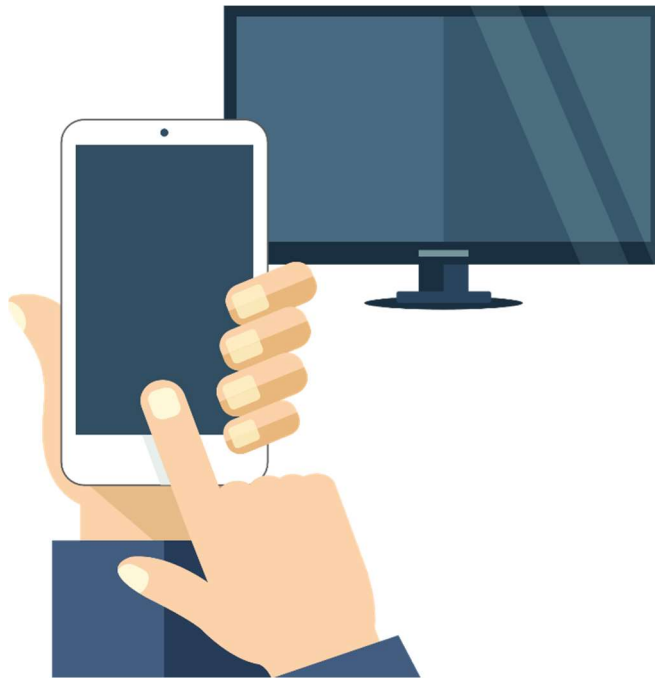


# Sodyo Software Development Kit (SDK) Integration Manual for iOS and Android



**Version:** 2.2.0

**Date:** 28-Feb-2018

## Table of Contents

<b>Introduction .....</b>	<b>3</b>
About Sodyo.....	3
The Sodyo Software Development Kit (SDK).....	3
Components of the Sodyo Software Development Kit (SDK).....	3
System Description and Workflow .....	4
General: .....	4
Operational Scenario .....	4
Supported Platforms .....	4
Supported Languages .....	4
License Agreement.....	4
Support .....	4
<b>Android: .....</b>	<b>5</b>
Installation.....	5
Initialization .....	6
Sodyo Marker Detection.....	7
Intent Filter .....	8
Setting Up ProGuard.....	8
Migrating from previous versions of the SDK .....	8
<b>IOS: .....</b>	<b>9</b>
Installation.....	9
Initialization .....	9
Sodyo Marker Detection.....	10
Migrating from previous versions of the SDK .....	10
<b>Appendix A – License Agreement .....</b>	<b>11</b>

## Introduction

### About Sodyo

Sodyo's technology creates an interactive experience with items in the physical world. Just point your mobile phone camera at any item, place or media display assigned with a Sodyo code and reveal layers of information, content and links.

Sodyo enhances the TV commercial experience by strengthening the sales funnel. Viewers can interact immediately with the television via with their smartphone and:

- **Point and Purchase** – The viewer points their phone or mobile device to the TV screen; a web page instantly appears on their phone which allows them to purchase a product, review their order and complete the purchase if they so choose.
- **Point and Learn More** – The viewer points their phone or mobile device to the TV screen, and instantly receives additional information about a product or service.
- **Point and Vote** – The viewer points their phone or mobile device to the TV screen and votes for content choices offered on the TV – favorite singer, favorite news story or whatever poll or vote your TV station offers.

### The Sodyo Software Development Kit (SDK)

With Sodyo's SDK, your mobile phone application can now "see" from a distance and recognize any 2D/3D item in the physical world. Apply a Sodyo code to any indoor/outdoor item, place or media display and your mobile device will detect and interact with it from up to dozens of meters.

The Sodyo SDK allows application developers to connect their app's data to Sodyo codes.

### Components of the Sodyo Software Development Kit (SDK)

Sodyo's SDK is a software library that can be easily integrated into any mobile application to provide the ability to scan and receive interactive content. As part of the SDK Sodyo provides:

- A software library for iOS / Android
- An example application that shows the developer how to use the SDK

## System Description and Workflow

### General:

The Sodyo system consists of the SDK integrated in a mobile application, the Sodyo Server and Sodyo's Portal / content management system.

