

UGemini
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Chapter 1

Breaking Changes Notice

UGemini v2.0.0 contains many breaking changes. To update your code to use UGemini 2.0.0, refer to the following list and table of changes:

1.0.1 General Changes

- `EnumExtensions` is now `GeminiContentTypeExtensions`.
- The `fileId` field in the constructors for `GeminiFileDeleteRequest` and `GeminiFileGetRequest` has been renamed to `fileNameOrId`.
- All code previously marked as "deprecated" has been removed.

1.0.2 Namespace Changes

Class	Old Namespace	New Namespace
<code>GeminiContent</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>GeminiContentBlob</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>GeminiContentPart</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>GeminiFileData</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>GeminiRole</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>UnityExtensions</code>	<code>Uralstech.UGemini</code>	<code>Uralstech.UGemini.Models.Content</code>
<code>GeminiAttributionSourceId</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Att</code>
<code>GeminiGroundingAttribution</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Att</code>
<code>GeminiGroundingPassageId</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Att</code>
<code>GeminiSemanticRetrieverChunk</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Att</code>
<code>GeminiCitationMetadata</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Cit</code>
<code>GeminiCitationSource</code>	<code>Uralstech.UGemini.Chat</code>	<code>Uralstech.UGemini.Models.Content.Cit</code>
<code>GeminiTokenCountRequest</code>	<code>Uralstech.UGemini.TokenCounting</code>	<code>Uralstech.UGemini.Models.CountTokens</code>
<code>GeminiTokenCountResponse</code>	<code>Uralstech.UGemini.TokenCounting</code>	<code>Uralstech.UGemini.Models.CountTokens</code>

Class	Old Namespace	New Namespace	
GeminiBatchEmbed↔ ContentRequest	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiBatchEmbed↔ ContentResponse	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiContentEmbedding	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiEmbedContent↔ Request	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiEmbedContent↔ Response	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiEmbedTaskType	Uralstech.UGemini.↔ Embedding	Uralstech.UGemini.Models	Embedding
GeminiGeneration↔ Configuration	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation
GeminiResponseType	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation
GeminiCandidate	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiPromptFeedback	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiUsageMetadata	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiFinishReason	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiChatRequest	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiChatResponse	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiAnswerRequest	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiAnswerResponse	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiAnswerStyle	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiGroundingPassage	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiGroundingPassages	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiMetadataCondition	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiMetadataFilter	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiSemantic↔ RetrieverConfig	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiMetadata↔ ConditionOperator	Uralstech.UGemini.↔ Answer	Uralstech.UGemini.Models	Generation.
GeminiSafetyRating	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiSafetySettings	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiBlockReason	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiHarmProbability	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiSafetyHarmBlock↔ Threshold	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiSafetyHarm↔ Category	Uralstech.UGemini.Chat	Uralstech.UGemini.Models	Generation.
GeminiSchema	Uralstech.UGemini.↔ Schema	Uralstech.UGemini.Models	Generation.
GeminiSchemaDataFormat	Uralstech.UGemini.↔ Schema	Uralstech.UGemini.Models	Generation.
GeminiSchemaDataType	Uralstech.UGemini.↔ Schema	Uralstech.UGemini.Models	Generation.
GeminiFunctionCall	Uralstech.UGemini.Tools	Uralstech.UGemini.Models	Generation.

Class	Old Namespace	New Namespace
GeminiFunctionResponse	Uralstech.UGemini.Tools	Uralstech.UGemini.Models.Generation.
GeminiFunction↔ ResponseContent	Uralstech.UGemini.Tools	Uralstech.UGemini.Models.Generation.
GeminiFunctionCalling↔ Configuration	Uralstech.UGemini.↔ Tools.Declaration	Uralstech.UGemini.Models.Generation.
GeminiFunction↔ Declaration	Uralstech.UGemini.↔ Tools.Declaration	Uralstech.UGemini.Models.Generation.
GeminiTool	Uralstech.UGemini.↔ Tools.Declaration	Uralstech.UGemini.Models.Generation.
GeminiToolConfiguration	Uralstech.UGemini.↔ Tools.Declaration	Uralstech.UGemini.Models.Generation.
GeminiFunctionCalling↔ Mode	Uralstech.UGemini.↔ Tools.Declaration	Uralstech.UGemini.Models.Generation.

Chapter 2

QuickStart and Documentation

2.1 Basics

2.1.1 Setup

Add an instance of `Uralstech.UGemini.GeminiManager` to your scene, and set it up with your Gemini API key. You can get your API key from [here](#).

2.1.2 GeminiManager

There are only three methods in `GeminiManager`:

Method	What it does
<code>SetApiKey</code>	Sets the Gemini API key through code
<code>Request</code>	Computes a request on the Gemini API
<code>StreamRequest*</code>	Computes a streaming request on the Gemini API

*Requires `Utilities.Async`.

All computations on the Gemini API are done through `GeminiManager.Request`, `GeminiManager.↔StreamRequest` and their variants.

In this page, the fields, properties and methods of each type will not be explained. Every type has been fully documented in code, so please check the code docstrings or reference documentation to learn more about each type.

2.1.3 Beta API

`GeminiManager` supports both the `v1` and `v1beta` Gemini API versions. As a lot of features are still unsupported in the main `v1` API, you may need to use the Beta API. You can set the `useBetaApi` boolean parameter in the request's constructor to do so.

2.1.4 Models

`Uralstech.UGemini.Models.GeminiModel` has four static model IDs:

- `Gemini1_5Flash`
- `Gemini1_5Pro`
- `Gemini1_0Pro`
- `Gemini1_0ProVision`
 - Gemini 1.0 Pro Vision is deprecated. Use Use 1.5 Flash (`Gemini1_5Flash`) or 1.5 Pro (`Gemini1_5Pro`) instead.
- `TextEmbedding004`
- `Aqa`

You can provide these to the `model` parameter in the constructors for model-related requests. `UGemini` can also implicitly convert `string` model IDs to `GeminiModelId` objects.

2.1.5 QuickStart: Multi-turn Chat Request

This is a simple script that maintains the user's chat history with Gemini.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;

private List<GeminiContent> _chatHistory = new();

private async Task<string> OnChat(string text)
{
    _chatHistory.Add(GeminiContent.GetContent(text, GeminiRole.User));
    GeminiChatResponse response = await GeminiManager.Instance.Request<GeminiChatResponse>(
        new GeminiChatRequest(GeminiModel.Gemini1_5Flash)
        {
            Contents = _chatHistory.ToArray(),
        }
    );

    _chatHistory.Add(response.Candidates[0].Content);
    return response.Parts[0].Text;
}
```

Here, we simply have a list of `GeminiContent` objects, which tracks the messages of the conversation. Every time `OnChat` is called, the user's request and the model's reply are added to the list.

2.2 All Supported Endpoints

2.2.1 Models

The Models endpoint contains methods that allow you to access and inference Gemini models.

2.2.1.1 Get

Gets information about a specific Model such as its version number, token limits, parameters and other metadata.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;

private async Task<GeminiModel> RunGetModelRequest(string modelId)
{
    return await GeminiManager.Instance.Request<GeminiModel>(new GeminiModelGetRequest(modelId));
}
```

See [GeminiModel](#) and [GeminiModelGetRequest](#) for more details.

Newer models will not be recognized by the request if you're not using the Beta API.

2.2.1.2 List

Lists the Models available through the Gemini API.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;

private async Task<GeminiModel[]> RunListModelsRequest(int maxModels = 50, string pageToken = null)
{
    GeminiModelListResponse response = await GeminiManager.Instance.Request<GeminiModelListResponse>(new
        GeminiModelListRequest()
    {
        MaxResponseModels = maxModels,
        PageToken = string.IsNullOrEmpty(pageToken) ? string.Empty : pageToken,
    });
    return response?.Models;
}
```

See [GeminiModelListResponse](#) and [GeminiModelListRequest](#) for more details.

Newer models will not be recognized by the request if you're not using the Beta API.

2.2.1.3 EmbedContent

Generates a text embedding vector from the input Content using the specified Gemini Embedding model.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Embedding;

private async void RunEmbedContentRequest()
{
    Debug.Log("Running embedding request.");

    GeminiEmbedContentResponse response = await GeminiManager.Instance.Request<GeminiEmbedContentResponse>(
        new GeminiEmbedContentRequest(GeminiModel.TextEmbedding004)
    {
        Content = GeminiContent.GetContent("Hello! How are you?"),
    });

    Debug.Log($"Embedding values: {string.Join(", ", response.Embedding.Values)}");
}
```

See [GeminiEmbedContentResponse](#) and [GeminiEmbedContentRequest](#) for more details.

2.2.1.4 BatchEmbedContents

Generates multiple embedding vectors from the input Content which consists of a batch of strings represented as EmbedContentRequest objects.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Embedding;

private async void RunBatchEmbedContentRequest()
{
    Debug.Log("Running batch embedding request.");

    // Make sure the model used for the batch request is the same for all included requests.
    GeminiBatchEmbedContentResponse response = await
        GeminiManager.Instance.Request<GeminiBatchEmbedContentResponse>(
            new GeminiBatchEmbedContentRequest(GeminiModel.TextEmbedding004)
            {
                Requests = new GeminiEmbedContentRequest[]
                {
                    new GeminiEmbedContentRequest(GeminiModel.TextEmbedding004)
                    {
                        Content = GeminiContent.GetContent("Hello! How are you?"),
                    },
                    new GeminiEmbedContentRequest(GeminiModel.TextEmbedding004)
                    {
                        Content = GeminiContent.GetContent("Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua."),
                    }
                }
            }
        );

    foreach (GeminiContentEmbedding embedding in response.Embeddings)
        Debug.Log($"Embedding values: {string.Join(" ", embedding.Values)}");
}
```

See [GeminiBatchEmbedContentResponse](#) and [GeminiBatchEmbedContentRequest](#) for more details.

2.2.1.5 GenerateContent

Generates a model response given an input GenerateContentRequest.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;

private async void RunChatRequest()
{
    Debug.Log("Running chat request.");

    GeminiChatResponse response = await GeminiManager.Instance.Request<GeminiChatResponse>(
        new GeminiChatRequest(GeminiModel.Gemini1_5Flash)
        {
            Contents = new GeminiContent[]
            {
                {
                    GeminiContent.GetContent("What's up?")
                },
            }
        }
    );

    Debug.Log($"Gemini's response: {response.Parts[^1].Text}");
}
```

See [GeminiChatResponse](#) and [GeminiChatRequest](#) for more details.

2.2.1.6 StreamGenerateContent

Generates a streamed response from the model given an input GenerateContentRequest.

```

using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;

private async void RunStreamingChatRequest()
{
    Debug.Log("Running streamed chat request.");

    GeminiChatResponse response = await GeminiManager.Instance.StreamRequest(
        new GeminiChatRequest(GeminiModel.Gemini_5Flash)
        {
            Contents = new GeminiContent[]
            {
                GeminiContent.GetContent("What's up? Tell me a story about airplanes.")
            },
            OnPartialResponseReceived = partialResponse =>
            {
                if (partialResponse.Candidates == null || partialResponse.Candidates.Length < 0)
                    return Task.CompletedTask;

                Debug.Log($"Gemini's partial response: {partialResponse.Parts[^1].Text}");
                return Task.CompletedTask;
            }
        }
    );

    Debug.Log($"Gemini's final response: {response.Parts[^1].Text}");
}

```

See [GeminiChatResponse](#) and [GeminiChatRequest](#) for more details.

2.2.1.7 GenerateAnswer (Beta API)

Generates a grounded answer from the model given an input `GenerateAnswerRequest`.

```

using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Content.Attribution;
using Uralstech.UGemini.Models.Generation.QuestionAnswering;
using Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding;

private async void RunQuestionAnsweringRequest()
{
    Debug.Log("Running Q/A request.");

    GeminiAnswerResponse response = await GeminiManager.Instance.Request<GeminiAnswerResponse>(
        new GeminiAnswerRequest(GeminiModel.Aqa)
        {
            Contents = new GeminiContent[]
            {
                GeminiContent.GetContent("What is eazr2?")
            },
            InlinePassages = new GeminiGroundingPassages()
            {
                Passages = new GeminiGroundingPassage[]
                {
                    new GeminiGroundingPassage()
                    {
                        Id = "eazrSquaredContext",
                        Content = GeminiContent.GetContent(
                            "eazr2 is an easy to learn and practical interpreted programming language for beginners and experts alike made in C#." +
                            "The latest version of eazr2 RE has been released! eazr2 RE, or REwrite, is the project's initiative to rewrite eazr2. " +
                            "The latest working version of eazr2 RE has many more features than the latest version of eazr2! But, it is still in " +
                            "development, has some essential features missing. Like the include expression, or any built-in object methods like " +
                            "\"a string\".length or [\"a\", \"list\"].insert. If you want to help in testing it out and fixing bugs, feel free to" +
                            " download the latest version of eazr2 RE from the eazr2 GitHub releases page and compiling it using the .NET SDK and/or" +
                            " Visual Studio. The GitHub releases page is: https://github.com/Uralstech/eazrSquared/releases."
                        )
                    }
                }
            }
        }
    );
}

```

```

        },
        AnswerStyle = GeminiAnswerStyle.Verbose,
    }
};

if (response.Answer.Content != null)
    Debug.Log($"Gemini's answer: {response.Answer.Content.Parts[^1].Text}");

foreach (GeminiGroundingAttribution attribution in response.Answer.GroundingAttributions)
    Debug.Log($"Attribution ID: {attribution.SourceId.GroundingPassage.PassageId} | Content: {attribution.Content.Parts[^1].Text}");
}

```

See [GeminiAnswerResponse](#) and [GeminiAnswerRequest](#) for more details.

2.2.1.8 CountTokens

Runs a model's tokenizer on input Content and returns the token count.

```

using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.CountTokens;

private async void RunTokenCountRequest()
{
    Debug.Log("Running token counting request.");

    GeminiTokenCountResponse response = await GeminiManager.Instance.Request<GeminiTokenCountResponse>(
        new GeminiTokenCountRequest(GeminiModel.Gemini1_5Flash)
        {
            Contents = new GeminiContent[]
            {
                GeminiContent.GetContent("Hello! How are you?"),
            }
        }
    );

    Debug.Log($"Tokens: {response.TotalTokens}");
}

```

See [GeminiTokenCountResponse](#) and [GeminiTokenCountRequest](#) for more details.

2.2.2 TunedModels (Unstable)

The TunedModels endpoint contains methods that allow you to access and inference fine-tuned Gemini models.

2.2.2.1 GenerateContent

Generates a model response given an input GenerateContentRequest.

```

// This is untested code.

using Uralstech.UGemini;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;

private async void RunTunedModelChatRequest()
{
    Debug.Log("Running chat request on tuned model.");

    GeminiChatResponse response = await GeminiManager.Instance.Request<GeminiChatResponse>(
        new GeminiChatRequest("tunedModels/modelname")
        {
            Contents = new GeminiContent[]
            {
                GeminiContent.GetContent("What's up?")
            },
        }
    );

    Debug.Log($"Tuned Gemini's response: {response.Parts[^1].Text}");
}

```

See [GeminiChatResponse](#) and [GeminiChatRequest](#) for more details.

2.2.3 Files (Beta API)

The Gemini File API can be used to store data on the cloud for future prompting with the Gemini models.

2.2.3.1 Delete

Deletes the File.

```
using Uralstech.UGemini;
using Uralstech.UGemini.FileAPI;

private async void RunDeleteFileRequest(string fileId)
{
    Debug.Log("Deleting file...");
    await GeminiManager.Instance.Request(new GeminiFileDeleteRequest(fileId));
    Debug.Log("File deleted.");
}
```

See [GeminiFileDeleteRequest](#) for more details.

2.2.3.2 Get

Gets the metadata for the given File.

```
using Uralstech.UGemini;
using Uralstech.UGemini.FileAPI;

private async Task<GeminiFile> RunGetFileRequest(string fileId)
{
    return await GeminiManager.Instance.Request<GeminiFile>(new GeminiFileGetRequest(fileId));
}
```

See [GeminiFile](#) and [GeminiFileGetRequest](#) for more details.

2.2.3.3 List

Lists the metadata for Files owned by the requesting project.

```
using Uralstech.UGemini;
using Uralstech.UGemini.FileAPI;

private async Task<GeminiFile[]> RunListFilesRequest(int maxFiles = 10, string pageToken = null)
{
    GeminiFileListResponse response = await GeminiManager.Instance.Request<GeminiFileListResponse>(new
        GeminiFileListRequest()
    {
        MaxResponseFiles = maxFiles,
        PageToken = string.IsNullOrEmpty(pageToken) ? string.Empty : pageToken,
    });
    return response?.Files;
}
```

See [GeminiFileListResponse](#) and [GeminiFileListRequest](#) for more details.

2.2.4 Media (Beta API)

The Gemini File API can be used to store data on the cloud for future prompting with the Gemini models.

2.2.4.1 Upload

Creates a File.

```
using Uralstech.UGemini;
using Uralstech.UGemini.FileAPI;

private async Task<GeminiFile> RunUploadFileRequest(string text)
{
    GeminiFileUploadResponse response = await GeminiManager.Instance.Request<GeminiFileUploadResponse>(new
        GeminiFileUploadRequest(GeminiContentType.TextPlain.MimeType()))
    {
        File = new GeminiFileUploadMetaData()
        {
            DisplayName = "I'm a File",
        },
        RawData = Encoding.UTF8.GetBytes(text)
    };

    return response.File;
}
```

See [GeminiFileUploadResponse](#) and [GeminiFileUploadRequest](#) for more details.

2.3 GeminiChatRequest Features

2.3.1 Streaming Responses

`GeminiChatRequest` allows you to stream Gemini's response in real-time. You can do so by using `GeminiManager.StreamRequest` and utilizing the callback in `GeminiChatRequest`.

