptions

[NotImplementedException](#)

Thrown if an [EnumMemberAttribute](#) could not be found on the enum value.

Enum GeminiAuthMethod

Namespace: [Uralstech.UGemini](#)

The preferred authentication method to use with the Gemini API.

```
public enum GeminiAuthMethod
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`APIKey = 0`

Use the provided API key.

`OAuthAccessToken = 1`

Use an OAuth access token.

Enum GeminiContentType

Namespace: [Uralstech.UGemini](#)

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

```
public enum GeminiContentType
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) ,
[GeminiContentTypeExtensions.MimeType\(GeminiContentType\)](#) ,
[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

[EnumMember(Value = "application/json")] ApplicationJSON = 33

(File API) Application JSON content.

[EnumMember(Value = "application/pdf")] ApplicationPDF = 35

(File API) Application PDF content.

[EnumMember(Value = "application/rtf")] ApplicationRTF = 34

(File API) Application RTF content.

[EnumMember(Value = "application/x-javascript")] ApplicationXJavaScript = 30

(File API) Application JavaScript content.

[EnumMember(Value = "application/x-python-code")] ApplicationXPython = 32

(File API) Application Python content.

[EnumMember(Value = "application/x-typescript")] ApplicationXTypeScript = 31

(File API) Application TypeScript content.

[EnumMember(Value = "audio/aac")] AudioAAC = 8

AAC encoded audio.

[EnumMember(Value = "audio/aiff")] AudioAIFF = 7

AIFF encoded audio.

```
[EnumMember(Value = "audio/flac")] AudioFLAC = 10
```

FLAC encoded audio.

```
[EnumMember(Value = "audio/mp3")] AudioMP3 = 6
```

MP3 encoded audio.

```
[EnumMember(Value = "audio/ogg")] AudioOGG = 9
```

OGG encoded audio.

```
[EnumMember(Value = "audio/wav")] AudioWAV = 5
```

WAV encoded audio.

```
[EnumMember(Value = "image/heic")] ImageHEIC = 2
```

A HEIC image.

```
[EnumMember(Value = "image/heif")] ImageHEIF = 3
```

A HEIF image.

```
[EnumMember(Value = "image/jpeg")] ImageJPEG = 1
```

A JPEG image.

```
[EnumMember(Value = "image/png")] ImagePNG = 0
```

A PNG image.

```
[EnumMember(Value = "image/webp")] ImageWebP = 4
```

A WebP image.

```
[EnumMember(Value = "text/css")] TextCSS = 22
```

(File API) CSS text.

```
[EnumMember(Value = "text/csv")] TextCSV = 25
```

(File API) CSV text.

```
[EnumMember(Value = "text/html")] TextHTML = 21
```

(File API) HTML text.

```
[EnumMember(Value = "text/javascript")] TextJavaScript = 23
```

(File API) JavaScript text.

```
[EnumMember(Value = "text/markdown")] TextMarkdown = 26
```

(File API) Markdown text.

```
[EnumMember(Value = "text/plain")] TextPlain = 20
```

(File API) Plain text.

```
[EnumMember(Value = "text/rtf")] TextRTF = 29
```

(File API) RTF text.

```
[EnumMember(Value = "text/xml")] TextXML = 28
```

(File API) XML text.

```
[EnumMember(Value = "text/x-python")] TextXPython = 27
```

(File API) Python text.

```
[EnumMember(Value = "text/x-typescript")] TextXTypeScript = 24
```

(File API) TypeScript text.

```
[EnumMember(Value = "video/3gpp")] Video3GPP = 19
```

3GPP encoded video.

```
[EnumMember(Value = "video/avi")] VideoAVI = 14
```

AVI encoded video.

```
[EnumMember(Value = "video/mov")] VideoMOV = 13
```

MOV encoded video.

```
[EnumMember(Value = "video/mp4")] VideoMP4 = 11
```

MP4 encoded video.

```
[EnumMember(Value = "video/mpeg")] VideoMPEG = 12
```

MPEG encoded video.

```
[EnumMember(Value = "video/mpg")] VideoMPG = 16
```

MPG encoded video.

```
[EnumMember(Value = "video/wmv")] VideoWMV = 18
```

WMV encoded video.

```
[EnumMember(Value = "video/webm")] VideoWebM = 17
```

WebM encoded video.

```
[EnumMember(Value = "video/x-flv")] VideoXFLV = 15
```

FLV encoded video.

Class GeminiContentTypeExtensions

Namespace: [Uralstech.UGemini](#)

Extensions for [GeminiContentType](#).

```
public static class GeminiContentTypeExtensions
```

Inheritance

[object](#) ← GeminiContentTypeExtensions

Methods

ContentType(string)

Converts a [string](#) MIME type to a [GeminiContentType](#).

```
public static GeminiContentType ContentType(this string mimeType)
```

Parameters

[mimeType](#) [string](#)

The MIME type string.

Returns

[GeminiContentType](#)

The [GeminiContentType](#) equivalent.

Exceptions

[NotImplementedException](#)

Thrown if [GeminiContentType](#) does not have an equivalent MIME type to [mimeType](#).

MimeType(GeminiContentType)

Converts a [GeminiContentType](#) to its [MIME type](#).

```
public static string MimeType(this GeminiContentType enumValue)
```

Parameters

enumValue [GeminiContentType](#)

The [GeminiContentType](#) value.

Returns

[string](#)

The MIME type as a string.

Exceptions

[NotImplementedException](#)

Thrown if the MIME type of the enum value could not be found.

Class GeminiManager

Namespace: [Uralstech.UGemini](#)

The class for accessing the Gemini API!

```
public class GeminiManager : Singleton<GeminiManager>
```

Inheritance

[object](#) ↗ ← GeminiManager

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BaseServiceUri

The base URI to the Generative Language service.

```
public const string BaseServiceUri = "https://generativelanguage.googleapis.com"
```

Field Value

[string](#) ↗

BetaApiUri

The v1 beta API URI to the Generative Language service.

```
public const string BetaApiUri = "https://generativelanguage.googleapis.com/v1beta"
```

Field Value

[string](#) ↗

EmptyJsonObject

An empty JSON object.

```
private const string EmptyJsonObject = "{}"
```

Field Value

[string](#)

MultiPartFormDataSeperator

Separator for Multi-Part Form Data.

```
private const string MultiPartFormDataSeperator = "xxxxxxxxxx"
```

Field Value

[string](#)

ProductionApiUri

The production v1 API URI to the Generative Language service.

```
public const string ProductionApiUri = "https://generativelanguage.googleapis.com/v1"
```

Field Value

[string](#)

_geminiApiKey

```
private string _geminiApiKey
```

Field Value

Methods

CheckWebRequest(UnityWebRequest)

Checks the given UnityWebRequest for errors.

```
private void CheckWebRequest(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request to check.

Exceptions

[GeminiRequestException](#)

Thrown if the request was not successful.

ComputeRequest(IGeminiRequest, UnityWebRequest)

Sets up, sends and verifies a UnityWebRequest.

```
private Task ComputeRequest(IGeminiRequest request, UnityWebRequest webRequest)
```

Parameters

request [IGeminiRequest](#)

The request data.

webRequest UnityWebRequest

The UnityWebRequest to compute.

Returns

ConfirmResponse(UnityWebRequest)

Checks if the downloaded response was empty, as to be expected of some endpoints.

```
private void ConfirmResponse(UnityWebRequest request)
```

Parameters

request UnityWebRequest

The web request.

Exceptions

[GeminiResponseParsingException](#)

Thrown if the response was not empty.

ConfirmResponse<TResponse>(UnityWebRequest)

Checks if the downloaded response was correct.

```
private TResponse ConfirmResponse<TResponse>(UnityWebRequest request)
```

Parameters

request UnityWebRequest

The web request.

Returns

TResponse

Type Parameters

TResponse

The expected response type.

Exceptions

[GeminiResponseParsingException](#)

Thrown if the response could not be parsed.

Request(IGeminiDeleteRequest)

Computes a DELETE request on the Gemini API.

```
public Task Request(IGeminiDeleteRequest request)
```

Parameters

[request](#) [IGeminiDeleteRequest](#)

The request object.

Returns

[Task](#) ↗

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response was not empty.

Request(IGeminiPostRequest)

Computes a POST request on the Gemini API.

```
public Task Request(IGeminiPostRequest request)
```

Parameters

`request` [IGeminiPostRequest](#)

The request object.

Returns

[Task](#) ↗

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response was not empty.

Request<TResponse>(IGeminiGetRequest)

Computes a GET request on the Gemini API.

```
public Task<TResponse> Request<TResponse>(IGeminiGetRequest request)
```

Parameters

`request` [IGeminiGetRequest](#)

The request object.

Returns

[Task](#) ↗ <TResponse>

The computed response.

Type Parameters

`TResponse`

The response type. For example, a request of type [GeminiChatRequest](#) corresponds to a response type of [GeminiChatResponse](#), and a request of type [GeminiTokenCountRequest](#) corresponds to a response of type [GeminiTokenCountResponse](#).

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response could not be parsed.

Request<TResponse>(IGeminiMultiPartPostRequest)

Computes a multi-part POST request on the Gemini API.

```
public Task<TResponse> Request<TResponse>(IGeminiMultiPartPostRequest request)
```

Parameters

request [IGeminiMultiPartPostRequest](#)

The request object.

Returns

[Task](#)<TResponse>

The computed response.

Type Parameters

TResponse

The response type. For example, a request of type [GeminiChatRequest](#) corresponds to a response type of [GeminiChatResponse](#), and a request of type [GeminiTokenCountRequest](#) corresponds to a response of type [GeminiTokenCountResponse](#).

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response could not be parsed.

Request<TResponse>(IGeminiPatchRequest)

Computes a PATCH request on the Gemini API.

```
public Task<TResponse> Request<TResponse>(IGeminiPatchRequest request)
```

Parameters

[request IGeminiPatchRequest](#)

The request object.

Returns

[Task<TResponse>](#)

The computed response.

Type Parameters

[TResponse](#)

The response type. For example, a request of type [GeminiChatRequest](#) corresponds to a response type of [GeminiChatResponse](#), and a request of type [GeminiTokenCountRequest](#) corresponds to a response of type [GeminiTokenCountResponse](#).

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response could not be parsed.

Request<TResponse>(IGeminiPostRequest)

Computes a POST request on the Gemini API.

```
public Task<TResponse> Request<TResponse>(IGeminiPostRequest request)
```

Parameters

request [IGeminiPostRequest](#)

The request object.

Returns

[Task](#)<TResponse>

The computed response.

Type Parameters

TResponse

The response type. For example, a request of type [GeminiChatRequest](#) corresponds to a response type of [GeminiChatResponse](#), and a request of type [GeminiTokenCountRequest](#) corresponds to a response of type [GeminiTokenCountResponse](#).

Exceptions

[GeminiRequestException](#)

Thrown if the API request fails.

[GeminiResponseParsingException](#)

Thrown if the response could not be parsed.

SetApiKey(string)

Sets the Gemini API key.

```
public void SetApiKey(string apiKey)
```

Parameters

apiKey [string](#)

The new API key.

SetupWebRequest(IGeminiRequest, UnityWebRequest)

Sets up the UnityWebRequest with API keys and disposal settings.

```
private void SetupWebRequest(IGeminiRequest request, UnityWebRequest webRequest)
```

Parameters

request [IGeminiRequest](#)

The request data.

webRequest UnityWebRequest

The request to set up.

Exceptions

[GeminiOAuthException](#)

Thrown if the request could not be authenticated.

Class GeminiRequestMetadata

Namespace: [Uralstech.UGemini](#)

Metadata about a computation request.

```
public class GeminiRequestMetadata
```

Inheritance

[object](#) ← GeminiRequestMetadata

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

IsStreaming

Is the request being streamed?

```
public bool IsStreaming
```

Field Value

[bool](#)

Interface IAppendableData<T>

Namespace: [Uralstech.UGemini](#)

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

```
public interface IAppendableData<T>
```

Type Parameters

T

The type that can be appended to the [IAppendableData<T>](#).

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Methods

Append(T)

Appends the **data** to the current [IAppendableData<T>](#).

```
void Append(T data)
```

Parameters

data T

The data to append.

Interface IGeminiDeleteRequest

Namespace: [Uralstech.UGemini](#)

All Gemini API DELETE requests must inherit from this interface.

```
public interface IGeminiDeleteRequest : IGeminiRequest
```

Inherited Members

[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest.OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Interface IGeminiGetRequest

Namespace: [Uralstech.UGemini](#)

All Gemini API GET requests must inherit from this interface.

```
public interface IGeminiGetRequest : IGeminiRequest
```

Inherited Members

[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest.OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Interface IGeminiMultiPartPostRequest

Namespace: [Uralstech.UGemini](#)

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

```
public interface IGeminiMultiPartPostRequest : IGeminiRequest
```

Inherited Members

[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Methods

GetUtf8EncodedData(string)

Converts the request object to a UTF-8 encoded multi-part [string](#).

```
string GetUtf8EncodedData(string dataSeparator)
```

Parameters

dataSeparator [string](#)

The boundary to separate each part of the data.

Returns

[string](#)

The string data.

Interface IGeminiPatchRequest

Namespace: [Uralstech.UGemini](#)

All Gemini API PATCH requests must inherit from this interface.

```
public interface IGeminiPatchRequest : IGeminiRequest
```

Inherited Members

[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Properties

ContentType

The MIME type of the request content.

```
string ContentType { get; }
```

Property Value

[string](#)

Methods

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
string GetUtf8EncodedData()
```

Returns

string ↗

The string data.

Interface IGeminiPostRequest

Namespace: [Uralstech.UGemini](#)

All Gemini API POST requests must inherit from this interface.

```
public interface IGeminiPostRequest : IGeminiRequest
```

Inherited Members

[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Properties

ContentType

The MIME type of the request content.

```
string ContentType { get; }
```

Property Value

[string](#)

Methods

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
string GetUtf8EncodedData()
```

Returns

string ↗

The string data.

Interface IGeminiRequest

Namespace: [Uralstech.UGemini](#)

All Gemini API requests must inherit from this interface.

```
public interface IGeminiRequest
```

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#).

Properties

AuthMethod

The preferred authentication method.

```
GeminiAuthMethod AuthMethod { get; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
string OAuthAccessToken { get; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Interface

IGeminiStreamablePostRequest<TResponse>

Namespace: [Uralstech.UGemini](#)

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

```
public interface IGeminiStreamablePostRequest<TResponse> : IGeminiPostRequest,  
IGeminiRequest where TResponse : IAppendableData<TResponse>
```

Type Parameters

TResponse

The streamed response type.

Inherited Members

[IGeminiPostRequest.ContentType](#) , [IGeminiPostRequest.GetUtf8EncodedData\(\)](#) ,
[IGeminiRequest.GetEndpointUri\(GeminiRequestMetadata\)](#) , [IGeminiRequest.AuthMethod](#) ,
[IGeminiRequest.OAuthAccessToken](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Properties

StreamedResponse

The response being streamed.

```
TResponse StreamedResponse { get; }
```

Property Value

TResponse

Methods

ProcessStreamedData(List<JToken>, JToken)

Callback to process Server Sent Events (SSEs).

```
Task ProcessStreamedData(List<JToken> allEvents, JToken lastEvent)
```

Parameters

allEvents [List](#)<JToken>

All previously sent SSEs.

lastEvent JToken

The latest SSE.

Returns

[Task](#)

Namespace Uralstech.UGemini.Exceptions

Classes

[GeminiOAuthException](#)

Thrown when an exception related to OAuth authentication is raised.

[GeminiRequestException](#)

Thrown if a Gemini API request fails.

[GeminiResponseParsingException](#)

Thrown if the response of a Gemini API request could not be parsed.

Class GeminiOAuthException

Namespace: [Uralstech.UGemini.Exceptions](#)

Thrown when an exception related to OAuth authentication is raised.

```
public class GeminiOAuthException : Exception
```

Inheritance

[object](#) ← [Exception](#) ← GeminiOAuthException

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiOAuthException(UnityWebRequest, string)

Creates a new [GeminiOAuthException](#).

```
internal GeminiOAuthException(UnityWebRequest webRequest, string reason)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

reason [string](#)

Fields

IsBetaApi

Was the request on a beta API?

```
public bool IsBetaApi
```

Field Value

[bool](#) ↗

Reason

The reason for the exception.

```
public string Reason
```

Field Value

[string](#) ↗

RequestEndpoint

The endpoint of the request.

```
public Uri RequestEndpoint
```

Field Value

[Uri](#) ↗

Class GeminiRequestException

Namespace: [Uralstech.UGemini.Exceptions](#)

Thrown if a Gemini API request fails.

```
public class GeminiRequestException : Exception
```

Inheritance

[object](#) ← [Exception](#) ← GeminiRequestException

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiRequestException(UnityWebRequest)

Creates a new [GeminiRequestException](#).

