1) Clone Project & add Agora RTC SDK via CocoaPods

git clone https://github.com/sidsharma27/OpenLive-iOS -b StartProject

Podfile should already be in your starter project, open the Podfile via Terminal

```
open Podfile
```

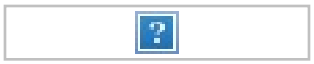
Double check the dependency is included in the Podfile

```
target ‘OpenLive' do
  use_frameworks!
  pod 'AgoraRtcEngine_iOS'
end
```

Install the pod & open the newly created .xcworkspace file

```
pod install
```

Add Privacy Settings – Info.plist



2) Create & Initialize ‘AgoraRtcEngineKit’ object

Create the ‘AgoraRtcEngineKit’ object and initialize it class as a singleton instance

```
import AgoraRtcEngineKit

var rtcEngine : AgoraRtcEngineKit!
func loadAgoraKit() {
    rtcEngine = AgoraRtcEngineKit.sharedEngine(withAppId: KeyCenter.AppID, delegate: self)
}
```

3) Set Channel Profile

Set the Channel Profile to Live Broadcast

```
rtcEngine.setChannelProfile(.channelProfile_LiveBroadcasting)
```

4) Enable Video Mode

Enables video data to be sent to stream, without this -> Audio Only

```
rtcEngine.enableVideo()
```

5) Set Channel Profile

Tells AgoraRtcEngine what type of channel it is in order to optimize the particular call

```
engine.setChannelProfile(.channelProfile_LiveBroadcasting)
```

6) Set video resolution

Sets the video encoding profile (FPS / Resolution)

```
engine.setVideoProfile(videoProfile, swapWidthAndHeight:true)
```

7) Set user role

Tells RtcEngine which role the member is: Audience or Broadcaster

```
rtcEngine.setClientRole(clientRole, withKey: nil)
```

8) Enable dual stream mode

Allows the ability to have two different types of stream modes (high and low)

```
rtcEngine.enableDualStreamMode(true)
```

9) Set Remote Video Stream

Adjust stream type based on size of UI windows to save bandwidth & calculation resources (in setStreamType())

```
rtcEngine.setRemoteVideoStream(UInt(session.uid), type: (session == fullScreenSession ?  .videoSt

rtcEngine.setRemoteVideoStream(UInt(session.uid), type: .videoStream_High)
```

10) Join Channel

Join the channel with App ID as Key (unsecure alternative instead of Dynamic Key - demo purposes only)

```
rtcEngine.joinChannel(byKey: KeyCenter.AppID, channelName: roomName, info: nil, uid: 0, joinSuces
```

11) Leave Channel

Stop the local preview, unbind the view, and leave the channel (in leaveChannel( ))

```
rtcEngine.setupLocalVideo(nil)
rtcEngine.leaveChannel(nil)
```

12) Set the local/remote video view

VideoSession is an object that contains the information regarding an individual video session

```
var canvas: AgoraRtcVideoCanvas!
canvas = AgoraRtcVideoCanvas()
canvas.uid = Uint(uid)
canvas.renderMode = .render_Hidden
canvas.view = hostingView
```

Set remote video view in rtcEngine callback

(didJoinedOfUid)

```
rtcEngine.setupRemoteVideo(userSession.canvas)
```

Set local video view in addLocalSession()

```
rtcEngine.setupLocalVideo(localSession.canvas)
```

13) Setup additional features

Switch camera (toggle front/back)

```
@IBAction func doSwitchCameraPressed (_sender:UIButton) {
    rtcEngine?.switchCamera()
}
```

Mute Local Audio Stream (don’t send audio stream)

```
fileprivate var isMuted = false {
    didSet{
        rtcEngine?.muteLocalAudioStream(isMuted)
    }
}
```

Join broadcast (audience member joins as Guest broadcaster)

```
@IBAction func doBroadcastPressed(_sender:UIButton) {
    if isBroadcaster{
        clientRole= .clientRole_Audience
    } else {
        clientRole= .clientRole_Broadcaster
```

```
    }
    rtcEngine.setClientRole(clientRole, withKey: nil)
}
```

Run the app!