OpenIAB Unity Plugin

API Reference

for Samsung IAP 3.0 / Android Devices

Version 01

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Purpose and Audience

This document provides details of the Samsung API class library for the Unit plugin that allows service applications to easily integrate Samsung In-App Purchase (IAP) purchase functionality, and provide a basis to easily integrate the functionality of other purchase services that support One Platform Foundation's Open In-App Billing (OpenIAB).

This document is intended to help service application developers.

Revision History

The following are highlights of the changes to this document.

Version	Primary Authors	Change Highlights
01	Samsung Research Institute Philippines Media Solution Center America, Samsung Electronics America	Initial Draft

Contents

1. Classes

This section details the classes in the OpenIAB Unity Plugin API for Samsung IAP 3.0.

1.1. OpenIAB

public class OpenIAB

This is the main class for OpenIAB functions. This class creates the OpenIAB plug-in billing instance using the OpenIAB interface based on the current platform (Android, IOS, or WP8). The methods from this class use the Java Native Interface to access the methods in the UnityPlugin.java source code.

1.1.1. Fields

Modifier	Field and Description
static IOpenIAB	`_billing` The static OpenIAB plug-in billing instance created based on the current platform.

1.1.2. Constructor Summary

Modifier	Constructor
static	OpenIAB()

1.1.3. Method Summary

Modifier and Type	Method
public static void	mapSku(string sku, string storeName, string storeSku)
public static void	init(Options options)
public static void	unbindService()
public static bool	areSubscriptionsSupported()
public static void	queryInventory(params object[] extraParams)
public static void	queryInventory(string[] skus, params object[] extraParams)
public static void	purchaseProduct(string sku, string developerPayload = "")
public static void	purchaseSubscription(string sku, string developerPayload = "")

public static void	consumeProduct(Purchase purchase)
public static void	restoreTransactions()
public static void	samsungIapMode (int mode)
public static void	samsungForcedMode(boolean enabled)
public static bool	isDebugLog()
public static void	enableDebugLogging(bool enabled)
public static void	enableDebugLogging(bool enabled, string tag)
public static void	querySkuList()
public static void	querySkuList(string skuType)

1.1.4. Constructor Details

OpenIAB

static OpenIAB()

This static constructor initializes the OpenIAB plug-in billing instance based on the current platform, which is determined based on the Unity preprocessor (for example, #if UNITY_ANDROID – OpenIAB_Android).

1.1.5. Method Details

mapSku

public static void mapSku(string sku, string storeName, string storeSku)

This method initializes the app store items by mapping the store items to the supported stores.

NOTE: When a commercial item's app store SKUs are the same for ALL app stores, do NOT use this mapSku API call for that commercial item.

This API method must be called ONLY before init().

Parameters:

sku	SKU identifier of the item specified in the Unity plugin code
storeName	App store name (such as STORE_SAMSUNG)
storeSku	Combination of the item group ID and the item ID. For Samsung IAP version 3.0, use only the item ID, as the item group ID concept has been deprecated.

Examples:

Prepare the sku parameter:

```
public const string SKU_PLANE_FUEL = "sku_plane_fuel";
public const string SKU_CHANGE_PLANE = "sku_change_plane";
```

Use with the storeName and the storeSKU parameters respectively:

```
// Samsung IAP ver. 3 doesn't require the twelve digit itemGroupID
// but it can still be used as shown with SKU_PLANE_FUEL
OpenIAB.mapSku(SKU_PLANE_FUEL, OpenIAB_Android.STORE_SAMSUNG,
"100000105847/sku_plane_fuel");
OpenIAB.mapSku(SKU_CHANGE_PLANE, OpenIAB_Android.STORE_SAMSUNG,
"sku_change_plane");
```

init

public static void init(Options options)

Starts the billing service. This will fire the appropriate event (billingSupportedEvent or billingNotSupportedEvent) after checking if in-app billing is supported.

The Options object specifies options for the billing service (such as preferred app store names, available app store names, app store search strategy).

