Android SDK Integration Document

1. Prerequisites:

1. Purchase Mobile Plan

Clients need to purchase mobile membership using server-to-server API calls.

[OnBoard Customer api calls](it will be provided via mail)

2. Oauth Token

Get SDK OAuth token using `generateToken Api`

[generateToken API]. (it will be provided via mail)

3. Activation Code

To activate any mobile membership use `Activation Code` from `onboardCustomer Api` and `lead status Api` API. (document will be provided via mail)

2. Getting Started

1. Installation

OneAssist Android SDK `.aar` is available on `github`. Use the following link to get the latest version of SDK.

https://github.com/oneassist/sdk-fraud-detection-android

Add library `.aar` file dependency to Project.

[How to add .aar to Android Project]

USED GRADLE VERSION : `3.6.4`

COMPILESDKVERSION : `29` MINSDKVERSION : `16` TARGETSDKVERSION: `29`

2. Initialization

Step 1: Initialize SDK from `onCreate` method of Activity

```
        OASdkCredential credential = OASdkCredential.build()
                                    .setUserToken(<OAUTH_TOKEN>)
                                    .setSdkTestingEnv(<SDK_ENV>)
                                    .isDeveloperModeEnabled
    (<true|false>);
        try {
                OneAssistSDK.initialize(<Activity Context>, credential, new
    OneAssistSDK.InitState() {
                    @Override
                    public void onSuccess(OAAction action) {
                        //.... SDK initialization success
                    }
                    @Override
                    public void onFail(OAError error) {
                        //.... SDK initialization error
                    }
                });
        } catch (Exception e) {
                // Custom Exception
        }
```

Replace `OAUTH_TOKEN` with oauth token generated using `generateToken API`.

Replace `SDK_ENV` with SDK environment domain :

https://uat1.1atesting.in/	Staging
https://api.oneassist.in/	Production(Default)

Set SDK mode using `isDeveloperModeEnabled` :

`true` - for staging environment

`false` - for Production

For `Staging` set `isDeveloperModeEnabled` true and pass staging URL in `setSdkTestingEnv`. if `isDeveloperModeEnabled` is false, SDK will ignore `setSdkTestingEnv` value and use production URL for API Calls.

Replace `<Activity Context>` with Activity Context(`AppCompatActivity`)

`OneAssistSDK.InitState` callbacks provide status with success/fail error messages.

2. Membership Activation:

1. In `Activity` which contain user membership details Override `onActivityResult` method.

```
@Override
    protected void onActivityResult(int requestCode, int resultCode,
    Intent data) {
            super.onActivityResult(requestCode, resultCode, data);
            OneAssistSDK.setOnActivityResult(requestCode, resultCode, data);
            //....
    }
```

2. Event Call back Listener: To get events/next step and error messages from SDK `implements` membership call back listener `OneAssistSD K.SDKCallbacks`:

Call back methods :

(A). `onSuccess(OAAction action` Get provided task status with next step require to complete Activation flow. `OAAction` contains `getStatu s()`,`getNextAction()` and `getNextActionDesc()` methods.

(B). `onProcess(boolean status)` Show SDK task progress to user. When SDK doing any background processing return `true` and on task complete `false`.

(C). `onError(OAError oaError)` Get error message if any occurred during SDK processing. `OAError` contains `getErrorCode()`, `getErrorMsg()` methods

3. SDK Capabilities

	Task	Method Name	Description
1	Start Membership Activation flow or update user basic details	`OneAssistSDK. MembershipActivateRequestBui lder()`	Use this method to initiate membership Activation process
2	Update user basic details	`.setUserBasicDetails (<OAUserBasicInfo>)`	Use this method of `MembershipAc tivateRequestBuilder` to provide user details and move membership next step
3	Send Doc upload link using SMS on user other devices	`OneAssistSDK. OASendDocUploadLinkRequestBu ilder()`	Use this method for sending SMS with doc upload link to user other device . using this link user will upload device front or back panel images
4	Open SDK Secure screen	`.isOpenSecureScreen (true|false)`	Use this method to open SDK secure screen, user need to capture front panel image

Required Data-Types for SDK methods:

Method Name	Data Type	Mandatory(M) or Optional(O)
`setActivationCode`	`ACTIVATION_CODE` as `String`	M
`setUserAddress`	`USER_ADDRESS` as `String`	M
`setUserPinCode`	`USER_ADDRESS_PINCODE` as `String`	M
`setVerificationNo`	`VERIFICATION_MOBILE_NUMBER` as `String`	M
`isOpenSecureScreen`	`boolean`	M

A. Use `OneAssistSDK.MembershipActivateRequestBuilder()` to initiate membership activation process:

```
                    try {
                        OneAssistSDK.MembershipActivateRequestBuilder()
                                .setActivationCode(<ACTIVATION_CODE>)
                                .setEventListener(this)
                                .activate(this);
                    } catch (Exception e) {
                         // error message from sdk
                    }
```

Replace `ACTIVATION_CODE` with membership activation code . `ACTIVATION_CODE` is `String` type.

B. Use `OneAssistSDK.MembershipActivateRequestBuilder` with `setUserBasicDetails` method to provide user basic details:

```
                    OAUserBasicInfo userBasicInfo = new OAUserBasicInfo();
                    userBasicInfo.setUserAddress(<USER_ADDRESS>);
                    userBasicInfo.setUserPinCode(<USER_ADDRESS_PINCODE>);
                    try {
                        OneAssistSDK.MembershipActivateRequestBuilder()
                                .setActivationCode(<ACTIVATION_CODE>)
                                .setEventListener(this)
                                .setUserBasicDetails(userBasicInfo)
                                .activate(this);
                    } catch (Exception e) {
                        // error message from sdk
                    }
```

Replace `USER_ADDRESS` with user address,`USER_ADDRESS_PINCODE` with user address Pincode and `ACTIVATION_CODE` with membership activation code.

