

Face Liveness SDK Build Instructions

This guide will help you set up, build, and distribute the Face Liveness SDK.

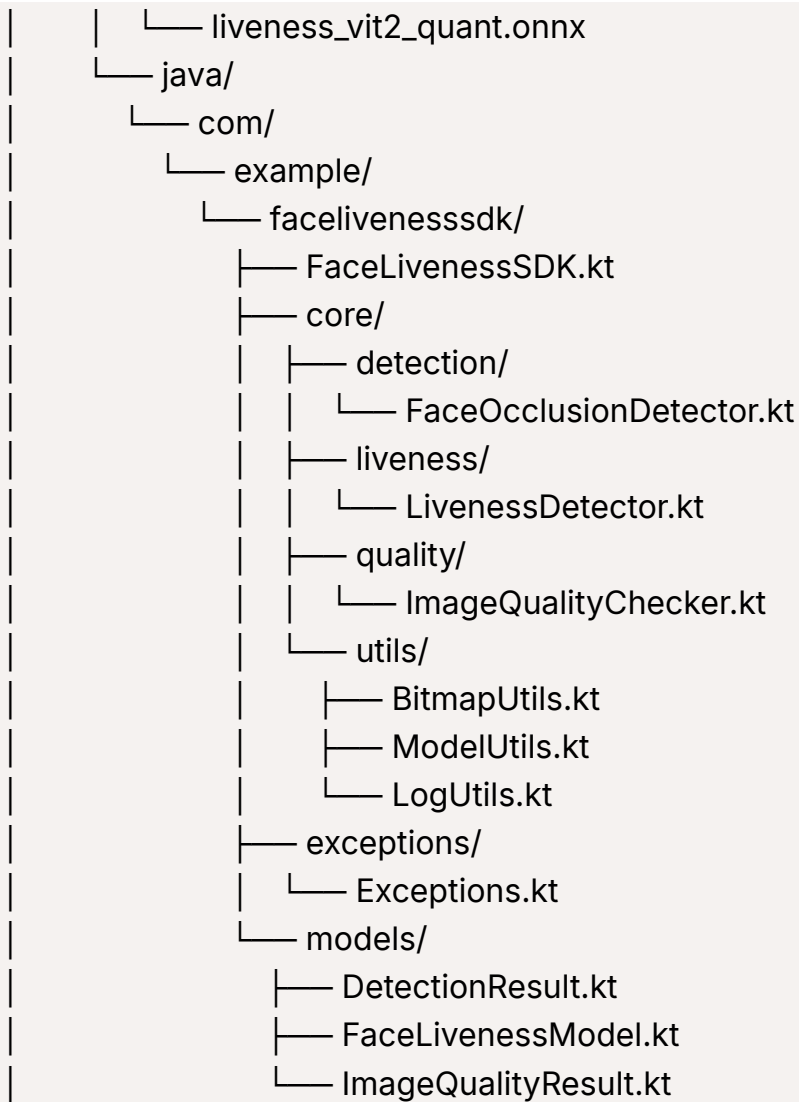
Project Setup

1. Create a new Android project in Android Studio:
 - File > New > New Project
 - Choose "Empty Activity" template
 - Name: "FaceLivenessDetection"
 - Package name: "com.example.facelivenesssdetection"
 - Minimum SDK: API 21 (Android 5.0)
 - Language: Kotlin
2. Add a library module for the SDK:
 - File > New > New Module
 - Choose "Android Library"
 - Name: "facelivenesssdk"
 - Minimum SDK: Same as your app (API 21)
 - Language: Kotlin

SDK Files Structure

Organize your SDK module with the following structure:

```
facelivenesssdk/  
├── build.gradle           // Already created in this guide  
├── src/  
│   ├── main/  
│   │   ├── AndroidManifest.xml // Auto-generated  
│   │   ├── assets/           // Create this folder  
│   │   └── face_mask.onnx     // Add your model files here
```



Required Models

The SDK requires two ONNX model files:

1. **face_mask.onnx**: For face occlusion detection
2. **liveness_vit2_quant.onnx**: For liveness detection

Place these in the `src/main/assets/` directory of your library module.

If you don't have the model files, you'll need to either:

- Obtain them from a trusted source
- Train your own models (outside the scope of this guide)
- Use placeholder models for testing

Building the AAR

1. Open the Terminal in Android Studio or use a command prompt
2. Navigate to your project directory
3. Run:

```
./gradlew :facelivenesssdk:assembleRelease
```

4. The AAR will be generated at:

```
facelivenesssdk/build/outputs/aar/facelivenesssdk-release.aar
```