```
internal GeminiRequestException(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

Fields

IsBetaApi

Was the request on a beta API?

```
public bool IsBetaApi
```

Field Value

[bool](#) ↗

RequestEndpoint

The endpoint of the failed request.

```
public Uri RequestEndpoint
```

Field Value

[Uri](#) ↗

RequestError

The name of the request's error.

```
public string RequestError
```

Field Value

[string](#) ↗

RequestErrorCode

The response code returned by the request.

```
public long RequestErrorCode
```

Field Value

[long](#) ↗

RequestErrorMessage

The request's error message.

```
public string RequestErrorMessage
```

Field Value

[string](#) ↗

Class GeminiResponseParsingException

Namespace: [Uralstech.UGemini.Exceptions](#)

Thrown if the response of a Gemini API request could not be parsed.

```
public class GeminiResponseParsingException : Exception
```

Inheritance

[object](#) ← [Exception](#) ← GeminiResponseParsingException

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiResponseParsingException(UnityWebRequest)

Creates a new [GeminiResponseParsingException](#).

```
internal GeminiResponseParsingException(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

GeminiResponseParsingException(UnityWebRequest, Exception)

Creates a new [GeminiResponseParsingException](#).

```
internal GeminiResponseParsingException(UnityWebRequest webRequest,  
Exception innerException)
```

Parameters

webRequest [UnityWebRequest](#)

The request that caused the exception.

innerException [Exception](#)

The inner exception that caused this one.

Fields

DownloadedText

The content downloaded from the request.

```
public string DownloadedText
```

Field Value

[string](#)

IsBetaApi

Was the request on a beta API?

```
public bool IsBetaApi
```

Field Value

[bool](#)

RequestEndpoint

The endpoint of the request.

```
public Uri RequestEndpoint
```

Field Value

Namespace Uralstech.UGemini.FileAPI

Classes

[GeminiFile](#)

Metadata for a file uploaded to the File API.

[GeminiFileDeleteRequest](#)

Requests the deletion of a file.

[GeminiFileGetRequest](#)

Requests metadata for an existing file. Return type is [GeminiFile](#).

[GeminiFileListRequest](#)

Requests metadata for all existing files. Return type is [GeminiFileListResponse](#).

[GeminiFileListResponse](#)

The response for a [GeminiFileListRequest](#) call.

[GeminiFileUploadMetaData](#)

Metadata for a [GeminiFile](#) to be uploaded.

[GeminiFileUploadRequest](#)

Uploads a file to the Gemini File API. Response type is [GeminiFileUploadResponse](#).

[GeminiFileUploadResponse](#)

Response for a file upload request.

[GeminiFileVideoMetaData](#)

Metadata for a video [GeminiFile](#).

Enums

[GeminiFileState](#)

States for the lifecycle of a File.

Class GeminiFile

Namespace: [Uralstech.UGemini.FileAPI](#)

Metadata for a file uploaded to the File API.

```
public class GeminiFile
```

Inheritance

[object](#) ← GeminiFile

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CreateTime

The timestamp of when the [GeminiFile](#) was created.

```
public DateTime CreateTime
```

Field Value

[DateTime](#)

DisplayName

The human-readable display name for the [GeminiFile](#).

```
public string DisplayName
```

Field Value

[string](#)

Error

Error status if [GeminiFile](#) processing failed.

```
public OperationStatus Error
```

Field Value

OperationStatus

ExpirationTime

The timestamp of when the [GeminiFile](#) will be deleted. Only set if the [GeminiFile](#) is scheduled to expire.

```
public DateTime ExpirationTime
```

Field Value

[DateTime](#)

MimeType

MIME type of the file.

```
public string MimeType
```

Field Value

[string](#)

Remarks

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

Name

The [GeminiFile](#) resource name.

```
public string Name
```

Field Value

[string](#) ↗

Sha256Hash

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

```
public string Sha256Hash
```

Field Value

[string](#) ↗

SizeBytes

Size of the file in bytes.

```
public long SizeBytes
```

Field Value

[long](#) ↗

State

Processing state of the [GeminiFile](#).

```
public GeminiFileState State
```

Field Value

[GeminiFileState](#)

Status

Error status if [GeminiFile](#) processing failed.

```
[Obsolete("Use GeminiFile.Error instead.")]  
public OperationStatus Status
```

Field Value

OperationStatus

UpdateTime

The timestamp of when the [GeminiFile](#) was last updated.

```
public DateTime UpdateTime
```

Field Value

[DateTime](#)

Uri

The uri of the [GeminiFile](#).

```
public string Uri
```

Field Value

[string](#)

VideoMetadata

Metadata for a video.

```
public GeminiFileVideoMetaData VideoMetadata
```

Field Value

[GeminiFileVideoMetaData](#)

Class GeminiFileDeleteRequest

Namespace: [Uralstech.UGemini.FileAPI](#)

Requests the deletion of a file.

```
public class GeminiFileDeleteRequest : IGeminiDeleteRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiFileDeleteRequest

Implements

[IGeminiDeleteRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiFileDeleteRequest(string, bool)

Creates a new [GeminiFileDeleteRequest](#).

```
public GeminiFileDeleteRequest(string fileNameOrId, bool useBetaApi = true)
```

Parameters

fileNameOrId [string](#)

The name (format 'files/{fileId}') or ID of the file to delete.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

FileId

The ID of the file to delete.

```
public string FileId
```

Field Value

[string](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiFileGetRequest

Namespace: [Uralstech.UGemini.FileAPI](#)

Requests metadata for an existing file. Return type is [GeminiFile](#).

```
public class GeminiFileGetRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiFileGetRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiFileGetRequest(string, bool)

Creates a new [GeminiFileGetRequest](#).

```
public GeminiFileGetRequest(string fileNameOrId, bool useBetaApi = true)
```

Parameters

fileNameOrId [string](#)

The name (format 'files/{fileId}') or ID of the file to get.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

FileId

The ID of the file to get.

```
public string FileId
```

Field Value

[string](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiFileListRequest

Namespace: [Uralstech.UGemini.FileAPI](#)

Requests metadata for all existing files. Return type is [GeminiFileListResponse](#).

```
public class GeminiFileListRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiFileListRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiFileListRequest(bool)

Creates a new [GeminiFileListRequest](#).

```
public GeminiFileListRequest(bool useBetaApi = true)
```

Parameters

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#) ↗

MaxResponseFiles

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

```
public int MaxResponseFiles
```

Field Value

[int](#) ↗

PageToken

A page token from a previous [GeminiFileListRequest](#) call.

```
public string PageToken
```

Field Value

[string](#) ↗

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

`metadata` [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiFileListResponse

Namespace: [Uralstech.UGemini.FileAPI](#)

The response for a [GeminiFileListRequest](#) call.

```
public class GeminiFileListResponse
```

Inheritance

[object](#) ↗ ← GeminiFileListResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Files

The list of files.

```
public GeminiFile[] Files
```

Field Value

[GeminiFile\[\]](#)

NextPageToken

A token that can be sent as a [PageToken](#) into a subsequent [GeminiFileListRequest](#) call.

```
public string NextPageToken
```

Field Value

[string](#) ↗

Enum GeminiFileState

Namespace: [Uralstech.UGemini.FileAPI](#)

States for the lifecycle of a File.

```
public enum GeminiFileState
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

`[EnumMember(Value = "ACTIVE")] Active = 2`

File is processed and available for inference.

`[EnumMember(Value = "FAILED")] Failed = 3`

File failed processing.

`[EnumMember(Value = "PROCESSING")] Processing = 1`

File is being processed and cannot be used for inference yet.

`[EnumMember(Value = "STATE_UNSPECIFIED")] Unspecified = 0`

The default value. This value is used if the state is omitted.

Class GeminiFileUploadMetaData

Namespace: [Uralstech.UGemini.FileAPI](#)

Metadata for a [GeminiFile](#) to be uploaded.

```
public class GeminiFileUploadMetaData
```

Inheritance

[object](#) ← GeminiFileUploadMetaData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

DisplayName

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"

```
public string DisplayName
```

Field Value

[string](#)

Name

The [GeminiFileUploadRequest](#) resource name, in format "files/{fileId}".

```
public string Name
```

Field Value

[string](#)

Remarks

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

Class GeminiFileUploadRequest

Namespace: [Uralstech.UGemini.FileAPI](#)

Uploads a file to the Gemini File API. Response type is [GeminiFileUploadResponse](#).

```
public class GeminiFileUploadRequest : IGeminiMultiPartPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiFileUploadRequest

Implements

[IGeminiMultiPartPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiFileUploadRequest(string, bool)

Creates a new [GeminiFileUploadRequest](#).

```
public GeminiFileUploadRequest(string contentType, bool useBetaApi = true)
```

Parameters

contentType [string](#)

The content type of the data.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

GeminiFileUploadRequest(GeminiContentType, bool)

Creates a new [GeminiFileUploadRequest](#).

```
public GeminiFileUploadRequest(GeminiContentType contentType, bool useBetaApi = true)
```

Parameters

contentType [GeminiContentType](#)

The content type of the data.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

File

Optional metadata for the [GeminiFile](#) to be uploaded.

```
public GeminiFileUploadMetaData File
```

Field Value

[GeminiFileUploadMetaData](#)

MimeType

The IANA standard MIME type of the [GeminiFileUploadRequest](#).

```
public string MimeType
```

Field Value

[string](#)

RawData

The raw file data to upload.

```
public byte[] RawData
```

Field Value

[byte](#)[]

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

ContentType

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

`metadata` [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData(string)

Converts the request object to a UTF-8 encoded multi-part [string](#).

```
public string GetUtf8EncodedData(string dataSeperator)
```

Parameters

dataSeperator [string](#)

The boundary to seperate each part of the data.

Returns

[string](#)

The string data.

Class GeminiFileUploadResponse

Namespace: [Uralstech.UGemini.FileAPI](#)

Response for a file upload request.

```
public class GeminiFileUploadResponse
```

Inheritance

[object](#) ← GeminiFileUploadResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

File

Metadata for the created file.

```
public GeminiFile File
```

Field Value

[GeminiFile](#)

Class GeminiFileVideoMetaData

Namespace: [Uralstech.UGemini.FileAPI](#)

Metadata for a video [GeminiFile](#).

```
public class GeminiFileVideoMetaData
```

Inheritance

[object](#) ← GeminiFileVideoMetaData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

VideoDuration

Duration of the video.

```
public TimeSpan VideoDuration
```

Field Value

[TimeSpan](#)

Namespace Uralstech.UGemini.JsonConverters

Classes

[GeminiLongArrayToStringArrayJsonConverter](#)

Converts a [long](#) array value to a [string](#) array and vice-versa.

[GeminiLongToStringJsonConverter](#)

Converts a [long](#) value to a [string](#) and vice-versa.

[GeminiModelIdStringConverter](#)

Custom JSON converter to handle conversion of [GeminiModelId](#) to a single [string](#) value and vice-versa.

[GeminiSecondsToTimeSpanJsonConverter](#)

Custom JSON converter to convert a time [string](#) of a format like "10.334s" to a [TimeSpan](#).

Class GeminiLongArrayToStringArrayJsonConverter

Namespace: [Uralstech.UGemini.JsonConverters](#)

Converts a [long](#) array value to a [string](#) array and vice-versa.

```
public class GeminiLongArrayToStringArrayJsonConverter : JsonConverter<long[]>
```

Inheritance

[object](#) ← GeminiLongArrayToStringArrayJsonConverter

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Methods

ReadJson(JsonReader, Type, long[], bool, JsonSerializer)

```
public override long[] ReadJson(JsonReader reader, Type objectType, long[] existingValue,  
bool hasExistingValue, JsonSerializer serializer)
```

Parameters

reader JsonReader

objectType Type

existingValue long[]

hasExistingValue bool

serializer JsonSerializer

Returns

long[]

WriteJson(JsonWriter, long[], JsonSerializer)

```
public override void WriteJson(JsonWriter writer, long[] value, JsonSerializer serializer)
```

Parameters

writer JsonWriter

value [long](#)[]

serializer JsonSerializer

Class GeminiLongToStringJsonConverter

Namespace: [Uralstech.UGemini.JsonConverters](#)

Converts a [long](#) value to a [string](#) and vice-versa.

```
public class GeminiLongToStringJsonConverter : JsonConverter<long?>
```

Inheritance

[object](#) ← GeminiLongToStringJsonConverter

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Methods

ReadJson(JsonReader, Type, long?, bool, JsonSerializer)

```
public override long? ReadJson(JsonReader reader, Type objectType, long? existingValue, bool  
hasExistingValue, JsonSerializer serializer)
```

Parameters

reader JsonReader

objectType [Type](#)

existingValue [long](#)?

hasExistingValue [bool](#)

serializer JsonSerializer

Returns

[long](#)?

WriteJson(JsonWriter, long?, JsonSerializer)

```
public override void WriteJson(JsonWriter writer, long? value, JsonSerializer serializer)
```

Parameters

writer JsonWriter

value long?

serializer JsonSerializer

Class GeminiModelIdStringConverter

Namespace: [Uralstech.UGemini.JsonConverters](#)

Custom JSON converter to handle conversion of [GeminiModelId](#) to a single [string](#) value and vice-versa.

```
public class GeminiModelIdStringConverter : JsonConverter<GeminiModelId>
```

Inheritance

[object](#) ← GeminiModelIdStringConverter

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Methods

ReadJson(JsonReader, Type, GeminiModelId, bool, JsonSerializer)

```
public override GeminiModelId ReadJson(JsonReader reader, Type objectType, GeminiModelId existingValue, bool hasExistingValue, JsonSerializer serializer)
```

Parameters

reader JsonReader

objectType Type

existingValue GeminiModelId

hasExistingValue bool

serializer JsonSerializer

Returns

[GeminiModelId](#)

WriteJson(JsonWriter, GeminiModelId, JsonSerializer)

```
public override void WriteJson(JsonWriter writer, GeminiModelId value,  
JsonSerializer serializer)
```

Parameters

writer JsonWriter

value [GeminiModelId](#)

serializer JsonSerializer

Class GeminiSecondsToTimeSpanJsonConverter

Namespace: [Uralstech.UGemini.JsonConverters](#)

Custom JSON converter to convert a time [string](#) of a format like "10.334s" to a [TimeSpan](#).

```
public class GeminiSecondsToTimeSpanJsonConverter : JsonConverter<TimeSpan>
```

Inheritance

[object](#) ← GeminiSecondsToTimeSpanJsonConverter

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Methods

[ReadJson\(JsonReader, Type, TimeSpan, bool, JsonSerializer\)](#)

```
public override TimeSpan ReadJson(JsonReader reader, Type objectType, TimeSpan  
existingValue, bool hasExistingValue, JsonSerializer serializer)
```

Parameters

reader JsonReader

objectType [Type](#)

existingValue [TimeSpan](#)

hasExistingValue [bool](#)

serializer JsonSerializer

Returns

[TimeSpan](#)

WriteJson(JsonWriter, TimeSpan, JsonSerializer)

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

Parameters

writer JsonWriter

value [TimeSpan](#)

serializer JsonSerializer

Namespace Uralstech.UGemini.Models

Classes

[GeminiFieldMaskGenerator](#)

Extension to generate a [Field Mask](#) from any object.

[GeminiModel](#)

Information about a Generative Language Model.

[GeminiModelGetRequest](#)

Gets information about a specific model. Return type is [GeminiModel](#).

[GeminiModelId](#)

Information about the unique ID of a Generative Language Model.

[GeminiModelListRequest](#)

Requests metadata for all existing models. Return type is [GeminiModelListResponse](#).

[GeminiModelListResponse](#)

The response for a [GeminiModelListRequest](#) call.

Class GeminiFieldMaskGenerator

Namespace: [Uralstech.UGemini.Models](#)

Extension to generate a [Field Mask](#) from any object.

```
public static class GeminiFieldMaskGenerator
```

Inheritance

[object](#) ← GeminiFieldMaskGenerator

Fields

s_publicInstanceMembers

Binding flags for accessing public instance members.

```
private static readonly BindingFlags s_publicInstanceMembers
```

Field Value

[BindingFlags](#)

Methods

GetFieldMask<T>(T)

Generates a [Field Mask](#) from an object of type [T](#).

```
public static string GetFieldMask<T>(this T thiz)
```

Parameters

[thiz](#) [T](#)

The object.

Returns

[string](#)

A string field mask.

Type Parameters

T

The type.

Remarks

This is a reflection heavy process. Also, this only works if the default value off all fields and properties in T is [null](#).

Exceptions

[NotImplementedException](#)

Thrown if T does not implement JsonObjectAttribute or has no defined NamingStrategy.

GetJsonMemberName(MemberInfo, NamingStrategy)

Gets the JSON name of a type member as defined in its JsonPropertyAttribute, or uses a NamingStrategy to convert its name.

```
private static string GetJsonMemberName(MemberInfo member, NamingStrategy namingStrategy)
```

Parameters

member [MemberInfo](#)

The member.

namingStrategy [NamingStrategy](#)

The naming strategy to use if a defined JSON name was not found.

Returns

string ↴

The JSON name of the member.

Class GeminiModel

Namespace: [Uralstech.UGemini.Models](#)

Information about a Generative Language Model.

```
public class GeminiModel : GeminiModelId
```

Inheritance

[object](#) ← [GeminiModelId](#) ← GeminiModel

Inherited Members

[GeminiModelId.DefaultModelResourceLocation](#), [GeminiModelId.Name](#), [GeminiModelId.BaseModelId](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Aqa

You can use the AQA model to perform Attributed Question-Answering (AQA)-related tasks over a document, corpus, or a set of passages. The AQA model returns answers to questions that are grounded in provided sources, along with estimating answerable probability. ↗

```
public static readonly GeminiModelId Aqa
```

Field Value

[GeminiModelId](#)

Remarks

Supports text input.

