iOS SDK Integration Document

1. Prerequisites:

1. Purchase Mobile Plan

Client needs to purchase mobile membership using server-to-server API calls.

[OnBoard Customer API calls]

2. OAuth Token

Get SDK OAuth token using generateToken API.

3. Activation Code

To activate any mobile membership use Activation Code from membership details API

2. Getting Started

1. Installation

OneAssistSDK for iOS is available at cocoapods. Add the line below to the Podfile

```
pod "OneAssistSDK", "0.0.1"
and then run $pod install
```

[How to add cocoapods to the iOS project]

Also, add the following permission to info.plist file of the app.

```
<key>NSPhotoLibraryUsageDescription</key>
<string>Need permission for activation</string> // replace with custom text.
```

Swift version supported: 5.0

iOS Deployment target: 11.0

Third-party dependencies: Alamofire, GoogleMLKit/TextRecognition, DeviceKit, CocoaLumberjack/Swift

2. Usage

Use the below import statement to import the SDK.

```
import OneAssistSDK
```

SDK interface will consist of OAAction, OAActivation and OAError.

2.1 OAAction is the enum that will represent the stage at which the activation flow is or the next action item.

| | OAAction | Description | Next Action |
|---|--------------------------------------|---|--|
| 1 | INITIALIZEDSDK | THIS STAGE INDICATES THAT THE SDK HAS BEEN INITIALIZED | CALL STARTACTIVATION METHOD OF OAACTIVATION OBJECT |
| 2 | FETCHDEVICEID | THIS STAGE INDICATES THAT THE DEVICE ID IS MISSING AND THE CLIENT NEEDS TO FETCH DEVICE ID TO PROCEED FURTHER | CALL FETCHDEVICEID METHOD OF OAACTIVATION OBJECT |
| 3 | PROVIDEUSERBASICDETAIL | THIS STAGE INDICATES THAT THE CLIENT NEEDS TO PROVIDE THE BASIC DETAILS. | CALL SUBMITBASICDETAILS METHOD OF OAACTIVATION OBJECT |
| 4 | SENDUPLOADLINK | THIS STAGE INDICATES THAT THE CLIENT SHOULD SEND UPLOAD LINK AND CONTINUE TO DOCUMENT UPLOAD FROM ANOTHER DEVICE. | CALL SENDUPLOADLINK METHOD OF OAACTIVATION OBJECT |
| 5 | SENDUPLOADLINKOROPENSE CURESCREEN | THIS STAGE INDICATES THAT THE CLIENT CAN OPEN THE SECURE-SCREEN AND CAPTURE IT OR THE CLIENT SHOULD SEND UPLOAD LINK AND CONTINUE TO DOCUMENT UPLOAD FROM ANOTHER DEVICE. | CALL SENDUPLOADLINK METHOD OR CALL OPENS ECURESCREEN METHOD OF OAACTIVATION OBJECT |
| 6 | SECURESCREENDISMISSED | THIS STAGE INDICATES THAT THE SECURE-SCREEN IS DISMISSED, THE CLIENT CAN MAKE USE OF THIS STAGE TO UPDATE THE MEMBERSHIP STATUS. | THE CLIENT MAY WISH TO REFRESH THE MEMBERSHIP STATUS AFTER RECEIVING THIS ACTION TO SHOW THE UPDATED STATUS. |
| 7 | COMPLETED | THIS STAGE INDICATES THAT ACTIVATION FLOW IS COMPLETED | NA |