You can even stream function calls! Check out the `Streaming Generated Content` sample included in the package.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;

[SerializeField] private Text _chatResponse;

private async Task<string> OnChat(string text)
{
    GeminiChatResponse response = await GeminiManager.Instance.StreamRequest(new
        GeminiChatRequest(GeminiModel.Gemini_5Flash)
    {
        Contents = new GeminiContent[]
        {
            GeminiContent.GetContent(text, GeminiRole.User),
        },

        OnPartialResponseReceived = streamedResponse =>
        {
            _chatResponse.text = streamedResponse.Parts[0].Text;
            return Task.CompletedTask;
        }
    });

    return response.Parts[0].Text;
}
```

If you do not want to use the callback, you can let the `StreamRequest` task run in the background, and access the streamed data from the `GeminiChatRequest.StreamedResponse` property.

2.3.2 Adding Media Content to Requests

`GeminiContent.Parts` contains the actual contents of each chat request and response. You can add media content to the `Parts` array, but you must only have one type of data in each part, like one part of text, one part of an image, and so on. The following samples shows data being read from a file and into a `GeminiContent` object.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models.Content;

private async Task<GeminiContent> GetFileContent(string filePath, GeminiContentType contentType)
{
    byte[] data;
    try
    {
        data = await File.ReadAllBytesAsync(filePath);
    }
    catch (SystemException exception)
    {
        Debug.LogError($"Failed to load file: {exception.Message}");
        return null;
    }

    return new GeminiContent()
    {
        Parts = new GeminiContentPart[]
        {
            new GeminiContentPart()
            {
                Text = "What's in this file?"
            },
            new GeminiContentPart()
            {
                InlineData = new GeminiContentBlob()
                {
                    MimeType = contentType,
                    Data = Convert.ToBase64String(data)
                }
            }
        }
    };
}
```

Now, the `GeminiContent` returned by the method can be fed into a chat request!

2.3.2.1 Utility Methods

`GeminiContent` and `GeminiContentBlob` also contain static utility methods to help create them from Unity types like `AudioClip` or `Texture2D`:

- `GeminiContent.GetContent`
 - Can convert string messages, `Texture2D` images, `AudioClip`* audio and `GeminiFile` data to `GeminiContent` objects.
- `GeminiContentBlob.GetContentBlob`
 - Can convert `Texture2D` images and `AudioClip`* audio to `GeminiContentBlob` objects.

*Requires `Utilities.Encoding.Wav`.

2.3.3 Function Calling

First, we have to setup our tools and define our function schemas.

```
using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation.Chat;
using Uralstech.UGemini.Models.Generation.Schema;
using Uralstech.UGemini.Models.Generation.Tools;
using Uralstech.UGemini.Models.Generation.Tools.Declaration;

private GeminiTool _geminiFunctions = new GeminiTool()
{
    FunctionDeclarations = new GeminiFunctionDeclaration[]
    {
        new GeminiFunctionDeclaration()
        {
            Name = "printToConsole",
            Description = "Print text to the user's console.",
            Parameters = new GeminiSchema()
            {
                Type = GeminiSchemaDataType.Object,
                Properties = new Dictionary<string, GeminiSchema>()
                {
                    {
                        "text", new GeminiSchema()
                        {
                            Type = GeminiSchemaDataType.String,
                            Description = "The text to print. e.g. \"Hello, World!\"",
                            Nullable = false,
                        }
                    },
                },
                Required = new string[] { "text" },
            },
        },
        new GeminiFunctionDeclaration()
        {
            Name = "changeTextColor",
            Description = "Change the color of the text.",
            Parameters = new GeminiSchema()
            {
                Type = GeminiSchemaDataType.Object,
                Properties = new Dictionary<string, GeminiSchema>()
                {
                    {
                        "color", new GeminiSchema()
                        {
                            Type = GeminiSchemaDataType.String,
                            Description = "The color to set. e.g. \"BLUE\"",
                            Format = GeminiSchemaDataFormat.Enum,
                            Enum = new string[]
                            {
                                "RED",
                                "GREEN",
                                "BLUE",
                                "WHITE",
                            },
                            Nullable = false,
                        }
                    },
                },
                Required = new string[] { "color" },
            },
        },
    },
};
```

For each function, we need a declaration with a name and description. The parameters are an object of type `GeminiSchema`, which defines the schema of each of the parameters. The type is of `GeminiSchemaDataType.Object`, and contains the dictionary of parameter schemas.

The keys of the dictionary should be the parameter name, and the values should be `GeminiSchema` objects which define the type, description, format, etc. of the parameter.

Finally, we have the `Required` property which tells Gemini which fields are absolutely required in each call. Now, we can move on to the chat.

```
[SerializeField] private Text _chatResponse;

private async Task<string> OnChat(string text)
```

```

{
    List<GeminiContent> contents = new()
    {
        GeminiContent.GetContent(text, GeminiRole.User),
    };

    GeminiChatResponse response;
    GeminiFunctionCall functionCall;
    string responseText = string.Empty;
    do
    {
        response = await GeminiManager.Instance.Request<GeminiChatResponse>(new
            GeminiChatRequest(GeminiModel.Gemini1_5Flash, true)
            {
                Contents = contents.ToArray(),
                Tools = new GeminiTool[] { _geminiFunctions },
                ToolConfig = GeminiToolConfiguration.GetConfiguration(GeminiFunctionCallingMode.Any),
            });

        // Don't forget to do this! If the function call is not added to the chat
        // history, Gemini will throw an error when receiving the response!
        contents.Add(response.Candidates[0].Content);

        responseText = Array.Find(response.Parts, part => !string.IsNullOrEmpty(part.Text)).Text;
        GeminiContentPart[] allFunctionCalls = Array.FindAll(response.Parts, part => part.FunctionCall !=
            null);

        functionCall = null;
        for (int i = 0; i < allFunctionCalls.Length; i++)
        {
            functionCall = allFunctionCalls[i].FunctionCall;
            JObject functionResponse = null;

            switch (functionCall.Name)
            {
                case "printToConsole":
                    Debug.Log(functionCall.Arguments["text"].ToObject<string>());
                    break;

                case "changeTextColor":
                    if (!TryChangeTextColor(functionCall.Arguments["color"].ToObject<string>()))
                    {
                        functionResponse = new JObject()
                        {
                            ["result"] = "Unknown color."
                        };
                    }
                    break;

                default:
                    functionResponse = new JObject()
                    {
                        ["result"] = "Sorry, but that function does not exist."
                    };
                    break;
            }

            contents.Add(GeminiContent.GetContent(functionCall.GetResponse(functionResponse ?? new JObject()
                {
                    ["result"] = "Completed executing function successfully."
                })));
        }
    } while (functionCall != null);

    _chatResponse.text = responseText;
    return responseText;
}

private bool TryChangeTextColor(string color)
{
    switch (color)
    {
        case "RED":
            _chatResponse.color = Color.red; break;

        case "GREEN":
            _chatResponse.color = Color.green; break;

        case "BLUE":
            _chatResponse.color = Color.blue; break;

        case "WHITE":
            _chatResponse.color = Color.white; break;

        default:
    }
}

```

```

        return false;
    }

    Debug.Log("Changed text color!");
    return true;
}

```

Here, we are going through each response, checking if a function was called, and calling the requested function.

The response is a JSON object, which is optional, but it is recommended to include. Note the use of `GeminiToolConfiguration.GetConfiguration`, which is a utility method to create a `GeminiToolConfiguration` with the given `GeminiFunctionCallingMode`. Here, it is `GeminiFunctionCallingMode.Any`, which means Gemini will always call at least one function in each conversation.

After the function is called, we respond by adding the calls and responses to the history. We use the `GetResponse` utility method to get a `GeminiFunctionResponse` object with the response JSON.

Function calling is, as of writing, only available in the Beta API.

2.3.4 JSON Response Mode

In JSON mode, Gemini will always respond in the specified JSON response schema.

```

using Uralstech.UGemini;
using Uralstech.UGemini.Models;
using Uralstech.UGemini.Models.Content;
using Uralstech.UGemini.Models.Generation;
using Uralstech.UGemini.Models.Generation.Chat;
using Uralstech.UGemini.Models.Generation.Schema;

private async Task<string> OnChat(string text)
{
    // Note: It seems GeminiModel.Gemini1_5Flash is not very good at JSON.
    GeminiChatResponse response = await GeminiManager.Instance.Request<GeminiChatResponse>(new
        GeminiChatRequest(GeminiModel.Gemini1_5Pro, true)
    {
        Contents = new GeminiContent[]
        {
            GeminiContent.GetContent(text, GeminiRole.User),
        },
        SystemInstruction = GeminiContent.GetContent("You are a helpful math teacher who teacher their
students mathematics in the most helpful way possible."),
        GenerationConfig = new GeminiGenerationConfiguration()
        {
            ResponseMimeType = GeminiResponseType.Json,
            ResponseSchema = new GeminiSchema()
            {
                Type = GeminiSchemaDataType.Array,
                Description = "A list of mathematical expressions.",
                Items = new GeminiSchema()
                {
                    {
                        Type = GeminiSchemaDataType.Object,
                        Properties = new Dictionary<string, GeminiSchema>()
                        {
                            {
                                {
                                    "expression", new GeminiSchema()
                                    {
                                        {
                                            Type = GeminiSchemaDataType.String,
                                        }
                                    },
                                },
                                {
                                    "explanation", new GeminiSchema()
                                    {
                                        {
                                            Type = GeminiSchemaDataType.String,
                                        }
                                    }
                                }
                            },
                        },
                        Required = new string[] { "expression", "explanation", },
                    },
                },
            },
        },
    });

    return response.Parts[0].Text;
}

```

Here, we used a schema for an array of objects, which contain two parameters: `expression` and `explanation`. We have told Gemini to split the response into the parameters, where a mathematical expression and its explanation is given.

The `GeminiSchema` object is the same type used for function calling.

JSON mode is also only available in the Beta API.

2.4 Samples

For full-fledged examples of the features of this package, check out the samples included in the package:

2.4.1 Mult-turn Chat

A sample scene showing a multi-turn chat system. [GitHub Source](#)

2.4.2 Function Calling

A sample scene showing a function calling system. [GitHub Source](#)

2.4.3 Streaming Generated Content

A sample showing a system which streams Gemini's responses, including function calls. [GitHub Source](#)

2.4.4 Question Answering

A sample scene with a system where Gemini answers questions based only on the given context. [GitHub Source](#)

2.4.5 Prompting with File API

A sample scene with a system to create, delete, retrieve, list and prompt Gemini with files stored in the File/Media API endpoints. [GitHub Source](#)

2.4.6 JSON Response

A sample scene showing a system where Gemini responds in a specified JSON format. [GitHub Source](#)

2.4.7 List and Get Model Metadata

A sample scene with a system to list, get and chat with models using the `models.get` and `models.list` endpoints. [GitHub Source](#)

2.4.8 Token Counting

A sample scene showing a token counting system using the `countTokens` endpoint. [GitHub Source](#)

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Chapter 6

Namespace Documentation

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6.2 Uralstech.UGemini Namespace Reference

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- class [GeminiManager](#)
The class for accessing the Gemini API!
- class [GeminiRequestMetadata](#)
Metadata about a computation request.
- interface [IAppendableData](#)
An interface for data that is to be appended to at runtime.
- interface [IGeminiDeleteRequest](#)
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- interface [IGeminiGetRequest](#)
All Gemini API GET requests must inherit from this interface.
- interface [IGeminiMultiPartPostRequest](#)
All Gemini API POST requests with multi-part data must inherit from this interface.
- interface [IGeminiPostRequest](#)
All Gemini API POST requests must inherit from this interface.
- interface [IGeminiRequest](#)
All Gemini API requests must inherit from this interface.
- interface [IGeminiStreamablePostRequest](#)
All streamed Gemini API POST requests must inherit from this interface.

Enumerations

- enum [GeminiContentType](#) {
 [ImagePNG](#) , [ImageJPEG](#) , [ImageHEIC](#) , [ImageHEIF](#) ,
 [ImageWebP](#) , [AudioWAV](#) , [AudioMP3](#) , [AudioAIFF](#) ,
 [AudioAAC](#) , [AudioOGG](#) , [AudioFLAC](#) , [VideoMP4](#) ,
 [VideoMPEG](#) , [VideoMOV](#) , [VideoAVI](#) , [VideoXFLV](#) ,
 [VideoMPG](#) , [VideoWebM](#) , [VideoWMV](#) , [Video3GPP](#) ,
 [TextPlain](#) , [TextHTML](#) , [TextCSS](#) , [TextJavaScript](#) ,
 [TextXTypeScript](#) , [TextCSV](#) , [TextMarkdown](#) , [TextXPython](#) ,
 [TextXML](#) , [TextRTF](#) , [ApplicationXJavaScript](#) , [ApplicationXTypeScript](#) ,
 [ApplicationXPython](#) , [ApplicationJSON](#) , [ApplicationRTF](#) }
Enum for the types of content able to be fed to the Gemini API.

6.2.1 Enumeration Type Documentation

6.2.1.1 GeminiContentType

enum [Uralstech.UGemini.GeminiContentType](#)

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

Enumerator

ImagePNG	A PNG image.
ImageJPEG	A JPEG image.
ImageHEIC	A HEIC image.
ImageHEIF	A HEIF image.
ImageWebP	A WebP image.
AudioWAV	WAV encoded audio.
AudioMP3	MP3 encoded audio.
AudioAIFF	AIFF encoded audio.
AudioAAC	AAC encoded audio.
AudioOGG	OGG encoded audio.
AudioFLAC	FLAC encoded audio.
VideoMP4	MP4 encoded video.
VideoMPEG	MPEG encoded video.
VideoMOV	MOV encoded video.
VideoAVI	AVI encoded video.
VideoXFLV	FLV encoded video.
VideoMPG	MPG encoded video.
VideoWebM	WebM encoded video.
VideoWMV	WMV encoded video.
Video3GPP	3GPP encoded video.
TextPlain	(File API) Plain text.
TextHTML	(File API) HTML text.
TextCSS	(File API) CSS text.
TextJavaScript	(File API) JavaScript text.
TextTypeScript	(File API) TypeScript text.
TextCSV	(File API) CSV text.
TextMarkdown	(File API) Markdown text.
TextXPython	(File API) Python text.
TextXML	(File API) XML text.
TextRTF	(File API) RTF text.
ApplicationXJavaScript	(File API) Application JavaScript content.
ApplicationXTypeScript	(File API) Application TypeScript content.
ApplicationXPython	(File API) Application Python content.
ApplicationJSON	(File API) Application JSON content.
ApplicationRTF	(File API) Application RTF content.

6.3 Uralstech.UGemini.Exceptions Namespace Reference

Classes

- class [GeminiRequestException](#)

Thrown when a Gemini API request fails.

6.4 Uralstech.UGemini.FileAPI Namespace Reference

Classes

- class [GeminiFile](#)
Metadata for a file uploaded to the File API.
- class [GeminiFileDeleteRequest](#)
Requests the deletion of a file.
- class [GeminiFileGetRequest](#)
Requests metadata for an existing file. Return type is [GeminiFile](#).
- class [GeminiFileListRequest](#)
Requests metadata for all existing files. Return type is [GeminiFileListResponse](#).
- class [GeminiFileListResponse](#)
The response for a [GeminiFileListRequest](#) call.
- class [GeminiFileUploadMetaData](#)
Metadata for a [GeminiFile](#) to be uploaded.
- class [GeminiFileUploadRequest](#)
Uploads a file to the Gemini File API. Response type is [GeminiFileUploadResponse](#).
- class [GeminiFileUploadResponse](#)
Response for a file upload request.
- class [GeminiFileVideoMetaData](#)
Metadata for a video [GeminiFile](#).
- class [GeminiTimeSpanJsonConverter](#)
Custom JSON converter to convert a time string of a format like "10.334s" to a TimeSpan.

Enumerations

- enum [GeminiFileState](#) { [Unspecified](#) , [Processing](#) , [Active](#) , [Failed](#) }
States for the lifecycle of a File.

6.4.1 Enumeration Type Documentation

6.4.1.1 GeminiFileState

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

States for the lifecycle of a File.

Enumerator

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

6.5 Uralstech.UGemini.Models Namespace Reference

Classes

- class [GeminiModel](#)
Information about a Generative Language Model.
- class [GeminiModelGetRequest](#)
Gets information about a specific model. Return type is [GeminiModel](#).
- class [GeminiModelId](#)
Information about the unique ID of a Generative Language Model.
- class [GeminiModelIdStringConverter](#)
Custom JSON converter to handle conversion of [GeminiModelId](#) to a single string value and vice-versa.
- class [GeminiModelListRequest](#)
Requests metadata for all existing models. Return type is [GeminiModelListResponse](#).
- class [GeminiModelListResponse](#)
The response for a [GeminiModelListResponse](#) call.

6.6 Uralstech.UGemini.Models.Content Namespace Reference

Classes

- class [GeminiContent](#)
The base structured datatype containing multi-part content of a message.
- class [GeminiContentBlob](#)
Raw media bytes.
- class [GeminiContentPart](#)
A datatype containing media that is part of a multi-part [Content](#) message. Must only contain one field at a time.
- class [GeminiFileData](#)
URI based data.
- class [UnityExtensions](#)
Extensions for Unity types.

Enumerations

- enum [GeminiRole](#) { [Unspecified](#) , [User](#) , [Assistant](#) , [ToolResponse](#) }
The role of a Gemini content creator.

6.6.1 Enumeration Type Documentation

6.6.1.1 GeminiRole

```
enum Uralstech.UGemini.Models.Content.GeminiRole
```

The role of a Gemini content creator.

Enumerator

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

6.7 Uralstech.UGemini.Models.Content.Attribution Namespace Reference

Classes

- class [GeminiAttributionSourceId](#)
Identifier for the source contributing to this attribution.
- class [GeminiGroundingAttribution](#)
Attribution for a source that contributed to an answer.
- class [GeminiGroundingPassageId](#)
Identifier for a part within a GroundingPassage.
- class [GeminiSemanticRetrieverChunk](#)
Identifier for a Chunk retrieved via Semantic Retriever specified in the GenerateAnswerRequest using SemanticRetrieverConfig.