Description

A short description of the model.

```
public string Description
```

Field Value

[string ↗](#)

DisplayName

The human-readable name of the model. E.g. "Chat Bison".

```
public string DisplayName
```

Field Value

[string ↗](#)

Remarks

The name can be up to 128 characters long and can consist of any UTF-8 characters.

Gemini1_0Pro

[Gemini 1.0 Pro is an NLP model that handles tasks like multi-turn text and code chat, and code generation. ↗](#)

```
public static readonly GeminiModelId Gemini1_0Pro
```

Field Value

[GeminiModelId](#)

Remarks

Supports text input.

Gemini1_0ProTuning

Finetuning-supported version of [Gemini1_0Pro](#).

```
public static readonly GeminiModelId Gemini1_0ProTuning
```

Field Value

[GeminiModelId](#)

Remarks

[Gemini 1.0 Pro is an NLP model that handles tasks like multi-turn text and code chat, and code generation.](#) ↴ Supports text input.

Gemini1_0ProVision

[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.](#) ↴

```
public static readonly GeminiModelId Gemini1_0ProVision
```

Field Value

[GeminiModelId](#)

Remarks

Supports image, video and text input.

Gemini1_5Flash

[Gemini 1.5 Flash is a fast and versatile multimodal model for scaling across diverse tasks.](#) ↴

```
public static readonly GeminiModelId Gemini1_5Flash
```

Field Value

[GeminiModelId](#)

Remarks

Supports audio, image, video and text input.

Gemini1_5FlashTuning

Finetuning-supported version of [Gemini1_5Flash](#).

```
public static readonly GeminiModelId Gemini1_5FlashTuning
```

Field Value

[GeminiModelId](#)

Remarks

[Gemini 1.5 Flash is a fast and versatile multimodal model for scaling across diverse tasks.](#) ↗ Supports audio, image, video and text input.

Gemini1_5Pro

[Gemini 1.5 Pro is a mid-size multimodal model that is optimized for a wide-range of reasoning tasks.](#)
[1.5 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.](#) ↗

```
public static readonly GeminiModelId Gemini1_5Pro
```

Field Value

[GeminiModelId](#)

Remarks

Supports audio, image, video and text input.

InputTokenLimit

Maximum number of input tokens allowed for this model.

```
public int InputTokenLimit
```

Field Value

[int](#)

MaxTemperature

The maximum temperature this model can use.

```
public float MaxTemperature
```

Field Value

[float](#)

OutputTokenLimit

Maximum number of output tokens available for this model.

```
public int OutputTokenLimit
```

Field Value

[int](#)

SupportedGenerationMethods

The model's supported generation methods.

```
public string[] SupportedGenerationMethods
```

Field Value

[string](#)[]

Remarks

The method names are defined as Pascal case strings, such as [generateMessage](#) which correspond to API methods.

Temperature

Controls the randomness of the output.

```
public float Temperature
```

Field Value

[float](#)[]

Remarks

Values can range over [0.0,2.0], inclusive. A higher value will produce responses that are more varied, while a value closer to 0.0 will typically result in less surprising responses from the model. This value specifies default to be used by the backend while making the call to the model.

TextEmbedding004

[text-embedding-004 achieves a stronger retrieval performance and outperforms existing models with comparable dimensions, on the standard MTEB embedding benchmarks.](#)

```
public static readonly GeminiModelId TextEmbedding004
```

Field Value

[GeminiModelId](#)

Remarks

Supports text input.

TopK

For Top-k sampling.

```
public int TopK
```

Field Value

[int](#)

Remarks

Top-k sampling considers the set of topK most probable tokens. This value specifies default to be used by the backend while making the call to the model. If unset, indicates the model doesn't use top-k sampling, and topK isn't allowed as a generation parameter.

TopP

For Nucleus sampling.

```
public float TopP
```

Field Value

[float](#)

Remarks

Nucleus sampling considers the smallest set of tokens whose probability sum is at least topP. This value specifies default to be used by the backend while making the call to the model.

Version

The version number of the model.

```
public string Version
```

Field Value

[string](#) ↗

Remarks

This represents the major version

Class GeminiModelGetRequest

Namespace: [Uralstech.UGemini.Models](#)

Gets information about a specific model. Return type is [GeminiModel](#).

```
public class GeminiModelGetRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiModelGetRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiModelGetRequest(GeminiModelId, bool)

Creates a new [GeminiModelGetRequest](#).

```
public GeminiModelGetRequest(GeminiModelId modelId, bool useBetaApi = false)
```

Parameters

modelId [GeminiModelId](#)

The ID of the model to get.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Some newer models do not work with this request unless through the Beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Model

The ID of the [GeminiModel](#) to get.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ModelName

The resource name of the model to get, in the format models/{model}.

```
[Obsolete("This has been deprecated, please use GeminiModelGetRequest.Model instead.")]
public string ModelName { get; set; }
```

Property Value

[string](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

Class GeminiModelId

Namespace: [Uralstech.UGemini.Models](#)

Information about the unique ID of a Generative Language Model.

```
public class GeminiModelId
```

Inheritance

[object](#) ← GeminiModelId

Derived

[GeminiModel](#), [GeminiTunedModel](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#)

Constructors

GeminiModelId(string)

Creates a new [GeminiModelId](#).

```
public GeminiModelId(string nameOrBaseModelId)
```

Parameters

`nameOrBaseModelId` [string](#)

The full name of the model resource (see [Name](#)) or the unique ID of the base model.

GeminiModelId(string, string)

Creates a new [GeminiModelId](#).

```
public GeminiModelId(string name, string baseModelId)
```

Parameters

`name` [string](#)

The resource name of the Model, see [Name](#).

`baseModelId` [string](#)

The ID of the base model.

Fields

BaseModelId

The ID of the base model, not very useful for [GeminiTunedModels](#)s.

```
public string BaseModelId
```

Field Value

[string](#)

DefaultModelResourceLocation

The default resource location for all models.

```
public const string DefaultModelResourceLocation = "models/"
```

Field Value

[string](#)

Name

The resource name of the Model.

```
public string Name
```

Field Value

[string](#) ↗

Remarks

Format: models/{model} with a {model} naming convention of:

"{baseModelId}-{version}"

Operators

implicit operator GeminiModelId(string)

Creates a new [GeminiModelId](#) with the full name of the model resource (see [Name](#)) or the unique ID of the base model.

```
public static implicit operator GeminiModelId(string nameOrBaseModelId)
```

Parameters

[nameOrBaseModelId](#) [string](#) ↗

The full name of the model resource or the unique ID of the base model.

Returns

[GeminiModelId](#)

implicit operator string(GeminiModelId)

Gets the full name of the model resource of the [GeminiModelId](#).

```
public static implicit operator string(GeminiModelId model)
```

Parameters

[model](#) [GeminiModelId](#)

The [GeminiModelId](#).

Returns

[string](#) ↗

Class GeminiModelListRequest

Namespace: [Uralstech.UGemini.Models](#)

Requests metadata for all existing models. Return type is [GeminiModelListResponse](#).

```
public class GeminiModelListRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiModelListRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiModelListRequest(bool)

Creates a new [GeminiModelListRequest](#).

```
public GeminiModelListRequest(bool useBetaApi = false)
```

Parameters

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Some newer models do not work with this request unless through the Beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

MaxResponseModels

The maximum number of [GeminiModel](#)s to return (per page).

```
public int MaxResponseModels
```

Field Value

[int](#)

Remarks

This method returns at most 1000 models per page, even if you pass a larger [MaxResponseModels](#).

PageToken

A page token from a previous [GeminiModelListRequest](#) call.

```
public string PageToken
```

Field Value

[string](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiModelListResponse

Namespace: [Uralstech.UGemini.Models](#)

The response for a [GeminiModelListRequest](#) call.

```
public class GeminiModelListResponse
```

Inheritance

[object](#) ↗ ← GeminiModelListResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Models

The list of models.

```
public GeminiModel[] Models
```

Field Value

[GeminiModel\[\]](#)

NextPageToken

A token that can be sent as a [PageToken](#) into a subsequent [GeminiModelListRequest](#) call.

```
public string NextPageToken
```

Field Value

[string](#) ↗

Namespace Uralstech.UGemini.Models.Caching Classes

[GeminiCachedContent](#)

Content that has been preprocessed and can be used in subsequent request to GenerativeService.

[GeminiCachedContentCreateRequest](#)

Creates a [GeminiCachedContent](#) resource. Response type is [GeminiCachedContent](#).

[GeminiCachedContentCreationData](#)

Data to cache content that has been preprocessed and can be used in subsequent request to GenerativeService.

[GeminiCachedContentDeleteRequest](#)

Requests for deletion of a cached content resource.

[GeminiCachedContentGetRequest](#)

Requests metadata cached content. Return type is [GeminiCachedContent](#).

[GeminiCachedContentListRequest](#)

Requests metadata for all existing cached content. Return type is [GeminiCachedContentListResponse](#).

[GeminiCachedContentListResponse](#)

The response for a [GeminiCachedContentListRequest](#) call.

[GeminiCachedContentPatchData](#)

Data to patch an existing cached content resource with new data.

[GeminiCachedContentPatchRequest](#)

Patches a [GeminiCachedContent](#) resource. Response type is [GeminiCachedContent](#).

[GeminiCachedContentUsageMetadata](#)

Metadata on the usage of the cached content.

Class GeminiCachedContent

Namespace: [Uralstech.UGemini.Models.Caching](#)

Content that has been preprocessed and can be used in subsequent request to GenerativeService.

```
public class GeminiCachedContent
```

Inheritance

[object](#) ← GeminiCachedContent

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Cached content can be only used with model it was created for.

Fields

CreateTime

Creation time of the cache entry.

```
public DateTime CreateTime
```

Field Value

[DateTime](#)

DisplayName

The user-generated meaningful display name of the cached content. Maximum 128 Unicode characters.

```
public string DisplayName
```

Field Value

[string](#)

ExpireTime

Timestamp in UTC of when this resource is considered expired.

```
public DateTime ExpireTime
```

Field Value

[DateTime](#)

Model

The name of the Model to use for cached content Format: mod

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

Name

The resource name referring to the cached content. Format: cachedContents/{contentId}.

```
public string Name
```

Field Value

[string](#)

UpdateTime

When the cache entry was last updated in UTC time.

```
public DateTime UpdateTime
```

Field Value

[DateTime](#)

UsageMetadata

Metadata on the usage of the cached content.

```
public GeminiCachedContentUsageMetadata UsageMetadata
```

Field Value

[GeminiCachedContentUsageMetadata](#)

Class GeminiCachedContentCreateRequest

Namespace: [Uralstech.UGemini.Models.Caching](#)

Creates a [GeminiCachedContent](#) resource. Response type is [GeminiCachedContent](#).

```
public class GeminiCachedContentCreateRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiCachedContentCreateRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiCachedContentCreateRequest(GeminiCachedContentCreationData, bool)

Creates a new [GeminiCachedContentCreateRequest](#).

```
public GeminiCachedContentCreateRequest(GeminiCachedContentCreationData content, bool  
useBetaApi = true)
```

Parameters

content [GeminiCachedContentCreationData](#)

The content to cache.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Content

The content to be cached.

```
public GeminiCachedContentCreationData Content
```

Field Value

[GeminiCachedContentCreationData](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

`metadata` [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiCachedContentCreationData

Namespace: [Uralstech.UGemini.Models.Caching](#)

Data to cache content that has been preprocessed and can be used in subsequent request to GenerativeService.

```
public class GeminiCachedContentCreationData
```

Inheritance

[object](#) ← GeminiCachedContentCreationData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Contents

The content to cache.

```
public GeminiContent[] Contents
```

Field Value

[GeminiContent\[\]](#)

DisplayName

The user-generated meaningful display name of the cached content. Maximum 128 Unicode characters.

```
public string DisplayName
```

Field Value

[string](#)

ExpireTime

Timestamp in UTC of when this resource is considered expired.

```
public DateTime? ExpireTime
```

Field Value

[DateTime](#)?

Remarks

If not provided, [TimeToLive](#) must be provided.

Model

The name of the Model to use for cached content.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

SystemInstruction

Developer set system instruction. Currently text only.

```
public GeminiContent SystemInstruction
```

Field Value

[GeminiContent](#)

TimeToLive

New TTL for this resource.

```
public TimeSpan? TimeToLive
```

Field Value

[TimeSpan](#)?

Remarks

If not provided, [ExpireTime](#) must be provided.

ToolConfig

This config is shared for all tools.

```
public GeminiToolConfiguration ToolConfig
```

Field Value

[GeminiToolConfiguration](#)

Tools

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

```
public GeminiTool[] Tools
```

Field Value

[GeminiTool](#)[]

Class GeminiCachedContentDeleteRequest

Namespace: [Uralstech.UGemini.Models.Caching](#)

Requests for deletion of a cached content resource.

```
public class GeminiCachedContentDeleteRequest : IGeminiDeleteRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiCachedContentDeleteRequest

Implements

[IGeminiDeleteRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiCachedContentDeleteRequest(string, bool)

Creates a new [GeminiCachedContentDeleteRequest](#).

```
public GeminiCachedContentDeleteRequest(string cachedContentIdOrName, bool useBetaApi  
= true)
```

Parameters

cachedContentIdOrName [string](#)

The ID or name (format cachedContents/{contentId}) of the cached content to delete.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

ContentId

The ID of the cached content.

```
public string ContentId
```

Field Value

[string](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiCachedContentGetRequest

Namespace: [Uralstech.UGemini.Models.Caching](#)

Requests metadata cached content. Return type is [GeminiCachedContent](#).

```
public class GeminiCachedContentGetRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiCachedContentGetRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiCachedContentGetRequest(string, bool)

Creates a new [GeminiCachedContentGetRequest](#).

```
public GeminiCachedContentGetRequest(string cachedContentIdOrName, bool useBetaApi = true)
```

Parameters

cachedContentIdOrName [string](#)

The ID or name (format cachedContents/{contentId}) of the cached content to get.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

ContentId

The ID of the cached content.

```
public string ContentId
```

Field Value

[string](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiCachedContentListRequest

Namespace: [Uralstech.UGemini.Models.Caching](#)

Requests metadata for all existing cached content. Return type is [GeminiCachedContentListResponse](#).

```
public class GeminiCachedContentListRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiCachedContentListRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiCachedContentListRequest(bool)

Creates a new [GeminiCachedContentListRequest](#).

```
public GeminiCachedContentListRequest(bool useBetaApi = true)
```

Parameters

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#) ↗

MaxResponseContents

The maximum number of [GeminiCachedContent](#) objects to return (per page).

```
public int MaxResponseContents
```

Field Value

[int](#) ↗

Remarks

This method returns at most 1000 [GeminiCachedContent](#) objects per page, even if you pass a larger [MaxResponseContents](#).

PageToken

A page token from a previous [GeminiCachedContentListRequest](#) call.

```
public string PageToken
```

Field Value

[string](#) ↗

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiCachedContentListResponse

Namespace: [Uralstech.UGemini.Models.Caching](#)

The response for a [GeminiCachedContentListRequest](#) call.

```
public class GeminiCachedContentListResponse
```

Inheritance

[object](#) ← GeminiCachedContentListResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CachedContents

The list of cached contents.

```
public GeminiCachedContent[] CachedContents
```

Field Value

[GeminiCachedContent\[\]](#)

NextPageToken

A token that can be sent as a [PageToken](#) into a subsequent [GeminiCachedContentListRequest](#) call.

```
public string NextPageToken
```

Field Value

[string](#)

Class GeminiCachedContentPatchData

Namespace: [Uralstech.UGemini.Models.Caching](#)

Data to patch an existing cached content resource with new data.

```
public class GeminiCachedContentPatchData
```

Inheritance

[object](#) ← GeminiCachedContentPatchData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

ExpireTime

Timestamp in UTC of when this resource is considered expired.

```
public DateTime? ExpireTime
```

Field Value

[DateTime](#)?

Remarks

If not provided, [TimeToLive](#) must be provided.

TimeToLive

New TTL for this resource.

```
public TimeSpan? TimeToLive
```

Field Value

[TimeSpan](#)?

Remarks

If not provided, [ExpireTime](#) must be provided.

Class GeminiCachedContentPatchRequest

Namespace: [Uralstech.UGemini.Models.Caching](#)

Patches a [GeminiCachedContent](#) resource. Response type is [GeminiCachedContent](#).

```
public class GeminiCachedContentPatchRequest : IGeminiPatchRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiCachedContentPatchRequest

Implements

[IGeminiPatchRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiCachedContentPatchRequest(GeminiCachedContentPatchData patch, string cachedContentIdOrName, bool useBetaApi = true)

Creates a new [GeminiCachedContentPatchRequest](#).

```
public GeminiCachedContentPatchRequest(GeminiCachedContentPatchData patch, string  
cachedContentIdOrName, bool useBetaApi = true)
```

Parameters

patch [GeminiCachedContentPatchData](#)

The patch data.

cachedContentIdOrName [string](#)

The ID or name (format cachedContents/{contentId}) of the cached content to patch.

`useBetaApi` [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

ContentId

The ID of the cached content.

```
public string ContentId
```

Field Value

[string](#)

Patch

The patch data.

```
public GeminiCachedContentPatchData Patch
```

Field Value

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiCachedContentUsageMetadata

Namespace: [Uralstech.UGemini.Models.Caching](#)

Metadata on the usage of the cached content.

