Introduction

Welcome to the build documentation for the *amos2023ws03-gui-frame-diff* project — a tool designed for analyzing and presenting differences in various video files. This documentation outlines the process of building the different modules that form part of the project.

Prerequisites

- Java (Working at least with JDK Coretto 17.0.9)
- Gradle (Working at least with version 7.4.2)

For detailed information please refer to the corresponding readme of the respective libraries.

Building and Running the modules

Library 1

1. build in VideoGenerator/example
    - `./gradlew assemble`
2. download test assets
    - `./gradlew downloadAndUnzipTestAssets`
3. to run unit tests
    - `./gradlew test`
4. For the next steps we assume, that `emulator` and `adb` are installed (usually at $ANDROID_HOME/{emulator,platform-tools}) and in the PATH
    - `emulator -list-avds`
5. start the emulator without loading a previous snapshot
    - `emulator -avd Pixel_3a_API_34_extension_level_7_x86_64 -no-snapshot-load`
6. if the emulator says that it cant connect to adb, we need to restart the adb server
    - `adb kill-server && adb start-server`
7. to run android tests
    - `./gradlew connectedAndroidTest`
8. installing the debug apk into the emulator
    - `adb install app/build/outputs/apk/debug/app-debug.apk`
9. To run the app, one needs to click the appropriate icon in the emulator or by running this adb shell command
    - `adb shell am start -n`
    `de.guiframediff.videogeneratorexample/de.guiframediff.videogeneratorexample.MainActivit`

```
y -a android.intent.action.MAIN -c android.intent.category.LAUNCHER --splashscreen-
show-icon
```

Library 2

1. Build a jar file:
   - `./gradlew assemble`
2. Download test assets:
   - `./gradlew downloadAndUnzipTestAssets`
3. To run tests:
   - `./gradlew test`

GUI

1. Build a jar file:
   - `./gradlew build`
2. To run tests:
   - [To be determined; no tests available yet]
3. To build a native application for the current OS:
   - `./gradlew createDistributable`