See section 1.3 Options for field details.

Parameters:

options OpenIAB library options object

Example:

Prior to calling this method, set the OpenIAB library options first using the Options class and then set this as the parameter for the OpenIAB plug-in billing instance initialization.

```
OpenIAB.init(options);
```

unbindService

public static void unbindService()

Unbinds and shuts down the billing service.

areSubscriptionsSupported

public static bool areSubscriptionsSupported()

Determines whether or not subscription items are supported.

NOTE: Currently, this API call is only used by Android service apps.

Returns:

Returns true when subscription items are supported. Returns false otherwise.

queryInventory

public static void queryInventory(params object[] extraParams)

Saves all completed purchases in _purchaseMap and saves all available items in _skuMap.

Parameters:

extraParams — List of purchase parameters in addition to the basic parameters. This allows the use of variable number of parameters to support Samsung IAP 3.0's cached inbox list by passing the string "true" as an extra parameter (i.e., cached query inventory). Other app stores do not make use of this extra parameter.
Extra parameter to be added:
"true" will not save anything in _purchaseMap
"false" saves in _purchaseMap all purchased items except for consumable items

Example:

```
public const string SKU_PLANE_FUEL = "sku_plane_fuel";
public const string SKU_CHANGE_PLANE = "sku_change_plane";
public const string SKU_INFINITE_FUEL = "sku_infinite_fuel";
public const string SKU_GHOST_MODE = "sku_ghost_mode";

private string[] skuList = new string[] { SKU_PLANE_FUEL, SKU_CHANGE_PLANE,
SKU_INFINITE_FUEL, SKU_GHOST_MODE };
OpenIAB.queryInventory(skuList);
```

queryInventory (SKUs)

public static void queryInventory(string[] skus, params object[] extraParams)

Saves all completed purchases in _purchaseMap and saves all available items in _skuMap.

Parameters:

skus — List of SKU identifiers of the items that will be included in the _purchaseMap

extraParams — List of purchase parameters in addition to the basic parameters. This allows the use of variable number of parameters to support Samsung IAP 3.0's cached inbox list by passing the string "true" as an extra parameter (i.e., cached query inventory). Other app stores do not make use of this extra parameter

Extra parameter to be added:
"true" saves in _purchaseMap all purchased items as specified in the SKU list parameter
"false" saves in _purchaseMap all purchased items except for consumable items

Example:

```
public const string SKU_PLANE_FUEL = "sku_plane_fuel";
public const string SKU_CHANGE_PLANE = "sku_change_plane";
public const string SKU_INFINITE_FUEL = "sku_infinite_fuel";
public const string SKU_GHOST_MODE = "sku_ghost_mode";
private string[] skuList = new string[] { SKU_PLANE_FUEL, SKU_CHANGE_PLANE,
SKU_INFINITE_FUEL, SKU_GHOST_MODE };
OpenIAB.queryInventory(skuList, "true");
```

purchaseProduct

public static void purchaseProduct(string sku, string developerPayload = "")

Initiates purchase processing of specified non-subscription SKU item (such as consumable and nonconsumable items).

Parameters:

sku	SKU identifier of the item to be purchased
developerPayload	Always specified as a blank string because Samsung IAP does not currently support developer payload.

Example:

```
OpenIAB.purchaseProduct(SKU_PLANE_FUEL);
OpenIAB.purchaseProduct(SKU_CHANGE_PLANE);
```

purchaseSubscription

public static void purchaseSubscription(string sku, string developerPayload = "")

Initiates purchase processing of the specified subscription SKU item (such as non-recurring and auto-recurring subscription items).

Parameters:

sku	SKU identifier of the item to be purchased
developerPayload	Always specified as a blank string because Samsung IAP does not currently support developer payload.

consumeProduct

public static void consumeProduct(Purchase purchase)

Sends a request to consume the product specified in the Purchase object instance. This method is supported by OpenIAB, but currently is not applicable to Samsung IAP.