2.2 OAError is the enum that will represent any error that will occur in the activation process.

| | Error | Code | Description |
|----|------------------------------|------|--|
| 1 | ERROR_EMPTY_TOKEN | 1001 | TOKEN EMPTY |
| 2 | ERROR_EMPTY_ACTIVATION_CODE | 1002 | ACTIVATION CODE EMPTY |
| 3 | ERROR_EMPTY_MOBILE_NUMBER | 1003 | MOBILE NUMBER IS EMPTY |
| 4 | ERROR_EMPTY_USER_DETAILS | 1004 | USER DETAILS NOT PROVIDED |
| 5 | ERROR_EMPTY_PINCODE | 1005 | PINCODE IS EMPTY |
| 6 | ERROR_EMPTY_ADDRESS | 1006 | ADDRESS IS EMPTY |
| 7 | ERROR_IMEI_MISSING | 1007 | IMEI IS MISSING |
| 8 | ERROR_SMS_NOT_SENT | 1008 | SEND MESSAGE ON SECONDARY DEVICE FIRST |
| 9 | ERROR_MEMBERSHIP_IN_PROGRESS | 2001 | ACTIVATION IN-PROGRESS |
| 10 | ERROR_MEMBERSHIP_PENDING | 2002 | ACTIVATION IN-PROGRESS |
| 11 | ERROR_MEMBERSHIP_APPROVED | 2003 | MEMBERSHIP APPROVED |
| 12 | ERROR_MEMBERSHIP_QUEUED | 2004 | MEMBERSHIP QUEUED |
| 13 | ERROR_MEMBERSHIP_REJECTED | 2005 | MEMBERSHIP REJECTED |
| 14 | ERROR_MEMBERSHIP_CANCELLED | 2006 | MEMBERSHIP CANCELLED |
| 15 | ERROR_GET_MEMBERSHIP_DETAILS | 3001 | UNABLE TO GET MEMBERSHIP DETAIL |
| 16 | ERROR_GET_REQ_DOC_DETAILS | 3002 | UNABLE TO GET MEMBERSHIP DETAIL |
| 17 | ERROR_UPDATE_USER_DETAILS | 3003 | UNABLE TO UPDATE USER DETAIL |
| 18 | ERROR_SEND_UPLOAD_LINK | 3004 | UNABLE TO SEND SMS |

| 19 | ERROR_UNABLE_TO_DO_OCR | 4001 | IMEI NOT RECOGNIZED |
|----|--|------|---------------------------------|
| 20 | ERROR_PHOTO_PERMISSION | 4002 | PHOTO LIBRARY PERMISSION NEEDED |
| 21 | ERROR_SCREEN_RECORDING | 4003 | SCREEN RECORDING |
| 22 | ERROR_SCREENSHOT_FETCH | 4004 | UNABLE TO FETCH SCREENSHOT |
| 23 | ERROR_SCREENSHOT_LOAD | 4005 | UNABLE TO LOAD SCREENSHOT |
| 24 | ERROR_UNABLE_TO_PROCESS_DESC | 4006 | UNABLE TO PROCESS. TRY AGAIN! |
| 25 | ERROR_UNKNOW | 5000 | SOME ERROR OCCURRED. TRY AGAIN! |
| 26 | ERROR_API(CODE: STRING, DESCRIPTION: STRING) | CODE | DESCRIPTION |

2.3 OAActivation class will consist of methods that the client should execute depending on the OAAction as state above in OAAction table.

2.3.1 OAActivationCompletion

Each method of this class will have a completion block in the format below

(_ success: Bool, _ stage: OAAction, _ error: OAError?) -> ()

- 1. success Bool value that represents whether the method has processed successfully.
- 2. stage OAAction value that represents the next stage in the activation flow after the successful execution of the method.
- 3. error OAError value that represents any error which has occurred in the method execution.

2.3.2 OAActivation methods and activation steps

Step 1. Initialization

```
/// This method will set up the SDK with the token generated from
generateToken API.
/// - Parameter token: non-empty token string needed to setup the SDK.
/// - Parameter isDebugMode: optional param, (default false) it
represent is the SDK is to be run in debug mode or not.
/// - Parameter apiEndPoint: optional param, (default nil) client can
provide the custom endpoint here to work in debug mode
/// to redirect all the activation related API calls to that endpoint.
If this is nil,
/// then default endpoint for debug mode will be used.
func initializeSDK(token: String, isDebugMode: Bool = false,
apiEndPoint: String? = nil, completion: OAActivationCompletion)
```

Step 2. Start Activation

```
/// This method will start the activation flow
/// - Parameter activationCode: activation code of the pending
membership.
func startActivation(for activationCode: String, completion: @escaping
OAActivationCompletion)
```

Step 3. Fetching Device Id

```
/// This method will fetch the device id from the device and move onto
the next stage of activation.
/// If pincode and address are also provided then user doesn't have to
submit these detail again.
/// - Parameter pincode: optional param, pincode of the user
/// - Parameter address: optional param, address of the user
func fetchDeviceId(pincode: String? = nil, address: String? = nil,
completion: @escaping OAActivationCompletion)
```

Step 4. Submitting Detail

```
/// This method will submit the basic details of the user.
/// - Parameter pincode: pincode of the user
/// - Parameter address: address of the user
func submitBasicDetails(pincode: String, address: String, completion:
@escaping OAActivationCompletion)
```

Step 5: Sending Upload Link

```
/// This method will send the document upload link to secondary device.
/// - Parameters mobileNumber: mobile number of the secondary device,
should not be same as the mobile number with which the membership is
purchased.
func sendUploadLink(_ mobileNumber: String, completion: @escaping
OAActivationCompletion)
```

