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# Namespace Uralstech.UMoth

## Classes

### [HashUtils](#)

Utilities for cryptographically secure hashing.

# Class HashUtils

Namespace: [Uralstech.UMoth](#)

Utilities for cryptographically secure hashing.

```
public static class HashUtils
```

## Inheritance

object ← HashUtils

## Methods

### RandomNonceString(int)

Generates a cryptographically secure nonce of length **length**.

```
public static string RandomNonceString(int length = 32)
```

## Parameters

**length** int

The length of the nonce.

## Returns

string

The generated nonce.

## Remarks

Loosely based on this [Firebase example](#):

## Exceptions

ArgumentException

Thrown if `length` is  $\leq 0$ .

## Sha256Hash(string)

Hashes a string using SHA256 and returns it encoded as a HEX string.

```
public static string Sha256Hash(string content)
```

### Parameters

`content` string

The content to hash.

### Returns

string

The hashed data as a HEX string.

### Exceptions

ArgumentException

Thrown if `content` is [null](#) or empty.

# Namespace Uralstech.UMoth.AppleIdSignIn

## Classes

### [AppleIdCredential](#)

An AppleID account credential.

### [AppleIdSignInManager](#)

Class to handle AppleID account sign-in.

### [PersonNameComponents](#)

The components of the user's name.

## Enums

### [AppleIdCredentialState](#)

Possible values for the credential state of a user.

### [AppleIdScope](#)

The kinds of contact information that can be requested from the user.

### [AppleIdSignInErrorCode](#)

Errors that can occur during authorization.

### [AppleIdUserAgeRange](#)

Wrapper for ASUserAgeRange.

### [AppleIdUserDetectionStatus](#)

Wrapper for ASUserDetectionStatus.

# Class AppleIdCredential

Namespace: [Uralstech.UMoTh.AppleIdSignIn](#)

An AppleID account credential.

```
public record AppleIdCredential
```

## Inheritance

object ← AppleIdCredential

## Constructors

AppleIdCredential(string, string?, AppleIdScope, string?, string?, string?, PersonNameComponents?, AppleIdUserDetectionStatus, AppleIdUserAgeRange)

```
protected AppleIdCredential(string userId, string? state, AppleIdScope scopes, string? authorizationCode, string? identityToken, string? email, PersonNameComponents? fullName, AppleIdUserDetectionStatus realUserStatus, AppleIdUserAgeRange userAgeRange)
```

## Parameters

**userId** string

**state** string

**scopes** [AppleIdScope](#)

**authorizationCode** string

**identityToken** string

**email** string

**fullName** [PersonNameComponents](#)

**realUserStatus** [AppleIdUserDetectionStatus](#)

## Fields

### AuthorizationCode

A short-lived, one-time valid token that provides proof of authorization to the server component of the app. The authorization code is bound to the specific transaction using the state attribute passed in the authorization request. The server component of the app can validate the code using Apple's identity service endpoint provided for this purpose.

```
public readonly string? AuthorizationCode
```

Field Value

string

### Email

An optional email shared by the user. This field is populated with a value that the user authorized.

```
public readonly string? Email
```

Field Value

string

### FullName

An optional full name shared by the user. This field is populated with a value that the user authorized.

```
public readonly PersonNameComponents? FullName
```

Field Value

[PersonNameComponents](#)

# IdentityToken

A JSON Web Token (JWT) used to communicate information about the identity of the user in a secure way to the app. The ID token will contain the following information: Issuer Identifier, Subject Identifier, Audience, Expiry Time and Issuance Time signed by Apple's identity service.

```
public readonly string? IdentityToken
```

## Field Value

string

# RealUserStatus

Check this property for a hint as to whether the current user is a "real user". See the documentation for `ASUserDetectionStatus` for guidelines on handling each status.

```
public readonly AppleIdUserDetectionStatus RealUserStatus
```

## Field Value

[AppleIdUserDetectionStatus](#)

# Scopes

This value will contain a list of scopes for which the user provided authorization. These may contain a subset of the requested scopes on @see `ASAuthorizationAppleIDRequest`. The application should query this value to identify which scopes were returned as it maybe different from ones requested.

```
public readonly AppleIdScope Scopes
```

## Field Value

[AppleIdScope](#)



## Remarks

TODO: Fix this, it always returns 0.