Parameters:

purchase	Purchase object instance of the purchased item

restoreTransactions

public static void restoreTransactions(Purchase purchase)

Restores purchased items specified in the Purchase object instance. This method is supported by OpenIAB, but currently is not applicable to Android because this is an IOS AppStore requirement.

Parameters:

purchase	Purchase object instance of the purchased item

samsungIapMode

public static void samsungIapMode (int mode)

Sets the operational mode that controls how API method call requests are processed.

Parameters:

mode Operational mode to be set:

- 0 Production mode
  Valid requests result in successful transaction including payment processing.
  Invalid requests result in failure cases.
- 1 Test mode success
  Valid requests result in successful processing EXCEPT for payment processing.
  Invalid requests result in failure cases.
- -1 Test mode failure
  ALL requests result in failure cases.

samsungForcedMode

public static void samsungForcedMode(boolean enabled)

Sets the Samsung Galaxy Apps Store as the selected store during OpenIAB initialization for testing purposes.

Parameters:

enabled Store mode to be set:

- true The Samsung Galaxy Apps Store is selected.
- false The app store selected depends on the options specified in the Options object.

For more details on determining the store search strategy, refer to section 3.3 of the OpenIAB Unity plug-in for Samsung IAP 3.0 Programming Guide

isDebugLog

public static void isDebugLog()

Determines whether or not verbose logging is enabled and returns the result.
Verbose logging is a logging mode that records more information than the usual logging mode.

The Android logging system provides a way of viewing debug output. Logcat dumps logs that you have written in the source code by using the Log class. LogCat can be run through ADB or from DDMS, which show the Log messages in real time.

Returns:

Returns true when verbose logging is enabled. Returns false otherwise.

enableDebugLogging

public static void enableDebugLogging(bool enabled)

Enables debug logging to get more debug information.

The Android logging system provides a way of viewing debug output. Logcat dumps logs that you have written in the source code by using the Log class. LogCat can be run through ADB or from DDMS, which show the Log messages in real time

Parameters:

enabled Whether or not additional debug information is to be logged:
- true Debug information will be logged and logs will be displayed in the debug console.
- false Debug information will NOT be logged.

enableDebugLogging (tag)

public static void (bool enabled, string tag)

Enables debug logging to get more debug information using the specified tag.

The Android logging system provides a way of viewing debug output. Logcat dumps logs that you have written in the source code by using the Log class. LogCat can be run through ADB or from DDMS, which show the Log messages in real time

querySkuList

public static void querySkuList()

Saves in skuDetails all available items for purchase.

querySkuList

public static void querySkuList(string skuType)

Saves in skuDetails all available items for purchase with the specified SKU type.

Parameters:

skuType SKU type to be queried.

1.2. OpenIABEventManager : MonoBehavior

public class OpenIABEventManager : MonoBehavior

This class is the manager of events such as billing, querying items, purchasing items, consuming items, and restoring items.

1.2.1. Callback Summary

Modifer and Type	Callback
public static event Action	billingSupportedEvent
public static event Action<string>	billingNotSupportedEvent
public static event Action<Inventory>	queryInventorySucceededEvent
public static event Action<string>	queryInventoryFailedEvent
public static event Action<Purchase>	purchaseSucceededEvent
public static event Action<int, string>	purchaseFailedEvent
public static event Action<Purchase>	consumePurchaseSucceededEvent
public static event Action<string>	consumePurchaseFailedEvent
public static event Action<string>	transactionRestoredEvent
public static event Action<string>	restoreFailedEvent
public static event Action	restoreSucceededEvent

1.2.2. Method Summary

Modifier and Type	Method
private void	Awake()
private void	OnMapSkuFailed(string exception)
private void	OnBillingSupported(string empty)
private void	OnBillingNotSupported(string error)
private void	OnQueryInventorySucceeded(string json)
private void	OnQueryInventoryFailed(string error)
private void	OnPurchaseSucceeded(string json)
private void	OnPurchaseFailed(string message)
private void	OnConsumePurchaseSucceeded(string json)
private void	OnConsumePurchaseFailed(string error)

public void	OnTransactionRestored(string sku)
public void	OnRestoreTransactionFailed(string error)
public void	OnRestoreTransactionSucceeded(string message)

1.2.3. Callback Details

billingSupportedEvent

public static event Action billingSupportedEvent

Successful init callback; billing is supported on the current platform.

