

iOS Lens Credit Cards

Adding Lens Credit Cards SDK to your project

Note: The below steps assume that you already have Cocoapods installed and initialized in your project. If you're new to Cocoapods, visit the [official site](#) to get started.

1. Open your project's *Podfile*
2. Add the Veryfi private Cocoapods repository as a source at the top of the *Podfile*

```
source 'git@bitbucket.org:veryfi/veryfi-lens-podspec.git '
```

3. Add the VeryfiLens pod to your target

```
pod 'VeryfiLens-CreditCards'
```

4. A minimal version of your *Podfile* should look similar to this:

```
source 'git@bitbucket.org:veryfi/veryfi-lens-podspec.git '  
source 'https://github.com/CocoaPods/Specs.git '  
  
target 'VeryfiLensExample' do  
  use_frameworks!  
  
  # Pods for VeryfiLensExample  
  pod 'VeryfiLens-CreditCards'  
end
```

5. Make sure your SSH key has been granted access to Veryfi's private Cocoapods repository [here](#).

Also make sure your SSH key has been added to ssh-agent by running this command in the Terminal:

```
# Replace /path/to/private_key with the actual path to your SSH  
private key  
ssh-add -K /path/to/private_key
```

6. Install the pod by running this command in the Terminal, in the root folder of your project:

```
pod install
```

Configuring your project to use Lens SDK

Add the following permissions to your app's plist:

```
<key>NSCameraUsageDescription</key>
<string>Scan documents</string>
<key>NSPhotoLibraryAddUsageDescription</key>
<string>Access photo gallery for document backups</string>
<key>NSPhotoLibraryUsageDescription</key>
<string>Access photo gallery for document uploads</string>
<key>NSPhotoLibraryAddUsageDescription</key>
<string>Access photo gallery for document backups</string>
<key>NSPhotoLibraryUsageDescription</key>
<string>Access photo gallery for document uploads</string>
<key>NSSpeechRecognitionUsageDescription</key>
<string>Quickly add transactions via voice dictation</string>
<key>NSMicrophoneUsageDescription</key>
<string>Quickly add transactions via voice dictation</string>
<key>NSLocationAlwaysAndWhenInUseUsageDescription</key>
<string>Helps to identify places around you</string>
<key>NSLocationWhenInUseUsageDescription</key>
<string>Helps to identify places around you</string>
<key>NSContactsUsageDescription</key>
<string>Add your ____@veryfi.cc assigned email address for reference<
/string>
<key>NSCalendarsUsageDescription</key>
<string>Enrich your data with business meetings and events from your
Calendar</string>
```

Initializing Lens

1. Import required symbols from Lens SDK:

```
import VeryfiLens
```

2. Configure your [authentication credentials](#):

```

let CLIENT_ID = "XXX" // replace XXX with your assigned Client Id
let AUTH_USERNAME = "XXX" // replace XXX with your assigned
Username
let AUTH_APIKEY = "XXX" // replace XXX with your assigned API Key
let URL = "XXX" // replace XXX with your assigned Endpoint URL

let veryfiLensCredentials = VeryfiLensCredentials(clientId:
CLIENT_ID,
username:
AUTH_USERNAME,
apiKey:
AUTH_APIKEY,
url: URL)

```

3. Mandatory Lens Credit Cards settings. More available settings later in this section.

```

let veryfiLensSettings = VeryfiLensSettings()
veryfiLensSettings.autoCaptureIsOn = true
veryfiLensSettings.autoRotateIsOn = true
veryfiLensSettings.documentTypes = ["credit_card"]
veryfiLensSettings.galleryIsOn = false
veryfiLensSettings.moreMenuIsOn = false
veryfiLensSettings.showDocumentTypes = true

```

4. Initialize Lens:

```

VeryfiLens.shared().configure(with: veryfiLensCredentials, settings:
veryfiLensSettings)

```

Available settings:

`docDetectFillUIColor`: credit card detection rectangle fill color (default: "#9653BF8A")

`docDetectStrokeUIColor`: credit card detection rectangle stroke color (default: *null*)

Launching Lens

1. Launch the Lens camera:

```

VeryfiLens.shared().showCamera(in: self)

```

Your app will need to communicate with Lens to handle user actions, various status changes and extraction results from Verify. See the [Communicating with Lens](#) section below for details.