6.8 Uralstech.UGemini.Models.Content.Citation Namespace Reference

Classes

- class [GeminiCitationMetadata](#)
A collection of source attributions for a piece of content.
- class [GeminiCitationSource](#)
A citation to a source for a portion of a specific response.

6.9 Uralstech.UGemini.Models.CountTokens Namespace Reference

Classes

- class [GeminiTokenCountRequest](#)
Request to count tokens in given content.
- class [GeminiTokenCountResponse](#)
A response from CountTokens.

6.10 Uralstech.UGemini.Models.Embedding Namespace Reference

Classes

- class [GeminiBatchEmbedContentRequest](#)
Generates multiple embeddings from the model given input text in a synchronous call.
- class [GeminiBatchEmbedContentResponse](#)
The response to a [GeminiBatchEmbedContentRequest](#).
- class [GeminiContentEmbedding](#)
A list of floats representing an embedding.
- class [GeminiEmbedContentRequest](#)
Generates an embedding from the model.
- class [GeminiEmbedContentResponse](#)
The response to a [GeminiEmbedContentRequest](#).

Enumerations

- enum [GeminiEmbedTaskType](#) {
[Unspecified](#) , [RetrievalQuery](#) , [RetrievalDocument](#) , [SemanticSimilarity](#) ,
[Classification](#) , [Clustering](#) , [QuestionAnswering](#) , [FactVerification](#) }
Type of task for which the embedding will be used.

6.10.1 Enumeration Type Documentation

6.10.1.1 GeminiEmbedTaskType

enum [Uralstech.UGemini.Models.Embedding.GeminiEmbedTaskType](#)

Type of task for which the embedding will be used.

Enumerator

Unspecified	Unset value.
RetrievalQuery	Specifies the given text is a query in a search/retrieval setting.
RetrievalDocument	Specifies the given text is a document from the corpus being searched.
SemanticSimilarity	Specifies the given text will be used for STS.
Classification	Specifies that the given text will be classified.
Clustering	Specifies that the embeddings will be used for clustering.
QuestionAnswering	Specifies that the given text will be used for question answering.
FactVerification	Specifies that the given text will be used for fact verification.

6.11 Uralstech.UGemini.Models.Generation Namespace Reference

Classes

- class [GeminiGenerationConfiguration](#)
Configuration options for model generation and outputs. Not all parameters may be configurable for every model.

Enumerations

- enum [GeminiResponseType](#) { [Unspecified](#) , [PlainText](#) , [Json](#) }

The response type for Gemini model responses.

6.11.1 Enumeration Type Documentation

6.11.1.1 GeminiResponseType

enum [Uralstech.UGemini.Models.Generation.GeminiResponseType](#)

The response type for Gemini model responses.

Enumerator

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

6.12 Uralstech.UGemini.Models.Generation.Candidate Namespace Reference

Classes

- class [GeminiCandidate](#)
A response candidate generated from the model.
- class [GeminiPromptFeedback](#)
A set of the feedback metadata for the prompt specified in a generation request.
- class [GeminiUsageMetadata](#)
Metadata on the generation request's token usage.

Enumerations

- enum [GeminiFinishReason](#) {
[Unspecified](#) , [Stop](#) , [MaxTokens](#) , [Safety](#) ,
[Recitation](#) , [Other](#) , [BlockList](#) , [ProhibitedContent](#) ,
[SPII](#) , [MalformedFunctionCall](#) }
Defines the reason why the model stopped generating tokens.

6.12.1 Enumeration Type Documentation

6.12.1.1 GeminiFinishReason

enum [Uralstech.UGemini.Models.Generation.Candidate.GeminiFinishReason](#)

Defines the reason why the model stopped generating tokens.

Enumerator

Unspecified	Default value. This value is unused.
Stop	Natural stop point of the model or provided stop sequence.
MaxTokens	The maximum number of tokens as specified in the request was reached.
Safety	The candidate content was flagged for safety reasons.
Recitation	The candidate content was flagged for recitation reasons.
Other	Unknown reason.
BlockList	Token generation stopped because the content contains forbidden terms.
ProhibitedContent	Token generation stopped for potentially containing prohibited content.
SPII	Token generation stopped because the content potentially contains Sensitive Personally Identifiable Information (SPII).
MalformedFunctionCall	The function call generated by the model is invalid.

6.13 Uralstech.UGemini.Models.Generation.Chat Namespace Reference

Classes

- class [GeminiChatRequest](#)
Request to generate a response from the model.
- class [GeminiChatResponse](#)
Response from the model supporting multiple candidates.

6.14 Uralstech.UGemini.Models.Generation.QuestionAnswering Namespace Reference

Classes

- class [GeminiAnswerRequest](#)
Generates a grounded answer from the model.
- class [GeminiAnswerResponse](#)
Response from the model for a grounded answer.

Enumerations

- enum [GeminiAnswerStyle](#) { [Unspecified](#) , [Abstractive](#) , [Extractive](#) , [Verbose](#) }
Style for grounded answers.

6.14.1 Enumeration Type Documentation

6.14.1.1 GeminiAnswerStyle

```
enum Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerStyle
```

Style for grounded answers.

Enumerator

Unspecified	Unspecified answer style.
Abstractive	Succint but abstract style.
Extractive	Very brief and extractive style.
Verbose	Verbose style including extra details. The response may be formatted as a sentence, paragraph, multiple paragraphs, or bullet points, etc.

6.15 Uralstech.UGemini.Models.Generation.QuestionAnswering. Grounding Namespace Reference

Classes

- class [GeminiGroundingPassage](#)
Passage included inline with a grounding configuration.
- class [GeminiGroundingPassages](#)
A repeated list of passages.

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

Classes

- class [GeminiMetadataCondition](#)
Filter condition applicable to a single key.
- class [GeminiMetadataFilter](#)
User provided filter to limit retrieval based on Chunk or Document level metadata values.
- class [GeminiSemanticRetrieverConfig](#)
Configuration for retrieving grounding content from a Corpus or Document created using the Semantic Retriever API.

Enumerations

- enum [GeminiMetadataConditionOperator](#) {
 [Unspecified](#) , [LessThan](#) , [LessThanOrEqual](#) , [Equal](#) ,
 [GreaterThanOrEqual](#) , [GreaterThan](#) , [NotEqual](#) , [Includes](#) ,
 [Excludes](#) }
Defines the valid operators that can be applied to a key-value pair.

6.16.1 Enumeration Type Documentation

6.16.1.1 GeminiMetadataConditionOperator

```
enum Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiMetadataConditionOperator
```

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

Enumerator

Unspecified	The default value. This value is unused.
LessThan	Supported by numeric.
LessThanOrEqual	Supported by numeric.
Equal	Supported by numeric and string.
GreaterThanOrEqual	Supported by numeric.
GreaterThan	Supported by numeric.
NotEqual	Supported by numeric and string.
Includes	Supported by string only when CustomMetadata value type for the given key has a stringListValue.
Excludes	Supported by string only when CustomMetadata value type for the given key has a stringListValue.

6.17 Uralstech.UGemini.Models.Generation.Safety Namespace Reference

Classes

- class [GeminiSafetyRating](#)
Safety rating for a piece of content.
- class [GeminiSafetySettings](#)
Safety setting, affecting the safety-blocking behavior.

Enumerations

- enum [GeminiBlockReason](#) {
[Unspecified](#) , [Safety](#) , [Other](#) , [BlockList](#) ,
[ProhibitedContent](#) }
Specifies what was the reason why prompt was blocked.
- enum [GeminiHarmProbability](#) {
[Unspecified](#) , [Negligible](#) , [Low](#) , [Medium](#) ,
[High](#) }
The probability that a piece of content is harmful.
- enum [GeminiSafetyHarmBlockThreshold](#) {
[Unspecified](#) , [LowAndAbove](#) , [MediumAndAbove](#) , [OnlyHigh](#) ,
[None](#) }
Block at and beyond a specified harm probability.
- enum [GeminiSafetyHarmCategory](#) {
[Unspecified](#) , [Derogatory](#) , [Toxicity](#) , [Violence](#) ,
[Sexual](#) , [Medical](#) , [Dangerous](#) , [Harassment](#) ,
[HateSpeech](#) , [SexuallyExplicit](#) , [DangerousContent](#) }
The category of a rating.

6.17.1 Enumeration Type Documentation

6.17.1.1 GeminiBlockReason

enum [Uralstech.UGemini.Models.Generation.Safety.GeminiBlockReason](#)

Specifies what was the reason why prompt was blocked.

Enumerator

Unspecified	Default value. This value is unused.
Safety	Prompt was blocked due to safety reasons. You can inspect Candidate.GeminiPromptFeedback.SafetyRatings to understand which safety category blocked it.
Other	Prompt was blocked due to unknown reasons.
BlockList	Prompt was blocked due to the terms which are included from the terminology blocklist.
ProhibitedContent	Prompt was blocked due to prohibited content.

6.17.1.2 GeminiHarmProbability

```
enum Uralstech.UGemini.Models.Generation.Safety.GeminiHarmProbability
```

The probability that a piece of content is harmful.

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

Enumerator

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

6.17.1.3 GeminiSafetyHarmBlockThreshold

```
enum Uralstech.UGemini.Models.Generation.Safety.GeminiSafetyHarmBlockThreshold
```

Block at and beyond a specified harm probability.

Enumerator

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

6.17.1.4 GeminiSafetyHarmCategory

```
enum Uralstech.UGemini.Models.Generation.Safety.GeminiSafetyHarmCategory
```

The category of a rating.

Enumerator

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

6.18 Uralstech.UGemini.Models.Generation.Schema Namespace Reference

Classes

- class [GeminiSchema](#)

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

Enumerations

- enum [GeminiSchemaDataFormat](#) {
[Unspecified](#) , [Float](#) , [Double](#) , [Int](#) ,
[Long](#) , [Enum](#) , [Base64Bytes](#) , [Binary](#) ,
[Date](#) , [DateTime](#) }

Defines the format of schema data.

- enum [GeminiSchemaDataType](#) {
[Unspecified](#) , [String](#) , [Float](#) , [Integer](#) ,
[Boolean](#) , [Array](#) , [Object](#) }

Contains the list of OpenAPI data types as defined by the [OpenAPI Specification](#).

6.18.1 Enumeration Type Documentation

6.18.1.1 GeminiSchemaDataFormat

```
enum Uralstech.UGemini.Models.Generation.Schema.GeminiSchemaDataFormat
```

Defines the format of schema data.

Enumerator

Unspecified	Unspecified, don't use.
Float	Equivalent to float.

Enumerator

Double	Equivalent to double.
Int	Equivalent to int.
Long	Equivalent to long.
Enum	A string enum value.
Base64Bytes	A base64 encoded string of bytes.
Binary	A string of "any sequence of octets".
Date	Date string as defined by full-date - RFC 3339 .
DateTime	Date and time string as defined by date-time - RFC 3339 .

6.18.1.2 GeminiSchemaDataType

enum [Uralstech.UGemini.Models.Generation.Schema.GeminiSchemaDataType](#)

Contains the list of OpenAPI data types as defined by the [OpenAPI Specification](#).

Enumerator

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

6.19 Uralstech.UGemini.Models.Generation.Tools Namespace Reference

Classes

- class [GeminiFunctionCall](#)
A predicted FunctionCall returned from the model that contains a string representing the FunctionDeclaration.name with the arguments and their values.
- class [GeminiFunctionResponse](#)
The result output from a [GeminiFunctionCall](#) that contains a string representing the [Declaration.GeminiFunctionDeclaration.Name](#) and a structured JSON object containing any output from the function is used as context to the model. This should contain the result of a [GeminiFunctionCall](#) made based on model prediction.
- class [GeminiFunctionResponseContent](#)
The response of a Gemini function call. Based on the Protocol Buffer [Struct](#) type.

6.20 Uralstech.UGemini.Models.Generation.Tools.CodeExecution Namespace Reference

Classes

- class [GeminiCodeExecutionResult](#)
Result of executing the [GeminiExecutableCode](#).
- class [GeminiExecutableCode](#)
Code generated by the model that is meant to be executed, and the result returned to the model.

Enumerations

- enum [GeminiCodeExecutionLanguage](#) { [Unspecified](#) , [Python](#) }
Supported programming languages for the generated code.
- enum [GeminiCodeExecutionOutcome](#) { [Unspecified](#) , [Ok](#) , [Failed](#) , [DeadlineExceeded](#) }
Enumeration of possible outcomes of the code execution.

6.20.1 Enumeration Type Documentation

6.20.1.1 GeminiCodeExecutionLanguage

enum [Uralstech.UGemini.Models.Generation.Tools.CodeExecution.GeminiCodeExecutionLanguage](#)

Supported programming languages for the generated code.

Enumerator

Unspecified	Unspecified language. This value should not be used.
Python	Python \geq 3.10, with numpy and simpy available.

6.20.1.2 GeminiCodeExecutionOutcome

enum [Uralstech.UGemini.Models.Generation.Tools.CodeExecution.GeminiCodeExecutionOutcome](#)

Enumeration of possible outcomes of the code execution.

Enumerator

Unspecified	Unspecified status. This value should not be used.
Ok	Code execution completed successfully.
Failed	Code execution finished but with a failure. stderr should contain the reason.
DeadlineExceeded	Code execution ran for too long, and was cancelled. There may or may not be a partial output present.

6.21 Uralstech.UGemini.Models.Generation.Tools.Declaration Namespace Reference

Classes

- class [GeminiCodeExecution](#)
Tool that executes code generated by the model, and automatically returns the result to the model.
- class [GeminiFunctionCallingConfiguration](#)
Configuration for specifying function calling behavior.
- class [GeminiFunctionDeclaration](#)
Structured representation of a function declaration as defined by the OpenAPI 3.03 specification. Included in this declaration are the function name and parameters. This FunctionDeclaration is a representation of a block of code that can be used as a Tool by the model and executed by the client.
- class [GeminiTool](#)
Tool details that the model may use to generate response.
- class [GeminiToolConfiguration](#)
The Tool configuration containing parameters for specifying Tool use in the request.

Enumerations

- enum [GeminiFunctionCallingMode](#) { [Unspecified](#) , [Auto](#) , [Any](#) , [None](#) }
Defines the execution behavior for function calling by defining the execution mode.

6.21.1 Enumeration Type Documentation

6.21.1.1 GeminiFunctionCallingMode

enum [Uralstech.UGemini.Models.Generation.Tools.Declaration.GeminiFunctionCallingMode](#)

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

Enumerator

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

6.22 Uralstech.UGemini.Status Namespace Reference

Classes

- class [GeminiStatus](#)
The [GeminiStatus](#) type defines a logical error model that is suitable for different programming environments, including REST APIs and RPC APIs. It is used by gRPC.
- class [GeminiStatusDetails](#)
An object containing fields of an arbitrary type.

6.23 Uralstech.UGemini.Utils Namespace Reference

6.24 Uralstech.UGemini.Utils.Singleton Namespace Reference

Classes

- class [Singleton](#)
Utility class to make inheriting types singletons.

6.25 Uralstech.UGemini.Utils.Web Namespace Reference

Classes

- class [WebRequestHelper](#)
Extensions for the [UnityWebRequest](#) type.

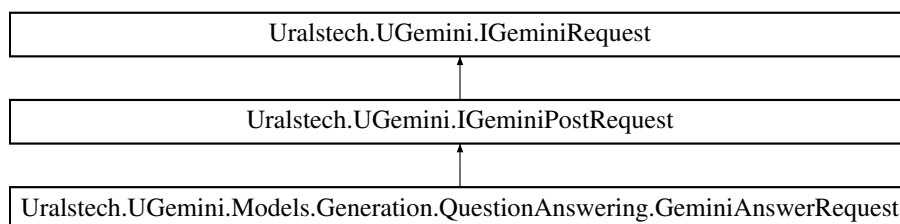
Chapter 7

Class Documentation

7.1 Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest Class Reference

Generates a grounded answer from the model.

Inheritance diagram for Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

metadata	<i>The metadata of the request to be carried out on the URI.</i>
----------	--

Returns

The URI.

- [GeminiAnswerRequest](#) ([GeminiModelId](#) model, bool useBetaApi=true)
Creates a new [GeminiAnswerRequest](#).
- string [GetUtf8EncodedData](#) ()
Converts the request object to a UTF-8 encoded string.

Returns

The string data.

Public Attributes

- [GeminiContent\[\] Contents](#)
The content of the current conversation with the model.
- [GeminiAnswerStyle AnswerStyle](#)
Style in which answers should be returned.
- [GeminiSafetySettings\[\] SafetySettings](#) = null
A list of unique GeminiSafetySettings instances for blocking unsafe content.
- [GeminiGroundingPassages InlinePassages](#) = null
Passages provided inline with the request.
- [GeminiSemanticRetrieverConfig SemanticRetriever](#) = null
Content retrieved from resources created via the Semantic Retriever API.
- float [Temperature](#) = -1f
Controls the randomness of the output.
- [GeminiModelId Model](#)
The model to use.
- string [ApiVersion](#)
The API version to use.

Properties

- string [ContentType](#) [get]
The MIME type of the request content.

Properties inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

7.1.1 Detailed Description

Generates a grounded answer from the model.

7.1.2 Constructor & Destructor Documentation

7.1.2.1 GeminiAnswerRequest()

```
Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.GeminiAnswerRequest
(
    GeminiModelId model,
    bool useBetaApi = true)
```

Creates a new [GeminiAnswerRequest](#).

Parameters

<i>model</i>	The model to use.
<i>useBetaApi</i>	Should the request use the Beta API?