```
public class GeminiCachedContentUsageMetadata
```

Inheritance

[object](#) ← GeminiCachedContentUsageMetadata

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

TotalTokenCount

Total number of tokens that the cached content consumes.

```
public int TotalTokenCount
```

Field Value

[int](#)

Namespace Uralstech.UGemini.Models.Content

Classes

[GeminiContent](#)

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

[GeminiContentBlob](#)

Raw media bytes.

Text should not be sent as raw bytes, use the [Text](#) field.

[GeminiContentPart](#)

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

[GeminiFileData](#)

URI based data.

[UnityExtensions](#)

Extensions for Unity types.

Enums

[GeminiRole](#)

The role of a Gemini content creator.

Class GeminiContent

Namespace: [Uralstech.UGemini.Models.Content](#)

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

```
public class GeminiContent : IAppendableData<GeminiContent>
```

Inheritance

[object](#) ← GeminiContent

Implements

[IAppendableData<GeminiContent>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Parts

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

```
public GeminiContentPart[] Parts
```

Field Value

[GeminiContentPart\[\]](#)

Role

Optional. The producer of the content.

```
public GeminiRole Role
```

Field Value

Methods

Append(GeminiContent)

Appends the `data` to the current [IAppendableData<T>](#).

```
public void Append(GeminiContent data)
```

Parameters

`data` [GeminiContent](#)

The data to append.

GetContent(string, Texture2D, GeminiRole)

Creates a new [GeminiContent](#) from a role, message and Texture2D.

```
public static GeminiContent GetContent(string message, Texture2D image, GeminiRole role  
= GeminiRole.Unspecified)
```

Parameters

`message` [string](#) ↗

The message.

`image` Texture2D

The image texture.

`role` [GeminiRole](#)

The role of the content creator.

Returns

[GeminiContent](#)

A new [GeminiContent](#) object.

GetContent(string, GeminiFile, GeminiRole)

Creates a new [GeminiContent](#) from a role, message and [GeminiFile](#).

```
public static GeminiContent GetContent(string message, GeminiFile file, GeminiRole role  
= GeminiRole.Unspecified)
```

Parameters

message [string](#) ↗

The message.

file [GeminiFile](#)

The [GeminiFile](#).

role [GeminiRole](#)

The role of the content creator.

Returns

[GeminiContent](#)

A new [GeminiContent](#) object.

GetContent(string, GeminiRole)

Creates a new [GeminiContent](#) from a role and message.

```
public static GeminiContent GetContent(string message, GeminiRole role  
= GeminiRole.Unspecified)
```

Parameters

message [string](#) ↗

The message.

role [GeminiRole](#)

The role of the content creator.

Returns

[GeminiContent](#)

A new [GeminiContent](#) object.

GetContent(GeminiFunctionCall)

Creates a new [GeminiContent](#) from a [GeminiFunctionCall](#).

```
public static GeminiContent GetContent(GeminiFunctionCall functionCall)
```

Parameters

functionCall [GeminiFunctionCall](#)

The function call.

Returns

[GeminiContent](#)

A new [GeminiContent](#) object.

GetContent(GeminiFunctionResponse)

Creates a new [GeminiContent](#) from a [GeminiFunctionResponse](#).

```
public static GeminiContent GetContent(GeminiFunctionResponse functionResponse)
```

Parameters

functionResponse [GeminiFunctionResponse](#)

The function response.

Returns

[GeminiContent](#)

A new [GeminiContent](#) object.

Class GeminiContentBlob

Namespace: [Uralstech.UGemini.Models.Content](#)

Raw media bytes.

Text should not be sent as raw bytes, use the [Text](#) field.

```
public class GeminiContentBlob
```

Inheritance

[object](#) ← GeminiContentBlob

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#).

Fields

Data

The base64 encoded bytes of data.

```
public string Data
```

Field Value

[string](#)

MimeType

The type of the data.

```
public GeminiContentType MimeType
```

Field Value

[GeminiContentType](#)

Remarks

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

Methods

GetContentBlob(Texture2D, bool)

Converts the given Texture2D to a [GeminiContentBlob](#).

```
public static GeminiContentBlob GetContentBlob(Texture2D image, bool useJPEG = false)
```

Parameters

image Texture2D

The Texture2D to use.

useJPEG [bool](#)

Should the encoder use JPEG instead of PNG?

Returns

[GeminiContentBlob](#)

A new [GeminiContentBlob](#) object.

Class GeminiContentPart

Namespace: [Uralstech.UGemini.Models.Content](#)

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

```
public class GeminiContentPart : IAppendableData<GeminiContentPart>
```

Inheritance

[object](#) ← GeminiContentPart

Implements

[IAppendableData<GeminiContentPart>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CodeExecutionResult

Result of executing the [ExecutableCode](#).

```
public GeminiCodeExecutionResult CodeExecutionResult
```

Field Value

[GeminiCodeExecutionResult](#)

ExecutableCode

Code generated by the model that is meant to be executed.

```
public GeminiExecutableCode ExecutableCode
```

Field Value

FileData

URI based data.

```
public GeminiFileData FileData
```

Field Value

[GeminiFileData](#)

Remarks

Only available in the beta API.

FunctionCall

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

```
public GeminiFunctionCall FunctionCall
```

Field Value

[GeminiFunctionCall](#)

Remarks

Only available in the beta API.

FunctionResponse

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.

```
public GeminiFunctionResponse FunctionResponse
```

Field Value

[GeminiFunctionResponse](#)

Remarks

Only available in the beta API.

InlineData

Inline media bytes.

```
public GeminiContentBlob InlineData
```

Field Value

[GeminiContentBlob](#)

Text

Inline text.

```
public string Text
```

Field Value

[string](#) ↗

Properties

IsEmpty

Is there no content stored in this [GeminiContentPart](#)?

```
public bool IsEmpty { get; }
```

Property Value

[bool](#) ↗

Methods

Append(GeminiContentPart)

Appends the [data](#) to the current [IAppendableData<T>](#).

```
public void Append(GeminiContentPart data)
```

Parameters

[data](#) [GeminiContentPart](#)

The data to append.

IsAppendable(GeminiContentPart)

Is the data to be appended compatible with the current [GeminiContentPart](#)?

```
public bool IsAppendable(GeminiContentPart data)
```

Parameters

[data](#) [GeminiContentPart](#)

The data to be appended.

Returns

[bool](#) ↗

Class GeminiFileData

Namespace: [Uralstech.UGemini.Models.Content](#)

URI based data.

```
public class GeminiFileData
```

Inheritance

[object](#) ← GeminiFileData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiFileData()

Creates a new [GeminiFileData](#) object.

```
public GeminiFileData()
```

GeminiFileData(GeminiContentType, string)

Creates a new [GeminiFileData](#) object.

```
public GeminiFileData(GeminiContentType contentType, string fileUri)
```

Parameters

contentType [GeminiContentType](#)

The type of the file's contents.

fileUri [string](#)

The URI to the file.

Fields

FileUri

URI.

```
public string FileUri
```

Field Value

[string](#)

MimeType

The IANA standard MIME type of the source data.

```
public string MimeType
```

Field Value

[string](#)

Enum GeminiRole

Namespace: [Uralstech.UGemini.Models.Content](#)

The role of a Gemini content creator.

```
public enum GeminiRole
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "model")] Assistant = 2`

The content was made by the model.

`[EnumMember(Value = "function")] ToolResponse = 3`

The content was made by a function.

`Unspecified = 0`

Don't use this.

`[EnumMember(Value = "user")] User = 1`

The content was made by the user.

Class UnityExtensions

Namespace: [Uralstech.UGemini.Models.Content](#)

Extensions for Unity types.

```
public static class UnityExtensions
```

Inheritance

[object](#) ← UnityExtensions

Methods

ToBase64JPEG(Texture2D)

Converts the given Texture2D to a JPEG Base64 encoded string.

```
public static string ToBase64JPEG(this Texture2D image)
```

Parameters

image Texture2D

The Texture2D.

Returns

[string](#)

The Base64 encoded [string](#).

ToBase64PNG(Texture2D)

Converts the given Texture2D to a PNG Base64 encoded string.

```
public static string ToBase64PNG(this Texture2D image)
```

Parameters

image Texture2D

The Texture2D.

Returns

[string](#)

The Base64 encoded [string](#).

Namespace Uralstech.UGemini.Models.Content.Attribution

Classes

[GeminiAttributionSourceId](#)

Identifier for the source contributing to this attribution.

[GeminiGroundingAttribution](#)

Attribution for a source that contributed to an answer.

[GeminiGroundingPassageId](#)

Identifier for a part within a GroundingPassage.

[GeminiSemanticRetrieverChunk](#)

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

Class GeminiAttributionSourceId

Namespace: [Uralstech.UGemini.Models.Content.Attribution](#)

Identifier for the source contributing to this attribution.

```
public class GeminiAttributionSourceId
```

Inheritance

[object](#) ← GeminiAttributionSourceId

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

GroundingPassage

Identifier for an inline passage.

```
public GeminiGroundingPassageId GroundingPassage
```

Field Value

[GeminiGroundingPassageld](#)

SemanticRetrieverChunk

Identifier for a Chunk fetched via Semantic Retriever.

```
public GeminiSemanticRetrieverChunk SemanticRetrieverChunk
```

Field Value

[GeminiSemanticRetrieverChunk](#)

Class GeminiGroundingAttribution

Namespace: [Uralstech.UGemini.Models.Content.Attribution](#)

Attribution for a source that contributed to an answer.

```
public class GeminiGroundingAttribution
```

Inheritance

[object](#) ← GeminiGroundingAttribution

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Content

Grounding source content that makes up this attribution.

```
public GeminiContent Content
```

Field Value

[GeminiContent](#)

SourceId

Identifier for the source contributing to this attribution.

```
public GeminiAttributionSourceId SourceId
```

Field Value

[GeminiAttributionSourceId](#)

Class GeminiGroundingPassageld

Namespace: [Uralstech.UGemini.Models.Content.Attribution](#)

Identifier for a part within a GroundingPassage.

```
public class GeminiGroundingPassageId
```

Inheritance

[object](#) ← GeminiGroundingPassageld

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

PartIndex

Index of the part within the GenerateAnswerRequest's [GroundingPassage](#).

```
public int PartIndex
```

Field Value

[int](#)

Passageld

ID of the passage matching the GenerateAnswerRequest's [GroundingPassage](#).

```
public string PassageId
```

Field Value

[string](#)

Class GeminiSemanticRetrieverChunk

Namespace: [Uralstech.UGemini.Models.Content.Attribution](#)

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

```
public class GeminiSemanticRetrieverChunk
```

Inheritance

[object](#) ← GeminiSemanticRetrieverChunk

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Chunk

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

```
public string Chunk
```

Field Value

[string](#)

Source

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

```
public string Source
```

Field Value

[string](#)

Namespace Uralstech.UGemini.Models.Content.Citation

Classes

[GeminiCitationMetadata](#)

A collection of source attributions for a piece of content.

[GeminiCitationSource](#)

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

Class GeminiCitationMetadata

Namespace: [Uralstech.UGemini.Models.Content.Citation](#)

A collection of source attributions for a piece of content.

```
public class GeminiCitationMetadata
```

Inheritance

[object](#) ← GeminiCitationMetadata

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CitationSources

Citations to sources for a specific response.

```
public GeminiCitationSource[] CitationSources
```

Field Value

[GeminiCitationSource\[\]](#)

Class GeminiCitationSource

Namespace: [Uralstech.UGemini.Models.Content.Citation](#)

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

```
public class GeminiCitationSource
```

Inheritance

[object](#) ← GeminiCitationSource

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

EndIndex

End of the attributed segment, exclusive.

```
public int EndIndex
```

Field Value

[int](#)

License

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

```
public string License
```

Field Value

[string](#)

StartIndex

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

```
public int StartIndex
```

Field Value

[int](#)

Remarks

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

Uri

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

```
public string Uri
```

Field Value

[string](#)

Namespace Uralstech.UGemini.Models.CountTokens

Classes

[GeminiTokenCountRequest](#)

Request to count tokens in given content.

[GeminiTokenCountResponse](#)

A response from CountTokens.

Class GeminiTokenCountRequest

Namespace: [Uralstech.UGemini.Models.CountTokens](#)

Request to count tokens in given content.

```
public class GeminiTokenCountRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTokenCountRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiTokenCountRequest(GeminiModelId, bool)

Creates a new [GeminiTokenCountRequest](#).

```
public GeminiTokenCountRequest(GeminiModelId model, bool useBetaApi = false)
```

Parameters

model [GeminiModelId](#)

The model to use.

useBetaApi [bool](#)

Should the request use the Beta API?

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

CompleteRequest

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

```
public GeminiChatRequest CompleteRequest
```

Field Value

[GeminiChatRequest](#)

Contents

The input given to the model as a prompt. This field is ignored when [CompleteRequest](#) is set.

```
public GeminiContent[] Contents
```

Field Value

[GeminiContent\[\]](#)

Model

The model to use.

```
public GeminiModelId Model
```

Field Value

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiTokenCountResponse

Namespace: [Uralstech.UGemini.Models.CountTokens](#)

A response from CountTokens.

```
public class GeminiTokenCountResponse
```

Inheritance

[object](#) ← GeminiTokenCountResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CachedContentTokenCount

Number of tokens in the cached part of the prompt (the cached content).

```
public int CachedContentTokenCount
```

Field Value

[int](#)

TotalTokens

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

```
public int TotalTokens
```

Field Value

[int](#)

Remarks

Always non-negative. 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.

Namespace Uralstech.UGemini.Models.Embedding

Classes

[GeminiBatchEmbedContentRequest](#)

Generates multiple embeddings from the model given input text in a synchronous call.

[GeminiBatchEmbedContentResponse](#)

The response to a [GeminiBatchEmbedContentRequest](#).

[GeminiContentEmbedding](#)

A list of floats representing an embedding.

[GeminiEmbedContentRequest](#)

Generates an embedding from the model.

[GeminiEmbedContentResponse](#)

The response to a [GeminiEmbedContentRequest](#).

Enums

[GeminiEmbedTaskType](#)

Type of task for which the embedding will be used.

Class GeminiBatchEmbedContentRequest

Namespace: [Uralstech.UGemini.Models.Embedding](#)

Generates multiple embeddings from the model given input text in a synchronous call.

```
public class GeminiBatchEmbedContentRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiBatchEmbedContentRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiBatchEmbedContentRequest(GeminiModelId, bool)

Creates a new [GeminiBatchEmbedContentRequest](#).

```
public GeminiBatchEmbedContentRequest(GeminiModelId model, bool useBetaApi = false)
```

Parameters

model [GeminiModelId](#)

The model to use.

useBetaApi [bool](#)

Should the request use the Beta API?

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Model

The model to use.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

Requests

Embed requests for the batch. The model in each of these requests must match the model specified in [Model](#).

```
public GeminiEmbedContentRequest[] Requests
```

Field Value

[GeminiEmbedContentRequest](#)[]

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

[GetUtf8EncodedData\(\)](#)

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiBatchEmbedContentResponse

Namespace: [Uralstech.UGemini.Models.Embedding](#)

The response to a [GeminiBatchEmbedContentRequest](#).

```
public class GeminiBatchEmbedContentResponse
```

Inheritance

[object](#) ← GeminiBatchEmbedContentResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Embeddings

The embeddings for each request, in the same order as provided in the batch request.

```
public GeminiContentEmbedding[] Embeddings
```

Field Value

[GeminiContentEmbedding\[\]](#)

Class GeminiContentEmbedding

Namespace: [Uralstech.UGemini.Models.Embedding](#)

A list of floats representing an embedding.

```
public class GeminiContentEmbedding
```

Inheritance

[object](#) ← GeminiContentEmbedding

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Values

The embedding values.

```
public float[] Values
```

Field Value

[float](#)[]

Class GeminiEmbedContentRequest

Namespace: [Uralstech.UGemini.Models.Embedding](#)

Generates an embedding from the model.

```
public class GeminiEmbedContentRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ↪ GeminiEmbedContentRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiEmbedContentRequest(GeminiModelId, bool)

Creates a new [GeminiEmbedContentRequest](#).

```
public GeminiEmbedContentRequest(GeminiModelId model, bool useBetaApi = false)
```

Parameters

model [GeminiModelId](#)

The model to use.

useBetaApi [bool](#) ↪

Should the request use the Beta API?

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Content

The content to embed. Only the [Text](#) fields will be counted.

```
public GeminiContent Content
```

Field Value

[GeminiContent](#)

Model

The model to use.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

OutputDimensionality

Optional reduced dimension for the output embedding.

```
public int OutputDimensionality
```

Field Value

[int](#)

Remarks

If set, excessive values in the output embedding are truncated from the end. Supported by newer models since 2024, and the earlier model (models/embedding-001) cannot specify this value.

TaskType

Optional task type for which the embeddings will be used.

```
public GeminiEmbedTaskType TaskType
```

Field Value

[GeminiEmbedTaskType](#)

Remarks

Can only be set for "models/embedding-001" model.

Title

An optional title for the text. Only applicable when [TaskType](#) is [RetrievalDocument](#).

```
public string Title
```

Field Value

[string](#)

Remarks

Specifying a this for [RetrievalDocument](#) provides better quality embeddings for retrieval.

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiEmbedContentResponse

Namespace: [Uralstech.UGemini.Models.Embedding](#)

The response to a [GeminiEmbedContentRequest](#).