This event is fired when the billing is supported.

billingNotSupportedEvent

public static event Action<string> billingNotSupportedEvent

Failed init callback; billing is NOT supported on current platform.

This event is fired when the billing is not supported.

queryInventorySucceededEvent

public static event Action<Inventory> queryInventorySucceededEvent

Successful QueryInventory callback. This event is fired when the query inventory succeeded.

Returns:
Purchase history and app store listings are returned.

queryInventoryFailedEvent

public static event Action<string> queryInventoryFailedEvent

Failed QueryInventory callback .

This event is fired when the query inventory failed.

purchaseSucceededEvent

public static event Action<Purchase> purchaseSucceededEvent

Successful purchase callback

This event is fired when the purchase of a product or subscription succeeded.

purchaseFailedEvent

public static event Action<int, string> purchaseFailedEvent

Failed purchase callback

This event is fired when the purchase of a product or subscription failed.

consumePurchaseSucceededEvent

public static event Action<Purchase> consumePurchaseSucceededEvent

Successful consume attempt callback

This event is fired after the purchase product is consumed or is used.

consumePurchaseFailedEvent

public static event Action<string> consumePurchaseFailedEvent

Failed consume attempt callback

This event is fired after the purchase product is failed to be consumed or is used.

transactionRestoredEvent

public static event Action<string> transactionRestoredEvent

Successful transaction restoration callback. This event is fired when a transaction is restored.

NOTE: This API method is supported by OpenIAB, but currently is NOT supported by Android OS.

restoreFailedEvent

public static event Action<string> restoreFailedEvent

Failed transaction restoration callback

This event is fired when a transaction restoration process failed.

restoreSucceededEvent

public static event Action restoreSucceededEvent

Successful transaction restoration callback

This event is fired when a transaction restoration process succeeded.

1.2.4. Method Details

Awake

private void Awake()

Sets the GameObject name to the class name for easy access via a native plugin.

Awake is part of the MonoBehavior in Unity. It is called when the script instance is being loaded.

OnMapSkuFailed

private void OnMapSkuFailed(string exception)

Function for failed mapping of SKUs. Logs the exception received.
The SKU is attempting to be mapped to the app store. The exception message is from OpenIAB; it is specified in the library.

Parameters:

exception	Exception message to be included in the callback

OnBillingSupported

private void OnBillingSupported(string empty)

Function to be called when billing is supported. Fires the callback bilingSupportedEvent.

Parameters:

empty	Empty string

OnBillingNotSupported

private void OnBillingNotSupported(string error)

Function to be called when billing is unsupported. Fires the callback billingNotSupportedEvent.

Parameters:

error	Error message

OnQueryInventorySucceeded

private void OnQueryInventorySucceeded(string json)

Function to be called for successful queries of inventories. Fires the callback queryInventorySucceededEvent.

Parameters:

json	String in JSON format

OnQueryInventoryFailed

private void OnQueryInventoryFailed(string error)

Function to be called for failed queries of inventories. Fires the callback queryInventoryFailedEvent.

Parameters:

error	Error message

OnPurchaseSucceeded

private void OnPurchaseSucceeded(string json)

Function to be called for successful purchases. Fires the callback purchaseSucceededEvent.

Parameters:

json	String in JSON format

OnPurchaseFailed

private void OnPurchaseFailed(string message)

Function to be called for failed purchases. Fires the callback purchaseFailedEvent.

Parameters:

message	Message string

OnConsumePurchaseSucceeded

private void OnConsumePurchaseSucceeded(string json)

Function to be called for successful consumption of purchase items.
Fires the callback consumePurchaseSucceededEvent.