7.1.3 Member Function Documentation

7.1.3.1 GetEndpointUri()

```
string Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.GetEndpoint↵
Uri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.1.3.2 GetUtf8EncodedData()

```
string Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.GetUtf8↔
EncodedData ()
```

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

Returns

The string data.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

7.1.4 Member Data Documentation**7.1.4.1 Contents**

```
GeminiContent [ ] Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswer↔
Contents
```

The content of the current conversation with the model.

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

generateAnswer currently only supports queries in English.

7.1.4.2 InlinePassages

```
GeminiGroundingPassages Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswer↔
Request.InlinePassages = null
```

Passages provided inline with the request.

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

7.1.4.3 SafetySettings

```
GeminiSafetySettings [] Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.SafetySettings = null
```

A list of unique GeminiSafetySettings instances for blocking unsafe content.

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

7.1.4.4 SemanticRetriever

```
GeminiSemanticRetrieverConfig Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.SemanticRetriever = null
```

[Content](#) retrieved from resources created via the Semantic Retriever API.

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

7.1.4.5 Temperature

```
float Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.Temperature = ~1f
```

Controls the randomness of the output.

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.

7.1.5 Property Documentation

7.1.5.1 ContentType

```
string Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest.ContentType [get]
```

The MIME type of the request content.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/GeminiAnswerRequest.cs

7.2 Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerResponse Class Reference

Response from the model for a grounded answer.

Public Attributes

- [GeminiCandidate Answer](#)
Candidate answer from the model.
- float [AnswerableProbability](#)
The model's estimate of the probability that its answer is correct and grounded in the input passages.
- [GeminiPromptFeedback InputFeedback](#)
Feedback related to the input data used to answer the question, as opposed to model-generated response to the question.

7.2.1 Detailed Description

Response from the model for a grounded answer.

7.2.2 Member Data Documentation

7.2.2.1 Answer

[GeminiCandidate](#) Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerResponse.[Answer](#)

[Candidate](#) answer from the model.

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 [AnswerableProbability](#).

7.2.2.2 AnswerableProbability

float Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerResponse.[AnswerableProbability](#)

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

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.

7.2.2.3 InputFeedback

[GeminiPromptFeedback](#) Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswer↔
Response.InputFeedback

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

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

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/Gemini↔
AnswerResponse.cs

7.3 Uralstech.UGemini.Models.Content.Attribution.GeminiAttribution↔ SourceId Class Reference

Identifier for the source contributing to this attribution.

Public Attributes

- [GeminiGroundingPassageId](#) **GroundingPassage**
Identifier for an inline passage.
- [GeminiSemanticRetrieverChunk](#) **SemanticRetrieverChunk**
Identifier for a Chunk fetched via Semantic Retriever.

7.3.1 Detailed Description

Identifier for the source contributing to this attribution.

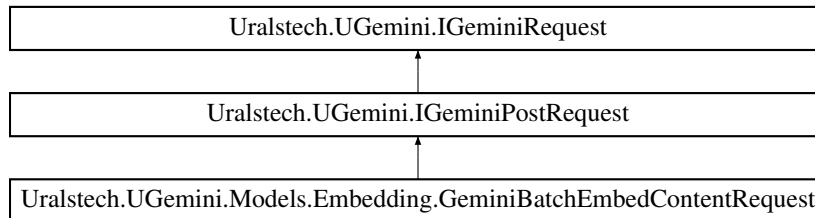
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Attribution/Gemini↔
AttributionSourceId.cs

7.4 Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiBatchEmbedContentRequest](#) ([GeminiModelId](#) model, bool useBetaApi=false)
Creates a new [GeminiBatchEmbedContentRequest](#).
- string [GetUtf8EncodedData](#) ()
Converts the request object to a UTF-8 encoded string.

Returns

The string data.

Public Attributes

- [GeminiEmbedContentRequest](#)[] **Requests**
Embed requests for the batch. The model in each of these requests must match the model specified in [Model](#).
- [GeminiModelId](#) **Model**
The model to use.
- string **ApiVersion**
The API version to use.

Properties

- string [ContentType](#) [get]
The MIME type of the request content.

Properties inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

7.4.1 Detailed Description

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

7.4.2 Constructor & Destructor Documentation

7.4.2.1 GeminiBatchEmbedContentRequest()

```
Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest.GeminiBatchEmbedContent↔  
Request (  
    GeminiModelId model,  
    bool useBetaApi = false)
```

Creates a new [GeminiBatchEmbedContentRequest](#).

Parameters

<i>model</i>	The model to use.
<i>useBetaApi</i>	Should the request use the Beta API?

7.4.3 Member Function Documentation

7.4.3.1 GetEndpointUri()

```
string Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest.GetEndpointUri (  
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.4.3.2 GetUtf8EncodedData()

```
string Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest.GetUtf8EncodedData ()
```

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

Returns

The string data.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

7.4.4 Property Documentation

7.4.4.1 ContentType

```
string Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest.ContentType [get]
```

The MIME type of the request content.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Embedding/BatchEmbedContent/GeminiBatchEmbedContentRequest.cs

7.5 Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentResponse Class Reference

The response to a [GeminiBatchEmbedContentRequest](#).

Public Attributes

- [GeminiContentEmbedding\[\]](#) **Embeddings**
The embeddings for each request, in the same order as provided in the batch request.

7.5.1 Detailed Description

The response to a [GeminiBatchEmbedContentRequest](#).

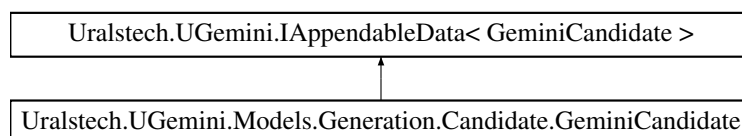
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Embedding/BatchEmbedContent/GeminiBatchEmbedContentResponse.cs

7.6 Uralstech.UGemini.Models.Generation.Candidate.GeminiCandidate Class Reference

A response candidate generated from the model.

Inheritance diagram for Uralstech.UGemini.Models.Generation.Candidate.GeminiCandidate:



Public Member Functions

- void **Append** ([GeminiCandidate](#) data)

Public Member Functions inherited from [Uralstech.UGemini.IAppendableData](#)< [GeminiCandidate](#) >

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

Public Attributes

- [GeminiContent](#) **Content**
Generated content returned from the model.
- [GeminiFinishReason](#) **FinishReason**
The reason why the model stopped generating tokens.
- [GeminiSafetyRating](#)[] **SafetyRatings**
List of ratings for the safety of a response candidate There is at most one rating per category.
- [GeminiCitationMetadata](#) **CitationMetadata**
Citation information for model-generated candidate.
- int **TokenCount**
Token count for this candidate.
- [GeminiGroundingAttribution](#)[] **GroundingAttributions**
Attribution information for sources that contributed to a grounded answer.
- int **Index**
Index of the candidate in the list of candidates.

7.6.1 Detailed Description

A response candidate generated from the model.

7.6.2 Member Data Documentation

7.6.2.1 CitationMetadata

[GeminiCitationMetadata](#) `Uralstech.UGemini.Models.Generation.Candidate.GeminiCandidate.CitationMetadata`

Citation information for model-generated candidate.

This field may be populated with recitation information for any text included in [Content](#). These are passages that are "recited" from copyrighted material in the foundational LLM's training data.

7.6.2.2 GroundingAttributions

[GeminiGroundingAttribution](#) [] Uralstech.UGemini.Models.Generation.Candidate.GeminiCandidate.↔
GroundingAttributions

Attribution information for sources that contributed to a grounded answer.

This field is populated for GenerateAnswer calls.

Only available in the beta API.

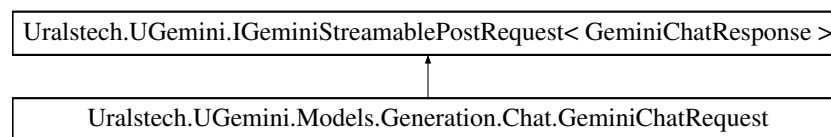
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Candidate/Gemini↔
Candidate.cs

7.7 Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest Class Reference

Request to generate a response from the model.

Inheritance diagram for Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest:



Public Member Functions

- string **GetEndpointUri** ([GeminiRequestMetadata](#) metadata)
- [GeminiChatRequest](#) ([GeminiModelId](#) model, bool useBetaApi=false)
Creates a new [GeminiChatRequest](#).
- string **GetUtf8EncodedData** ()
- async Task **ProcessStreamedData** (List< JToken > allEvents, JToken lastEvent)

Public Member Functions inherited from [Uralstech.UGemini.IGeminiStreamablePostRequest< GeminiChatResponse >](#)

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

Public Attributes

- [GeminiContent](#)[] [Contents](#)
The content of the current conversation with the model.
- [GeminiTool](#)[] [Tools](#) = null
A list of [Tools](#) the model may use to generate the next response.
- [GeminiToolConfiguration](#) [ToolConfig](#) = null
Tool configuration for any [Tool](#) specified in the request.
- [GeminiSafetySettings](#)[] [SafetySettings](#) = null
A list of unique [GeminiSafetySettings](#) instances for blocking unsafe content.
- [GeminiContent](#) [SystemInstruction](#) = null
Developer set system instruction. Currently, text only.
- [GeminiGenerationConfiguration](#) [GenerationConfig](#) = null
Configuration options for model generation and outputs.
- string [CachedContent](#) = null
The name of the cached content used as context to serve the prediction. Format: `cachedContents/{cachedContent}`.
- [GeminiModelId](#) [Model](#)
The model to use.
- string [ApiVersion](#)
The API version to use.
- Func< [GeminiChatResponse](#), Task > [OnPartialResponseReceived](#)
Callback for receiving streamed responses.

Properties

- string [ContentType](#) [get]
- [GeminiChatResponse](#) [StreamedResponse](#) [get]
The streamed response.

Properties inherited from

[Uralstech.UGemini.IGeminiStreamablePostRequest](#)< [GeminiChatResponse](#) >

- TResponse [StreamedResponse](#) [get]
The response being streamed.

7.7.1 Detailed Description

Request to generate a response from the model.

7.7.2 Constructor & Destructor Documentation

7.7.2.1 GeminiChatRequest()

```
Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.GeminiChatRequest (
    GeminiModelId model,
    bool useBetaApi = false)
```

Creates a new [GeminiChatRequest](#).

Parameters

<i>model</i>	The model to use.
<i>useBetaApi</i>	Should the request use the Beta API?

7.7.3 Member Data Documentation

7.7.3.1 CachedContent

```
string Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.CachedContent = null
```

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

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

Only available in the beta API.

7.7.3.2 Contents

```
GeminiContent [] Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.Contents
```

The content of the current conversation with the model.

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

7.7.3.3 SafetySettings

```
GeminiSafetySettings [] Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.SafetySettings = null
```

A list of unique GeminiSafetySettings instances for blocking unsafe content.

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

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

7.7.3.4 SystemInstruction

```
GeminiContent Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.SystemInstruction = null
```

Developer set system instruction. Currently, text only.

Only available in the beta API.

7.7.3.5 ToolConfig

```
GeminiToolConfiguration Uralstech.UGemini.Models.Generation.Chat.GeminiChatRequest.ToolConfig
= null
```

Tool configuration for any Tool specified in the request.

Only available in the beta API.

7.7.3.6 Tools

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

A list of [Tools](#) the model may use to generate the next response.

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

Only available in the beta API.

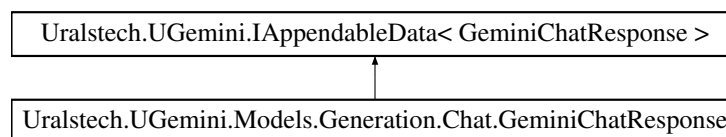
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Chat/GeminiChatRequest.cs

7.8 Uralstech.UGemini.Models.Generation.Chat.GeminiChatResponse Class Reference

Response from the model supporting multiple candidates.

Inheritance diagram for Uralstech.UGemini.Models.Generation.Chat.GeminiChatResponse:



Public Member Functions

- void **Append** ([GeminiChatResponse](#) data)

Public Member Functions inherited from [Uralstech.UGemini.IAppendableData< GeminiChatResponse >](#)

- void **Append** (T data)
Appends the data to the current IAppendableData< T>.

Public Attributes

- [GeminiCandidate\[\]](#) **Candidates**
Candidate responses from the model.
- [GeminiPromptFeedback](#) **PromptFeedback**
Returns the prompt's feedback related to the content filters.
- [GeminiUsageMetadata](#) **UsageMetadata**
Metadata on the generation requests' token usage.

Properties

- [GeminiContentPart\[\]](#) **Parts** [get]
The parts of the [GeminiChatResponse](#) message.

7.8.1 Detailed Description

Response from the model supporting multiple candidates.

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

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Chat/GeminiChat↔
Response.cs

7.9 Uralstech.UGemini.Models.Content.Citation.GeminiCitationMetadata Class Reference

A collection of source attributions for a piece of content.

Public Attributes

- [GeminiCitationSource\[\]](#) **CitationSources**
Citations to sources for a specific response.

7.9.1 Detailed Description

A collection of source attributions for a piece of content.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Citation/GeminiCitation↔
Metadata.cs

7.10 Uralstech.UGemini.Models.Content.Citation.GeminiCitationSource Class Reference

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

Public Attributes

- int [StartIndex](#)
Start of segment of the response that is attributed to this source.
- int **EndIndex**
End of the attributed segment, exclusive.
- string **Uri**
URI that is attributed as a source for a portion of the text.
- string **License**
License for the GitHub project that is attributed as a source for segment.

7.10.1 Detailed Description

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

7.10.2 Member Data Documentation

7.10.2.1 StartIndex

```
int Uralstech.UGemini.Models.Content.Citation.GeminiCitationSource.StartIndex
```

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

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Citation/GeminiCitation↔
Source.cs

7.11 Uralstech.UGemini.Models.Generation.Tools.Declaration.GeminiCodeExecution Class Reference

Tool that executes code generated by the model, and automatically returns the result to the model.

7.11.1 Detailed Description

Tool that executes code generated by the model, and automatically returns the result to the model.

See [CodeExecution.GeminiExecutableCode](#) and [CodeExecution.GeminiCodeExecutionResult](#) which are only generated when using this tool.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/Declaration/GeminiCodeExecution.cs

7.12 Uralstech.UGemini.Models.Generation.Tools.CodeExecution.GeminiCodeExecutionResult Class Reference

Result of executing the [GeminiExecutableCode](#).

Public Attributes

- [GeminiCodeExecutionOutcome](#) **Outcome**
Outcome of the code execution.
- string **Output** = null
Contains stdout when code execution is successful, stderr or other description otherwise.

7.12.1 Detailed Description

Result of executing the [GeminiExecutableCode](#).

Only generated when using the [Declaration.GeminiCodeExecution](#) tool, and always follows a part containing the [GeminiExecutableCode](#).

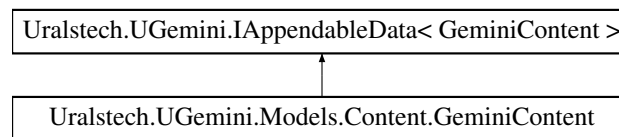
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/CodeExecution/GeminiCodeExecutionResult.cs

7.13 Uralstech.UGemini.Models.Content.GeminiContent Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.Content.GeminiContent:



Public Member Functions

- void **Append** ([GeminiContent](#) data)

Public Member Functions inherited from [Uralstech.UGemini.IAppendableData< GeminiContent >](#)

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

Static Public Member Functions

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

Public Attributes

- [GeminiContentPart\[\] Parts](#)
Ordered Parts that constitute a single message. Parts may have different MIME types.
- [GeminiRole Role](#)
Optional. The producer of the content.

7.13.1 Detailed Description

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

7.13.2 Member Function Documentation

7.13.2.1 GetContent() [1/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    GeminiFunctionCall functionCall) [static]
```

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

Parameters

<i>functionCall</i>	The function call.
---------------------	--------------------

Returns

A new [GeminiContent](#) object.

7.13.2.2 GetContent() [2/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    GeminiFunctionResponse functionResponse) [static]
```

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

Parameters

<i>functionResponse</i>	The function response.
-------------------------	------------------------

Returns

A new [GeminiContent](#) object.

7.13.2.3 GetContent() [3/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    string message,  
    AudioClip audio,  
    GeminiRole role = GeminiRole::Unspecified) [static]
```

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

Requires [Utilities.Encoding.Wav](#).

Parameters

<i>role</i>	The role of the content creator.
<i>message</i>	The message.
<i>audio</i>	The audio clip.

Returns

A new [GeminiContent](#) object.

7.13.2.4 GetContent() [4/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    string message,  
    GeminiFile file,  
    GeminiRole role = GeminiRole::Unspecified) [static]
```

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

Parameters

<i>role</i>	The role of the content creator.
<i>message</i>	The message.
<i>file</i>	The GeminiFile.

Returns

A new [GeminiContent](#) object.