## State

Data that's returned to you unmodified in the corresponding credential after a successful authentication.

```
public readonly string? State
```

## Field Value

string

## UserAgeRange

Check this property to determine whether the current user is a child. See the documentation for `ASUserAgeRange` for guidelines on handling each status.

```
public readonly AppleIdUserAgeRange UserAgeRange
```

## Field Value

[AppleIdUserAgeRange](#)

## UserId

An opaque user ID associated with the AppleID used for the sign in. This identifier will be stable across the 'developer team'.

```
public readonly string UserId
```

## Field Value

string

# Enum AppleIdCredentialState

Namespace: [Uralstech.UMoth.AppleIdSignIn](#)

Possible values for the credential state of a user.

```
public enum AppleIdCredentialState
```

## Fields

**Authorized = 1**

The user is authorized.

**NotFound = 2**

The user hasn't established a relationship with Sign in with Apple.

**Revoked = 0**

The given user's authorization has been revoked and they should be signed out.

**Transferred = 3**

The app has been transferred to a different team, and you need to migrate the user's identifier.

# Enum AppleIdScope

Namespace: [Uralstech.UMoth.AppleIdSignIn](#)

The kinds of contact information that can be requested from the user.

```
[Flags]  
public enum AppleIdScope
```

## Fields

Email = 2

A scope that includes the user's full name.

FullName = 1

A scope that includes the user's email address.

None = 0

No scopes have been authorized.

# Enum AppleIdSignInErrorCode

Namespace: [Uralstech.UMoTh.AppleIdSignIn](#)

Errors that can occur during authorization.

```
public enum AppleIdSignInErrorCode
```

## Fields

**Canceled = 1001**

The user canceled the authorization attempt.

**CredentialExport = 1008**

The credential export request failed.

**CredentialImport = 1007**

The credential import request failed.

**Failed = 1004**

The authorization attempt failed.

**InvalidResponse = 1002**

The authorization request received an invalid response.

**MatchedExcludedCredential = 1006**

This error should only be returned when specifying @c excludedCredentials on a public key credential registration request.

**NotHandled = 1003**

The authorization request wasn't handled.

**NotInteractive = 1005**

The authorization request isn't interactive.

**Unknown = 1000**

The authorization attempt failed for an unknown reason.

`UnknownCredentialType = -1`

An unknown credential type was returned.

This is not a part of `ASAuthorizationError.Code` but a custom error returned by the native plugin.

# Class AppleIdSignInManager

Namespace: [Uralstech.UMoTh.AppleIdSignIn](#)

Class to handle AppleID account sign-in.

```
public class AppleIdSignInManager : DontCreateNewSingleton<AppleIdSignInManager>
```

## Inheritance

object ← AppleIdSignInManager

## Fields

### OnGotCredentialState

Called when the credential state checking operation completes, with the state and any error that occurred.

```
public UnityEvent<AppleIdCredentialState, string?> OnGotCredentialState
```

#### Field Value

UnityEvent<[AppleIdCredentialState](#), string>

### OnSignInFailed

Called when the sign-in flow fails, with the failure reason.

```
public UnityEvent<AppleIdSignInErrorCode> OnSignInFailed
```

#### Field Value

UnityEvent<[AppleIdSignInErrorCode](#)>

### OnSignedIn

Called when the sign-in flow succeeds, with the AppleID credential.

```
public UnityEvent<AppleIdCredential> OnSignedIn
```

Field Value

UnityEvent<[AppleIdCredential](#)>

## Methods

### Awake()

```
protected override void Awake()
```

### GetCredentialState(string)

Returns the credential state for the given user in [OnGotCredentialState](#).

```
public void GetCredentialState(string userId)
```

Parameters

**userId** string

An opaque string associated with the Apple ID that your app receives in the credential's user property after performing a successful authentication request.

### GetCredentialStateAsync(string)

Returns the credential state for the given user.

```
public Awaitable<(AppleIdCredentialState state, string? errorDescription)>  
GetCredentialStateAsync(string userId)
```

Parameters

`userId` string

An opaque string associated with the Apple ID that your app receives in the credential's user property after performing a successful authentication request.

## Returns

Awaitable<(AppleIdCredentialState state, string errorDescription)>

The state and any error that occurred.