Parameters:

json	String in JSON format

OnConsumePurchaseFailed

private void OnConsumePurchaseFailed(string error)

Function to be called for failed consumption of purchase items.
Fires the callback consumePurchaseFailedEvent.

Parameters:

error	Error message

OnTransactionRestored

private void OnTransactionRestored(string sku)

Function to be called for transaction restoration of the specified item SKU. Fires the callback transactionRestoredEvent.

Parameters:

sku	SKU identifier of the item

OnRestoreTransactionFailed

private void OnRestoreTransactionFailed(string error)

Function to be called for failed transaction restorations. Fires the callback restoreFailedEvent.

Parameters:

error	Error message

OnRestoreTransactionSucceeded

private void OnRestoreTransactionSucceeded(string message)

Function to be called for successful transaction restoration. Fires the callback restoreSucceededEvent.

Parameters:

message	Message string

1.3. Options

public class Options

This class contains all options to configure how OpenIAB chooses the app store strategy, inventory checking, and purchase verification mode selection. These settings only work with Android OS and some are not applicable for all Android app stores.

1.3.1. Fields

Modifer and Type	Field and Description
public const int	DISCOVER_TIMEOUT_MS Default timeout (in milliseconds) for discovering all OpenStores on the device
public const int	INVENTORY_CHECK_TIMEOUT_MS Timeout (milliseconds) for inventory checking
public int	discoveryTimeoutMs Waiting time (milliseconds) to find all OpenStores on the device
public bool	checkInventory To check user inventories in every app store to select the proper app store.
public int	checkInventoryTimeoutMs Waiting time (milliseconds) to check inventories in all stores
public OptionsVerifyMode	verifyMode Check purchases by using the setting VERIFY_SKIP or let OpenIAB do the checking by setting VERIFY_EVERYTHING or VERIFY_ONLY_KNOWN. This requires public keys for supported Android stores. The Samsung Galaxy Apps Store does not support this option.

public SearchStrategy	storeSearchStrategy Search strategy to determine the app store to be used. Possible values: SEARCH_STRATEGY_INSTALLER Uses the app store the app was downloaded from, or what app store was specified when side loading via ADB. SEARCH_STRATEGY_BEST_FIT Determines the best app store to purchase from by checking past purchases and purchasable items. SEARCH_STRATEGY_INSTALLER_THEN_BEST_FIT Combines the SEARCH_STRATEGY_INSTALLER and SEARCH_STRATEGY_BEST_FIT options. It chooses SEARCH_STRATEGY_INSTALLER first, and if no installer has been found either due to an unrecognized app store or app sideload, it then uses SEARCH_STRATEGY_BEST_FIT.
public Dictionary<string, string>	storeKeys Map of app store names and their equivalent public key base 64.
public string[]	prefferedStoreNames Priority list if there are multiple stores installed on the same device that supports billing.
public string[]	availableStoreNames
public int	samsungCertificationRequestCode

1.4. Inventory

public class Inventory

This class is a container for items currently available in store listings.

1.4.1. Fields

Modifier and Type	Field
private Dictionary<String, SkuDetails>	_skuMap Map of SKU item names and their details.
private Dictionary<String, Purchase>	_purchaseMap Map of purchased items and their details.

1.4.2. Constructor Summary

Modifier	Constructor
public	Inventory(string json)
public	Inventory()

1.4.3. Method Summary

Modifier and Type	Method
public override	string ToString()
public SkuDetails	GetSkuDetails(string sku)
public Purchase	GetPurchase(string sku)
public bool	HasPurchase(string sku)
public bool	HasDetails(string sku)
public void	ErasePurchase(string sku)
public List<string>	GetAllOwnedSkus()
public List<string>	GetAllOwnedSkus(string itemType)
public List<Purchase>	GetAllPurchases()
public List<SkuDetails>	GetAllAvailableSkus()
public void	AddSkuDetails(SkuDetails d)
public void	AddPurchase(Purchase p)

1.4.4. Constructor Details

Inventory

public Inventory()

Creates an Inventory instance.

This method is only used for WP8.