7.13.2.5 GetContent() [5/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    string message,  
    GeminiRole role = GeminiRole::Unspecified) [static]
```

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

Parameters

<i>role</i>	The role of the content creator.
<i>message</i>	The message.

Returns

A new [GeminiContent](#) object.

7.13.2.6 GetContent() [6/6]

```
static GeminiContent Uralstech.UGemini.Models.Content.GeminiContent.GetContent (  
    string message,  
    Texture2D image,  
    GeminiRole role = GeminiRole::Unspecified) [static]
```

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

Parameters

<i>role</i>	The role of the content creator.
<i>message</i>	The message.
<i>image</i>	The image texture.

Returns

A new [GeminiContent](#) object.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/GeminiContent.cs

7.14 Uralstech.UGemini.Models.Content.GeminiContentBlob Class Reference

Raw media bytes.

Static Public Member Functions

- static [GeminiContentBlob GetContentBlob](#) (AudioClip audio)
Converts the given AudioClip to a [GeminiContentBlob](#).
- static [GeminiContentBlob GetContentBlob](#) (Texture2D image, bool useJPEG=false)
Converts the given Texture2D to a [GeminiContentBlob](#).

Public Attributes

- [GeminiContentType MimeType](#)
The type of the data.
- string **Data**
The base64 encoded bytes of data.

7.14.1 Detailed Description

Raw media bytes.

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

7.14.2 Member Function Documentation

7.14.2.1 GetContentBlob() [1/2]

```
static GeminiContentBlob Uralstech.UGemini.Models.Content.GeminiContentBlob.GetContentBlob (
    AudioClip audio) [static]
```

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

Requires [Utilities.Encoding.Wav](#).

Parameters

<i>audio</i>	The AudioClip to use.
--------------	-----------------------

Returns

A new [GeminiContentBlob](#) object.

7.14.2.2 GetContentBlob() [2/2]

```
static GeminiContentBlob Uralstech.UGemini.Models.Content.GeminiContentBlob.GetContentBlob (
    Texture2D image,
    bool useJPEG = false) [static]
```

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

Parameters

<i>image</i>	The Texture2D to use.
<i>useJPEG</i>	Should the encoder use JPEG instead of PNG?

Returns

A new [GeminiContentBlob](#) object.

7.14.3 Member Data Documentation

7.14.3.1 MimeType

[GeminiContentType](#) Uralstech.UGemini.Models.Content.GeminiContentBlob.MimeType

The type of the data.

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

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

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

7.15 Uralstech.UGemini.Models.Embedding.GeminiContentEmbedding Class Reference

A list of floats representing an embedding.

Public Attributes

- `float[]` **Values**
The embedding values.

7.15.1 Detailed Description

A list of floats representing an embedding.

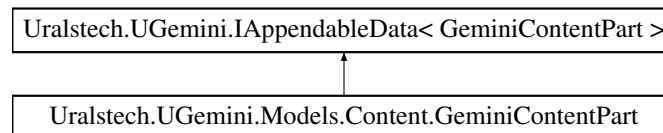
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Embedding/GeminiContent↵
Embedding.cs

7.16 Uralstech.UGemini.Models.Content.GeminiContentPart Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.Content.GeminiContentPart:



Public Member Functions

- void **Append** ([GeminiContentPart](#) data)
- bool **IsAppendable** ([GeminiContentPart](#) data)
Is the data to be appended compatible with the current [GeminiContentPart](#)?

Public Member Functions inherited from [Uralstech.UGemini.IAppendableData< GeminiContentPart >](#)

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

Public Attributes

- string **Text** = null
Inline text.
- [GeminiContentBlob](#) **InlineData** = null
Inline media bytes.
- [GeminiFunctionCall](#) **FunctionCall** = null
A predicted [FunctionCall](#) returned from the model that contains a string representing the [FunctionDeclaration.name](#) with the arguments and their values.
- [GeminiFunctionResponse](#) **FunctionResponse** = null
The result output of a [FunctionCall](#) that contains a string representing the [FunctionDeclaration.name](#) and a structured JSON object containing any output from the function is used as context to the model.
- [GeminiFileData](#) **FileData** = null
URI based data.
- [GeminiExecutableCode](#) **ExecutableCode** = null
Code generated by the model that is meant to be executed.
- [GeminiCodeExecutionResult](#) **CodeExecutionResult** = null
Result of executing the [ExecutableCode](#).

Properties

- bool **IsEmpty** [get]
Is there no content stored in this [GeminiContentPart](#)?

7.16.1 Detailed Description

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

7.16.2 Member Function Documentation

7.16.2.1 IsAppendable()

```
bool Uralstech.UGemini.Models.Content.GeminiContentPart.IsAppendable (  
    GeminiContentPart data)
```

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

Parameters

<i>data</i>	The data to be appended.
-------------	--------------------------

7.16.3 Member Data Documentation

7.16.3.1 FileData

```
GeminiFileData Uralstech.UGemini.Models.Content.GeminiContentPart.FileData = null
```

URI based data.

Only available in the beta API.

7.16.3.2 FunctionCall

```
GeminiFunctionCall Uralstech.UGemini.Models.Content.GeminiContentPart.FunctionCall = null
```

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

Only available in the beta API.

7.16.3.3 FunctionResponse

```
GeminiFunctionResponse Uralstech.UGemini.Models.Content.GeminiContentPart.FunctionResponse =  
null
```

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

Only available in the beta API.

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

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

7.17 Uralstech.UGemini.GeminiContentTypeExtensions Class Reference

Extensions for Enum type objects.

Static Public Member Functions

- static string [MimeType](#) (this [GeminiContentType](#) enumValue)
Converts a [GeminiContentType](#) to its *MIME type*.
- static [GeminiContentType ContentType](#) (this string mimeType)
Converts a string MIME type to a [GeminiContentType](#).

7.17.1 Detailed Description

Extensions for Enum type objects.

7.17.2 Member Function Documentation

7.17.2.1 ContentType()

```
static GeminiContentType Uralstech.UGemini.GeminiContentTypeExtensions.ContentType (
    this string mimeType) [static]
```

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

Parameters

<i>mimeType</i>	The MIME type string.
-----------------	-----------------------

Returns

The [GeminiContentType](#) equivalent.

Exceptions

<i>NotImplementedException</i>	Thrown if GeminiContentType does not have an equivalent MIME type to <i>mimeType</i> .
--------------------------------	--

7.17.2.2 MimeType()

```
static string Uralstech.UGemini.GeminiContentTypeExtensions.MimeType (
    this GeminiContentType enumValue) [static]
```

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

Parameters

<i>enumValue</i>	The GeminiContentType value.
------------------	--

Returns

The MIME type as a string.

Exceptions

<i>NotImplementedException</i>	Thrown if the MIME type of the enum value could not be found.
--------------------------------	---

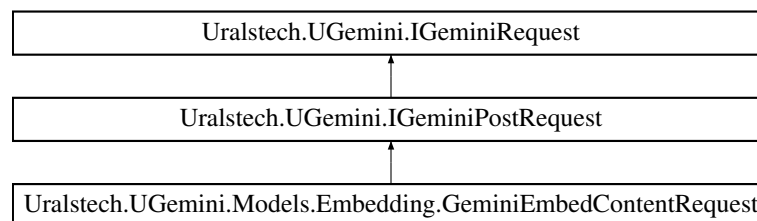
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/GeminiContentTypeExtensions.cs

7.18 Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest Class Reference

Generates an embedding from the model.

Inheritance diagram for Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

- [GeminiEmbedContentRequest](#) ([GeminiModelId](#) model, bool useBetaApi=false)
Creates a new [GeminiEmbedContentRequest](#).
- string [GetUtf8EncodedData](#) ()
Converts the request object to a UTF-8 encoded string.

Returns

The string data.

Public Attributes

- **GeminiContent Content**
The content to embed. Only the [GeminiContentPart.Text](#) fields will be counted.
- **GeminiEmbedTaskType TaskType = GeminiEmbedTaskType.Unspecified**
Optional task type for which the embeddings will be used.
- string **Title** = null
An optional title for the text. Only applicable when [TaskType](#) is [GeminiEmbedTaskType.RetrievalDocument](#).
- int **OutputDimensionality** = -1
Optional reduced dimension for the output embedding.
- **GeminiModelId Model**
The model to use.
- string **ApiVersion**
The API version to use.

Properties

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

Properties inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

7.18.1 Detailed Description

Generates an embedding from the model.

7.18.2 Constructor & Destructor Documentation

7.18.2.1 GeminiEmbedContentRequest()

```
Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.GeminiEmbedContentRequest (
    GeminiModelId model,
    bool useBetaApi = false)
```

Creates a new [GeminiEmbedContentRequest](#).

Parameters

<i>model</i>	The model to use.
<i>useBetaApi</i>	Should the request use the Beta API?

7.18.3 Member Function Documentation

7.18.3.1 GetEndpointUri()

```
string Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.18.3.2 GetUtf8EncodedData()

```
string Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.GetUtf8EncodedData ()
```

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

Returns

The string data.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

7.18.4 Member Data Documentation

7.18.4.1 OutputDimensionality

```
int Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.OutputDimensionality = -1
```

Optional reduced dimension for the output embedding.

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.

7.18.4.2 TaskType

```
GeminiEmbedTaskType Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.TaskType =  
GeminiEmbedTaskType.Unspecified
```

Optional task type for which the embeddings will be used.

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

7.18.4.3 Title

```
string Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.Title = null
```

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

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

7.18.5 Property Documentation

7.18.5.1 ContentType

```
string Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest.ContentType [get]
```

The MIME type of the request content.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Embedding/EmbedContent/Gemini↔
EmbedContentRequest.cs

7.19 Uralstech.UGemini.Models.Embedding.GeminiEmbedContent↔ Response Class Reference

The response to a [GeminiEmbedContentRequest](#).

Public Attributes

- [GeminiContentEmbedding](#) **Embedding**
The embedding generated from the input content.

7.19.1 Detailed Description

The response to a [GeminiEmbedContentRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Embedding/EmbedContent/Gemini↔
EmbedContentResponse.cs

7.20 Uralstech.UGemini.Models.Generation.Tools.CodeExecution.↔ GeminiExecutableCode Class Reference

Code generated by the model that is meant to be executed, and the result returned to the model.

Public Attributes

- [GeminiCodeExecutionLanguage](#) **Language**
Programming language of the [Code](#).
- string **Code**
The code to be executed.

7.20.1 Detailed Description

Code generated by the model that is meant to be executed, and the result returned to the model.

Only generated when using the [Declaration.GeminiCodeExecution](#) tool, in which the code will be automatically executed, and a corresponding [GeminiCodeExecutionResult](#) will also be generated.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/CodeExecution/GeminiExecutableCode.cs

7.21 Uralstech.UGemini.FileAPI.GeminiFile Class Reference

Metadata for a file uploaded to the File API.

Public Attributes

- string **Name**
The [GeminiFile](#) resource name.
- string **DisplayName** = null
The human-readable display name for the [GeminiFile](#).
- string **MimeType**
MIME type of the file.
- long **SizeBytes**
Size of the file in bytes.
- DateTime **CreateTime**
The timestamp of when the [GeminiFile](#) was created.
- DateTime **UpdateTime**
The timestamp of when the [GeminiFile](#) was last updated.
- DateTime **ExpirationTime**
The timestamp of when the [GeminiFile](#) will be deleted. Only set if the [GeminiFile](#) is scheduled to expire.
- string **Sha256Hash**
SHA-256 hash of the uploaded bytes. A base64-encoded string.
- string **Uri**
The uri of the [GeminiFile](#).
- [GeminiFileState](#) **State**
Processing state of the [GeminiFile](#).
- [GeminiStatus](#) **Status**
Error status if [GeminiFile](#) processing failed.
- [GeminiFileVideoMetaData](#) **VideoMetadata**
Metadata for a video.

7.21.1 Detailed Description

Metadata for a file uploaded to the File API.

7.21.2 Member Data Documentation

7.21.2.1 MimeType

```
string Uralstech.UGemini.FileAPI.GeminiFile.MimeType
```

MIME type of the file.

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

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

- `UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/GeminiFile.cs`

7.22 Uralstech.UGemini.Models.Content.GeminiFileData Class Reference

URI based data.

Public Member Functions

- **GeminiFileData ()**
Creates a new [GeminiFileData](#) object.
- **GeminiFileData (GeminiContentType contentType, string fileUri)**
Creates a new [GeminiFileData](#) object.

Public Attributes

- string **MimeType** = null
The IANA standard MIME type of the source data.
- string **FileUri**
URI.

7.22.1 Detailed Description

URI based data.

7.22.2 Constructor & Destructor Documentation

7.22.2.1 GeminiFileData()

```
Uralstech.UGemini.Models.Content.GeminiFileData.GeminiFileData (  
    GeminiContentType contentType,  
    string fileUri)
```

Creates a new [GeminiFileData](#) object.

Parameters

<i>contentType</i>	The type of the file's contents.
<i>fileUri</i>	The URI to the file.

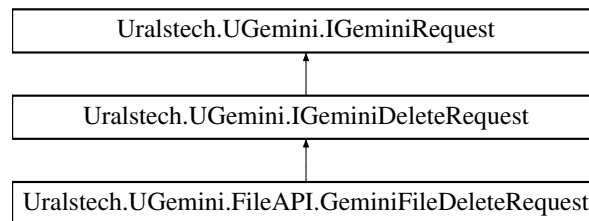
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/GeminiFileData.cs

7.23 Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest Class Reference

Requests the deletion of a file.

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiFileDeleteRequest](#) (string fileNameOrId, bool useBetaApi=true)
Creates a new [GeminiFileDeleteRequest](#).

Public Attributes

- string **ApiVersion**
The API version to use.
- string **FileId**
The ID of the file to delete.

7.23.1 Detailed Description

Requests the deletion of a file.

7.23.2 Constructor & Destructor Documentation

7.23.2.1 GeminiFileDeleteRequest()

```
Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest.GeminiFileDeleteRequest (
    string fileNameOrId,
    bool useBetaApi = true)
```

Creates a new [GeminiFileDeleteRequest](#).

Parameters

<i>fileNameOrId</i>	The name (format 'files/{fileId}') or ID of the file to delete.
<i>useBetaApi</i>	Should the request use the Beta API?

7.23.3 Member Function Documentation

7.23.3.1 GetEndpointUri()

```
string Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

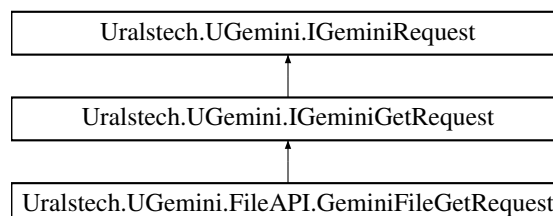
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/Delete/GeminiFileDeleteRequest.cs

7.24 Uralstech.UGemini.FileAPI.GeminiFileGetRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileGetRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiFileGetRequest](#) (string fileNameOrId, bool useBetaApi=true)

Creates a new [GeminiFileGetRequest](#).

Public Attributes

- string **ApiVersion**

The API version to use.

- string **FileId**

The ID of the file to get.

7.24.1 Detailed Description

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

7.24.2 Constructor & Destructor Documentation**7.24.2.1 GeminiFileGetRequest()**

```
Uralstech.UGemini.FileAPI.GeminiFileGetRequest.GeminiFileGetRequest (
    string fileNameOrId,
    bool useBetaApi = true)
```

Creates a new [GeminiFileGetRequest](#).

Parameters

<i>fileNameOrId</i>	The name (format 'files/{fileId}') or ID of the file to get.
<i>useBetaApi</i>	Should the request use the Beta API?

7.24.3 Member Function Documentation**7.24.3.1 GetEndpointUri()**

```
string Uralstech.UGemini.FileAPI.GeminiFileGetRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

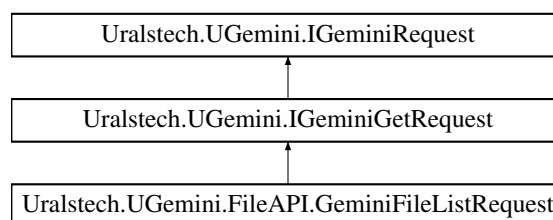
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/Get/GeminiFileGetRequest.cs

7.25 Uralstech.UGemini.FileAPI.GeminiFileListRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileListRequest:

**Public Member Functions**

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	<i>The metadata of the request to be carried out on the URI.</i>
-----------------	--

Returns

The URI.

- [GeminiFileListRequest](#) (bool useBetaApi=true)
Creates a new [GeminiFileListRequest](#).

Public Attributes

- string **ApiVersion**
The API version to use.
- int **MaxResponseFiles** = 10
Maximum number of Files to return per page. If unspecified, defaults to 10. Maximum pageSize is 100.
- string **PageToken** = string.Empty
A page token from a previous files.list call.

7.25.1 Detailed Description

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

7.25.2 Constructor & Destructor Documentation

7.25.2.1 GeminiFileListRequest()

```
Uralstech.UGemini.FileAPI.GeminiFileListRequest.GeminiFileListRequest (
    bool useBetaApi = true)
```

Creates a new [GeminiFileListRequest](#).

Parameters

<i>useBetaApi</i>	Should the request use the Beta API?
-------------------	--------------------------------------

7.25.3 Member Function Documentation

7.25.3.1 GetEndpointUri()

```
string Uralstech.UGemini.FileAPI.GeminiFileListRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/List/GeminiFileListRequest.cs

7.26 Uralstech.UGemini.FileAPI.GeminiFileListResponse Class Reference

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

Public Attributes

- [GeminiFile\[\]](#) **Files**
The list of files.
- string **NextPageToken**
A token that can be sent as a [GeminiFileListRequest.PageToken](#) into a subsequent [GeminiFileListRequest](#) call.

7.26.1 Detailed Description

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/List/GeminiFileListResponse.cs

7.27 Uralstech.UGemini.FileAPI.GeminiFileUploadMetaData Class Reference

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

Public Attributes

- string [Name](#) = null
The [GeminiFileUploadRequest](#) resource name. This does not work right now.
- string **DisplayName** = null
The human-readable display name for the [GeminiFileUploadRequest](#). The display name must be no more than 512 characters in length, including spaces. Example: "Welcome Image".

7.27.1 Detailed Description

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

7.27.2 Member Data Documentation

7.27.2.1 Name

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

The [GeminiFileUploadRequest](#) resource name. This does not work right now.

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

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

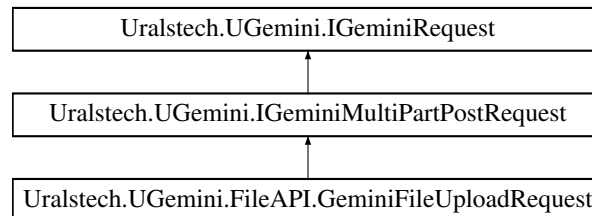
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/Upload/GeminiFileUploadMeta↵Data.cs

7.28 Uralstech.UGemini.FileAPI.GeminiFileUploadRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiFileUploadRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiFileUploadRequest](#) (string contentType, bool useBetaApi=true)
Creates a new [GeminiFileUploadRequest](#).
- [GeminiFileUploadRequest](#) ([GeminiContentType](#) contentType, bool useBetaApi=true)
Creates a new [GeminiFileUploadRequest](#).
- string [GetUtf8EncodedData](#) (string dataSeperator)
Converts the request object to a UTF-8 encoded multi-part string.

Parameters

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

Returns

The string data.

Public Attributes

- [GeminiFileUploadMetaData](#) **File** = null
Optional metadata for the [GeminiFile](#) to be uploaded.
- string **MimeType**
The IANA standard MIME type of the [GeminiFileUploadRequest](#).
- byte[] **RawData**
The raw file data to upload.
- string **ApiVersion**
The API version to use.

Properties

- string **ContentType** [get]

7.28.1 Detailed Description

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

This feature is currently being worked on and is unstable.

7.28.2 Constructor & Destructor Documentation

7.28.2.1 GeminiFileUploadRequest() [1/2]

```
Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.GeminiFileUploadRequest (  
    string contentType,  
    bool useBetaApi = true)
```

Creates a new [GeminiFileUploadRequest](#).

Parameters

<i>contentType</i>	The content type of the data.
<i>useBetaApi</i>	Should the request use the Beta API?

7.28.2.2 GeminiFileUploadRequest() [2/2]

```
Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.GeminiFileUploadRequest (  
    GeminiContentType contentType,  
    bool useBetaApi = true)
```

Creates a new [GeminiFileUploadRequest](#).

Parameters

<i>contentType</i>	The content type of the data.
<i>useBetaApi</i>	Should the request use the Beta API?

7.28.3 Member Function Documentation

7.28.3.1 GetEndpointUri()

```
string Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.GetEndpointUri (  
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.28.3.2 GetUtf8EncodedData()

```
string Uralstech.UGemini.FileAPI.GeminiFileUploadRequest.GetUtf8EncodedData (
    string dataSeperator)
```

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

Parameters

<i>dataSeperator</i>	The boundary to seperate each part of the data.
----------------------	---

Returns

The string data.