## ReadNameComponentsToManagedType(ref NativePersonNameComponents?)

Reads a [NativePersonNameComponents](#) object into an instance of [PersonNameComponents](#).

```
protected static PersonNameComponents? ReadNameComponentsToManagedType(ref
NativePersonNameComponents? nativeComponents)
```

## Parameters

`nativeComponents` [NativePersonNameComponents?](#)

The native object to read.

## Returns

[PersonNameComponents](#)

The managed object or [null](#) if `nativeComponents` is [null](#).

## Remarks

While this method DOES NOT dispose of `nativeComponents`, it does dispose of its [Phonetic Representation](#).

## SignIn(AppleIdScope, string?, string?)

Starts the AppleID Sign-In flow.



```
public void SignIn(AppleIdScope requestedScopes, string? nonce = null, string? state = null)
```

## Parameters

**requestedScopes** [AppleIdScope](#)

The kinds of contact information that can be requested from the user.

**nonce** string

A string value to pass to the identity provider.

**state** string

Data that's returned to you unmodified in the corresponding credential after a successful authentication.

## SignInAsync(AppleIdScope, string?, string?)

Starts the AppleID Sign-In flow.

```
public Awaitable<(AppleIdCredential?, AppleIdSignInErrorCode)> SignInAsync(AppleIdScope requestedScopes, string? nonce = null, string? state = null)
```

## Parameters

**requestedScopes** [AppleIdScope](#)

The kinds of contact information that can be requested from the user.

**nonce** string

A string value to pass to the identity provider.

**state** string

Data that's returned to you unmodified in the corresponding credential after a successful authentication.

## Returns

Awaitable<[AppleIdCredential](#), [AppleIdSignInErrorCode](#)>

The AppleID credential or the failure reason.

# Enum AppleIdUserAgeRange

Namespace: [Uralstech.UMoth.AppleIdSignIn](#)

Wrapper for ASUserAgeRange.

```
public enum AppleIdUserAgeRange
```

## Fields

**Child = 2**

The user is a child.

**NotAvailable = 0**

The age range was not returned during the sign-in operation.

This is not a part of ASUserAgeRange, but is returned if the device or OS does not support ASUserAgeRange.

**NotChild = 3**

The user is not a child.

**Unknown = 1**

This is returned if the project is missing the required entitlement to support child accounts.

# Enum AppleIdUserDetectionStatus

Namespace: [Uralstech.UMoth.AppleIdSignIn](#)

Wrapper for ASUserDetectionStatus.

```
public enum AppleIdUserDetectionStatus
```

## Fields

**LikelyReal = 2**

A hint that we have high confidence that the user is real.

**Unknown = 1**

We could not determine the value. New users in the ecosystem will get this value as well, so you should not block these users, but instead treat them as any new user through standard email sign up flows.

**Unsupported = 0**

Not supported on current platform, ignore the value.

# Class PersonNameComponents

Namespace: [Uralstech.UMoth.AppleIdSignIn](#)

The components of the user's name.

```
public record PersonNameComponents
```

## Inheritance

object ← PersonNameComponents

## Constructors

PersonNameComponents(string?, string?, string?, string?, string?, string?, PersonNameComponents?)

```
protected PersonNameComponents(string? namePrefix, string? givenName,  
string? middleName, string? familyName, string? nameSuffix, string? nickname,  
PersonNameComponents? phoneticRepresentation)
```

## Parameters

**namePrefix** string

**givenName** string

**middleName** string

**familyName** string

**nameSuffix** string

**nickname** string

**phoneticRepresentation** [PersonNameComponents](#)

## Fields

## FamilyName

The user's family name, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? FamilyName
```

### Field Value

string

## GivenName

The user's given name, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? GivenName
```

### Field Value

string

## MiddleName

The user's middle name, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? MiddleName
```

### Field Value

string

## NamePrefix

Prefix to the user's name, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? NamePrefix
```

Field Value

string

## NameSuffix

Suffix to the user's name, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? NameSuffix
```

Field Value

string

## Nickname

The user's nickname, or its phonetic representation if this object is from [PhoneticRepresentation](#).

```
public readonly string? Nickname
```

Field Value

string

## PhoneticRepresentation

Phonetic representation of this object's values.

