AKiOS 2.0 for Unity

The AKiOS is a set of public types and APIs in the AKiOS and AKiOS.Core namespaces. The purpose of the AKiOS is to make developers more productive by simplifying the process of using native features of iOS in applications.

Plugin comes with few working examples. One of its Google AdMod Ads.

```
var request = GADRequest.New();
var testDevices = AKiOS.NSMutableArray<NSString>.Array();
testDevices.AddObject(NSString.StringWithUTF8String("1cf5076f1d9f0cd99458fd28e29dc3ea")
);
request.TestDevices = testDevices;

var bannerDelegte = new ExampleOfBannerDelegate();

var currentBannerView = GADBannerView.AllocInitWithAdSize(sz);
currentBannerView.RootViewController = viewController;
currentBannerView.AdUnitID = NSString.StringWithUTF8String(admobId);
currentBannerView.Delegate = bannerDelegte;
currentBannerView.LoadRequest(request);
```

Getting Started

Get handle to Cocoa Class

```
AKiOS.Class classUIApplcation = AKiOS.Class.FindByName("UIApplication");
```

Call class method

```
AKiOS.UnknowValue unkSharedApplication = classUIApplcation.Call("sharedApplication");
```

Call instance method

```
AKiOS.UnknowValue unkKeyWindow = unkSharedApplication.Call("keyWindow");
AKiOS.UnknowValue unkSubviews = unkKeyWindow.Call("subviews")
AKiOS.UnknowValue unkSubview_2 = unkSubviews.Call("objectAtIndex:", 2);
```

Call() method marshal in ObjC parameters of next types:
- null marshal as nil
- string marshal as C-string zero terminated
- AKiOS.NSObject and based on it marshal to id
- AKiOS.UnknownValue
- any value type variables like int, double, float and any struct

Convert UnknowValue to simple types

```
var unkScreenScale = AKiOS.UIScreen.MainScreen.Call("scale");
var screenScale = unkScreenScale.AsFloat();
```

Cast UnknowValue to any class derived from NSObject

```
UIApplication sharedApplicaiton = unkSharedApplication.Cast<UIApplication>();
```

To check AKiOS.NSObject for nil use propery IsNil or Handle

```
if (currentBannerView.IsNil)
{
    // ...
}
```

Plugin contains several wrappers around standart classes and methods

Use wrapper to short your code

```
UIWindow keyWindow = UIApplication.SharedApplication.KeyWindow;
```

Wrapper for NSArray implemented as generic and can be enumerate by foreach

```
foreach (var view in KeyWindow.SubView)
{
    // do smth with view
}
```

Extend existing classes by adding methods in source

Extend existing classes by adding extended methods

Call property like method

```
bannerView.Call("setDelegate:", bannerDlegate);
```

Create delegate classes

```
class ExampleOfBannerDelegate : AKiOS.Core.ProxyObject
{
    public ExampleOfBannerDelegate()
    {
        InitProxyObject("new"); // required for objects derived from ProxyObject
        // or InitProxyObject("alloc", "initWithOne:andTwo:", 1, 2);
    }
}
```

Define and implement callbacks

```
[AKiOS.Core.CocoaMethod("adViewDidReceiveAd:")]
public void adViewDidReceiveAd_(GADBannerView adView)
{
    // ...
}

[AKiOS.Core.CocoaMethod("adView:didFailToReceiveAdWithError:")]
public void adView_didFailToReceiveAdWithError_(GADBannerView adView, NSError error)
{
    // ...
}
```

List of components

- AKiOS namespace
    - Class class
        - FindByName(string)
    - Functions class
        - NSLog(string)
    - NSObject class
        - Call(string, object[])
        - Cast<T>()
        - Release()
        - Retain()
    - NSString class
        - StringWithUTF8String(string)
        - ToString()
        - UTF8String()
- AKiOS.Core namespace
    - Arguments class
        - GetValue(int)
    - CocoaMethodAttribute(string)
    - CocoaProtocolAttribute(string)
    - CocoaSuperClassAttribute(string)
    - ProxyObject class
        - InitProxyObject(string)
    - UnknownValue class
        - AsBool()
        - AsCString()
        - AsDouble()
        - AsFloat()
        - AsInt32()

- AsIntPtr()
- AsStruct()

Examples

If you want to run examples before you need read standard docs about using <u>AdMod</u> and <u>In App Purchases</u>

https://developers.google.com/mobile-ads-sdk/docs/#ios

https://developer.apple.com/library/ios/documentation/NetworkingInternet/Conceptual/StoreKitGuide/Introduction.html#//apple_ref/doc/uid/TP40008267

Thank you

For any question email me as.kirienko(at)gmail(dot)com