Implements [Uralstech.UGemini.IGeminiMultiPartPostRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/Upload/GeminiFileUploadRequest.cs

7.29 Uralstech.UGemini.FileAPI.GeminiFileUploadResponse Class Reference

Response for a file upload request.

Public Attributes

- [GeminiFile](#) **File**
Metadata for the created file.

7.29.1 Detailed Description

Response for a file upload request.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/Upload/GeminiFileUploadResponse.↔
cs

7.30 Uralstech.UGemini.FileAPI.GeminiFileVideoMetaData Class Reference

Metadata for a video [GeminiFile](#).

Public Attributes

- TimeSpan **VideoDuration**
Duration of the video.

7.30.1 Detailed Description

Metadata for a video [GeminiFile](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Files/GeminiFileVideoMetaData.cs

7.31 Uralstech.UGemini.Models.Generation.Tools.GeminiFunctionCall Class Reference

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

Public Member Functions

- [GeminiFunctionResponse](#) **GetResponse** (JsonObject responseJson=null)
Creates a [GeminiFunctionResponse](#) for this function call.

Public Attributes

- string **Name**
The name of the function to call. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.
- JsonObject **Arguments** = null
Optional. The function parameters and values in JSON object format.

7.31.1 Detailed Description

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

7.31.2 Member Function Documentation

7.31.2.1 GetResponse()

```
GeminiFunctionResponse Uralstech.UGemini.Models.Generation.Tools.GeminiFunctionCall.GetResponse(
    JsonObject responseJson = null)
```

Creates a [GeminiFunctionResponse](#) for this function call.

Parameters

<code>responseJson</code>	The JSON response data.
---------------------------	-------------------------

Returns

A new [GeminiFunctionResponse](#) object.

7.31.3 Member Data Documentation

7.31.3.1 Arguments

```
JsonObject Uralstech.UGemini.Models.Generation.Tools.GeminiFunctionCall.Arguments = null
```

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

See Protocol Buffer [Struct](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/GeminiFunction↵
Call.cs

7.32 Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↵ FunctionCallingConfiguration Class Reference

Configuration for specifying function calling behavior.

Public Attributes

- [GeminiFunctionCallingMode](#) **Mode** = [GeminiFunctionCallingMode.Auto](#)
Specifies the mode in which function calling should execute. If unspecified, the default value will be set to AUTO.
- string[] [AllowedFunctionNames](#) = null
A set of function names that, when provided, limits the functions the model will call.

7.32.1 Detailed Description

Configuration for specifying function calling behavior.

7.32.2 Member Data Documentation

7.32.2.1 AllowedFunctionNames

```
string [] Uralstech.UGemini.Models.Generation.Tools.Declaration.GeminiFunctionCallingConfiguration.↵
AllowedFunctionNames = null
```

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

This should only be set when [Mode](#) is [GeminiFunctionCallingMode.Any](#).
Function names should match [\[GeminiFunctionDeclaration.Name\]](#). With mode set to [GeminiFunctionCallingMode.Any](#), model will predict a function call from the set of function names provided.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/Declaration/Gemini↵
FunctionCallingConfiguration.cs

7.33 Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↵ FunctionDeclaration Class Reference

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

Public Attributes

- string **Name**
The name of the function. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.
- string **Description**
A brief description of the function.
- [GeminiSchema](#) **Parameters** = null
*Describes the parameters to this function. Reflects the Open API 3.03 Parameter Object string Key: the name of the parameter.
Parameter names are case sensitive.
[Schema](#) Value: the [Schema](#) defining the type used for the parameter.*

7.33.1 Detailed Description

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/Declaration/Gemini↵
FunctionDeclaration.cs

7.34 Uralstech.UGemini.Models.Generation.Tools.GeminiFunctionResponse Class Reference

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

Public Attributes

- string **Name**
The name of the function to call. Must be a-z, A-Z, 0-9, or contain underscores and dashes, with a maximum length of 63.
- [GeminiFunctionResponseContent](#) **Response** = null
The function response data.

7.34.1 Detailed Description

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

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

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

7.35 Uralstech.UGemini.Models.Generation.Tools.GeminiFunctionResponseContent Class Reference

The response of a Gemini function call. Based on the Protocol Buffer [Struct](#) type.

Public Attributes

- string **Name**
The name of the function.
- JObject **ResponseData**
The actual JSON response data of the function.

7.35.1 Detailed Description

The response of a Gemini function call. Based on the Protocol Buffer [Struct](#) type.

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

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

7.36 Uralstech.UGemini.Models.Generation.GeminiGeneration Configuration Class Reference

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

Public Attributes

- `string[] StopSequences = null`
The set of character sequences (up to 5) that will stop output generation. If specified, the API will stop at the first appearance of a stop sequence. The stop sequence will not be included as part of the response.
- `GeminiResponseType ResponseMimeType = GeminiResponseType.Unspecified`
Output response type of the generated candidate text.
- `GeminiSchema ResponseSchema = null`
Output response schema of the generated candidate text when response mime type can have schema.
- `int CandidateCount = 1`
Number of generated responses to return.
- `int MaxOutputTokens = -1`
The maximum number of tokens to include in a candidate.
- `float Temperature = -1f`
Controls the randomness of the output. Values can range from 0.0 - 2.0.
- `float TopP = -1f`
The maximum cumulative probability of tokens to consider when sampling.
- `int TopK = -1`
The maximum number of tokens to consider when sampling.

7.36.1 Detailed Description

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

7.36.2 Member Data Documentation

7.36.2.1 CandidateCount

```
int Uralstech.UGemini.Models.Generation.GeminiGenerationConfiguration.CandidateCount = 1
```

Number of generated responses to return.

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

7.36.2.2 ResponseMimeType

```
GeminiResponseType Uralstech.UGemini.Models.Generation.GeminiGenerationConfiguration.Response<
MimeType = GeminiResponseType.Unspecified
```

Output response type of the generated candidate text.

Only available in the beta API.

7.36.2.3 ResponseSchema

```
GeminiSchema Uralstech.UGemini.Models.Generation.GeminiGenerationConfiguration.ResponseSchema
= null
```

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

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

Only available in the beta API.

7.36.2.4 TopK

```
int Uralstech.UGemini.Models.Generation.GeminiGenerationConfiguration.TopK = -1
```

The maximum number of tokens to consider when sampling.

[Models](#) use nucleus sampling or combined Top-k and nucleus sampling. Top-k sampling considers the set of topK most probable tokens. [Models](#) running with nucleus sampling don't allow topK setting.

7.36.2.5 TopP

```
float Uralstech.UGemini.Models.Generation.GeminiGenerationConfiguration.TopP = -1f
```

The maximum cumulative probability of tokens to consider when sampling.

The model uses combined Top-k and nucleus sampling.

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

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

- [UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/GeminiGeneration](#)↔
[Configuration.cs](#)

7.37 Uralstech.UGemini.Models.Content.Attribution.GeminiGroundingAttribution Class Reference↔

[Attribution](#) for a source that contributed to an answer.

Public Attributes

- [GeminiAttributionSourceId](#) **SourceId**
Identifier for the source contributing to this attribution.
- [GeminiContent](#) **Content**
Grounding source content that makes up this attribution.

7.37.1 Detailed Description

[Attribution](#) for a source that contributed to an answer.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Attribution/Gemini↔
GroundingAttribution.cs

7.38 Uralstech.UGemini.Models.Generation.QuestionAnswering.↔ Grounding.GeminiGroundingPassage Class Reference

Passage included inline with a grounding configuration.

Public Attributes

- string **Id**
Identifier for the passage for attributing this passage in grounded answers.
- [GeminiContent](#) **Content**
Content of the passage.

7.38.1 Detailed Description

Passage included inline with a grounding configuration.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/Grounding/Gemini↔
GroundingPassage.cs

7.39 Uralstech.UGemini.Models.Content.Attribution.GeminiGrounding↔ PassageId Class Reference

Identifier for a part within a GroundingPassage.

Public Attributes

- string **PassageId**
ID of the passage matching the GenerateAnswerRequest's [GeminiAttributionSourceId.GroundingPassage](#).
- int **PartIndex**
Index of the part within the GenerateAnswerRequest's [GeminiAttributionSourceId.GroundingPassage](#).

7.39.1 Detailed Description

Identifier for a part within a GroundingPassage.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Attribution/GeminiGroundingPassageId.cs

7.40 Uralstech.UGemini.Models.Generation.QuestionAnswering.Grounding.GeminiGroundingPassages Class Reference

A repeated list of passages.

Public Attributes

- GeminiGroundingPassage[] Passages
List of passages.

7.40.1 Detailed Description

A repeated list of passages.

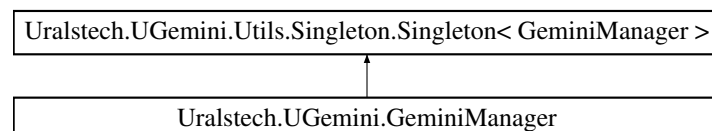
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/Grounding/GeminiGroundingPassages.cs

7.41 Uralstech.UGemini.GeminiManager Class Reference

The class for accessing the Gemini API!

Inheritance diagram for Uralstech.UGemini.GeminiManager:



Public Member Functions

- void [SetApiKey](#) (string apiKey)
Sets the Gemini API key.
- async Task< TResponse > [Request< TResponse >](#) ([IGeminiPostRequest](#) request)
Computes a POST request on the Gemini API.
- async Task< TResponse > [Request< TResponse >](#) ([IGeminiMultiPartPostRequest](#) request)
Computes a multi-part POST request on the Gemini API.
- async Task< TResponse > [Request< TResponse >](#) ([IGeminiGetRequest](#) request)
Computes a GET request on the Gemini API.
- async Task [Request](#) ([IGeminiDeleteRequest](#) request)
Computes a DELETE request on the Gemini API.
- async Task< TResponse > [StreamRequest< TResponse >](#) ([IGeminiStreamablePostRequest< TResponse >](#) request)
Computes a streaming POST request on the Gemini API.

Additional Inherited Members

Properties inherited from

[Uralstech.UGemini.Utils.Singleton.Singleton< GeminiManager >](#)

- static T **Instance** [get]
The active instance of type T.

7.41.1 Detailed Description

The class for accessing the Gemini API!

7.41.2 Member Function Documentation

7.41.2.1 Request()

```
async Task Uralstech.UGemini.GeminiManager.Request (
    IGeminiDeleteRequest request)
```

Computes a DELETE request on the Gemini API.

Parameters

<i>request</i>	The request object.
----------------	---------------------

Exceptions

<i>GeminiRequestException</i>	Thrown when the API request fails.
-------------------------------	------------------------------------

7.41.2.2 Request< TResponse >() [1/3]

```
async Task< TResponse > Uralstech.UGemini.GeminiManager.Request< TResponse > (
    IGeminiGetRequest request)
```

Computes a GET request on the Gemini API.

Template Parameters

<i>TResponse</i>	The response type. For example, a request of type Models.Generation.Chat.GeminiChatRequest corresponds to a response type of Models.Generation.Chat.GeminiChatResponse , and a request of type Models.CountTokens.GeminiTokenCountRequest corresponds to a response of type Models.CountTokens.GeminiTokenCountResponse .
------------------	---

Parameters

<i>request</i>	The request object.
----------------	---------------------

Exceptions

<i>GeminiRequestException</i>	Thrown when the API request fails.
-------------------------------	------------------------------------

7.41.2.3 Request< TResponse >() [2/3]

```
async Task< TResponse > Uralstech.UGemini.GeminiManager.Request< TResponse > (
    IGeminiMultiPartPostRequest request)
```

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

Template Parameters

<i>TResponse</i>	The response type. For example, a request of type Models.Generation.Chat.GeminiChatRequest corresponds to a response type of Models.Generation.Chat.GeminiChatResponse , and a request of type Models.CountTokens.GeminiTokenCountRequest corresponds to a response of type Models.CountTokens.GeminiTokenCountResponse .
------------------	---

Parameters

<i>request</i>	The request object.
----------------	---------------------

Returns

The computed response.

Exceptions

<i>GeminiRequestException</i>	Thrown when the API request fails.
-------------------------------	------------------------------------

7.41.2.4 Request< TResponse >() [3/3]

```
async Task< TResponse > Uralstech.UGemini.GeminiManager.Request< TResponse > (
    IGeminiPostRequest request)
```

Computes a POST request on the Gemini API.

Template Parameters

<i>TResponse</i>	The response type. For example, a request of type Models.Generation.Chat.GeminiChatRequest corresponds to a response type of Models.Generation.Chat.GeminiChatResponse , and a request of type Models.CountTokens.GeminiTokenCountRequest corresponds to a response of type Models.CountTokens.GeminiTokenCountResponse .
------------------	---

Parameters

<i>request</i>	The request object.
----------------	---------------------

Returns

The computed response.

Exceptions

<i>GeminiRequestException</i>	Thrown when the API request fails.
-------------------------------	------------------------------------

7.41.2.5 SetApiKey()

```
void Uralstech.UGemini.GeminiManager.SetApiKey (
    string apiKey)
```

Sets the Gemini API key.

Parameters

<i>apiKey</i>	The new API key.
---------------	------------------

7.41.2.6 StreamRequest< TResponse >()

```
async Task< TResponse > Uralstech.UGemini.GeminiManager.StreamRequest< TResponse > (
    IGeminiStreamablePostRequest< TResponse > request)
```

Computes a streaming POST request on the Gemini API.

Use callbacks in the request object to receive the streamed data.

Template Parameters

<i>TResponse</i>	The response type. For example, a request of type Models.Generation.Chat.GeminiChatRequest corresponds to a response type of Models.Generation.Chat.GeminiChatResponse , and a request of type Models.CountTokens.GeminiTokenCountRequest corresponds to a response of type Models.CountTokens.GeminiTokenCountResponse .
------------------	---

Parameters

<i>request</i>	The request object.
----------------	---------------------

Exceptions

<i>GeminiRequestException</i>	Thrown when the API request fails.
-------------------------------	------------------------------------

Type Constraints

***TResponse* : *IAppendableData*<*TResponse*>**

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

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

7.42 Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiMetadataCondition Class Reference

Filter condition applicable to a single key.

Public Attributes

- [GeminiMetadataConditionOperator](#) **Operation**
Operator applied to the given key-value pair to trigger the condition.
- string [StringValue](#) = null
The string value to filter the metadata on.
- float? [NumericValue](#) = null
The numeric value to filter the metadata on.

7.42.1 Detailed Description

Filter condition applicable to a single key.

7.42.2 Member Data Documentation

7.42.2.1 NumericValue

```
float? Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiMetadataCondition.NumericValue = null
```

The numeric value to filter the metadata on.

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 [GeminiMetadataConditionOperator.Excludes](#) operation, otherwise the result will also be an empty set.

7.42.2.2 StringValue

```
string Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiMetadata↔
Condition.StringValue = null
```

The string value to filter the metadata on.

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 [GeminiMetadataConditionOperator.Include/GeminiMetadataConditionOperator.Excludes](#) operation, otherwise the result will also be an empty set.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/Semantic↔Retriever/GeminiMetadataCondition.cs

7.43 Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiMetadataFilter Class Reference

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

Public Attributes

- string **Key**
The key of the metadata to filter on.
- [GeminiMetadataCondition](#)[] **Conditions**
The Conditions for the given key that will trigger this filter. Multiple Conditions are joined by logical ORs.

7.43.1 Detailed Description

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

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

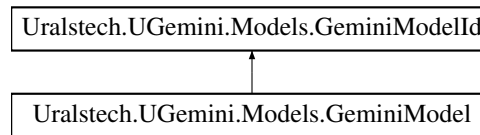
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/Semantic↔Retriever/GeminiMetadataFilter.cs

7.44 Uralstech.UGemini.Models.GeminiModel Class Reference

Information about a Generative Language Model.

Inheritance diagram for Uralstech.UGemini.Models.GeminiModel:



Public Attributes

- string [Version](#)
The version number of the model.
- string [DisplayName](#)
The human-readable name of the model. E.g. "Chat Bison".
- string **Description**
A short description of the model.
- int **InputTokenLimit**
Maximum number of input tokens allowed for this model.
- int **OutputTokenLimit**
Maximum number of output tokens available for this model.
- string[] [SupportedGenerationMethods](#)
The model's supported generation methods.
- float [Temperature](#)
Controls the randomness of the output.
- float [TopP](#)
For Nucleus sampling.
- int [TopK](#)
For Top-k sampling.

Public Attributes inherited from [Uralstech.UGemini.Models.GeminiModelId](#)

- string [Name](#)
The resource name of the Model.
- string **BaseModelId**
The ID of the base model, pass this to the generation request.