```
public readonly PersonNameComponents? PhoneticRepresentation
```

Field Value

[PersonNameComponents](#)

# Namespace Uralstech.UMoth.AppleIdSign

## In.Native

### Classes

#### [NativeCalls](#)

Interface for the native Swift plugin.

### Structs

#### [NativeAppleIdCredential](#)

Wrapper for iOS's native ASAuthorizationAppleIDCredential.

#### [NativePersonNameComponents](#)

Wrapper for iOS's PersonNameComponents.

### Delegates

#### [NativeCalls.GetCredentialStateCallback](#)

Callback delegate for when ASAuthorizationAppleIDProvider.getCredentialState() completes executing.

#### [NativeCalls.OnSignInFailedCallback](#)

Callback delegate for when AppleID Sign-In fails.

#### [NativeCalls.OnSignedInCallback](#)

Callback delegate for when AppleID Sign-In completes successfully.



# Struct NativeAppleIdCredential

Namespace: [Uralstech.UMoth.AppleIdSignIn.Native](#)

Wrapper for iOS's native ASAuthorizationAppleIDCredential.

```
public struct NativeAppleIdCredential
```

## Fields

### AuthorizationCode

A short-lived, one-time valid token that provides proof of authorization to the server component of the app. The authorization code is bound to the specific transaction using the state attribute passed in the authorization request. The server component of the app can validate the code using Apple's identity service endpoint provided for this purpose.

```
public string? AuthorizationCode
```

### Field Value

string

### Email

An optional email shared by the user. This field is populated with a value that the user authorized.

```
public string? Email
```

### Field Value

string

### FullName

An optional full name shared by the user. This field is populated with a value that the user authorized.

```
public nint FullName
```

Field Value

nint

Remarks

This is an instance of [NativePersonNameComponents](#). If it has not been unwrapped, it will be freed when this struct's [Dispose\(\)](#) is called. If unwrapped using [UnwrapFullName\(\)](#), the caller is responsible for disposing the returned object.

## IdentityToken

A JSON Web Token (JWT) used to communicate information about the identity of the user in a secure way to the app. The ID token will contain the following information: Issuer Identifier, Subject Identifier, Audience, Expiry Time and Issuance Time signed by Apple's identity service.

```
public string? IdentityToken
```

Field Value

string

## RealUserStatus

Check this property for a hint as to whether the current user is a "real user". See the documentation for [ASUserDetectionStatus](#) for guidelines on handling each status.

```
public byte RealUserStatus
```

Field Value

byte

## Scopes

This value will contain a list of scopes for which the user provided authorization. These may contain a subset of the requested scopes on @see ASAuthorizationAppleIDRequest. The application should query this value to identify which scopes were returned as it maybe different from ones requested.

```
public byte Scopes
```

### Field Value

byte

### Remarks

TODO: Fix this, it always returns 0.

## State

Data that's returned to you unmodified in the corresponding credential after a successful authentication.

```
public string? State
```

### Field Value

string

## UserAgeRange

Check this property to determine whether the current user is a child. See the documentation for ASUserAgeRange for guidelines on handling each status.

```
public byte UserAgeRange
```

### Field Value

byte

# UserId

An opaque user ID associated with the AppleID used for the sign in. This identifier will be stable across the 'developer team'.

```
public string UserId
```

## Field Value

string

## Methods

### Dispose()

Deallocates native resources.

```
public void Dispose()
```

## Remarks

This struct has been intentionally not set as IDisposable to prevent accidental struct copies caused by "using" statements.

### UnwrapFullName()

Unwraps [FullName](#) into an instance of [NativePersonNameComponents](#).

```
public NativePersonNameComponents? UnwrapFullName()
```

## Returns

[NativePersonNameComponents?](#)

The unwrapped struct or [null](#)  if [FullName](#) is a nullptr.

## Remarks

This can only be called once, as after [FullName](#) is unwrapped, the reference is deallocated. This is to prevent multiple copies of the same memory from being created.

# Class NativeCalls

Namespace: [Uralstech.UMoth.AppleIdSignIn.Native](#)

Interface for the native Swift plugin.

```
public static class NativeCalls
```

## Inheritance

object ← NativeCalls

## Methods

umoth\_appleid\_auth\_get\_credential\_state(string, GetCredentialStateCallback)

Returns the credential state for the given user in a completion handler.