`USER_ADDRESS`, `USER_ADDRESS_PINCODE` and `ACTIVATION_CODE` is `String` type.

C. Use `OneAssistSDK.OASendDocUploadLinkRequestBuilder()` to send doc upload link on other device:

```
                    try {
                        OneAssistSDK.OASendDocUploadLinkRequestBuilder()
                                .setActivationCode(<ACTIVATION_CODE>)
                                .setVerificationNo
    (<VERIFICATION_MOBILE_NUMBER>)
                                .setEventListener(this)
                                .sendDocUploadLink(this);
                    } catch (Exception e) {
                        // error message from sdk
                    }
```

Replace `ACTIVATION_CODE` with membership activation code and `VERIFICATION_MOBILE_NUMBER` with verification mobile number on which user want to receive upload doc link.

D. Use `OneAssistSDK.MembershipActivateRequestBuilder()` with `isOpenSecureScreen` method to open SDK secure screen for user. user need to capture this screen as front panel image if required.

```
try {
    OneAssistSDK.MembershipActivateRequestBuilder()
            .setActivationCode(<ACTIVATION_CODE>)
            .setEventListener(this)
            .isOpenSecureScreen(true)
            .activate(this);
} catch (Exception e) {
    // error message from sdk
}
```

Normal UI Flow to use OneAssist SDK:

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

Membership Status	Possible actions for SDK	UI/UX
POSTDTLPENDING	User basic details pending. ask address and pinCode to user and call `MembershipActivateRequestBuilder` with `setUserBasicDetails()` method	Show UI to user ask pinCode and address
PENDING	No Action required from user	In this stage OneAssist is processing user membership. show processing related custom message.
POSTDTLCOMPLETE	Front and back panel images pending.	Show following actions for membership: a. Show action for Send SMS b. Show open secure screen action
REUPLOAD	Provided details are rejected by OneAssist. user need to provide details again	Show following actions for membership: a. Show action for Send SMS b. Show open secure screen action
CANCELLED, REJECTED, APPROVED, QUEUED	No Action required from user	

> **SDK Success and Error Codes**

1. OAError will contains following error code with messages:

Error	Code	Description
ERROR_EMPTY_ACTIVATION_CODE	1002	ACTIVATION CODE EMPTY
ERROR_EMPTY_ADDRESS	1006	ADDRESS IS EMPTY
ERROR_EMPTY_MOBILE_NUMBER	1003	MOBILE NUMBER IS EMPTY
ERROR_EMPTY_PINCODE	1005	PINCODE IS EMPTY

ERROR_EMPTY_TOKEN	1001	TOKEN EMPTY
ERROR_EMPTY_USER_DETAILS	1004	USER DETAILS NOT PROVIDED
ERROR_GET_MEMBERSHIP_DETAILS	3001	UNABLE TO GET MEMBERSHIP DETAIL
ERROR_GET_REQ_DOC_DETAILS	3002	UNABLE TO GET MEMBERSHIP DETAIL
ERROR_IMEI_MISSING	1007	IMEI IS MISSING
ERROR_MEMBERSHIP_APPROVED	2003	MEMBERSHIP APPROVED
ERROR_MEMBERSHIP_CANCELLED	2006	MEMBERSHIP CANCELLED
ERROR_MEMBERSHIP_IN_PROGRESS	2001	ACTIVATION IN-PROGRESS
ERROR_MEMBERSHIP_PENDING	2002	ACTIVATION IN-PROGRESS
ERROR_MEMBERSHIP_QUEUED	2004	MEMBERSHIP QUEUED
ERROR_MEMBERSHIP_REJECTED	2005	MEMBERSHIP REJECTED
ERROR_SEND_UPLOAD_LINK	3004	UNABLE TO SEND SMS
ERROR_SMS_NOT_SENT	1008	SEND MESSAGE ON SECONDARY DEVICE FIRST
ERROR_UNABLE_TO_DO_OCR	4001	IMEI NOT RECOGNIZED
ERROR_UNABLE_TO_PROCESS_DESC	4006	UNABLE TO PROCESS. TRY AGAIN!
ERROR_UPDATE_USER_DETAILS	3003	UNABLE TO UPDATE USER DETAIL
ERROR_MIN_ANDROID_VERSION	6001	THIS FEATURE REQUIRE MINIMUM OREO (ANDROID 8) TO WORK!
ERROR_TESTING_ENV_NOT_FOUND	6001	PROVIDE TESTING ENV BASE URL OR SET DEVELOPER MODE TO FALSE
ERROR_REQUIRED_ACTIVITY_CONTEXT	6003	PROVIDE ACTIVITY CONTEXT!!
ERROR_UNABLE_TO_DO_OCR	4001	DEVICE ID NOT RECOGNIZED

2. OAAction will contains following success code with messages:

Next Action	Next Action Description
ACTION_PROVIDE_USER_BASIC_DETAILS	USE MEMBERSHIPACTIVATEREQUESTBUILDER WITH SETUSERBASICDETAILS METHOD
ACTION_SEND_UPLOAD_LINK_OR_OPEN_SECURE_SCREEN	SEND SMS ON OTHER DEVICE OR OPEN SECURE SCREEN
ACTION_SEND_UPLOAD_LINK	SEND SMS ON OTHER DEVICE
ACTION_SECURE_SCREEN_DISMISSED	SECURE SCREEN DISMISSED