Static Public Attributes

- static readonly [GeminiModelId Gemini1_0ProVision](#) = "gemini-pro-vision"

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

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

- static readonly [GeminiModelId Gemini1_0Pro](#) = "gemini-1.0-pro"

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

- static readonly [GeminiModelId Gemini1_5Pro](#) = "gemini-1.5-pro"

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

- static readonly [GeminiModelId Gemini1_5Flash](#) = "gemini-1.5-flash"

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

- static readonly [GeminiModelId TextEmbedding004](#) = "text-embedding-004"

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

- static readonly [GeminiModelId Aqa](#) = "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.

Static Public Attributes inherited from [Uralstech.UGemini.Models.GeminiModelId](#)

- const string [DefaultModelResourceLocation](#) = "models/"

The default resource location for all models.

Additional Inherited Members

Public Member Functions inherited from [Uralstech.UGemini.Models.GeminiModelId](#)

- [GeminiModelId](#) (string nameOrBaseModelId)
Creates a new [GeminiModelId](#).
- [GeminiModelId](#) (string name, string baseModelId)
Creates a new [GeminiModelId](#).

Static Public Member Functions inherited from [Uralstech.UGemini.Models.GeminiModelId](#)

- static implicit **operator string** ([GeminiModelId](#) model)
Gets the base model ID of the [GeminiModelId](#).
- static implicit **operator GeminiModelId** (string nameOrBaseModelId)
Creates a new [GeminiModelId](#) with the full name of the model resource (see [Name](#)) or the unique ID of the base model.

7.44.1 Detailed Description

Information about a Generative Language Model.

7.44.2 Member Data Documentation

7.44.2.1 Aqa

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.Aqa = "aqa" [static]
```

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.

Supports text input.

7.44.2.2 DisplayName

```
string Uralstech.UGemini.Models.GeminiModel.DisplayName
```

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

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

7.44.2.3 Gemini1_0Pro

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.Gemini1_0Pro = "gemini-1.0-pro" [static]
```

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

Supports text input.

7.44.2.4 Gemini1_0ProVision

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.Gemini1_0ProVision = "gemini-pro-vision" [static]
```

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

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

Supports image, video and text input.

7.44.2.5 Gemini1_5Flash

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.Gemini1_5Flash = "gemini-1.5-flash" [static]
```

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

Supports audio, image, video and text input.

7.44.2.6 Gemini1_5Pro

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.Gemini1_5Pro = "gemini-1.5-pro" [static]
```

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.

Supports audio, image, video and text input.

7.44.2.7 SupportedGenerationMethods

```
string [] Uralstech.UGemini.Models.GeminiModel.SupportedGenerationMethods
```

The model's supported generation methods.

The method names are defined as Pascal case strings, such as `generateMessage` which correspond to API methods.

7.44.2.8 Temperature

```
float Uralstech.UGemini.Models.GeminiModel.Temperature
```

Controls the randomness of the output.

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.

7.44.2.9 TextEmbedding004

```
readonly GeminiModelId Uralstech.UGemini.Models.GeminiModel.TextEmbedding004 = "text-embedding-004" [static]
```

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

Supports text input.

7.44.2.10 TopK

```
int Uralstech.UGemini.Models.GeminiModel.TopK
```

For Top-k sampling.

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.

7.44.2.11 TopP

```
float Uralstech.UGemini.Models.GeminiModel.TopP
```

For Nucleus sampling.

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.

7.44.2.12 Version

```
string Uralstech.UGemini.Models.GeminiModel.Version
```

The version number of the model.

This represents the major version

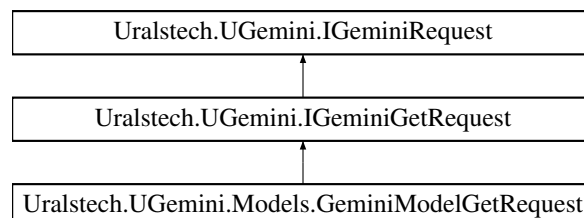
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/GeminiModel.cs

7.45 Uralstech.UGemini.Models.GeminiModelGetRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.GeminiModelGetRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiModelGetRequest](#) ([GeminiModelId](#) modelId, bool useBetaApi=false)

Creates a new [GeminiModelGetRequest](#).

Public Attributes

- string **ApiVersion**

The API version to use.

- string **ModelName**

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

7.45.1 Detailed Description

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

7.45.2 Constructor & Destructor Documentation**7.45.2.1 GeminiModelGetRequest()**

```
Uralstech.UGemini.Models.GeminiModelGetRequest.GeminiModelGetRequest (
    GeminiModelId modelId,
    bool useBetaApi = false)
```

Creates a new [GeminiModelGetRequest](#).

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

Parameters

modelId	The ID of the model to get.
useBetaApi	Should the request use the Beta API?

7.45.3 Member Function Documentation**7.45.3.1 GetEndpointUri()**

```
string Uralstech.UGemini.Models.GeminiModelGetRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

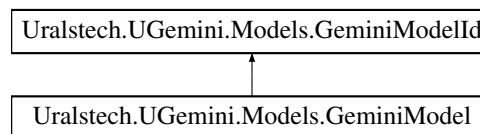
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Get/GeminiModelGetRequest.cs

7.46 Uralstech.UGemini.Models.GeminiModelId Class Reference

Information about the unique ID of a Generative Language Model.

Inheritance diagram for Uralstech.UGemini.Models.GeminiModelId:



Public Member Functions

- [GeminiModelId](#) (string nameOrBaseModelId)
Creates a new [GeminiModelId](#).
- [GeminiModelId](#) (string name, string baseModelId)
Creates a new [GeminiModelId](#).

Static Public Member Functions

- static implicit **operator string** ([GeminiModelId](#) model)
Gets the base model ID of the [GeminiModelId](#).
- static implicit **operator GeminiModelId** (string nameOrBaseModelId)
Creates a new [GeminiModelId](#) with the full name of the model resource (see [Name](#)) or the unique ID of the base model.

Public Attributes

- string [Name](#)
The resource name of the Model.
- string **BaseModelId**
The ID of the base model, pass this to the generation request.

Static Public Attributes

- const string **DefaultModelResourceLocation** = "models/"
The default resource location for all models.

7.46.1 Detailed Description

Information about the unique ID of a Generative Language Model.

7.46.2 Constructor & Destructor Documentation

7.46.2.1 GeminiModelId() [1/2]

```
Uralstech.UGemini.Models.GeminiModelId.GeminiModelId (  
    string nameOrBaseModelId)
```

Creates a new [GeminiModelId](#).

Parameters

<i>nameOrBaseModelId</i>	The full name of the model resource (see Name) or the unique ID of the base model.
--------------------------	---

7.46.2.2 GeminiModelId() [2/2]

```
Uralstech.UGemini.Models.GeminiModelId.GeminiModelId (  
    string name,  
    string baseModelId)
```

Creates a new [GeminiModelId](#).

Parameters

<i>name</i>	The resource name of the Model, see Name .
<i>baseModelId</i>	The ID of the base model.

7.46.3 Member Data Documentation

7.46.3.1 Name

```
string Uralstech.UGemini.Models.GeminiModelId.Name
```

The resource name of the Model.

Format: models/{model} with a {model} naming convention of:
"{baseModelId}-{version}"

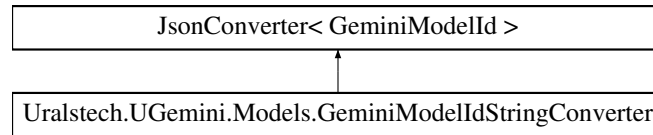
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/GeminiModelId.cs

7.47 Uralstech.UGemini.Models.GeminiModelIdStringConverter Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.GeminiModelIdStringConverter:



Public Member Functions

- override [GeminiModelId](#) **ReadJson** (JsonReader reader, Type objectType, [GeminiModelId](#) existingValue, bool hasExistingValue, JsonSerializer serializer)
/>
- override void **WriteJson** (JsonWriter writer, [GeminiModelId](#) value, JsonSerializer serializer)
/>

7.47.1 Detailed Description

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

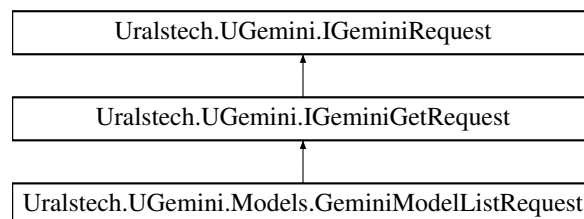
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/GeminiModelIdStringConverter.cs

7.48 Uralstech.UGemini.Models.GeminiModelListRequest Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.GeminiModelListRequest:



Public Member Functions

- string **GetEndpointUri** ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiModelListRequest](#) (bool useBetaApi=false)
Creates a new [GeminiModelListRequest](#).

Public Attributes

- string **ApiVersion**
The API version to use.
- int **MaxResponseModels** = 50
The maximum number of [Models](#) to return (per page).
- string **PageToken** = string.Empty
A page token from a previous models.list call.

7.48.1 Detailed Description

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

7.48.2 Constructor & Destructor Documentation**7.48.2.1 GeminiModelListRequest()**

```
Uralstech.UGemini.Models.GeminiModelListRequest.GeminiModelListRequest (
    bool useBetaApi = false)
```

Creates a new [GeminiModelListRequest](#).

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

Parameters

useBetaApi	Should the request use the Beta API?
------------	--------------------------------------

7.48.3 Member Function Documentation**7.48.3.1 GetEndpointUri()**

```
string Uralstech.UGemini.Models.GeminiModelListRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.48.4 Member Data Documentation

7.48.4.1 MaxResponseModels

```
int Uralstech.UGemini.Models.GeminiModelListRequest.MaxResponseModels = 50
```

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

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/List/GeminiModelListRequest.cs

7.49 Uralstech.UGemini.Models.GeminiModelListResponse Class Reference

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

Public Attributes

- [GeminiModel](#)[] **Models**
The list of models.
- string **NextPageToken**
A token that can be sent as a [GeminiModelListRequest.PageToken](#) into a subsequent [GeminiModelListRequest](#) call.

7.49.1 Detailed Description

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

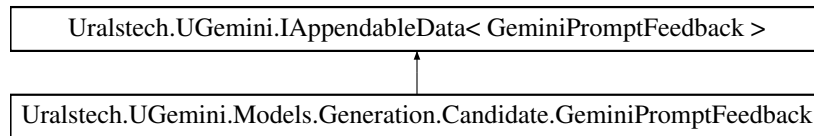
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/List/GeminiModelListResponse.cs

7.50 Uralstech.UGemini.Models.Generation.Candidate.GeminiPromptFeedback Class Reference

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

Inheritance diagram for Uralstech.UGemini.Models.Generation.Candidate.GeminiPromptFeedback:



Public Member Functions

- void **Append** ([GeminiPromptFeedback](#) data)

Public Member Functions inherited from [Uralstech.UGemini.IAppendableData< GeminiPromptFeedback >](#)

- void **Append** (T data)
Appends the data to the current IAppendableData<T>.

Public Attributes

- [GeminiBlockReason](#) **BlockReason**
If set, the prompt was blocked and no candidates are returned. Rephrase your prompt.
- [GeminiSafetyRating\[\]](#) **SafetyRatings**
Ratings for safety of the prompt. There is at most one rating per category.

7.50.1 Detailed Description

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

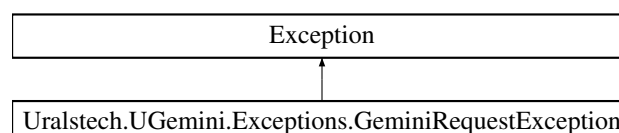
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Candidate/GeminiPromptFeedback.cs

7.51 Uralstech.UGemini.Exceptions.GeminiRequestException Class Reference

Thrown when a Gemini API request fails.

Inheritance diagram for Uralstech.UGemini.Exceptions.GeminiRequestException:



Public Attributes

- Uri **RequestEndpoint**
The endpoint of the failed request.
- long **RequestErrorCode**
The response code returned by the request.
- string **RequestError**
The name of the request's error.
- string **RequestErrorMessage**
The request's error message.
- bool **IsBetaApi**
Was the request on a beta API?

7.51.1 Detailed Description

Thrown when a Gemini API request fails.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Exceptions/GeminiRequestException.cs

7.52 Uralstech.UGemini.GeminiRequestMetadata Class Reference

Metadata about a computation request.

Public Attributes

- bool **IsStreaming**
Is the request being streamed?

7.52.1 Detailed Description

Metadata about a computation request.

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

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

7.53 Uralstech.UGemini.Models.Generation.Safety.GeminiSafetyRating Class Reference

[Safety](#) rating for a piece of content.

Public Attributes

- [GeminiSafetyHarmCategory](#) **Category**
The category for this rating.
- [GeminiHarmProbability](#) **Probability**
The probability of harm for this content.
- bool **Blocked**
Was this content blocked because of this rating?

7.53.1 Detailed Description

[Safety](#) rating for a piece of content.

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Safety/GeminiSafety↔
Rating.cs

7.54 Uralstech.UGemini.Models.Generation.Safety.GeminiSafetySettings Class Reference

[Safety](#) setting, affecting the safety-blocking behavior.

Public Attributes

- [GeminiSafetyHarmCategory](#) **Category**
The category for this setting.
- [GeminiSafetyHarmBlockThreshold](#) **Threshold**
Controls the probability threshold at which harm is blocked.

7.54.1 Detailed Description

[Safety](#) setting, affecting the safety-blocking behavior.

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Safety/GeminiSafety↔
Settings.cs

7.55 Uralstech.UGemini.Models.Generation.Schema.GeminiSchema Class Reference

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

Public Attributes

- [GeminiSchemaDataType](#) **Type**
Data type.
- [GeminiSchemaDataFormat](#) **Format** = [GeminiSchemaDataFormat.Unspecified](#)
The format of the data. This is used only for primitive datatypes.
- string **Description** = null
A brief description of the parameter. This could contain examples of use. Parameter description may be formatted as Markdown.
- bool? **Nullable** = null
Indicates if the value may be null.
- string[] **Enum** = null
Possible values of the element of [GeminiSchemaDataType.String](#) with enum format.
- long? **MaxItems** = null
Optional. Maximum number of the elements for [GeminiSchemaDataType.Array](#).
- Dictionary< string, [GeminiSchema](#) > **Properties** = null
The properties of [GeminiSchemaDataType.Object](#).
- string[] **Required** = null
Required properties of [GeminiSchemaDataType.Object](#).
- [GeminiSchema](#) **Items** = null
[Schema](#) of the elements of [GeminiSchemaDataType.Array](#).

7.55.1 Detailed Description

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

7.55.2 Member Data Documentation

7.55.2.1 Enum

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

Possible values of the element of [GeminiSchemaDataType.String](#) with enum format.

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",
    },
};
```

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

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

7.56 Uralstech.UGemini.Models.Content.Attribution.GeminiSemanticRetrieverChunk Class Reference

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

Public Attributes

- string **Source**
Name of the source matching the request's SemanticRetrieverConfig.source. Example: corpora/123 or corpora/123/documents/abc.
- string **Chunk**
Name of the Chunk containing the attributed text. Example: corpora/123/documents/abc/chunks/xyz.

7.56.1 Detailed Description

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/Attribution/GeminiSemanticRetrieverChunk.cs

7.57 Uralstech.UGemini.Models.Generation.QuestionAnswering.SemanticRetriever.GeminiSemanticRetrieverConfig Class Reference

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

Public Attributes

- string **Source**
Name of the resource for retrieval, e.g. corpora/123 or corpora/123/documents/abc.
- GeminiContent **Query**
Query to use for similarity matching Chunks in the given resource.
- GeminiMetadataFilter[] **MetadataFilters** = null
Filters for selecting Documents and/or Chunks from the resource.
- int **MaxChunksCount** = -1
Maximum number of relevant Chunks to retrieve.
- float **MinimumRelevanceScore** = -1f
Minimum relevance score for retrieved relevant Chunks.

7.57.1 Detailed Description

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Answer/SemanticRetriever/GeminiSemanticRetrieverConfig.cs

7.58 Uralstech.UGemini.Status.GeminiStatus Class Reference

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

Public Attributes

- int **Code**
The status code, which should be an enum value of google.rpc.Code.
- string [Message](#)
A developer-facing error message, which should be in English.
- [GeminiStatusDetails](#)[] **Details**
A list of messages that carry the error details. There is a common set of message types for APIs to use.

7.58.1 Detailed Description

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

Each [GeminiStatus](#) message contains three pieces of data: error code, error message, and error details.

7.58.2 Member Data Documentation

7.58.2.1 Message

```
string Uralstech.UGemini.Status.GeminiStatus.Message
```

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

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

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

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

7.59 Uralstech.UGemini.Status.GeminiStatusDetails Class Reference

An object containing fields of an arbitrary type.

Public Attributes

- string **Type**
Contains a URI identifying the type.
- Dictionary< string, JToken > **Data**
The actual details of the [GeminiStatusDetails](#) object.

7.59.1 Detailed Description

An object containing fields of an arbitrary type.

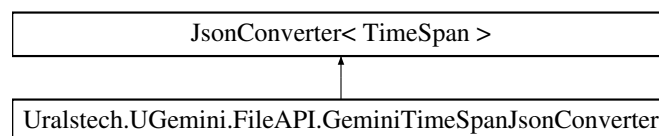
The documentation for this class was generated from the following file:

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

7.60 Uralstech.UGemini.FileAPI.GeminiTimeSpanJsonConverter Class Reference

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

Inheritance diagram for Uralstech.UGemini.FileAPI.GeminiTimeSpanJsonConverter:



Public Member Functions

- override TimeSpan **ReadJson** (JsonReader reader, Type objectType, TimeSpan existingValue, bool hasExistingValue, JsonSerializer serializer)
/>
- override void **WriteJson** (JsonWriter writer, TimeSpan value, JsonSerializer serializer)
/>

7.60.1 Detailed Description

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

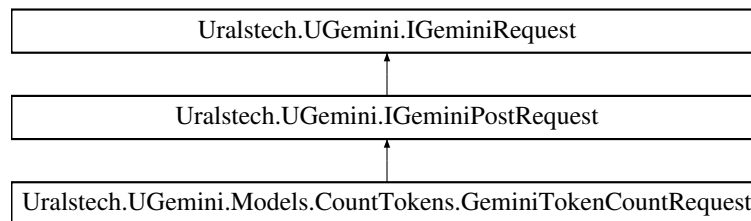
The documentation for this class was generated from the following file:

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

7.61 Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest Class Reference

Request to count tokens in given content.