Step 6: Opening Secure Screen

```
/// This method will open the secure screen.
/// - Parameter viewController: view controller reference on which the screen will be opened.
func openSecureScreen(onViewController viewController:
UIViewController, completion: @escaping OAActivationCompletion)
```

Example:

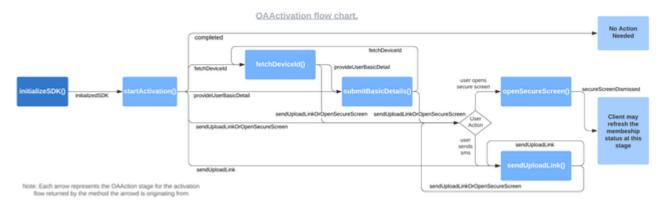
```
var activationHelper = OAActivation()
```

```
// Intialization
activationHelper.initializeSDK(token: AUTH TOKEN, isDebugMode: true,
completion: handleSDKCallback)
activationHelper.initializeSDK(token: AUTH_TOKEN, completion:
handleSDKCallback)
// Activation
activationHelper.startActivation(for: ACTIVATION_CODE, completion:
handleSDKCallback)
// Fetch Device Id
activationHelper.fetchDeviceId(pincode: PINCODE, address: ADDRESS,
completion: handleSDKCallback)
activationHelper.fetchDeviceId(completion: handleSDKCallback)
// Submit Basic Detail
activationHelper.submitBasicDetails(pincode: PINCODE, address: ADDRESS,
completion: handleSDKCallback)
// Send Upload link
activationHelper.sendUploadLink(SECONDARY DEVICE MOBILE NUMBER,
completion: handleSDKCallback)
// Open Secure Screen
activationHelper.openSecureScreen(onViewController:
VIEW_CONTROLLER_REF, completion: handleSDKCallback)
// Callback handler
func handleSDKCallback(status: Bool, stage: OAAction, error: OAError?) {
    if status {
        switch stage {
        case .initializedSDK:
            // Client can show UI that will call startActivation or may
call startActivation here if ACTIVATION_CODE exists
        case .fetchDeviceId:
            // Client can show UI that will call fetchDeviceId or call
fetchDeviceId here
        case .provideUserBasicDetail:
            // Client can show UI that will call submitBasicDetails or
call submitBasicDetails here if PINCODE and ADDRESS is already taken
from user.
        case .sendUploadLink:
            // Client will show UI that will call sendUploadLink
        case .sendUploadLinkOrOpenSecureScreen:
            // Client will show UI that will call openSecureScreen and
sendUploadLink
        case .secureScreenDismissed:
            // Client can call membership api to update the membership
       case .completed:
```

```
// Activation Flow Completed
}

} else if let error = error {
    let alert = UIAlertController(title: "Error \((error.)\)
    errorCode)", message: error.localizedDescription, preferredStyle: .
    alert)
        alert.addAction(UIAlertAction(title: "ok", style: .default, handler: nil))
        present(alert, animated: true, completion: nil)
    }
}
```

Flow Chart:



Extra info:

API endpoint setup in the SDK.

| API Endpoint | Environment |
|--------------------------------------|---------------------|
| https://uat1.1atesting.in/apigateway | Staging |
| https://api.oneassist.in/apigateway | Production(Default) |

Normal UI Flow to use OneAssistSDK:

1. Show membership info to the user with the following actions using membership details:

| Membership Status | Possible actions for SDK | UI/UX |
|---------------------------------------|---|--|
| POSTDTLPENDING, | CALL STARTACTIVATION METHOD AFTER SETTING UP | SHOW APPROPRIATE UI TO SHOW THE STAGES AT WHICH THE MEMBERSHIP ACTIVATION FLOW IS, |
| POSTDTLCOMPLETE, | THE SDK TO CHECK FOR THE STATE, AND PERFORM THE | SHOW UI TO TAKE INPUT FOR THE PINCODE, ADDRESS AND SECONDARY |
| REUPLOAD | ACTION AS PER THE OAACTION TABLE. | DEVICE MOBILE NUMBER FOR THE CORRESPONDING METHODS. |
| | OAAO IION TABLE. | SHOW UI TO SHOW THE CLIENT SOME INFORMATION AS TO HOW THE DEVICE ID (IMEI) WILL BE READ. |
| PENDING, | NO ACTION REQUIRED FROM | SHOW THE CURRENT STATUS ON THE MEMBERSHIP CARD, |
| CANCELLED, REJECTED, APPROVED, QUEUED | THE USER | FOR PENDING CASE THE MEMBERSHIP IS PROCESSING AT ONEASSIST'S END. |