### Operational Scenario

- Create content using the Sodyo Portal
- Create a campaign using the Sodyo Portal. A Sodyo code is assigned to the campaign.
- Integrate Sodyo's SDK to make your mobile application "Sodyo enabled".
- Run your mobile application and open the Sodyo Scanner to start detecting Sodyo codes.
- Once a Sodyo code is detected, the Sodyo SDK will deliver the interactive content associated with the scanned code to the mobile application.

### Supported Platforms

Sodyo currently runs on iOS 9 and higher as well as on Android 4.1 and higher (minSdkVersion >= 16 and targetSdkVersion <=24).

### Supported Languages

Sodyo currently supports English. The language displayed on Sodyo user interface is determined by the language set in the device's settings.

If the language set on the device is different than the supported languages, the Sodyo user interface will default to English.

### License Agreement

By opening the package, downloading the product or using any of its components, you are consenting to be bound by this agreement. If you do not agree to all of the terms of [this agreement](#), do not download and install this package or proceed.

### Support

Should you have any questions or need any help, please do not hesitate to contact us at [portalsupport@sodyo.com](mailto:portalsupport@sodyo.com).

## Android:

### Installation

Before you begin, please make sure that minSdkVersion >= 16 and targetSdkVersion <=24 (in your \app\build.gradle file).

Get the SodyoSdkExample app from [here](#)

1. In your project build.gradle file the following:

```
allprojects {
    repositories {
        maven {
            credentials {
                //Bitbucket credentials
                username "sodyold@gmail.com"
                password "sodyo@sdk"
            }
            url "https://api.bitbucket.org/1.0/repositories/sodyodevteam/sodyosdk-android/raw/releases"
        }
        jcenter()
    }
}
```

2. In your app build.gradle file add the following:

```
android {
    ...
    packagingOptions {
        exclude "META-INF/DEPENDENCIES.txt"
        exclude "META-INF/LICENSE.txt"
        exclude "META-INF/NOTICE.txt"
        exclude "META-INF/NOTICE"
        exclude "META-INF/LICENSE"
        exclude "META-INF/DEPENDENCIES"
        exclude "META-INF/notice.txt"
        exclude "META-INF/license.txt"
        exclude "META-INF/dependencies.txt"
        exclude "META-INF/LGPL2.1"
        exclude "META-INF/ASL2.0"
        exclude "META-INF/maven/com.google.guava/guava/pom.properties"
        exclude "META-INF/maven/com.google.guava/guava/pom.xml"
    }
}

dependencies {
    ...
    compile "com.sodyo:sodyo-android-sdk:3.00.04"
}
```

## Initialization

Prior to launching the Sodyo Scanner, the app should initialize the Sodyo engine. This will instantiate the Sodyo SDK and load your app data that is binded with your Sodyo Markers. The initialization method should be from your Main activity class.

1. Call the initialization method from your main activity onCreate():

```
import com.sodyo.sdk.Sodyo;

@Override
public void onCreate() {
    // init Sodyo engine App
    Sodyo.init(application, SODYO_APP_KEY, initializationCallback);

    // define a detection callback
    Sodyo.getInstance().setSodyoScannerCallback(this);
    ...
    super.onCreate();
}
```

### Parameters Description:

- application: application context
- The **SODYO\_APP\_KEY** can be found in the application provider module of your account in the Sodyo Portal
- initializationCallback: Used to provide an async callback to identify whether Sodyo SDK initialization failed or finished successfully.

2. Make your activity implement the SodyoInitCallback interface to get notified on the result of the initialization process:

```
import com.sodyo.sdk.SodyoInitCallback;

public void onSodyoAppLoadSuccess();
public void onSodyoAppLoadFailed(String error);
```

## Sodyo Marker Detection

The app invokes the Sodyo Scanner to start detecting markers. Sodyo scans for Markers in the camera field of view and uses a callback procedure for each detected Marker. The Sodyo Scanner will keep running until it is finished.