Inventory

public Inventory(string json)

Creates an Inventory instance using the specified JSON string.
The method parses the JSON string, converts the elements into Purchase and SkuDetails objects, and then maps these data to the _skuMap and _purchaseMap.

Parameters:

json String object that contains the inventory details in JSON format

1.4.5. Method Details

ToString

public override string ToString()

Returns a string of the purchase map and SKU map.

Returns:

A string containing the purchase map and SKU map.

GetSkuDetails

public SkuDetails GetSkuDetails(string sku)

Get the details of the specified SKU item.

Parameters:

sku SKU identifier of the item

Returns:

SkuDetails of the specified SKU when the SKU exists in the _skuMap. Returns null when the SKU does not exist.

GetPurchase

public Purchase GetPurchase(string sku)

Gets purchase information for the specified SKU item.

Parameters:

sku SKU identifier of the item

Returns:

Returns purchase information for the specified item. Returns null when there is no purchase.

HasPurchase

public Purchase HasPurchase(string sku)

Determines whether or not a purchase exists of the specified SKU item, and returns the results.

Parameters:

sku SKU identifier of the item

Returns:

Returns true when a purchase for the item exists. Returns false otherwise.

HasDetails

public bool HasDetails(string sku)

Determines whether or not details exist about the specified SKU item and returns the results.

Parameters:

sku SKU identifier of the item

Returns:

Returns true when item details are available. Returns false otherwise.

ErasePurchase

public void ErasePurchase(string sku)

Deletes the purchase information of the specified SKU item from the inventory.

Parameters:

sku SKU identifier of the item

GetAllOwnedSkus()

public List<string> GetAllOwnedSkus()

Gets the list of all purchased item SKUs by the user.

Returns:

Returns a list of all purchased item SKUs.

GetAllOwnedSkus

public List<string> GetAllOwnedSkus(string itemType)

Gets the list of all item SKUs of the specified item type that were purchased by the user.

Parameters:

itemType Type of item:

inapp	Consumable or non-consumable item
subs	Non-recurring or auto-recurring subscription item

Returns:

Returns a list of all purchased SKUs of the requested item type

GetAllPurchases

public List<Purchase> GetAllPurchases()

Gets all item SKUs purchased by the user.

Returns:

Returns a list of all SKUs in the _purchaseMap.

GetAllAvailableSkus

public List<SkuDetails> GetAllAvailableSkus()

Gets the SKUs of all available items.

Returns:

Returns a list of SKUs of all items available for purchase.

AddSkuDetails

public void AddSkuDetails(SkuDetails d)

Adds the item details in the specified object instance to the associated SkuDetails.

Parameters:

d Name of the SKU details object instance

AddPurchase

public void AddPurchase(Purchase p)

Adds the purchase details in the specified object instance to the associated SKU item.

Parameters:

p Name of the Purchase object instance

1.5. Purchase

public class Purchase

This class represents an in-app billing purchase.

1.5.1. Fields

Modifer and Type	Field and Description
public string	ItemType Kind of commercial item: 00 Consumable 01 Non-consumable 02 Non-recurring subscription 03 Auto-recurring subscription
public string	OrderId Unique identifier of the transaction that corresponds to the Google Wallet Order ID. For Samsung, this is the payment ID.
public string	PackageName Application package from which the purchase originated.
public string	Sku SKU identifier of the item For all items available for sale, their SKUs must be specified in the application's product list on the app store console. For the Galaxy Apps Store, this is the item ID. For details, see the OpenIAB Unity Plugin Integration Guide.
public long	PurchaseTime Time (milliseconds after Jan 1, 1970) when the product was purchased
public int	PurchaseState Current status of the purchase order: 0 Purchased 1 Cancelled 2 Refunded This field is not applicable to Samsung IAP, which does not have a purchase state.

public string	DeveloperPayload A developer-specified string that contains supplemental information about the order This string is used for verification purposes to check if the purchase is legitimate or not. The app store returns the developer payload and is matched with the developer payload from the app. This field is NOT applicable to Samsung IAP and is assigned a blank string.
public string	Token This token uniquely identifies the purchase of the associated item and user pair. For Samsung, this token corresponds to the purchase ID.
public string	OriginalJson The JSON string sent by the current app store upon purchasing or when querying. The string contains the purchase details and is used to make the Purchase object.
public string	Signature The signature of the JSON string, which is used in building the Purchase object.
public string	AppstoreName Current app store name
public string	Receipt Purchase receipt of the order This is supported in iOS only.