```
public class GeminiEmbedContentResponse
```

Inheritance

[object](#) ← GeminiEmbedContentResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Embedding

The embedding generated from the input content.

```
public GeminiContentEmbedding Embedding
```

Field Value

[GeminiContentEmbedding](#)

Enum GeminiEmbedTaskType

Namespace: [Uralstech.UGemini.Models.Embedding](#)

Type of task for which the embedding will be used.

```
public enum GeminiEmbedTaskType
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "CLASSIFICATION")] Classification = 4`

Specifies that the given text will be classified.

`[EnumMember(Value = "CLUSTERING")] Clustering = 5`

Specifies that the embeddings will be used for clustering.

`[EnumMember(Value = "FACT_VERIFICATION")] FactVerification = 7`

Specifies that the given text will be used for fact verification.

`[EnumMember(Value = "QUESTION_ANSWERING")] QuestionAnswering = 6`

Specifies that the given text will be used for question answering.

`[EnumMember(Value = "RETRIEVAL_DOCUMENT")] RetrievalDocument = 2`

Specifies the given text is a document from the corpus being searched.

`[EnumMember(Value = "RETRIEVAL_QUERY")] RetrievalQuery = 1`

Specifies the given text is a query in a search/retrieval setting.

`[EnumMember(Value = "SEMANTIC_SIMILARITY")] SemanticSimilarity = 3`

Specifies the given text will be used for STS.

`[EnumMember(Value = "TASK_TYPE_UNSPECIFIED")] Unspecified = 0`

Unset value.

Namespace Uralstech.UGemini.Models.Generation

Classes

[GeminiGenerationConfiguration](#)

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

Enums

[GeminiResponseType](#)

The response type for Gemini model responses.

Class GeminiGenerationConfiguration

Namespace: [Uralstech.UGemini.Models.Generation](#)

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

```
public class GeminiGenerationConfiguration
```

Inheritance

[object](#) ← GeminiGenerationConfiguration

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CandidateCount

Number of generated responses to return.

```
public int CandidateCount
```

Field Value

[int](#)

Remarks

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

FrequencyPenalty

Frequency penalty applied to the next token's logprobs, multiplied by the number of times each token has been seen in the response so far.

```
public float FrequencyPenalty
```

Field Value

[float](#)

Remarks

A positive penalty will discourage the use of tokens that have already been used, proportional to the number of times the token has been used: The more a token is used, the more difficult it is for the model to use that token again increasing the vocabulary of responses.

Caution: A negative penalty will encourage the model to reuse tokens proportional to the number of times the token has been used. Small negative values will reduce the vocabulary of a response. Larger negative values will cause the model to start repeating a common token until it hits the [MaxOutputTokens](#) limit: "...the the the the the...".

Logprobs

Only valid if [ResponseLogprobs](#) = [true](#). This sets the number of top logprobs to return at each decoding step in the [LogprobsResult](#).

```
public int Logprobs
```

Field Value

[int](#)

MaxOutputTokens

The maximum number of tokens to include in a candidate.

```
public int MaxOutputTokens
```

Field Value

PresencePenalty

Presence penalty applied to the next token's logprobs if the token has already been seen in the response.

```
public float PresencePenalty
```

Field Value

[float](#)

Remarks

This penalty is binary on/off and not dependant on the number of times the token is used (after the first). Use

[FrequencyPenalty](#) for a penalty that increases with each use. A positive penalty will discourage the use of tokens that have already been used in the response, increasing the vocabulary. A negative penalty will encourage the use of tokens that have already been used in the response, decreasing the vocabulary.

ResponseLogprobs

If [true](#), export the logprobs results in response.

```
public bool? ResponseLogprobs
```

Field Value

[bool](#)?

ResponseMimeType

Output response type of the generated candidate text.

```
public GeminiResponseType ResponseMimeType
```

Field Value

[GeminiResponseType](#)

Remarks

Only available in the beta API.

ResponseSchema

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

```
public GeminiSchema ResponseSchema
```

Field Value

[GeminiSchema](#)

Remarks

If set, a compatible [GeminiResponseType](#) must also be set. Compatible types: [Json](#): Schema for JSON response.

Only available in the beta API.

StopSequences

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.

```
public string[] StopSequences
```

Field Value

[string](#)[]

Temperature

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

```
public float Temperature
```

Field Value

[float](#)

TopK

The maximum number of tokens to consider when sampling.

```
public int TopK
```

Field Value

[int](#)

Remarks

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.

TopP

The maximum cumulative probability of tokens to consider when sampling.

```
public float TopP
```

Field Value

[float](#)

Remarks

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.

Enum GeminiResponseType

Namespace: [Uralstech.UGemini.Models.Generation](#)

The response type for Gemini model responses.

```
public enum GeminiResponseType
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "application/json")] Json = 2`

JSON response type.

`[EnumMember(Value = "text/plain")] PlainText = 1`

(default) Plain text response type.

`Unspecified = 0`

Unspecified, don't use.

Namespace Uralstech.UGemini.Models.Generation.Candidate

Classes

[GeminiCandidate](#)

A response candidate generated from the model.

[GeminiLogprobsCandidate](#)

Candidate for the logprobs token and score.

[GeminiLogprobsResult](#)

Logprobs result.

[GeminiPromptFeedback](#)

A set of the feedback metadata for the prompt specified in a generation request.

[GeminiTopLogprobsCandidates](#)

Candidates with top log probabilities at each decoding step.

[GeminiUsageMetadata](#)

Metadata on the generation request's token usage.

Enums

[GeminiFinishReason](#)

Defines the reason why the model stopped generating tokens.

Class GeminiCandidate

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

A response candidate generated from the model.

```
public class GeminiCandidate : IAppendableData<GeminiCandidate>
```

Inheritance

[object](#) ← GeminiCandidate

Implements

[IAppendableData<GeminiCandidate>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

AvgLogprobs

(No description provided)

```
public float AvgLogprobs
```

Field Value

[float](#)

CitationMetadata

Citation information for model-generated candidate.

```
public GeminiCitationMetadata CitationMetadata
```

Field Value

[GeminiCitationMetadata](#)

Remarks

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.

Content

Generated content returned from the model.

```
public GeminiContent Content
```

Field Value

[GeminiContent](#)

FinishReason

The reason why the model stopped generating tokens.

```
public GeminiFinishReason FinishReason
```

Field Value

[GeminiFinishReason](#)

GroundingAttributions

Attribution information for sources that contributed to a grounded answer.

```
public GeminiGroundingAttribution[] GroundingAttributions
```

Field Value

[GeminiGroundingAttribution\[\]](#)

Remarks

This field is populated for GenerateAnswer calls.

Only available in the beta API.

Index

Index of the candidate in the list of candidates.

```
public int Index
```

Field Value

[int](#)

LogprobsResult

Log-likelihood scores for the response tokens and top tokens

```
public GeminiLogprobsResult LogprobsResult
```

Field Value

[GeminiLogprobsResult](#)

SafetyRatings

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

```
public GeminiSafetyRating[] SafetyRatings
```

Field Value

[GeminiSafetyRating\[\]](#)

TokenCount

Token count for this candidate.

```
public int TokenCount
```

Field Value

[int](#)

Methods

Append(GeminiCandidate)

Appends the [data](#) to the current [IAppendableData<T>](#).

```
public void Append(GeminiCandidate data)
```

Parameters

[data](#) [GeminiCandidate](#)

The data to append.

Enum GeminiFinishReason

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

Defines the reason why the model stopped generating tokens.

```
public enum GeminiFinishReason
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "BLOCKLIST")] BlockList = 7`

Token generation stopped because the content contains forbidden terms.

`[EnumMember(Value = "LANGUAGE")] Language = 5`

The response candidate content was flagged for using an unsupported language.

`[EnumMember(Value = "MALFORMED_FUNCTION_CALL")] MalformedFunctionCall = 10`

The function call generated by the model is invalid.

`[EnumMember(Value = "MAX_TOKENS")] MaxTokens = 2`

The maximum number of tokens as specified in the request was reached.

`[EnumMember(Value = "OTHER")] Other = 6`

Unknown reason.

`[EnumMember(Value = "PROHIBITED_CONTENT")] ProhibitedContent = 8`

Token generation stopped for potentially containing prohibited content.

`[EnumMember(Value = "RECITATION")] Recitation = 4`

The candidate content was flagged for recitation reasons.

`[EnumMember(Value = "SPII")] SPII = 9`

Token generation stopped because the content potentially contains Sensitive Personally Identifiable Information (SPII).

[EnumMember(Value = "SAFETY")] Safety = 3

The candidate content was flagged for safety reasons.

[EnumMember(Value = "STOP")] Stop = 1

Natural stop point of the model or provided stop sequence.

[EnumMember(Value = "FINISH_REASON_UNSPECIFIED")] Unspecified = 0

Default value. This value is unused.

Class GeminiLogprobsCandidate

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

Candidate for the logprobs token and score.

```
public class GeminiLogprobsCandidate
```

Inheritance

[object](#) ← GeminiLogprobsCandidate

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

LogProbability

The candidate's log probability.

```
public float LogProbability
```

Field Value

[float](#)

Token

The candidate's token string value.

```
public string Token
```

Field Value

[string](#)

TokenId

The candidate's token id value.

```
public int TokenId
```

Field Value

[int ↗](#)

Class GeminiLogprobsResult

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

Logprobs result.

```
public class GeminiLogprobsResult
```

Inheritance

[object](#) ← GeminiLogprobsResult

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

ChosenCandidates

Length = total number of decoding steps. The chosen candidates may or may not be in [TopCandidates](#).

```
public GeminiLogprobsCandidate[] ChosenCandidates
```

Field Value

[GeminiLogprobsCandidate\[\]](#)

TopCandidates

Length = total number of decoding steps.

```
public GeminiTopLogprobsCandidates[] TopCandidates
```

Field Value

[GeminiTopLogprobsCandidates\[\]](#)

Class GeminiPromptFeedback

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

A set of the feedback metadata for the prompt specified in a generation request.

```
public class GeminiPromptFeedback : IAppendableData<GeminiPromptFeedback>
```

Inheritance

[object](#) ← GeminiPromptFeedback

Implements

[IAppendableData<GeminiPromptFeedback>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BlockReason

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

```
public GeminiBlockReason BlockReason
```

Field Value

[GeminiBlockReason](#)

SafetyRatings

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

```
public GeminiSafetyRating[] SafetyRatings
```

Field Value

Methods

Append(GeminiPromptFeedback)

Appends the `data` to the current [IAppendableData<T>](#).

```
public void Append(GeminiPromptFeedback data)
```

Parameters

`data` [GeminiPromptFeedback](#)

The data to append.

Class GeminiTopLogprobsCandidates

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

Candidates with top log probabilities at each decoding step.

```
public class GeminiTopLogprobsCandidates
```

Inheritance

[object](#) ← GeminiTopLogprobsCandidates

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Candidates

Sorted by log probability in descending order.

```
public GeminiLogprobsCandidate[] Candidates
```

Field Value

[GeminiLogprobsCandidate\[\]](#)

Class GeminiUsageMetadata

Namespace: [Uralstech.UGemini.Models.Generation.Candidate](#)

Metadata on the generation request's token usage.

```
public class GeminiUsageMetadata : IAppendableData<GeminiUsageMetadata>
```

Inheritance

[object](#) ← GeminiUsageMetadata

Implements

[IAppendableData<GeminiUsageMetadata>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CachedContentTokenCount

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

```
public int CachedContentTokenCount
```

Field Value

[int](#)

CandidatesTokenCount

Total number of tokens across the generated candidates.

```
public int CandidatesTokenCount
```

Field Value

[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.

```
public int PromptTokenCount
```

Field Value

[int↗](#)

Remarks

Cached content is not supported in this package.

TotalTokenCount

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

```
public int TotalTokenCount
```

Field Value

[int↗](#)

Methods

Append(GeminiUsageMetadata)

Appends the `data` to the current [IAppendableData<T>](#).

```
public void Append(GeminiUsageMetadata data)
```

Parameters

`data` [GeminiUsageMetadata](#)

The data to append.

Namespace Uralstech.UGemini.Models.Generation.Chat

Classes

[GeminiChatRequest](#)

Request to generate a response from the model.

[GeminiChatResponse](#)

Response from the model supporting multiple candidates.

Class GeminiChatRequest

Namespace: [Uralstech.UGemini.Models.Generation.Chat](#)

Request to generate a response from the model.

```
public class GeminiChatRequest : IGeminiStreamablePostRequest<GeminiChatResponse>,  
IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiChatRequest

Implements

[IGeminiStreamablePostRequest<GeminiChatResponse>](#), [IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Constructors

GeminiChatRequest(GeminiModelId, bool)

Creates a new [GeminiChatRequest](#).

```
public GeminiChatRequest(GeminiModelId model, bool useBetaApi = false)
```

Parameters

model [GeminiModelId](#)

The model to use.

useBetaApi [bool](#)

Should the request use the Beta API?

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

CachedContent

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

```
public string CachedContent
```

Field Value

[string](#)

Remarks

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.

Contents

The content of the current conversation with the model.

```
public GeminiContent[] Contents
```

Field Value

[GeminiContent\[\]](#)

Remarks

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

GenerationConfig

Configuration options for model generation and outputs.

```
public GeminiGenerationConfiguration GenerationConfig
```

Field Value

[GeminiGenerationConfiguration](#)

Model

The model to use.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

OnPartialResponseReceived

Callback for receiving streamed responses.

```
public Func<GeminiChatResponse, Task> OnPartialResponseReceived
```

Field Value

[Func<GeminiChatResponse, Task>](#)

SafetySettings

A list of unique [GeminiSafetySettings](#) instances for blocking unsafe content.

```
public GeminiSafetySettings[] SafetySettings
```

Field Value

[GeminiSafetySettings\[\]](#)

Remarks

This will be enforced on [Contents](#) and [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 [HateSpeech](#), [SexuallyExplicit](#), [DangerousContent](#) and [Harassment](#) are supported.

SystemInstruction

Developer set system instruction. Currently, text only.

```
public GeminiContent SystemInstruction
```

Field Value

[GeminiContent](#)

Remarks

Only available in the beta API.

ToolConfig

Tool configuration for any Tool specified in the request.

```
public GeminiToolConfiguration ToolConfig
```

Field Value

[GeminiToolConfiguration](#)

Remarks

Only available in the beta API.

Tools

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

```
public GeminiTool[] Tools
```

Field Value

[GeminiTool\[\]](#)

Remarks

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.

s_partialDataSerializerSettings

Serialization settings for deserializing partial streamed responses.

```
private static readonly JsonSerializerSettings s_partialDataSerializerSettings
```

Field Value

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

StreamedResponse

The streamed response.

```
public GeminiChatResponse StreamedResponse { get; private set; }
```

Property Value

[GeminiChatResponse](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

ProcessStreamedData(List<JToken>, JToken)

Callback to process Server Sent Events (SSEs).

```
public Task ProcessStreamedData(List<JToken> allEvents, JToken lastEvent)
```

Parameters

allEvents [List](#)<JToken>

All previously sent SSEs.

lastEvent JToken

The latest SSE.

Returns

[Task](#)

Class GeminiChatResponse

Namespace: [Uralstech.UGemini.Models.Generation.Chat](#)

Response from the model supporting multiple candidates.

```
public class GeminiChatResponse : IAppendableData<GeminiChatResponse>
```

Inheritance

[object](#) ← GeminiChatResponse

Implements

[IAppendableData<GeminiChatResponse>](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Note on safety ratings and content filtering. They are reported for both prompt in [PromptFeedback](#) and for each candidate in [FinishReason](#) and in [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 [Prompt Feedback](#))
- feedback on each candidate is reported on [FinishReason](#) and [SafetyRatings](#).

Fields

Candidates

Candidate responses from the model.

```
public GeminiCandidate[] Candidates
```

Field Value

[GeminiCandidate\[\]](#)

PromptFeedback

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

```
public GeminiPromptFeedback PromptFeedback
```

Field Value

[GeminiPromptFeedback](#)

UsageMetadata

Metadata on the generation requests' token usage.

```
public GeminiUsageMetadata UsageMetadata
```

Field Value

[GeminiUsageMetadata](#)

Properties

Parts

The parts of the [GeminiChatResponse](#) message.

```
public GeminiContentPart[] Parts { get; }
```

Property Value

[GeminiContentPart\[\]](#)

Methods

Append(GeminiChatResponse)

Appends the `data` to the current [IAppendableData<T>](#).

```
public void Append(GeminiChatResponse data)
```

Parameters

`data` [GeminiChatResponse](#)

The data to append.

Namespace Uralstech.UGemini.Models. Generation.QuestionAnswering Classes

[GeminiAnswerRequest](#)

Generates a grounded answer from the model.

[GeminiAnswerResponse](#)

Response from the model for a grounded answer.

Enums

[GeminiAnswerStyle](#)

Style for grounded answers.

Class GeminiAnswerRequest

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering](#)

Generates a grounded answer from the model.

```
public class GeminiAnswerRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiAnswerRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiAnswerRequest(GeminiModelId, bool)

Creates a new [GeminiAnswerRequest](#).

```
public GeminiAnswerRequest(GeminiModelId model, bool useBetaApi = true)
```

Parameters

model [GeminiModelId](#)

The model to use.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

AnswerStyle

Style in which answers should be returned.

```
public GeminiAnswerStyle AnswerStyle
```

Field Value

[GeminiAnswerStyle](#)

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Contents

The content of the current conversation with the model.

```
public GeminiContent[] Contents
```

Field Value

[GeminiContent\[\]](#)

Remarks

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

generateAnswer currently only supports queries in English.