Inheritance diagram for Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Parameters

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

Returns

The URI.

- [GeminiTokenCountRequest](#) ([GeminiModelId](#) model, bool useBetaApi=false)
Creates a new [GeminiTokenCountRequest](#).
- string [GetUtf8EncodedData](#) ()
Converts the request object to a UTF-8 encoded string.

Returns

The string data.

Public Attributes

- [GeminiContent](#)[] **Contents** = null
The input given to the model as a prompt. This field is ignored when [CompleteRequest](#) is set.
- [GeminiChatRequest](#) **CompleteRequest** = null
The overall input given to the model. [CountTokens](#) will count prompt, function calling, etc.
- [GeminiModelId](#) **Model**
The model to use.
- string **ApiVersion**
The API version to use.

Properties

- string [ContentType](#) [get]
The MIME type of the request content.

Properties inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

7.61.1 Detailed Description

Request to count tokens in given content.

7.61.2 Constructor & Destructor Documentation

7.61.2.1 GeminiTokenCountRequest()

```
Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest.GeminiTokenCountRequest (
    GeminiModelId model,
    bool useBetaApi = false)
```

Creates a new [GeminiTokenCountRequest](#).

Parameters

<i>model</i>	The model to use.
<i>useBetaApi</i>	Should the request use the Beta API?

7.61.3 Member Function Documentation

7.61.3.1 GetEndpointUri()

```
string Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implements [Uralstech.UGemini.IGeminiRequest](#).

7.61.3.2 GetUtf8EncodedData()

```
string Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest.GetUtf8EncodedData ()
```

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

Returns

The string data.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

7.61.4 Property Documentation

7.61.4.1 ContentType

```
string Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest.ContentType [get]
```

The MIME type of the request content.

Implements [Uralstech.UGemini.IGeminiPostRequest](#).

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/CountTokens/GeminiTokenCountRequest.cs

7.62 Uralstech.UGemini.Models.CountTokens.GeminiTokenCountResponse Class Reference

A response from [CountTokens](#).

Public Attributes

- int [TotalTokens](#)
The number of tokens that the model tokenizes the prompt into.

7.62.1 Detailed Description

A response from [CountTokens](#).

7.62.2 Member Data Documentation

7.62.2.1 TotalTokens

```
int Uralstech.UGemini.Models.CountTokens.GeminiTokenCountResponse.TotalTokens
```

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

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

Cached content is not supported in this package.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/CountTokens/GeminiTokenCountResponse.cs

7.63 Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↔ Tool Class Reference

Tool details that the model may use to generate response.

Public Attributes

- [GeminiFunctionDeclaration](#)[] [FunctionDeclarations](#) = null
A list of FunctionDeclarations available to the model that can be used for function calling.
- [GeminiCodeExecution](#) [CodeExecution](#) = null
Enables the model to execute code as part of generation.

7.63.1 Detailed Description

Tool details that the model may use to generate response.

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

7.63.2 Member Data Documentation

7.63.2.1 FunctionDeclarations

```
GeminiFunctionDeclaration [ ] Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↔
Tool.FunctionDeclarations = null
```

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

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

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

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/Declaration/Gemini↔
Tool.cs

7.64 Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↔ ToolConfiguration Class Reference

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

Static Public Member Functions

- static [GeminiToolConfiguration](#) [GetConfiguration](#) ([GeminiFunctionCallingMode](#) callingMode, string[] allowedFunctions=null)
Creates a new [GeminiToolConfiguration](#).

Public Attributes

- [GeminiFunctionCallingConfiguration](#) **FunctionCallingConfig** = null
Function calling config.

7.64.1 Detailed Description

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

7.64.2 Member Function Documentation**7.64.2.1 GetConfiguration()**

```
static GeminiToolConfiguration Uralstech.UGemini.Models.Generation.Tools.Declaration.Gemini↔
ToolConfiguration.GetConfiguration (
    GeminiFunctionCallingMode callingMode,
    string[] allowedFunctions = null) [static]
```

Creates a new [GeminiToolConfiguration](#).

Parameters

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

Returns

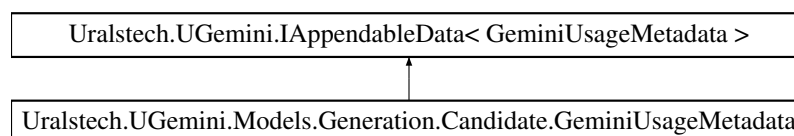
The documentation for this class was generated from the following file:

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Tools/Declaration/Gemini↔ToolConfiguration.cs

7.65 Uralstech.UGemini.Models.Generation.Candidate.GeminiUsage↔Metadata Class Reference

Metadata on the generation request's token usage.

Inheritance diagram for Uralstech.UGemini.Models.Generation.Candidate.GeminiUsageMetadata:



Public Member Functions

- void **Append** ([GeminiUsageMetadata](#) data)

Public Member Functions inherited from**[Uralstech.UGemini.IAppendableData](#)< [GeminiUsageMetadata](#) >**

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

Public Attributes

- int [PromptTokenCount](#)
Number of tokens in the prompt. When `cachedContent` is set, this is still the total effective prompt size. I.e. this includes the number of tokens in the cached content.
- int **CachedContentTokenCount**
Number of tokens in the cached part of the prompt, i.e. in the cached content.
- int **CandidatesTokenCount**
Total number of tokens across the generated candidates.
- int **TotalTokenCount**
Total token count for the generation request (prompt + candidates).

7.65.1 Detailed Description

Metadata on the generation request's token usage.

7.65.2 Member Data Documentation**7.65.2.1 PromptTokenCount**

```
int Uralstech.UGemini.Models.Generation.Candidate.GeminiUsageMetadata.PromptTokenCount
```

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

Cached content is not supported in this package.

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

- [UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Generation/Candidate/GeminiUsageMetadata.cs](#)

7.66 Uralstech.UGemini.IAppendableData< T > Interface Template Reference

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

Public Member Functions

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

7.66.1 Detailed Description

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

Template Parameters

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

7.66.2 Member Function Documentation

7.66.2.1 Append()

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

Appends the *data* to the current IAppendableData<T>.

Parameters

<i>data</i>	The data to append.
-------------	---------------------

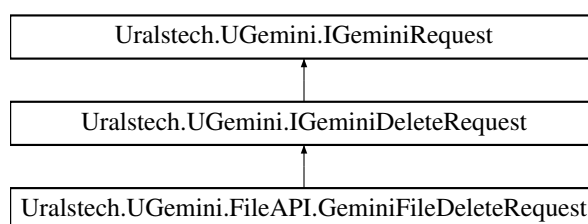
The documentation for this interface was generated from the following file:

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

7.67 Uralstech.UGemini.IGeminiDeleteRequest Interface Reference

All Gemini API DELETE requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiDeleteRequest:



Additional Inherited Members

Public Member Functions inherited from Uralstech.UGemini.IGeminiRequest

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

7.67.1 Detailed Description

All Gemini API DELETE requests must inherit from this interface.

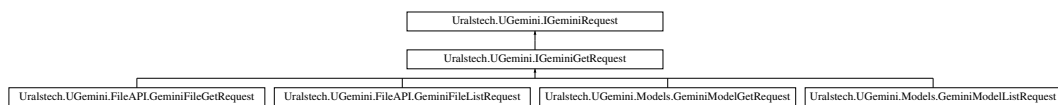
The documentation for this interface was generated from the following file:

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

7.68 Uralstech.UGemini.IGeminiGetRequest Interface Reference

All Gemini API GET requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiGetRequest:



Additional Inherited Members

Public Member Functions inherited from Uralstech.UGemini.IGeminiRequest

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

7.68.1 Detailed Description

All Gemini API GET requests must inherit from this interface.

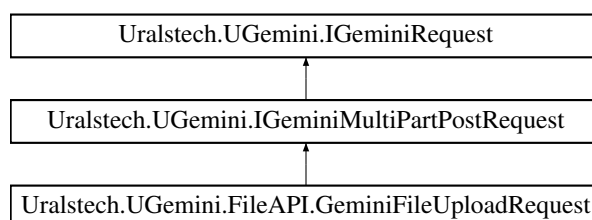
The documentation for this interface was generated from the following file:

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

7.69 Uralstech.UGemini.IGeminiMultiPartPostRequest Interface Reference

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

Inheritance diagram for Uralstech.UGemini.IGeminiMultiPartPostRequest:



Public Member Functions

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

Public Member Functions inherited from [Uralstech.UGemini.IGeminiRequest](#)

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

7.69.1 Detailed Description

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

7.69.2 Member Function Documentation**7.69.2.1 GetUtf8EncodedData()**

```
string Uralstech.UGemini.IGeminiMultiPartPostRequest.GetUtf8EncodedData (
    string dataSeperator)
```

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

Parameters

<i>dataSeperator</i>	The boundary to seperate each part of the data.
----------------------	---

Returns

The string data.

Implemented in [Uralstech.UGemini.FileAPI.GeminiFileUploadRequest](#).

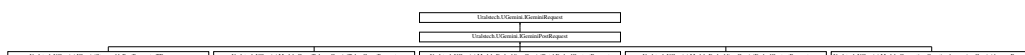
The documentation for this interface was generated from the following file:

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

7.70 Uralstech.UGemini.IGeminiPostRequest Interface Reference

All Gemini API POST requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiPostRequest:



Public Member Functions

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

Public Member Functions inherited from [Uralstech.UGemini.IGeminiRequest](#)

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Properties

- string [ContentType](#) [get]
The MIME type of the request content.

7.70.1 Detailed Description

All Gemini API POST requests must inherit from this interface.

7.70.2 Member Function Documentation

7.70.2.1 [GetUtf8EncodedData\(\)](#)

```
string Uralstech.UGemini.IGeminiPostRequest.GetUtf8EncodedData ()
```

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

Returns

The string data.

Implemented in [Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest](#), [Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest](#), and [Uralstech.UGemini.Models.Generation.QuestionAnswerRequest](#).

7.70.3 Property Documentation

7.70.3.1 [ContentType](#)

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

The MIME type of the request content.

Implemented in [Uralstech.UGemini.Models.CountTokens.GeminiTokenCountRequest](#), [Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest](#), and [Uralstech.UGemini.Models.Generation.QuestionAnswerRequest](#).

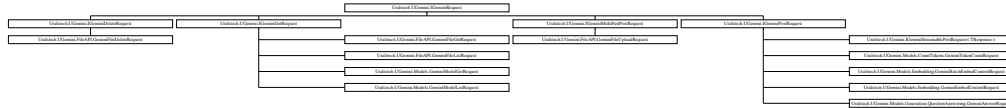
The documentation for this interface was generated from the following file:

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

7.71 Uralstech.UGemini.IGeminiRequest Interface Reference

All Gemini API requests must inherit from this interface.

Inheritance diagram for Uralstech.UGemini.IGeminiRequest:



Public Member Functions

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

7.71.1 Detailed Description

All Gemini API requests must inherit from this interface.

7.71.2 Member Function Documentation

7.71.2.1 GetEndpointUri()

```
string Uralstech.UGemini.IGeminiRequest.GetEndpointUri (
    GeminiRequestMetadata metadata)
```

Gets the URI to the API endpoint.

Parameters

<i>metadata</i>	The metadata of the request to be carried out on the URI.
-----------------	---

Returns

The URI.

Implemented in [Uralstech.UGemini.FileAPI.GeminiFileDeleteRequest](#), [Uralstech.UGemini.FileAPI.GeminiFileGetRequest](#), [Uralstech.UGemini.FileAPI.GeminiFileListRequest](#), [Uralstech.UGemini.FileAPI.GeminiFileUploadRequest](#), [Uralstech.UGemini.Models.Embedding.GeminiBatchEmbedContentRequest](#), [Uralstech.UGemini.Models.Embedding.GeminiEmbedContentRequest](#), [Uralstech.UGemini.Models.GeminiModelGetRequest](#), [Uralstech.UGemini.Models.GeminiModelListRequest](#), and [Uralstech.UGemini.Models.Generation.QuestionAnswering.GeminiAnswerRequest](#).

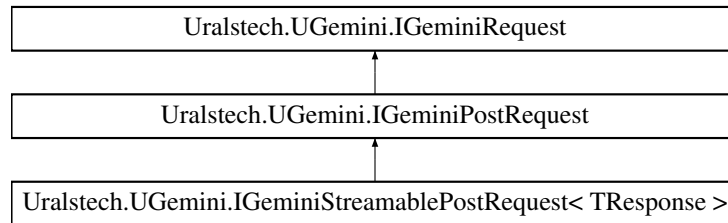
The documentation for this interface was generated from the following file:

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

7.72 Uralstech.UGemini.IGeminiStreamablePostRequest< TResponse > Interface Template Reference

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

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



Public Member Functions

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

Public Member Functions inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

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

Public Member Functions inherited from [Uralstech.UGemini.IGeminiRequest](#)

- string [GetEndpointUri](#) ([GeminiRequestMetadata](#) metadata)
Gets the URI to the API endpoint.

Properties

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

Properties inherited from [Uralstech.UGemini.IGeminiPostRequest](#)

- string [ContentType](#) [get]
The MIME type of the request content.

7.72.1 Detailed Description

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

Template Parameters

<i>TResponse</i>	The streamed response type.
------------------	-----------------------------

Type Constraints

TResponse : *IAppendableData*<*TResponse*>

7.72.2 Member Function Documentation

7.72.2.1 ProcessStreamedData()

```
Task Uralstech.UGemini.IGeminiStreamablePostRequest< TResponse >.ProcessStreamedData (
    List< JToken > allEvents,
    JToken lastEvent)
```

Callback to process Server Sent Events (SSEs).

Parameters

<i>allEvents</i>	All previously sent SSEs.
<i>lastEvent</i>	The latest SSE.

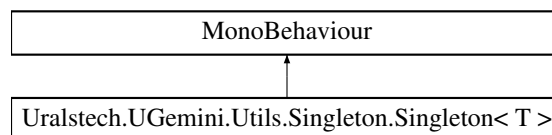
The documentation for this interface was generated from the following file:

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

7.73 Uralstech.UGemini.Utls.Singleton.Singleton< T > Class Template Reference

Utility class to make inheriting types singletons.

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



Properties

- static **T Instance** [get]
The active instance of type *T*.

7.73.1 Detailed Description

Utility class to make inheriting types singletons.

Template Parameters

<i>T</i>	The type to be made a singleton.
----------	----------------------------------

Type Constraints

T* : *Component

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

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

7.74 Uralstech.UGemini.Models.Content.UnityExtensions Class Reference

Extensions for Unity types.

Static Public Member Functions

- static byte[] [ToWAV](#) (this AudioClip clip)
Converts the given AudioClip to WAV bytes.
- static string [ToBase64WAV](#) (this AudioClip clip)
Converts the given AudioClip to a WAV Base64 encoded string.
- static string [ToBase64PNG](#) (this Texture2D image)
Converts the given Texture2D to a PNG Base64 encoded string.
- static string [ToBase64JPEG](#) (this Texture2D image)
Converts the given Texture2D to a JPEG Base64 encoded string.

7.74.1 Detailed Description

Extensions for Unity types.

7.74.2 Member Function Documentation

7.74.2.1 ToBase64JPEG()

```
static string Uralstech.UGemini.Models.Content.UnityExtensions.ToBase64JPEG (
    this Texture2D image) [static]
```

Converts the given Texture2D to a JPEG Base64 encoded string.

Parameters

<i>image</i>	The Texture2D.
--------------	----------------

Returns

The Base64 encoded string.

7.74.2.2 ToBase64PNG()

```
static string Uralstech.UGemini.Models.Content.UnityExtensions.ToBase64PNG (
    this Texture2D image) [static]
```

Converts the given Texture2D to a PNG Base64 encoded string.

Parameters

<i>image</i>	The Texture2D.
--------------	----------------

Returns

The Base64 encoded string.

7.74.2.3 ToBase64WAV()

```
static string Uralstech.UGemini.Models.Content.UnityExtensions.ToBase64WAV (  
    this AudioClip clip) [static]
```

Converts the given AudioClip to a WAV Base64 encoded string.

Parameters

<i>clip</i>	The AudioClip.
-------------	----------------

Returns

The Base64 encoded string.

7.74.2.4 ToWAV()

```
static byte[] Uralstech.UGemini.Models.Content.UnityExtensions.ToWAV (  
    this AudioClip clip) [static]
```

Converts the given AudioClip to WAV bytes.

Parameters

<i>clip</i>	The AudioClip.
-------------	----------------

Returns

The WAV encoded byte array.

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Data/Models/Content/UnityExtensions.cs

7.75 Uralstech.UGemini.Utils.Web.WebRequestHelper Class Reference

Extensions for the UnityWebRequest type.

Static Public Member Functions

- static async Task [SendStreamingWebRequest](#) (this UnityWebRequest webRequest, Func< List< JToken >, JToken, Task > serverSentEventHandler)

Sends a streaming web request.

7.75.1 Detailed Description

Extensions for the UnityWebRequest type.

7.75.2 Member Function Documentation

7.75.2.1 SendStreamingWebRequest()

```
static async Task Uralstech.UGemini.Utils.Web.WebRequestHelper.SendStreamingWebRequest (
    this UnityWebRequest webRequest,
    Func< List< JToken >, JToken, Task > serverSentEventHandler) [static]
```

Sends a streaming web request.

Parameters

<i>webRequest</i>	The request to send.
<i>serverSentEventHandler</i>	The callback to handle Server Sent Events (SSEs). Parameters: <ul style="list-style-type: none">List<JToken> : All SSEs, excluding the latest one.JToken : The latest SSE. Return type: Task

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

- UGemini/Packages/com.uralstech.ugemini/Runtime/Scripts/Utils/WebRequestHelper.cs

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