```
public static extern void umoth_appleid_auth_get_credential_state(string userId,
NativeCalls.GetCredentialStateCallback callback)
```

## Parameters

**userId** string

An opaque string associated with the Apple ID that your app receives in the credential's user property after performing a successful authentication request.

**callback** [NativeCalls.GetCredentialStateCallback](#)

A block the method calls to report the state and an optional error condition.

umoth\_appleid\_auth\_start\_sign\_in(byte, string?, string?, OnSignedInCallback, OnSignInFailedCallback)

Starts an AppleID Sign-In request.

```
public static extern void umoth_appleid_auth_start_sign_in(byte requestScopes, string?
nonce, string? state, NativeCalls.OnSignedInCallback onSignedInCallback,
NativeCalls.OnSignInFailedCallback onSignInFailedCallback)
```

## Parameters

**requestScopes** byte

The data scopes to request from the user.

**nonce** string

An optional nonce for the request.

**state** string

An optional state for the request which will be returned in the resulting  
ASAuthorizationAppleIDCredential.

**onSignedInCallback** [NativeCalls.OnSignedInCallback](#)

Success callback.

**onSignInFailedCallback** [NativeCalls.OnSignInFailedCallback](#)

Failure callback.

## umoth\_free\_native\_buffer(nint)

Frees up a buffer allocated from native code using Swift's UnsafeMutablePointer.allocate.

```
public static extern void umoth_free_native_buffer(nint ptr)
```

## Parameters

**ptr** nint

The buffer to deallocate.

# Delegate

## NativeCalls.GetCredentialStateCallback

Namespace: [Uralstech.UMoth.AppleIdSignIn.Native](#)

Callback delegate for when `ASAuthorizationAppleIDProvider.getCredentialState()` completes executing.

```
public delegate void NativeCalls.GetCredentialStateCallback(byte state,  
string? errorDescription)
```

### Parameters

**state** byte

The state of the credential.

**errorDescription** string

Any error which occurred while trying to get the state.



# Delegate NativeCalls.OnSignInFailedCallback

Namespace: [Uralstech.UMoth.AppleIdSignIn.Native](#)

Callback delegate for when AppleID Sign-In fails.

```
public delegate void NativeCalls.OnSignInFailedCallback(short errorCode)
```

## Parameters

**errorCode** short

The error code.

# Delegate NativeCalls.OnSignedInCallback

Namespace: [Uralstech.UMoth.AppleIdSignIn.Native](#)

Callback delegate for when AppleID Sign-In completes successfully.

```
public delegate void NativeCalls.OnSignedInCallback(NativeAppleIdCredential credential)
```

## Parameters

**credential** [NativeAppleIdCredential](#)

The native ASAuthorizationAppleIDCredential wrapper.

# Struct NativePersonNameComponents

Namespace: [Uralstech.UMoTh.AppleIdSignIn.Native](#)

Wrapper for iOS's PersonNameComponents.

```
public struct NativePersonNameComponents
```

## Fields

### FamilyName

The user's family name, or its phonetic representation if this struct is created from [Phonetic Representation](#).

```
public string? FamilyName
```

Field Value

string

### GivenName

The user's given name, or its phonetic representation if this struct is created from [Phonetic Representation](#).

```
public string? GivenName
```

Field Value

string

### MiddleName

The user's middle name, or its phonetic representation if this struct is created from [Phonetic Representation](#).

```
public string? MiddleName
```

Field Value

string

## NamePrefix

Prefix to the user's name, or its phonetic representation if this struct is created from [Phonetic Representation](#).

```
public string? NamePrefix
```

Field Value

string

## NameSuffix

Suffix to the user's name, or its phonetic representation if this struct is created from [Phonetic Representation](#).

```
public string? NameSuffix
```

Field Value

string

## Nickname

The user's nickname, or its phonetic representation if this struct is created from [PhoneticRepresentation](#).

```
public string? Nickname
```

Field Value

string

## PhoneticRepresentation

Phonetic representation of this struct's values.

```
public nint PhoneticRepresentation
```

Field Value

nint

Remarks

This is an instance of [NativePersonNameComponents](#). If it has not been unwrapped, it will be freed when this struct's [Dispose\(\)](#) is called. If unwrapped using [UnwrapPhoneticRepresentation\(\)](#), the caller is responsible for disposing the returned object.

## Methods

### Dispose()

Deallocates native resources.