1. Set a callback object that implements SodyoScannerCallback and receives the scanning results.

```
import com.sodyo.sdk.SodyoScannerCallback;

Sodyo.getInstance().setSodyoScannerCallback(this);
```

Make your activity implement the SodyoScannerCallback interface to get notified on marker scan:

```
@Override
public void onMarkerDetect(String data,String error) {

}
}
```

2. Launch SodyoScanner Activity using startActivityForResult(Intent, int). For example:

```
import com.sodyo.app.SodyoScanner;

private static final int SODYO_REQUEST_CODE = 1111;

Intent intent = new Intent(MainActivity.this, SodyoScanner.class);
startActivityForResult(intent, SODYO_REQUEST_CODE);
```

3. When ready, dismiss the SodyoScanner activity using finishActivity(int requestCode). Use the request code that was used in the previous section. For example:

```
finishActivity(SODYO_REQUEST_CODE);
```

## Intent Filter

Add additional intent filter for application to handle sodyo actions:

```
<intent-filter>
    <action android:name="android.intent.action.VIEW"/>

    <category android:name="android.intent.category.DEFAULT"/>
    <category android:name="android.intent.category.BROWSABLE"/>

    <data android:scheme="sodyo"/>

</intent-filter>
```

## Setting Up ProGuard

Add the following lines to your project's proguard-rules.pro file:

```
-dontwarn com.sodyo.**
-keep class com.crittercism.**
-keepclassmembers class com.com.sodyo.** { *, }
```

## Migrating from previous versions of the SDK

To upgrade from previous versions of the SDK, make sure to pull the latest version of the SDK as indicated in the dependencies of the app build.gradle file above. In addition, change your init function as indicated in the initialization section above.



## IOS:

### Installation

1. Sodyo's SDK is installed using CocoaPods. For more information on installing CocoaPods on your system, read: <http://cocoapods.org>.
2. In your project's pod file, add:

```
pod 'SodyoSDK'
```

3. Add an entry for NSCameraUsageDescription in your info.plist file.
4. An example project is available at <https://github.com/SodyoSDK/SodyoSDKPod>.

### Initialization

Prior to launching the Sodyo Scanner, the application should initialize the Sodyo engine.

This will instantiate the Sodyo SDK and load your application's data that is binded with your Sodyo Markers.

The initialization method should be called once in your AppDelegate or anywhere in the code.

1. Include the header file:

```
#import <SodyoSDK/SodyoSDK.h>
```

2. Call the initialization method:

```
[SodyoSDK LoadApp:<SODYO_APP_KEY> Delegate:NSObject<SodyoSDKDelegate> MarkerDelegate:NSObject<SodyoMarkerDelegate> PresentingViewController:UIViewController*];
```

#### Parameters Description:

- The **SODYO\_APP\_KEY** can be found in the application provider module of your account in the Sodyo Portal
- Optionally Implement the SodyoSDKDelegate functions below to get notified on the result of the initialization process:

```
- (void) onSodyoAppLoadSuccess:(NSInteger)AppID;  
- (void) onSodyoAppLoadFailed:(NSInteger)AppID error:(NSError *)error;
```

- **MarkerDelegate:** An object that conforms to the SodyoMarkerDelegate protocol (see below).
- **PresentingViewController:** For SodyoAd markers, the UIViewController that will be used to present SodyoAd's UIViewController.

## Sodyo Marker Detection

The app invokes the Sodyo Scanner to start detecting markers. Sodyo scans for Markers in the camera's field of view and calls back a delegate function for each detected Marker.

The Sodyo Scanner will keep running until it is dismissed.

1. Launch Sodyo Marker Scanner by presenting it as a UIViewController. For example:

```
#import <SodyoSDK/SodyoSDK.h>

...

[self presentViewController:[SodyoSDK initSodyoScanner] animated:YES completion:nil];
```

2. For data markers, implement the following delegate method. Sodyo will call this method upon a Sodyo Data Marker detection:

```
- (void) SodyoMarkerDetectedWithData:(NSDictionary*)Data;
```

Notes:

- Data - A JSON object: {SodyoMarkerData: <string data>}
- Not relevant when using Sodyo's Ad platform.

3. When ready, dismiss the Sodyo Marker Scanner. Use the UIViewController that you presented earlier. For example:

```
[self dismissViewControllerAnimated:YES completion:nil];
```

## Migrating from previous versions of the SDK

To upgrade from previous versions of the SDK, make sure to perform a POD update operation.