InlinePassages

Passages provided inline with the request.

```
public GeminiGroundingPassages InlinePassages
```

Field Value

[GeminiGroundingPassages](#)

Remarks

This or [SemanticRetriever](#) are must be provided at a time.

Model

The model to use.

```
public GeminiModelId Model
```

Field Value

[GeminiModelId](#)

SafetySettings

A list of unique [GeminiSafetySettings](#) instances for blocking unsafe content.

```
public GeminiSafetySettings[] SafetySettings
```

Field Value

[GeminiSafetySettings\[\]](#)

Remarks

This will be enforced on [Contents](#) and [Answer](#).

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 [HateSpeech](#), [SexuallyExplicit](#), [DangerousContent](#) and [Harassment](#) are supported.

SemanticRetriever

Content retrieved from resources created via the Semantic Retriever API.

```
public GeminiSemanticRetrieverConfig SemanticRetriever
```

Field Value

[GeminiSemanticRetrieverConfig](#)

Remarks

This or [InlinePassages](#) are must be provided at a time.

Temperature

Controls the randomness of the output.

```
public float Temperature
```

Field Value

[float](#)

Remarks

Values can range from [0.0,1.0], inclusive. A value closer to 1.0 will produce responses that are more varied and creative, while a value closer to 0.0 will typically result in more straightforward responses from the model. A low temperature (~0.2) is usually recommended for Attributed-Question-Answering use cases.

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string ↗](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata GeminiRequestMetadata](#)

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

Returns

[string ↗](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string ↗](#).

```
public string GetUtf8EncodedData()
```

Returns

[string ↗](#)

The string data.

Class GeminiAnswerResponse

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering](#)

Response from the model for a grounded answer.

```
public class GeminiAnswerResponse
```

Inheritance

[object](#) ← GeminiAnswerResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Answer

Candidate answer from the model.

```
public GeminiCandidate Answer
```

Field Value

[GeminiCandidate](#)

Remarks

The model always attempts to provide a grounded answer, even when the answer is unlikely to be answerable from the given passages.

In that case, a low-quality or ungrounded answer may be provided, along with a low [Answerable Probability](#).

AnswerableProbability

The model's estimate of the probability that its answer is correct and grounded in the input passages.

```
public float AnswerableProbability
```

Field Value

[float](#) ↗

Remarks

A low answerableProbability indicates that the answer might not be grounded in the sources.

When answerableProbability is low, some clients may wish to:

- Display a message to the effect of "We couldn't answer that question" to the user.
- Fall back to a general-purpose LLM that answers the question from world knowledge. The threshold and nature of such fallbacks will depend on individual clients' use cases. 0.5 is a good starting threshold.

InputFeedback

Feedback related to the input data used to answer the question, as opposed to model-generated response to the question.

```
public GeminiPromptFeedback InputFeedback
```

Field Value

[GeminiPromptFeedback](#)

Remarks

"Input data" can be one or more of the following:

- Question specified by the last entry in [Contents](#)
- Conversation history specified by the other entries in [Contents](#)
- Grounding sources ([SemanticRetriever](#) or [InlinePassages](#))

Enum GeminiAnswerStyle

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering](#)

Style for grounded answers.

```
public enum GeminiAnswerStyle
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "ABSTRACTIVE")] Abstractive = 1

Succint but abstract style.

[EnumMember(Value = "EXTRACTIVE")] Extractive = 2

Very brief and extractive style.

[EnumMember(Value = "ANSWER_STYLE_UNSPECIFIED")] Unspecified = 0

Unspecified answer style.

[EnumMember(Value = "VERBOSE")] Verbose = 3

Verbose style including extra details. The response may be formatted as a sentence, paragraph, multiple paragraphs, or bullet points, etc.

Namespace Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding Classes

[GeminiGroundingPassage](#)

Passage included inline with a grounding configuration.

[GeminiGroundingPassages](#)

A repeated list of passages.

Class GeminiGroundingPassage

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding](#)

Passage included inline with a grounding configuration.

```
public class GeminiGroundingPassage
```

Inheritance

[object](#) ← GeminiGroundingPassage

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Content

Content of the passage.

```
public GeminiContent Content
```

Field Value

[GeminiContent](#)

Id

Identifier for the passage for attributing this passage in grounded answers.

```
public string Id
```

Field Value

[string](#)

Class GeminiGroundingPassages

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding](#)

A repeated list of passages.

```
public class GeminiGroundingPassages
```

Inheritance

[object](#) ← GeminiGroundingPassages

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Passages

List of passages.

```
public GeminiGroundingPassage[] Passages
```

Field Value

[GeminiGroundingPassage\[\]](#)

Namespace Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever

Classes

[GeminiMetadataCondition](#)

Filter condition applicable to a single key.

[GeminiMetadataFilter](#)

User provided filter to limit retrieval based on Chunk or Document level metadata values.

[GeminiSemanticRetrieverConfig](#)

Configuration for retrieving grounding content from a Corpus or Document created using the Semantic Retriever API.

Enums

[GeminiMetadataConditionOperator](#)

Defines the valid operators that can be applied to a key-value pair.

Class GeminiMetadataCondition

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever](#)

Filter condition applicable to a single key.

```
public class GeminiMetadataCondition
```

Inheritance

[object](#) ← GeminiMetadataCondition

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

NumericValue

The numeric value to filter the metadata on.

```
public float? NumericValue
```

Field Value

[float](#)?

Remarks

If this is provided, DO NOT provide [StringValue](#).

The value type must be consistent with the value type defined in the field for the corresponding key. If the value types are not consistent, the result will be an empty set. When the CustomMetadata has a StringList value type, the filtering condition should use [StringValue](#) paired with an [Includes/Excludes](#) operation, otherwise the result will also be an empty set.

Operation

Operator applied to the given key-value pair to trigger the condition.

```
public GeminiMetadataConditionOperator Operation
```

Field Value

[GeminiMetadataConditionOperator](#)

StringValue

The string value to filter the metadata on.

```
public string StringValue
```

Field Value

[string](#) ↗

Remarks

If this is provided, DO NOT provide [NumericValue](#).

The value type must be consistent with the value type defined in the field for the corresponding key. If the value types are not consistent, the result will be an empty set. When the CustomMetadata has a StringList value type, the filtering condition should use [StringValue](#) paired with an [Includes/Excludes](#) operation, otherwise the result will also be an empty set.

Enum GeminiMetadataConditionOperator

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever](#)

Defines the valid operators that can be applied to a key-value pair.

```
public enum GeminiMetadataConditionOperator
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

`[EnumMember(Value = "EQUAL")] Equal = 3`

Supported by numeric and string.

`[EnumMember(Value = "EXCLUDES")] Excludes = 8`

Supported by string only when CustomMetadata value type for the given key has a stringValue.

`[EnumMember(Value = "GREATER")] GreaterThan = 5`

Supported by numeric.

`[EnumMember(Value = "GREATER_EQUAL")] GreaterThanOrEqual = 4`

Supported by numeric.

`[EnumMember(Value = "INCLUDES")] Includes = 7`

Supported by string only when CustomMetadata value type for the given key has a stringValue.

`[EnumMember(Value = "LESS")] LessThan = 1`

Supported by numeric.

`[EnumMember(Value = "LESS_EQUAL")] LessThanOrEqual = 2`

Supported by numeric.

`[EnumMember(Value = "NOT_EQUAL")] NotEqual = 6`

Supported by numeric and string.

```
[EnumMember(Value = "OPERATOR_UNSPECIFIED")] Unspecified = 0
```

The default value. This value is unused.

Class GeminiMetadataFilter

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever](#)

User provided filter to limit retrieval based on Chunk or Document level metadata values.

```
public class GeminiMetadataFilter
```

Inheritance

[object](#) ← GeminiMetadataFilter

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Example (genre = drama OR genre = action): key = "document.custom_metadata.genre" conditions = [{stringValue = "drama", operation = EQUAL}, {stringValue = "action", operation = EQUAL}]

Fields

Conditions

The Conditions for the given key that will trigger this filter. Multiple Conditions are joined by logical ORs.

```
public GeminiMetadataCondition[] Conditions
```

Field Value

[GeminiMetadataCondition\[\]](#)

Key

The key of the metadata to filter on.

```
public string Key
```

Field Value

[string](#) ↗

Class GeminiSemanticRetrieverConfig

Namespace: [Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever](#)

Configuration for retrieving grounding content from a Corpus or Document created using the Semantic Retriever API.

```
public class GeminiSemanticRetrieverConfig
```

Inheritance

[object](#) ← GeminiSemanticRetrieverConfig

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

MaxChunksCount

Maximum number of relevant Chunks to retrieve.

```
public int MaxChunksCount
```

Field Value

[int](#)

MetadataFilters

Filters for selecting Documents and/or Chunks from the resource.

```
public GeminiMetadataFilter[] MetadataFilters
```

Field Value

[GeminiMetadataFilter\[\]](#)

MinimumRelevanceScore

Minimum relevance score for retrieved relevant Chunks.

```
public float MinimumRelevanceScore
```

Field Value

[float](#)

Query

Query to use for similarity matching Chunks in the given resource.

```
public GeminiContent Query
```

Field Value

[GeminiContent](#)

Source

Name of the resource for retrieval, e.g. corpora/123 or corpora/123/documents/abc.

```
public string Source
```

Field Value

[string](#)

Namespace Uralstech.UGemini.Models.Generation.Safety

Classes

[GeminiSafetyRating](#)

Safety rating for a piece of content.

[GeminiSafetySettings](#)

Safety setting, affecting the safety-blocking behavior.

Enums

[GeminiBlockReason](#)

Specifies what was the reason why prompt was blocked.

[GeminiHarmProbability](#)

The probability that a piece of content is harmful.

[GeminiSafetyHarmBlockThreshold](#)

Block at and beyond a specified harm probability.

[GeminiSafetyHarmCategory](#)

The category of a rating.

Enum GeminiBlockReason

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

Specifies what was the reason why prompt was blocked.

```
public enum GeminiBlockReason
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "BLOCKLIST")] BlockList = 3`

Prompt was blocked due to the terms which are included from the terminology blocklist.

`[EnumMember(Value = "OTHER")] Other = 2`

Prompt was blocked due to unknown reasons.

`[EnumMember(Value = "PROHIBITED_CONTENT")] ProhibitedContent = 4`

Prompt was blocked due to prohibited content.

`[EnumMember(Value = "SAFETY")] Safety = 1`

Prompt was blocked due to safety reasons. You can inspect [SafetyRatings](#) to understand which safety category blocked it.

`[EnumMember(Value = "BLOCK_REASON_UNSPECIFIED")] Unspecified = 0`

Default value. This value is unused.

Enum GeminiHarmProbability

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

The probability that a piece of content is harmful.

```
public enum GeminiHarmProbability
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "HIGH")] High = 4

Content has a high chance of being unsafe.

[EnumMember(Value = "LOW")] Low = 2

Content has a low chance of being unsafe.

[EnumMember(Value = "MEDIUM")] Medium = 3

Content has a medium chance of being unsafe.

[EnumMember(Value = "NEGLIGIBLE")] Negligible = 1

Content has a negligible chance of being unsafe.

[EnumMember(Value = "HARM_PROBABILITY_UNSPECIFIED")] Unspecified = 0

Probability is unspecified.

Remarks

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

Enum GeminiSafetyHarmBlockThreshold

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

Block at and beyond a specified harm probability.

```
public enum GeminiSafetyHarmBlockThreshold
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "BLOCK_LOW_AND ABOVE")] LowAndAbove = 1

Content with [Negligible](#) will be allowed.

[EnumMember(Value = "BLOCK_MEDIUM_AND ABOVE")] MediumAndAbove = 2

Content with [Negligible](#) and [Low](#) will be allowed.

[EnumMember(Value = "BLOCK_NONE")] None = 4

All content will be allowed.

[EnumMember(Value = "OFF")] Off = 5

Turn off the safety filter.

[EnumMember(Value = "BLOCK_ONLY_HIGH")] OnlyHigh = 3

Content with [Negligible](#), [Low](#), and [Medium](#) will be allowed.

[EnumMember(Value = "HARM_BLOCK_THRESHOLD_UNSPECIFIED")] Unspecified = 0

Threshold is unspecified.

Enum GeminiSafetyHarmCategory

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

The category of a rating.

```
public enum GeminiSafetyHarmCategory
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "HARM_CATEGORY_CIVIC_INTEGRITY")] CivicIntegrity = 11

Content that may be used to harm civic integrity.

[EnumMember(Value = "HARM_CATEGORY_DANGEROUS")] Dangerous = 6

Dangerous content that promotes, facilitates, or encourages harmful acts.

[EnumMember(Value = "HARM_CATEGORY_DANGEROUS_CONTENT")] DangerousContent = 10

Dangerous content.

[EnumMember(Value = "HARM_CATEGORY_DEROGATORY")] Derogatory = 1

Negative or harmful comments targeting identity and/or protected attribute.

[EnumMember(Value = "HARM_CATEGORY_HARASSMENT")] Harassment = 7

Harasment content.

[EnumMember(Value = "HARM_CATEGORY_HATE_SPEECH")] HateSpeech = 8

Hate speech and content.

[EnumMember(Value = "HARM_CATEGORY_MEDICAL")] Medical = 5

Promotes unchecked medical advice.

[EnumMember(Value = "HARM_CATEGORY_SEXUAL")] Sexual = 4

Contains references to sexual acts or other lewd content.

```
[EnumMember(Value = "HARM_CATEGORY_SEXUALLY_EXPLICIT")] SexuallyExplicit = 9
```

Sexually explicit content.

```
[EnumMember(Value = "HARM_CATEGORY_TOXICITY")] Toxicity = 2
```

Content that is rude, disrespectful, or profane.

```
[EnumMember(Value = "HARM_CATEGORY_UNSPECIFIED")] Unspecified = 0
```

Category is unspecified.

```
[EnumMember(Value = "HARM_CATEGORY_VIOLENCE")] Violence = 3
```

Describes scenarios depicting violence against an individual or group, or general descriptions of gore.

Class GeminiSafetyRating

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

Safety rating for a piece of content.

```
public class GeminiSafetyRating
```

Inheritance

[object](#) ← GeminiSafetyRating

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

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.

Fields

Blocked

Was this content blocked because of this rating?

```
public bool Blocked
```

Field Value

[bool](#)

Category

The category for this rating.

```
public GeminiSafetyHarmCategory Category
```

Field Value

[GeminiSafetyHarmCategory](#)

Probability

The probability of harm for this content.

```
public GeminiHarmProbability Probability
```

Field Value

[GeminiHarmProbability](#)

Class GeminiSafetySettings

Namespace: [Uralstech.UGemini.Models.Generation.Safety](#)

Safety setting, affecting the safety-blocking behavior.

```
public class GeminiSafetySettings
```

Inheritance

[object](#) ← GeminiSafetySettings

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

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

Fields

Category

The category for this setting.

```
public GeminiSafetyHarmCategory Category
```

Field Value

[GeminiSafetyHarmCategory](#)

Threshold

Controls the probability threshold at which harm is blocked.

```
public GeminiSafetyHarmBlockThreshold Threshold
```

Field Value

GeminiSafetyHarmBlockThreshold

Namespace Uralstech.UGemini.Models.Generation.Schema

Classes

[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.

Enums

[GeminiSchemaDataFormat](#)

Defines the format of schema data. Based on the [OpenAPI Specification v3.0.3](#).

[GeminiSchemaDataType](#)

Contains the list of OpenAPI data types as defined by the [OpenAPI Specification](#).

Class GeminiSchema

Namespace: [Uralstech.UGemini.Models.Generation.Schema](#)

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 class GeminiSchema
```

Inheritance

[object](#) ← GeminiSchema

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Description

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

```
public string Description
```

Field Value

[string](#)

Enum

Possible values of the element of [String](#) with enum format.

```
public string[] Enum
```

Field Value

[string](#)[]

Remarks

For example we can define an Enum Direction as:

```
GeminiSchema enumSchema = new()
{
    Type = GeminiSchemaDataType.String,
    Format = GeminiSchemaDataFormat.Enum,
    Enum = new string[]
    {
        "EAST",
        "NORTH",
        "SOUTH",
        "WEST",
    },
};
```

Format

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

```
public GeminiSchemaDataFormat Format
```

Field Value

[GeminiSchemaDataFormat](#)

Items

Schema of the elements of [Array](#).

```
public GeminiSchema Items
```

Field Value

[GeminiSchema](#)

MaxItems

Optional. Maximum number of the elements for [Array](#).

```
public long? MaxItems
```

Field Value

[long](#)?

MinItems

Optional. Minimum number of the elements for [Array](#).

```
public long? MinItems
```

Field Value

[long](#)?

Nullable

Indicates if the value may be [null](#).

```
public bool? Nullable
```

Field Value

[bool](#)?

Properties

The properties of [Object](#).

```
public Dictionary<string, GeminiSchema> Properties
```

Field Value

[Dictionary](#) <[string](#), [GeminiSchema](#)>

Required

Required properties of [Object](#).

```
public string[] Required
```

Field Value

[string](#)[]

Type

Data type.