1.5.2. Constructor Summary

and Description	Constructor
private	Purchase()
public	Purchase(string jsonString)
public	Purchase(JSON json)

1.5.3. Method Summary

Modifier and Type	Method
public static Purchase	CreateFromSku(string sku)
public static Purchase	CreateFromSku(string sku, string developerPayload)

public override string	ToString()
private static void	AddIOSHack(Purchase p)
public string	Serialize()

1.5.4. Constructor Details

Purchase

private Purchase()

Empty constructor

Purchase

public Purchase(string jsonString)

Creates a Purchase object from a JSON string.

Parameters:

jsonString	String in JSON format

Purchase

public Purchase(JSON json)

Creates a Purchase object from a JSON object.

Parameters:

json	JSON object instance

1.5.5. Method Details

CreateFromSku

public static Purchase CreateFromSku(string sku)

Creates a purchase from the specified SKU item ID for debug purposes and in editor mode.

Parameters:

sku	SKU identifier of the item

CreateFromSku

public static Purchase CreateFromSku(string sku, string developerPayload)

For debug purposes and editor mode.

Parameters:

sku	SKU identifier of the item
developerPayload	This assigned with a blank string; not supported by Samsung IAP. This string is used for verification purposes to check if the purchase is legitimate or not. The app stores returns the developer payload and is matched with the developer payload from the app.

ToString

public override string ToString()

Gets a string of the original JSON sent by the current app store for the SKU.

Returns:

Returns a string of the original JSON sent by the current app store for the SKU.

AddIOSHack

private static void AddIOSHack(Purchase p)

For IOS Unity app, this method checks if the app store name, item type, or the order ID is null or empty.

When one of the variables is empty or null, this method sets the respective variables accordingly based on Apple app store settings.

Parameters:

p	Purchase object instance

Serialize

public string Seralize()

Creates a JSON object instance that contains the item type, order ID, package name, SKU, purchase time, purchase state, developer payload, token, original JSON, signature, app store name, and receipt.

Returns:

A serialized JSON object in string form.

1.6. SkuDetails

public class SkuDetails

This class represents the details about commercial items offered by a service app that are available in a specified app store. Each commercial item is identified by its SKU or item ID. All items have item IDs which can be used to map into an OpenIAB SKU.

1.6.1. Fields

Modifier and Type	Field and Description
public string	ItemType Item type of the SKU items sold by service apps available in the specified apps store for each item. Item types for items sold by service apps available in the Samsung Galaxy Apps Store: 00 Consumable 01 Non-consumable 02 Non-recurring subscription 03 Auto-recurring subscription
public string	Sku SKU identifier of the item for OpenIAB
public string	Type Grouping(s) of app store SKU item types into OpenIAB-specified groups (either "inapp" or "subs") Groupings of item types for items sold by service apps available in the Samsung Galaxy Apps Store: inapp Consumable, non-consumable subs non-recurring subscription, auto-recurring subscription
public string	Price SKU item price
public string	Title SKU item title displayable in the app store
public string	Description SKU item description displayable in the app store
public string	Json SKU details JSON object in string form
public string	CurrencyCode SKU item currency code

public string	PriceValue SKU item price value Price is the listed price, price value is the converted price. For example, if the price is 1 USD (46 PHP), but you want to set it to 60 PHP in the Philippines, regardless of the conversion. In this case, the price is 1 USD and the price value is 60 PHP.