## Appendix A – License Agreement

IMPORTANT -- READ CAREFULLY: THIS LICENSE AGREEMENT (THIS "AGREEMENT") IS A LEGAL AGREEMENT BETWEEN SODYO (AS DEFINED BELOW) AND THE USER (AS DEFINED BELOW). BY INSTALLING THE SOFTWARE (AS DEFINED BELOW), YOU REPRESENT AND WARRANT THAT (I) IF THE USER IS AN ENTITY, THAT YOU ARE AUTHORIZED TO ACCEPT THESE TERMS ON ITS BEHALF (IN SUCH EVENT "YOU" SHALL REFER TO YOU AND SUCH ENTITY, SEVERALLY AND JOINTLY), OR (II) IF THE USER IS AN INDIVIDUAL, THAT YOU INTEND TO BE PERSONALLY BOUND BY THE TERMS AND CONDITIONS OF THIS AGREEMENT. YOU AGREE THAT THIS AGREEMENT IS ENFORCEABLE LIKE ANY WRITTEN NEGOTIATED AGREEMENT SIGNED BY YOU. THIS AGREEMENT APPLIES TO ANY UPDATES, SUPPLEMENTS AND/OR SUPPORT SERVICES FOR THE SERVICE AND/OR SOFTWARE, UNLESS OTHER TERMS ACCOMPANY THOSE ITEMS (IF SO, THOSE OTHER TERMS APPLY).

### 1. Definitions

"SODYO" means Sodyo LTD.

"User" shall mean the user designated by you, who shall be licensed to use the applicable Software licensed hereunder pursuant to this Agreement.

"Software" shall mean a machine executable copy of the SODYO software products and applications, the access and usage to which has been ordered by you under this Agreement.

"Service" shall mean the online access to a machine executable copy of the SODYO software products and applications, which has been ordered by you under this Agreement.

### 2. License

As long as you comply with the terms of this Agreement, SODYO grants to you a nonexclusive, nontransferable right to use the Service, for your own purposes, subject to the terms and conditions of this Agreement. All rights not expressly granted to you are reserved by SODYO and its licensors.

You shall not (i) license, sublicense, sell, resell, transfer, assign, distribute or otherwise commercially exploit or make available to any third party the Service in any way; (ii) modify or make derivative works based upon the Service or the Software; (iii) create Internet "links" to the Service or "frame" or "mirror" any Content on any other server or wireless or Internet-based device; or (iv) reverse engineer or access the Service or the Software in order to (a) build a competitive product or service, (b) build a product using similar ideas, features, functions or graphics of the Service or the Software, or (c) copy any ideas, features, functions or graphics of the Service or the Software. User licenses cannot be shared or used by more than one individual.

During using the Service you shall not: (i) send spam or otherwise duplicative or unsolicited messages in violation of applicable laws; (ii) send or store infringing, obscene, threatening, libelous, or otherwise unlawful or tortuous material, including, without limitation, material harmful to children or violating third party privacy rights; (iii) send or store material containing software viruses, worms, Trojan horses or other harmful computer code, files, scripts, agents or programs; (iv) interfere with or disrupt the integrity or performance of the Service or the data contained therein; or (v) attempt to gain unauthorized access to the Service or its related systems or networks.

### 3. Restrictions

Except as expressly authorized above, you shall not copy the Software. You shall not reverse engineer, decompile, disassemble, or attempt to discover any of the Software object code or source code.

### 4. Ownership and Confidentiality

The structure, organization and code of the Software are the trade secrets and confidential information of SODYO and its licensors. You acquire only the right to use the Service pursuant to this Agreement and do not acquire any rights of ownership, express or implied, in the Software or the Service. This Agreement does not grant you any intellectual property rights in the Software or the Service and all rights not expressly granted herein are reserved by SODYO and its licensors.

### 5. Limited Warranty

SODYO does not warrant that: (i) Software will be free from defects; (ii) Software will satisfy all of your requirements; (iii) Software will operate without interruption or error; (iv) Software will always locate or block access to or transmission of all desired addresses, applications and/or files; (v) Software will identify every transmission or file that should potentially be located or blocked; (vi) addresses and files contained in the Software will be appropriately categorized; or (vii) algorithms used in the Software will be complete or accurate. TO THE EXTENT ALLOWED BY LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, TITLE OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SOFTWARE/SERVICE.