```
public GeminiSchemaDataType Type
```

Field Value

[GeminiSchemaDataType](#)

Enum GeminiSchemaDataFormat

Namespace: [Uralstech.UGemini.Models.Generation.Schema](#)

Defines the format of schema data. Based on the [OpenAPI Specification v3.0.3](#).

```
public enum GeminiSchemaDataFormat
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "byte")] Base64Bytes = 6`

A base64 encoded string of bytes. Not officially supported by the Gemini API.

`[EnumMember(Value = "binary")] Binary = 7`

A string of any sequence of octets. Not officially supported by the Gemini API.

`[EnumMember(Value = "date")] Date = 8`

Date string as defined by [full-date - RFC 3339](#). Not officially supported by the Gemini API.

`[EnumMember(Value = "date-time")] DateTime = 9`

Date and time string as defined by [date-time - RFC 3339](#). Not officially supported by the Gemini API.

`[EnumMember(Value = "double")] Double = 2`

Equivalent to [double](#).

`[EnumMember(Value = "enum")] Enum = 5`

A string enum value.

`[EnumMember(Value = "float")] Float = 1`

Equivalent to [float](#).

`[EnumMember(Value = "int32")] Int = 3`

Equivalent to [int](#).

[EnumMember(Value = "int64")] Long = 4

Equivalent to [long](#).

Unspecified = 0

Unspecified, don't use.

Enum GeminiSchemaDataType

Namespace: [Uralstech.UGemini.Models.Generation.Schema](#)

Contains the list of OpenAPI data types as defined by the [OpenAPI Specification](#).

```
public enum GeminiSchemaDataType
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "ARRAY")] Array = 5

Array type.

[EnumMember(Value = "BOOLEAN")] Boolean = 4

Boolean type.

[EnumMember(Value = "NUMBER")] Float = 2

Number/Float type.

[EnumMember(Value = "INTEGER")] Integer = 3

Integer type.

[EnumMember(Value = "OBJECT")] Object = 6

Object type.

[EnumMember(Value = "STRING")] String = 1

String type.

[EnumMember(Value = "TYPE_UNSPECIFIED")] Unspecified = 0

Not specified, should not be used.

Namespace Uralstech.UGemini.Models.Generation.Tools

Classes

[GeminiFunctionCall](#)

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

[GeminiFunctionResponse](#)

The result output from a [GeminiFunctionCall](#) that contains a string representing the [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.

[GeminiFunctionResponseContent](#)

The response of a Gemini function call. Based on the Protocol Buffer [Struct](#) type.

Class GeminiFunctionCall

Namespace: [Uralstech.UGemini.Models.Generation.Tools](#)

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

```
public class GeminiFunctionCall
```

Inheritance

[object](#) ← GeminiFunctionCall

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Arguments

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

```
public JObject Arguments
```

Field Value

JObject

Remarks

See Protocol Buffer [Struct](#).

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.

```
public string Name
```

Field Value

[string](#) ↗

Methods

GetResponse(JObject)

Creates a [GeminiFunctionResponse](#) for this function call.

```
public GeminiFunctionResponse GetResponse(JObject responseJson = null)
```

Parameters

responseJson JObject

The JSON response data.

Returns

[GeminiFunctionResponse](#)

A new [GeminiFunctionResponse](#) object.

Class GeminiFunctionResponse

Namespace: [Uralstech.UGemini.Models.Generation.Tools](#)

The result output from a [GeminiFunctionCall](#) that contains a string representing the [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 class GeminiFunctionResponse
```

Inheritance

[object](#) ← GeminiFunctionResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

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.

```
public string Name
```

Field Value

[string](#)

Response

The function response data.

```
public GeminiFunctionResponseContent Response
```

Field Value

GeminiFunctionResponseContent

Class GeminiFunctionResponseContent

Namespace: [Uralstech.UGemini.Models.Generation.Tools](#)

The response of a Gemini function call. Based on the Protocol Buffer [Struct](#) type.

```
public class GeminiFunctionResponseContent
```

Inheritance

[object](#) ← GeminiFunctionResponseContent

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Name

The name of the function.

```
public string Name
```

Field Value

[string](#)

responseData

The actual JSON response data of the function.

```
public JObject responseData
```

Field Value

JObject

Namespace Uralstech.UGemini.Models.Generation.Tools.CodeExecution

Classes

[GeminiCodeExecutionResult](#)

Result of executing the [GeminiExecutableCode](#).

[GeminiExecutableCode](#)

Code generated by the model that is meant to be executed, and the result returned to the model.

Enums

[GeminiCodeExecutionLanguage](#)

Supported programming languages for the generated code.

[GeminiCodeExecutionOutcome](#)

Enumeration of possible outcomes of the code execution.

Enum GeminiCodeExecutionLanguage

Namespace: [Uralstech.UGemini.Models.Generation.Tools.CodeExecution](#)

Supported programming languages for the generated code.

```
public enum GeminiCodeExecutionLanguage
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

[EnumMember(Value = "PYTHON")] Python = 1

Python >= 3.10, with numpy and simpy available.

[EnumMember(Value = "LANGUAGE_UNSPECIFIED")] Unspecified = 0

Unspecified language. This value should not be used.

Enum GeminiCodeExecutionOutcome

Namespace: [Uralstech.UGemini.Models.Generation.Tools.CodeExecution](#)

Enumeration of possible outcomes of the code execution.

```
public enum GeminiCodeExecutionOutcome
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "OUTCOME_DEADLINE_EXCEEDED")] DeadlineExceeded = 3`

Code execution ran for too long, and was cancelled. There may or may not be a partial output present.

`[EnumMember(Value = "OUTCOME_FAILED")] Failed = 2`

Code execution finished but with a failure. stderr should contain the reason.

`[EnumMember(Value = "OUTCOME_OK")] Ok = 1`

Code execution completed successfully.

`[EnumMember(Value = "OUTCOME_UNSPECIFIED")] Unspecified = 0`

Unspecified status. This value should not be used.

Class GeminiCodeExecutionResult

Namespace: [Uralstech.UGemini.Models.Generation.Tools.CodeExecution](#)

Result of executing the [GeminiExecutableCode](#).

```
public class GeminiCodeExecutionResult
```

Inheritance

[object](#) ← GeminiCodeExecutionResult

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only generated when using the [GeminiCodeExecution](#) tool, and always follows a part containing the [GeminiExecutableCode](#).

Fields

Outcome

Outcome of the code execution.

```
public GeminiCodeExecutionOutcome Outcome
```

Field Value

[GeminiCodeExecutionOutcome](#)

Output

Contains stdout when code execution is successful, stderr or other description otherwise.

```
public string Output
```

Field Value

[string](#) ↗

Class GeminiExecutableCode

Namespace: [Uralstech.UGemini.Models.Generation.Tools.CodeExecution](#)

Code generated by the model that is meant to be executed, and the result returned to the model.

```
public class GeminiExecutableCode
```

Inheritance

[object](#) ← GeminiExecutableCode

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only generated when using the [GeminiCodeExecution](#) tool, in which the code will be automatically executed, and a corresponding [GeminiCodeExecutionResult](#) will also be generated.

Fields

Code

The code to be executed.

```
public string Code
```

Field Value

[string](#)

Language

Programming language of the [Code](#).

```
public GeminiCodeExecutionLanguage Language
```

Field Value

[GeminiCodeExecutionLanguage](#)

Namespace Uralstech.UGemini.Models. Generation.Tools.Declaration

Classes

[GeminiCodeExecution](#)

Tool that executes code generated by the model, and automatically returns the result to the model.

[GeminiFunctionCallingConfiguration](#)

Configuration for specifying function calling behavior.

[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.

[GeminiTool](#)

Tool details that the model may use to generate response.

[GeminiToolConfiguration](#)

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

Enums

[GeminiFunctionCallingMode](#)

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

Class GeminiCodeExecution

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

Tool that executes code generated by the model, and automatically returns the result to the model.

```
public class GeminiCodeExecution
```

Inheritance

[object](#) ← GeminiCodeExecution

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

See [GeminiExecutableCode](#) and [GeminiCodeExecutionResult](#) which are only generated when using this tool.

Class GeminiFunctionCallingConfiguration

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

Configuration for specifying function calling behavior.

```
public class GeminiFunctionCallingConfiguration
```

Inheritance

[object](#) ← GeminiFunctionCallingConfiguration

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

AllowedFunctionNames

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

```
public string[] AllowedFunctionNames
```

Field Value

[string](#)[]

Remarks

This should only be set when [Mode](#) is [Any](#).

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

Mode

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

```
public GeminiFunctionCallingMode Mode
```

Field Value

[GeminiFunctionCallingMode](#)

Enum GeminiFunctionCallingMode

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

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

```
public enum GeminiFunctionCallingMode
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

`[EnumMember(Value = "ANY")] Any = 2`

Model is constrained to always predicting a function call only. If [AllowedFunctionNames](#) is set, the predicted function call will be limited to any one of [AllowedFunctionNames](#), else the predicted function call will be any one of the provided [FunctionDeclarations](#).

`[EnumMember(Value = "AUTO")] Auto = 1`

Default model behavior, model decides to predict either a function call or a natural language response.

`[EnumMember(Value = "NONE")] None = 3`

Model will not predict any function call. Model behavior is same as when not passing any function declarations.

`[EnumMember(Value = "MODE_UNSPECIFIED")] Unspecified = 0`

Unspecified function calling mode. This value should not be used.

Class GeminiFunctionDeclaration

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

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 class GeminiFunctionDeclaration
```

Inheritance

[object](#) ← GeminiFunctionDeclaration

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#).

Fields

Description

A brief description of the function.

```
public string Description
```

Field Value

[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.

```
public string Name
```

Field Value

[string](#) ↗

Parameters

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.

```
public GeminiSchema Parameters
```

Field Value

[GeminiSchema](#)

Class GeminiTool

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

Tool details that the model may use to generate response.

```
public class GeminiTool
```

Inheritance

[object](#) ← GeminiTool

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

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.

Fields

CodeExecution

Enables the model to execute code as part of generation.

```
public GeminiCodeExecution CodeExecution
```

Field Value

[GeminiCodeExecution](#)

FunctionDeclarations

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

```
public GeminiFunctionDeclaration[] FunctionDeclarations
```

Field Value

[GeminiFunctionDeclaration\[\]](#)

Remarks

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

The next conversation turn may contain a [\[GeminiFunctionResponse\]\[GeminiContent.FunctionResponse\]](#) with the [\[Role\] ToolResponse](#) generation context for the next model turn.

Class GeminiToolConfiguration

Namespace: [Uralstech.UGemini.Models.Generation.Tools.Declaration](#)

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

```
public class GeminiToolConfiguration
```

Inheritance

[object](#) ← GeminiToolConfiguration

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

FunctionCallingConfig

Function calling config.

```
public GeminiFunctionCallingConfiguration FunctionCallingConfig
```

Field Value

[GeminiFunctionCallingConfiguration](#)

Methods

GetConfiguration(GeminiFunctionCallingMode, string[])

Creates a new [GeminiToolConfiguration](#).

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

Parameters

callingMode [GeminiFunctionCallingMode](#)

Specifies the mode in which function calling should execute.

allowedFunctions [string](#) []

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

Returns

[GeminiToolConfiguration](#)

Namespace Uralstech.UGemini.Models.Tuning Classes

[GeminInitialTuningTask](#)

Tuning task that creates the tuned model.

[GeminiTunedModel](#)

A fine-tuned model created using ModelService.CreateTunedModel.

[GeminiTunedModelCreateRequest](#)

Creates a tuned model. Response type is [GeminiTunedModelCreateResponse](#).

[GeminiTunedModelCreateResponse](#)

The response type for a [GeminiTunedModelCreateRequest](#).

[GeminiTunedModelCreationData](#)

A fine-tuned model to be created using ModelService.CreateTunedModel.

[GeminiTunedModelCreationOperationMetadata](#)

Metadata about the state and progress of creating a tuned model returned from the long-running operation

[GeminiTunedModelDeleteRequest](#)

Requests for deletion of a tuned model.

[GeminiTunedModelGetRequest](#)

Gets information about a specific tuned model. Return type is [GeminiModel](#).

[GeminiTunedModelListRequest](#)

Requests metadata for all existing tuned models. Return type is [GeminiTunedModelListResponse](#).

[GeminiTunedModelListResponse](#)

The response for a [GeminiTunedModelListRequest](#) call.

[GeminiTunedModelPatchData](#)

Data to patch an existing cached content resource with new data.

[GeminiTunedModelPatchRequest](#)

Updates a tuned model. Response type is [GeminiTunedModelPatchData](#).

[GeminiTunedModelSource](#)

Tuned model as a source for training a new model.

[GeminiTunedModelTransferOwnershipRequest](#)

Transfers ownership of the tuned model. This is the only way to change ownership of the tuned model. The current owner will be downgraded to writer role. Does not return anything.

[GeminiTuningDataset](#)

Dataset for training or validation.

[GeminiTuningExample](#)

A single example for tuning.

[GeminiTuningExamples](#)

A set of tuning examples. Can be training or validation data.

[GeminiTuningHyperparameters](#)

Hyperparameters controlling the tuning process.

[GeminiTuningSnapshot](#)

Record for a single tuning step.

[GeminiTuningTask](#)

Tuning tasks that create tuned models.

Enums

[GeminiTunedModelListFilter](#)

Simple filter to get models by account authorization.

[GeminiTunedModelState](#)

The state of the tuned model.

Class GeminiInitialTuningTask

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Tuning task that creates the tuned model.

```
public class GeminiInitialTuningTask
```

Inheritance

[object](#) ← GeminiInitialTuningTask

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Hyperparameters

Hyperparameters controlling the tuning process.

```
public GeminiTuningHyperparameters Hyperparameters
```

Field Value

[GeminiTuningHyperparameters](#)

TrainingData

The model training data.

```
public GeminiTuningDataset TrainingData
```

Field Value

[GeminiTuningDataset](#)

Class GeminiTunedModel

Namespace: [Uralstech.UGemini.Models.Tuning](#)

A fine-tuned model created using ModelService.CreateTunedModel.

```
public class GeminiTunedModel : GeminiModelId
```

Inheritance

[object](#) ← [GeminiModelId](#) ← GeminiTunedModel

Inherited Members

[GeminiModelId.DefaultModelResourceLocation](#) , [GeminiModelId.Name](#) , [GeminiModelId.BaseModelId](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BaseModel

The name of the [GeminiModel](#) to tune. Example: models/gemini-1.5-flash-0

```
public GeminiModelId BaseModel
```

Field Value

[GeminiModelId](#)

CreateTime

The timestamp when this model was created.

```
public DateTime CreateTime
```

Field Value

Description

A short description of the model.

```
public string Description
```

Field Value

[string](#)

DisplayName

The name to display for this model in user interfaces.

```
public string DisplayName
```

Field Value

[string](#)

Remarks

The display name must be up to 40 characters including spaces.

ReaderProjectNumbers

List of project numbers that have read access to the tuned model.

```
public long[] ReaderProjectNumbers
```

Field Value

[long](#)[]

State

The state of the tuned model.

```
public GeminiTunedModelState State
```

Field Value

[GeminiTunedModelState](#)

Temperature

Controls the randomness of the output.

```
public float Temperature
```

Field Value

[float](#) ↗

Remarks

Values can range over [0.0,1.0], inclusive. A value closer to 1.0 will produce responses that are more varied, while a value closer to 0.0 will typically result in less surprising responses from the model. This value specifies default to be the one used by the base model while creating the model.

TopK

For Top-k sampling.

```
public int TopK
```

Field Value

[int](#) ↗

Remarks

Top-k sampling considers the set of topK most probable tokens. This value specifies default to be used by the backend while making the call to the model. This value specifies default to be the one used by the base model while creating the model.

TopP

For Nucleus sampling.

```
public float TopP
```

Field Value

[float](#)

Remarks

Nucleus sampling considers the smallest set of tokens whose probability sum is at least topP. This value specifies default to be the one used by the base model while creating the model.

TunedModelSource

TunedModel to use as the starting point for training the new model.

```
public GeminiTunedModelSource TunedModelSource
```

Field Value

[GeminiTunedModelSource](#)

TuningTask

The tuning task that creates the tuned model.

```
public GeminiTuningTask TuningTask
```

Field Value

[GeminiTuningTask](#)

UpdateTime

The timestamp when this model was updated.

```
public DateTime UpdateTime
```

Field Value

[DateTime](#) ↗

Class GeminiTunedModelCreateRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Creates a tuned model. Response type is [GeminiTunedModelCreateResponse](#).

```
public class GeminiTunedModelCreateRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelCreateRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelCreateRequest(GeminiTunedModelCreationData, bool)

Creates a new [GeminiTunedModelCreateRequest](#).

```
public GeminiTunedModelCreateRequest(GeminiTunedModelCreationData model, bool useBetaApi  
= true)
```

Parameters

model [GeminiTunedModelCreationData](#)

The tuned model to be created.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Model

The tuned model to be created.

```
public GeminiTunedModelCreationData Model
```

Field Value

[GeminiTunedModelCreationData](#)

ModelId

The unique id for the tuned model if specified.

```
public GeminiModelId ModelId
```

Field Value

[GeminiModelId](#)

Remarks

This value should be up to 40 characters, the first character must be a letter, the last could be a letter or a number.

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#)

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiTunedModelCreateResponse

Namespace: [Uralstech.UGemini.Models.Tuning](#)

The response type for a [GeminiTunedModelCreateRequest](#).