Communicating with Lens

1. Set your delegate:

```
VeryfiLens.shared().delegate = self
```

2. Implement the delegate methods:

```
extension ViewController: VeryfiLensDelegate {
    func veryfiLensClose(_ json: [String : Any]!) {
        let jsonData = try? JSONSerialization.data(withJSONObject:
json as Any, options: .prettyPrinted)
        let jsonString = String(data: jsonData!, encoding: .utf8)
        print(String("veryfiLensClose: " + jsonString!))    // do
something with the JSON here
    }

    func veryfiLensUpdate(_ json: [String : Any]!) {
        let jsonData = try? JSONSerialization.data(withJSONObject:
json as Any, options: .prettyPrinted)
        let jsonString = String(data: jsonData!, encoding: .utf8)
        print(String("veryfiLensUpdate: " + jsonString!))    // do
something with the JSON here
    }

    func veryfiLensSuccess(_ json: [String : Any]!) {
        let jsonData = try? JSONSerialization.data(withJSONObject:
json as Any, options: .prettyPrinted)
        let jsonString = String(data: jsonData!, encoding: .utf8)
        print(String("veryfiLensSuccess: " + jsonString!))    // do
something with the JSON here
    }

    func veryfiLensError(_ json: [String : Any]!) {
        let jsonData = try? JSONSerialization.data(withJSONObject:
json as Any, options: .prettyPrinted)
        let jsonString = String(data: jsonData!, encoding: .utf8)
        print(String("veryfiLensError: " + jsonString!))    // do
something with the error JSON here
    }
}
```

Delegate Definitions

- `veryfiLensClose` - the Veryfi Lens camera has been closed, either as a result of submitting a credit card for processing, or the user closed the camera without submitting an image.

Sample data:

```
{
  "status": "close",
  "queue_count": 1,
  "framework-version": "1.5.7",
  "session_scan_count": 1,
  "framework-build": "49"
}
```

- `veryfiLensUpdate` - during the processing of a credit card, this delegate will be fired multiple times. One time it will contain the thumbnail path for the submitted document and one time it will contain a full-size image path. In addition, it would let you know when the package was removed.

Sample *package created* notification:

```
{
  "status": "start",
  "package_id": "5kY9hX1b0COeg5n07y71"
}
```

Sample *thumbnail path* notification:

```
{
  "status": "inprogress",
  "msg": "img_thumbnail_path",
  "data": "/path/to/thumbnail.jpg",
  "package_id": "5kY9hX1b0COeg5n07y71"
}
```

Sample *full-size image path* data:

```
{
  "status": "inprogress",
  "msg": "img_original_path",
  "data": "/path/to/image.jpg",
  "package_id": "5kY9hX1b0COeg5n07y71",
  "document_type": "credit_card"
}
```

Sample *package removed* notification data:

```
{
  "status": "removed",
  "msg": "clear_package",
  "package_id": "5kY9hX1b0COeg5n07y71"
}
```

- `verifyLensError` - if an error occurs during uploading or processing a submitted or a general exception or crash is caught in Verifyfi Lens, this notification contains the error details.

Sample *error* data:

```
{
  "status": "error",
  "package_id": "5kY9hX1b0COeg5n07y71",
  "msg": "Error description"
}
```

- `verifyLensSuccess` - this delegate fires once a credit card has finished processing, This delegate provides the response from Verifyfi models.

Sample data:

```
{
  "status": "done",
  "msg": "results",
  "data": {
    "card_number": "5143 3201 1937 4709",
    "card_name": "ALEJANDRO URIBE",
    "card_type": "mastercard",
    "card_dates": [
      "1\10",
      ""
    ]
  },
  "package_id": "5kY9hX1b0COeg5n07y71"
}
```

Prepare your app for the App Store

1. Go to your app's *Target > Build Phases*

Make sure `VerifyfiLens.xcframework` is included in the *Embedded Frameworks* section

Please note: adding the iOS Lens Credit Cards SDK to your app will increase your final app size by up to 22 MB. This is due to machine learning models, support libraries, etc included in the SDK.