#### 6. Limitation of Liability

THIS SERVICE IS PROVIDED BY SODYO "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. IN NO EVENT SHALL SODYO BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, CONSEQUENTIAL OR SIMILAR DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) AND/OR ANY OTHER DAMAGE, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) OR OTHERWISE, ARISING IN ANY WAY OUT OF THE SERVICES AND/OR SOFTWARE AND/OR ANY USE AND/OR UTILIZATION THEREOF AND/OR IN CONNECTION WITH THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. YOU OR ANY THIRD PARTY SHALL HAVE NO REMEDIES IN CONNECTION WITH THIS AGREEMENT.

#### 7. Term & Termination

This Agreement shall be effective from the installation of the Software until its termination.

Either party may terminate this Agreement by written notice to the other party. You agree and acknowledge that SODYO has no obligation to retain Customer Data, and may delete such Customer Data after termination.

Termination will not limit SODYO from pursuing other remedies, such as injunctive relief, nor relieve you of any payment obligation (if any) that arose prior to termination. The parties' rights and obligations with respect to the fees and payment terms (if any), title and protection, confidentiality, patent and copyright indemnification, license, limitation of liability, attorney's fee (if any) and governing law provision of this Agreement shall survive termination of this Agreement.

#### 8. Invoicing and Payment

SODYO Service version is currently provided free of charge, but in the future the use of the Service might be subject to fees. If Sodyo, in its sole discretion, chooses to establish fees and payment terms for such use, SODYO will provide notice of such terms and you may elect to stop using the Service rather than incurring fees.

Payment for the Service shall be received by SODYO or other Service Providers before you use the Service. If you are granted a credit term, all fees charged by SODYO or other Service Providers are due and payable within thirty (30) days following the invoice date. Your order is non-cancelable and, upon payment, all payments are non-refundable. You will reimburse SODYO for all reasonable costs incurred (including attorney's fees) in collecting past due amounts. You will pay or reimburse SODYO for all taxes, duties, or any similar assessments on the amounts charged, except for Sodyo's income taxes.

#### 9. Account Data

You, not SODYO, shall have sole responsibility for the accuracy, quality, integrity, legality, reliability, appropriateness, and intellectual property ownership or right to use of all data that you submit in the course of using the Service ("Customer Data"), and SODYO shall not be responsible or liable for the deletion, correction, destruction, damage, loss or failure to store any Customer Data. SODYO reserves the right to withhold, remove and/or discard Customer Data without notice for any breach, including, without limitation, your non-payment. Sodyo may use the Customer Data in order to further develop and improve the Services.

#### 10. Intellectual Property Ownership

SODYO alone (and its licensors, where applicable) shall own all right, title and interest, including all related Intellectual Property Rights, in and to the Software, the content and the Service and any suggestions, ideas, enhancement requests, feedback, recommendations or other information provided by You or any other party relating to the Service. This Agreement is not a sale and does not convey to you any rights of ownership in or related to the

Service or the Software, or the Intellectual Property Rights owned by SODYO. The SODYO name, logo, product and service names are trademarks of SODYO or third parties, and no right or license is granted to use them.

#### 11. Modification to Terms

SODYO reserves the right to modify the terms and conditions of this Agreement or its policies relating to the Service at any time, effective upon posting of an updated version of this Agreement on the Service. You are responsible for regularly reviewing this Agreement. Continued use of the Service after any such changes shall constitute your consent to such changes.

#### 12. Assignment; Change in Control

This Agreement may not be assigned by you without the prior written approval of SODYO, but may be assigned without your consent by SODYO to (i) a parent or subsidiary, (ii) an acquirer of assets, or (iii) a successor by merger. Any purported assignment in violation of this section shall be void.

#### 13. Governing Law

This Agreement will be governed by and construed with the substantive Israeli laws (without its conflicts of laws provisions). Any dispute in connection with this Agreement shall be resolved exclusively by the competent courts of Tel Aviv – Jaffa, Israel.

#### 14. Entire Agreement

This Agreement constitutes the complete agreement between SODYO and you and replaces all previous agreements or representations, written or oral, regarding the Software and Service. Any terms and conditions of your purchase order are superseded by this Agreement, even if initialed by SODYO.

#### 15. General

In the event that any provision of this Agreement is held to be unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement will remain in effect and the parties shall substitute for the affected provisions an enforceable provision, which approximates the intent and economic effect of the affected provision.