```
public class GeminiTunedModelCreateResponse :  
Operation<GeminiTunedModelCreationOperationMetadata, GeminiTunedModel>
```

Inheritance

[object](#) ← GeminiTunedModelCreateResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Class GeminiTunedModelCreationData

Namespace: [Uralstech.UGemini.Models.Tuning](#)

A fine-tuned model to be created using ModelService.CreateTunedModel.

```
public class GeminiTunedModelCreationData
```

Inheritance

[object](#) ← GeminiTunedModelCreationData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BaseModel

The name of the [GeminiModel](#) to tune. Example: models/gemini-1.5-flash-0

```
public GeminiModelId BaseModel
```

Field Value

[GeminiModelId](#)

Remarks

If not provided, [TunedModelSource](#) must be provided.

Description

A short description of the model.

```
public string Description
```

Field Value

[string](#)

DisplayName

The name to display for this model in user interfaces.

```
public string DisplayName
```

Field Value

[string](#)

Remarks

The display name must be up to 40 characters including spaces.

ReaderProjectNumbers

List of project numbers that have read access to the tuned model.

```
public long[] ReaderProjectNumbers
```

Field Value

[long](#)[]

Temperature

Controls the randomness of the output.

```
public float? Temperature
```

Field Value

[float](#)?

Remarks

Values can range over [0.0,1.0], inclusive. A value closer to 1.0 will produce responses that are more varied, while a value closer to 0.0 will typically result in less surprising responses from the model. This value specifies default to be the one used by the base model while creating the model.

TopK

For Top-k sampling.

```
public int? TopK
```

Field Value

[int](#)?

Remarks

Top-k sampling considers the set of topK most probable tokens. This value specifies default to be used by the backend while making the call to the model. This value specifies default to be the one used by the base model while creating the model.

TopP

For Nucleus sampling.

```
public float? TopP
```

Field Value

[float](#)?

Remarks

Nucleus sampling considers the smallest set of tokens whose probability sum is at least topP. This value specifies default to be

the one used by the base model while creating the model.

TunedModelSource

TunedModel to use as the starting point for training the new model.

```
public GeminiTunedModelSource TunedModelSource
```

Field Value

[GeminiTunedModelSource](#)

Remarks

If not provided, [BaseModel](#) must be provided.

TuningTask

The tuning task that creates the tuned model.

```
public GeminiInitialTuningTask TuningTask
```

Field Value

[GemininitialTuningTask](#)

Class GeminiTunedModelCreationOperationMetadata

Namespace: [Uralstech.UGemini.Models.Tuning](#).

Metadata about the state and progress of creating a tuned model returned from the long-running operation

```
public class GeminiTunedModelCreationOperationMetadata
```

Inheritance

[object](#) ← GeminiTunedModelCreationOperationMetadata

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#).

Fields

CompletedPercent

The completed percentage for the tuning operation.

```
public float? CompletedPercent
```

Field Value

[float](#)?

CompletedSteps

The number of steps completed.

```
public int? CompletedSteps
```

Field Value

[int↗?](#)

Snapshots

Metrics collected during tuning.

```
public GeminiTuningSnapshot[] Snapshots
```

Field Value

[GeminiTuningSnapshot\[\]](#)

TotalSteps

The total number of tuning steps.

```
public int TotalSteps
```

Field Value

[int↗](#)

TunedModel

The ID of the model being tuned.

```
public GeminiModelId TunedModel
```

Field Value

[GeminiModelId](#)

Class GeminiTunedModelDeleteRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Requests for deletion of a tuned model.

```
public class GeminiTunedModelDeleteRequest : IGeminiDeleteRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelDeleteRequest

Implements

[IGeminiDeleteRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#).

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelDeleteRequest(GeminiModelId, bool)

Creates a new [GeminiTunedModelDeleteRequest](#).

```
public GeminiTunedModelDeleteRequest(GeminiModelId tunedModel, bool useBetaApi = true)
```

Parameters

tunedModel [GeminiModelId](#)

The ID of the tuned model to delete.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

TunedModel

The ID of the tuned model.

```
public GeminiModelId TunedModel
```

Field Value

[GeminiModelId](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiTunedModelGetRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Gets information about a specific tuned model. Return type is [GeminiModel](#).

```
public class GeminiTunedModelGetRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelGetRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelGetRequest(GeminiModelId, bool)

Creates a new [GeminiTunedModelGetRequest](#).

```
public GeminiTunedModelGetRequest(GeminiModelId modelId, bool useBetaApi = true)
```

Parameters

modelId [GeminiModelId](#)

The ID of the model to get, in the format tunedModels/{model}.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

TunedModel

The ID of the [GeminiTunedModel](#) to get, in the format tunedModels/{model}.

```
public GeminiModelId TunedModel
```

Field Value

[GeminiModelId](#)

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

[metadata](#) [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Enum GeminiTunedModelListFilter

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Simple filter to get models by account authorization.

```
public enum GeminiTunedModelListFilter
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

`[EnumMember(Value = "readers:everyone")] IAmReader = 4`

Returns all tuned models to which caller has reader role.

`[EnumMember(Value = "owner:me")] IAmOwner = 1`

Returns all tuned models to which caller has owner role.

`[EnumMember(Value = "readers:me")] IAmReader = 3`

Returns all tuned models to which caller has reader role.

`[EnumMember(Value = "writers:me")] IAmWriter = 2`

Returns all tuned models to which caller has writer role.

`None = 0`

Default value.

Class GeminiTunedModelListRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Requests metadata for all existing tuned models. Return type is [GeminiTunedModelListResponse](#).

```
public class GeminiTunedModelListRequest : IGeminiGetRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelListRequest

Implements

[IGeminiGetRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelListRequest(bool)

Creates a new [GeminiTunedModelListRequest](#).

```
public GeminiTunedModelListRequest(bool useBetaApi = true)
```

Parameters

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#) ↗

Filter

Simple filter to get models by account authorizations.

```
public GeminiTunedModelListFilter Filter
```

Field Value

[GeminiTunedModelListFilter](#)

MaxResponseModels

The maximum number of [GeminiTunedModels](#)s to return (per page).

```
public int MaxResponseModels
```

Field Value

[int](#) ↗

Remarks

This method returns at most 1000 models per page, even if you pass a larger [MaxResponseModels](#).

PageToken

A page token from a previous [GeminiTunedModelListRequest](#) call.

```
public string PageToken
```

Field Value

[string](#) ↗

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#) ↗

The URI.

Class GeminiTunedModelListResponse

Namespace: [Uralstech.UGemini.Models.Tuning](#)

The response for a [GeminiTunedModelListRequest](#) call.

```
public class GeminiTunedModelListResponse
```

Inheritance

[object](#) ↗ ← GeminiTunedModelListResponse

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

NextPageToken

A token that can be sent as a [PageToken](#) into a subsequent [GeminiModelListRequest](#) call.

```
public string NextPageToken
```

Field Value

[string](#) ↗

TunedModels

The list of tuned models.

```
public GeminiTunedModel[] TunedModels
```

Field Value

[GeminiTunedModel\[\]](#)

Class GeminiTunedModelPatchData

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Data to patch an existing cached content resource with new data.

```
public class GeminiTunedModelPatchData
```

Inheritance

[object](#) ← GeminiTunedModelPatchData

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BaseModel

The name of the [GeminiModel](#) to tune. Example: models/gemini-1.5-flash-0

```
public GeminiModelId BaseModel
```

Field Value

[GeminiModelId](#)

Remarks

If not provided, [TunedModelSource](#) must be provided.

Description

A short description of the model.

```
public string Description
```

Field Value

[string](#)

DisplayName

The name to display for this model in user interfaces.

```
public string DisplayName
```

Field Value

[string](#)

Remarks

The display name must be up to 40 characters including spaces.

Temperature

Controls the randomness of the output.

```
public float? Temperature
```

Field Value

[float](#)

Remarks

Values can range over [0.0,1.0], inclusive. A value closer to 1.0 will produce responses that are more varied, while a value closer to 0.0 will typically result in less surprising responses from the model. This value specifies default to be the one used by the base model while creating the model.

TopK

For Top-k sampling.

```
public int? TopK
```

Field Value

[int](#)?

Remarks

Top-k sampling considers the set of topK most probable tokens. This value specifies default to be used by the backend while making the call to the model. This value specifies default to be the one used by the base model while creating the model.

TopP

For Nucleus sampling.

```
public float? TopP
```

Field Value

[float](#)?

Remarks

Nucleus sampling considers the smallest set of tokens whose probability sum is at least topP. This value specifies default to be the one used by the base model while creating the model.

TunedModelSource

TunedModel to use as the starting point for training the new model.

```
public GeminiTunedModelSource TunedModelSource
```

Field Value

[GeminiTunedModelSource](#)

Remarks

If not provided, [BaseModel](#) must be provided.

TuningTask

The tuning task that creates the tuned model.

```
public GeminiInitialTuningTask TuningTask
```

Field Value

[GeminiInitialTuningTask](#)

Class GeminiTunedModelPatchRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Updates a tuned model. Response type is [GeminiTunedModelPatchData](#).

```
public class GeminiTunedModelPatchRequest : IGeminiPatchRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelPatchRequest

Implements

[IGeminiPatchRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelPatchRequest(GeminiTunedModelPatchData , GeminiModelId, bool)

Creates a new [GeminiTunedModelPatchRequest](#).

```
public GeminiTunedModelPatchRequest(GeminiTunedModelPatchData patch, GeminiModelId
tunedModel, bool useBetaApi = true)
```

Parameters

patch [GeminiTunedModelPatchData](#)

The patch data.

tunedModel [GeminiModelId](#)

The ID of the tuned model to patch.

`useBetaApi` [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

Patch

The patch data.

```
public GeminiTunedModelPatchData Patch
```

Field Value

[GeminiTunedModelPatchData](#)

TunedModel

The ID of the tuned model.

```
public GeminiModelId TunedModel
```

Field Value

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiTunedModelSource

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Tuned model as a source for training a new model.

```
public class GeminiTunedModelSource
```

Inheritance

[object](#) ← GeminiTunedModelSource

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BaseModel

The name of the base [GeminiModel](#) this [GeminiTunedModel](#) was tuned from. Example: models/gemini-1.5-flash-001

```
public GeminiModelId BaseModel
```

Field Value

[GeminiModelId](#)

TunedModel

The name of the [GeminiTunedModel](#) to use as the starting point for training the new model. Example: tunedModels/my-tuned-model

```
public GeminiModelId TunedModel
```

Field Value

[GeminiModelId](#)

Enum GeminiTunedModelState

Namespace: [Uralstech.UGemini.Models.Tuning](#)

The state of the tuned model.

```
public enum GeminiTunedModelState
```

Extension Methods

[EnumExtensions.EnumMemberValue\(Enum\)](#) , [GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

[EnumMember(Value = "ACTIVE")] Active = 2

The model is ready to be used.

[EnumMember(Value = "CREATING")] Creating = 1

The model is being created.

[EnumMember(Value = "FAILED")] Failed = 3

The model failed to be created.

[EnumMember(Value = "STATE_UNSPECIFIED")] Unspecified = 0

The default value. This value is unused.

Class

GeminiTunedModelTransferOwnershipRequest

Namespace: [Uralstech.UGemini.Models.Tuning](#).

Transfers ownership of the tuned model. This is the only way to change ownership of the tuned model. The current owner will be downgraded to writer role. Does not return anything.

```
public class GeminiTunedModelTransferOwnershipRequest : IGeminiPostRequest, IGeminiRequest
```

Inheritance

[object](#) ← GeminiTunedModelTransferOwnershipRequest

Implements

[IGeminiPostRequest](#), [IGeminiRequest](#)

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(T\)](#)

Remarks

Only available in the beta API.

Constructors

GeminiTunedModelTransferOwnershipRequest(GeminiModelId, bool)

Creates a new [GeminiTunedModelTransferOwnershipRequest](#).

```
public GeminiTunedModelTransferOwnershipRequest(GeminiModelId tunedModel, bool useBetaApi = true)
```

Parameters

tunedModel [GeminiModelId](#)

The ID of the tuned model to transfer.

useBetaApi [bool](#)

Should the request use the Beta API?

Remarks

Only available in the beta API.

Fields

ApiVersion

The API version to use.

```
public string ApiVersion
```

Field Value

[string](#)

EmailAddress

The email address of the user to whom the tuned model is being transferred to.

```
public string EmailAddress
```

Field Value

[string](#)

TunedModel

The ID of the tuned model.

```
public GeminiModelId TunedModel
```

Field Value

Properties

AuthMethod

The preferred authentication method.

```
public GeminiAuthMethod AuthMethod { get; set; }
```

Property Value

[GeminiAuthMethod](#)

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#) ↗

OAuthAccessToken

The OAuth access token to authenticate the request, if using [OAuthAccessToken](#) as [AuthMethod](#).

```
public string OAuthAccessToken { get; set; }
```

Property Value

[string](#) ↗

Methods

GetEndpointUri(GeminiRequestMetadata)

Gets the URI to the API endpoint.

```
public string GetEndpointUri(GeminiRequestMetadata metadata)
```

Parameters

metadata [GeminiRequestMetadata](#)

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

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).

```
public string GetUtf8EncodedData()
```

Returns

[string](#)

The string data.

Class GeminiTuningDataset

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Dataset for training or validation.

```
public class GeminiTuningDataset
```

Inheritance

[object](#) ← GeminiTuningDataset

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Examples

Inline examples.

```
public GeminiTuningExamples Examples
```

Field Value

[GeminiTuningExamples](#)

Class GeminiTuningExample

Namespace: [Uralstech.UGemini.Models.Tuning](#)

A single example for tuning.

```
public class GeminiTuningExample
```

Inheritance

[object](#) ← GeminiTuningExample

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Output

The expected model output.

```
public string Output
```

Field Value

[string](#)

TextInput

Text model input.

```
public string TextInput
```

Field Value

[string](#)

Class GeminiTuningExamples

Namespace: [Uralstech.UGemini.Models.Tuning](#)

A set of tuning examples. Can be training or validation data.

```
public class GeminiTuningExamples
```

Inheritance

[object](#) ← GeminiTuningExamples

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

Examples

The examples. Example input can be for text or discuss, but all examples in a set must be of the same type.

```
public GeminiTuningExample[] Examples
```

Field Value

[GeminiTuningExample\[\]](#)

Class GeminiTuningHyperparameters

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Hyperparameters controlling the tuning process.

```
public class GeminiTuningHyperparameters
```

Inheritance

[object](#) ← GeminiTuningHyperparameters

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

BatchSize

The batch size hyperparameter for tuning. If not set, a default of 4 or 16 will be used based on the number of training examples.

```
public int BatchSize
```

Field Value

[int](#)

EpochCount

The number of training epochs. An epoch is one pass through the training data. If not set, a default of 5 will be used.

```
public int EpochCount
```

Field Value

[int](#)

LearningRate

The learning rate hyperparameter for tuning. If not set, a default of 0.001 or 0.0002 will be calculated based on the number of training examples.

```
public float? LearningRate
```

Field Value

[float](#)?

Remarks

If [null](#), [LearningRateMultiplier](#) will be provided.

LearningRateMultiplier

The learning rate multiplier is used to calculate a final learningRate based on the default (recommended) value.

```
public float? LearningRateMultiplier
```

Field Value

[float](#)?

Remarks

Actual learning rate := learningRateMultiplier * default learning rate Default learning rate is dependent on base model and dataset size. If not set, a default of 1.0 will be used.

If [null](#), [LearningRate](#) will be provided.

Class GeminiTuningSnapshot

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Record for a single tuning step.

```
public class GeminiTuningSnapshot
```

Inheritance

[object](#) ← GeminiTuningSnapshot

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

ComputeTime

The timestamp when this metric was computed.

```
public DateTime ComputeTime
```

Field Value

[DateTime](#)

Epoch

The epoch this step was part of.

```
public int Epoch
```

Field Value

[int](#)

MeanLoss

The mean loss of the training examples for this step.

```
public float MeanLoss
```

Field Value

[float](#) ↗

Step

The tuning step.

```
public int Step
```

Field Value

[int](#) ↗

Class GeminiTuningTask

Namespace: [Uralstech.UGemini.Models.Tuning](#)

Tuning tasks that create tuned models.

```
public class GeminiTuningTask
```

Inheritance

[object](#) ← GeminiTuningTask

Extension Methods

[GeminiFieldMaskGenerator.GetFieldMask<T>\(I\)](#)

Fields

CompleteTime

The timestamp when tuning this model completed.

```
public DateTime CompleteTime
```

Field Value

[DateTime](#)

Hyperparameters

Hyperparameters controlling the tuning process.

```
public GeminiTuningHyperparameters Hyperparameters
```

Field Value

[GeminiTuningHyperparameters](#)

Snapshots

Metrics collected during tuning.

```
public GeminiTuningSnapshot[] Snapshots
```

Field Value

[GeminiTuningSnapshot\[\]](#)

StartTime

The timestamp when tuning this model started.

```
public DateTime StartTime
```

Field Value

[DateTime](#)

Namespace Uralstech.UGemini.Utils.Web Classes

[WebRequestHelper](#)

Extensions for the UnityWebRequest type.

Class WebRequestHelper

Namespace: [Uralstech.UGemini.Utils.Web](#)

Extensions for the UnityWebRequest type.

```
public static class WebRequestHelper
```

Inheritance

[object](#) ← WebRequestHelper