```
public void Dispose()
```

Remarks

This struct has been intentionally not set as `IDisposable` to prevent accidental struct copies caused by "using" statements.

### UnwrapPhoneticRepresentation()

Unwraps [PhoneticRepresentation](#) into an instance of [NativePersonNameComponents](#).

```
public NativePersonNameComponents? UnwrapPhoneticRepresentation()
```

## Returns

[NativePersonNameComponents?](#)

The unwrapped struct or [null](#)  if [PhoneticRepresentation](#) is a nullptr.

## Remarks

This can only be called once, as after [PhoneticRepresentation](#) is unwrapped, the reference is deallocated. This is to prevent multiple copies of the same memory from being created.

# Namespace Uralstech.UMoth.GoogleSignIn

## Classes

### [GoogleAuthCallbackReceiver](#)

Callback receiver for events from the native plugin.

### [GoogleIdTokenCredential](#)

Google ID token based credential.

### [GoogleSignInManager](#)

Class to handle Google account sign-in.

## Interfaces

### [IGoogleAuthCallbackReceiver](#)

Callback receiver object for Google auth events.

## Enums

### [GoogleSignInErrorCode](#)

Error codes for Sign-In failures.

# Class GoogleAuthCallbackReceiver

Namespace: [Uralstech.UMoth.GoogleSignIn](#)

Callback receiver for events from the native plugin.

```
public class GoogleAuthCallbackReceiver : AndroidJavaProxy
```

## Inheritance

object ← GoogleAuthCallbackReceiver

## Constructors

### GoogleAuthCallbackReceiver(IGoogleAuthCallbackReceiver)

```
public GoogleAuthCallbackReceiver(IGoogleAuthCallbackReceiver callbackReceiver)
```

## Parameters

**callbackReceiver** [IGoogleAuthCallbackReceiver](#)

The C# callback receiver for native plugin events.

## Fields

### NativeInterface

The fully qualified name of the Kotlin interface this class is implementing.

```
public const string NativeInterface = "com.uralstech.umoth.GoogleAuthCallbackReceiver"
```

## Field Value

string



# \_callbackReceiver

The C# callback receiver for native plugin events.

```
protected IGoogleAuthCallbackReceiver _callbackReceiver
```

Field Value

[IGoogleAuthCallbackReceiver](#)

## Methods

Invoke(string, nint)

```
public override nint Invoke(string methodName, nint javaArgs)
```

Parameters

**methodName** string

**javaArgs** nint

Returns

nint

# Class GoogleIdTokenCredential

Namespace: [Uralstech.UMoTh.GoogleSignIn](#)

Google ID token based credential.

```
public record GoogleIdTokenCredential
```

## Inheritance

object ← GoogleIdTokenCredential

## Constructors

GoogleIdTokenCredential(string?, string?, string?, string, string, string?, string?)

```
protected GoogleIdTokenCredential(string? displayName, string? familyName, string?  
givenName, string emailId, string idToken, string? phoneNumber, string? profilePictureUri)
```

## Parameters

**displayName** string

**familyName** string

**givenName** string

**emailId** string

**idToken** string

**phoneNumber** string

**profilePictureUri** string

## Fields

## DisplayName

Display name to show on the entry.

```
public readonly string? DisplayName
```

### Field Value

string

## EmailId

The email address associated with user's Google Account.

```
public readonly string EmailId
```

### Field Value

string

## FamilyName

User's family name.

```
public readonly string? FamilyName
```

### Field Value

string

## GivenName

User's given name.

```
public readonly string? GivenName
```

Field Value

string

## IdToken

User's Google ID Token.

```
public readonly string IdToken
```

Field Value

string

## PhoneNumber

User's stored phone number.

```
public readonly string? PhoneNumber
```

Field Value

string

## ProfilePictureUri

User's profile picture uri.

```
public readonly string? ProfilePictureUri
```

Field Value

string

# Enum GoogleSignInErrorCode

Namespace: [Uralstech.UMoTh.GoogleSignIn](#)

Error codes for Sign-In failures.

```
public enum GoogleSignInErrorCode
```

## Fields

**GenericError = 0**

Generic error from the native credential request.

**InvalidGoogleIdResponse = 2**

The Google ID token was not valid.

**UnknownCredentialType = 1**

The returned credential was not recognized.

# Class GoogleSignInManager

Namespace: [Uralstech.UMoTh.GoogleSignIn](#)

Class to handle Google account sign-in.