1.6.2. Constructor Summary

Modifier	Constructor
public	SkuDetails(string jsonString)
public	SkuDetails(JSON json)
public	SkuDetails(OnePF.WP8.ProductListing listing)

1.6.3. Method Summary

Modifier and Type	Method
private void	ParseFromJson()
public override string	ToString()

1.6.4. Constructor Details

SkuDetails (string)

public SkuDetails(string jsonString)

Sets the SKU details of the item specified by ToString()from a string when creating an SKU detail object instance.

Parameters:

jsonString	String in JSON format

SkuDetails (JSON object instance)

public SkuDetails(JSON json)

Sets the SKU details of the item specified by ToString()from a JSON object instance when creating an SKU detail object instance.

Parameters:

json	JSON object instance

SkuDetails (WP8 object instance)

public SkuDetails(OnePF.WP8.ProductListing listing)

Sets the SKU details of the item specified by ToString()from a Windows Phone 8 ProductListing object instance when creating an SKU detail object instance

Parameters:

listing	ProductListing object instance

1.6.5. Method Details

ParseFromJson

private void ParseFromJson()

Checks the PriceValue and CurrencyCode of an item using the other keys (typically price_amount_micros and price_currency_code).

It checks if the price value and currency is empty. For the price value, `price_amount_micros` is used then `val = val /= 1000000`. For the currency, it uses `price_currency_code` to get and assign values.

ToString

public override string ToString()

Converts the SKU details into a string that includes ItemType, Sku, Title, Price, Description, PriceValue, and CurrencyCode field values of the item specified by ToString().

Used when assigning values as a string (as in SKUDetails).

Returns:

String form of the SKU details

2. Error Response Codes

Modifer and Type	Field and Description
public static final int	IAP_ERROR_NONE No error. The request was successfully processed as specified.
public static final int	IAP_PAYMENT_IS_CANCELED The payment transaction was cancelled by the user.
public static final int	IAP_ERROR_INITIALIZATION Failure during IAP initialization.
public static final int	IAP_ERROR_NEED_APP_UPGRADE Samsung IAP needs to be upgraded to the latest version to access certain features.
public static final int	IAP_ERROR_COMMON Error while running IAP.
public static final int	IAP_ERROR_ALREADY_PURCHASED A purchase has been requested for a non-consumable, non-recurring subscription, or auto-recurring subscription item, but the item has already been purchased.
public static final int	IAP_ERROR_WHILE_RUNNING Payment is requested without bundle information.
public static final int	IAP_ERROR_PRODUCT_DOES_NOT_EXIST A purchase has been requested for an SKU that does not exist in the store.
public static final int	IAP_ERROR_CONFIRM_INBOX The payment result is not received after requesting payment from the server, and the purchased item list is not confirmed.

3. Function Mapping

The following table shows the function mapping among the classes `OpenIAS.cs`, `IOpenIAB.cs`, `OpenIAB_Android.cs`, and `UnityPlugin.java`.

OpenIAB.cs	**IOpenIAB.cs**	**OpenIAB_Android.cs**	**UnityPlugin.java**
mapSku	mapSku	mapSku	mapSku
init	init	init	init
unbindService	unbindService	unbindService	unbindService
areSubscriptionsSupported	areSubscriptionsSupported	areSubscriptionsSupported	areSubscriptionsSupported
queryInventory	queryInventory	queryInventory	queryInventory
purchaseProduct	purchaseProduct	purchaseProduct	purchaseProduct
purchaseSubscription	purchaseSubscription	purchaseSubscription	purchaseSubscription
consumeProduct	consumeProduct	consumeProduct	consumeProduct
restoreTransactions	restoreTransactions	restoreTransactions	restoreTransactions
samsungIapMode	samsungIapMode	samsungIapMode	samsungIapMode
samsungForcedMode	samsungForcedMode	samsungForcedMode	samsungForcedMode
isDebugLog	isDebugLog	isDebugLog	isDebugLog
enableDebugLogging	enableDebugLogging	enableDebugLogging	enableDebugLogging
querySkuList	querySkuList	querySkuList	querySkuList