```
public class GoogleSignInManager : DontCreateNewSingleton<GoogleSignInManager>,
    IGoogleAuthCallbackReceiver
```

## Inheritance

object ← GoogleSignInManager

## Implements

[IGoogleAuthCallbackReceiver](#)

## Fields

### AndroidNativeClass

The fully qualified name of the Kotlin plugin class.

```
public const string AndroidNativeClass = "com.uralstech.umoth.GoogleAuth"
```

### Field Value

string

### OnSignInFailed

Called when the sign-in flow fails, with the failure reason.

```
public UnityEvent<GoogleSignInErrorCode> OnSignInFailed
```

### Field Value

UnityEvent<[GoogleSignInErrorCode](#)>

## OnSignOutFailed

Called when the sign-out flow fails.

```
public UnityEvent OnSignOutFailed
```

Field Value

UnityEvent

## OnSignedIn

Called when the sign-in flow succeeds, with the Google ID Token credential.

```
public UnityEvent<GoogleIdTokenCredential> OnSignedIn
```

Field Value

UnityEvent<[GoogleIdTokenCredential](#)>

## OnSignedOut

Called when the sign-out flow succeeds.

```
public UnityEvent OnSignedOut
```

Field Value

UnityEvent

## \_callbackReceiver

The native callback receiver.

```
protected GoogleAuthCallbackReceiver _callbackReceiver
```

Field Value

[GoogleAuthCallbackReceiver](#)

## \_pluginInstance

The native plugin instance.

```
protected AndroidJavaObject? _pluginInstance
```

Field Value

AndroidJavaObject?

## Properties

### ServerClientId

The server's client ID to use as the audience for Google ID tokens generated during the sign-in.

```
public string ServerClientId { protected get; set; }
```

Property Value

string

## Methods

### Awake()

```
protected override void Awake()
```

### OnDestroy()



```
protected void OnDestroy()
```

## SignIn(string?, bool, bool)

Starts the Google Sign-In flow.

```
public void SignIn(string? nonce = null, bool filterByAuthorizedAccount = true, bool  
autoSelectSignIn = true)
```

### Parameters

**nonce** string

The nonce to use when generating a Google ID token.

**filterByAuthorizedAccount** bool

Whether to only allow the user to select from Google accounts that are already authorized to sign in to your application.

**autoSelectSignIn** bool

The auto-select behavior in the request.

## SignInAsync(string?, bool, bool)

Starts the Google Sign-In flow.

```
public Awaitable<(GoogleIdTokenCredential?, GoogleSignInErrorCode)> SignInAsync(string?  
nonce = null, bool filterByAuthorizedAccount = true, bool autoSelectSignIn = true)
```

### Parameters

**nonce** string

The nonce to use when generating a Google ID token.

**filterByAuthorizedAccount** bool

Whether to only allow the user to select from Google accounts that are already authorized to sign in to your application.

`autoSelectSignIn` bool

The auto-select behavior in the request.

Returns

`Awaitable<(GoogleIdTokenCredential, GoogleSignInErrorCode)>`

The ID token credential or the failure reason.

## SignIn()

Starts the sign-out flow.

```
public void SignIn()
```

## SignInAsync()

Starts the sign-out flow.

```
public Awaitable<bool> SignInAsync()
```

Returns

`Awaitable<bool>`

If the operation was successful.

# Interface IGoogleAuthCallbackReceiver

Namespace: [Uralstech.UMoTh.GoogleSignIn](#)

Callback receiver object for Google auth events.

```
public interface IGoogleAuthCallbackReceiver
```

## Methods

### OnSignInFailed(GoogleSignInErrorCode)

Called when the sign-in flow fails.

```
void OnSignInFailed(GoogleSignInErrorCode reason)
```

#### Parameters

**reason** [GoogleSignInErrorCode](#)

The reason for failure.

### OnSignOutFailed()

Called when the sign-out flow fails.

```
void OnSignOutFailed()
```

### OnSignedIn(GoogleIdTokenCredential)

Called when the sign-in flow succeeds.

```
void OnSignedIn(GoogleIdTokenCredential credential)
```

## Parameters

**credential** [GoogleIdTokenCredential](#)

The Google ID Token credential.

## OnSignedOut()

Called when the sign-out flow succeeds.

```
void OnSignedOut()
```