

Mobile Application Development

(Libraries and Resources)

Instructor: Thanh Binh Nguyen

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“The future of mobile is the future of online. It is how people access online content now.”

– David Murphy, Founder and Editor of [Mobile Marketing Daily](#)

UI Design Tools



UI Design

- Android Developer: <https://developer.android.com/design/index.html>
- Online Wireframe: <https://draw.io>
- Online Mockup Design: <https://www.figma.com>, <https://www.mockflow.com/>,
<https://www.justinmind.com> or ...
- Nine-patch generators:
<https://romannurik.github.io/AndroidAssetStudio/nine-patches.html>

Libraries



Utilities

- **Retrofit:** a type-safe HTTP client for Android and Java
 - <https://square.github.io/retrofit/>
- **Room:** develop offline apps with the official ORM Android library, full power of SQLite for handling data.
 - <https://developer.android.com/training/data-storage/room>
- **Dagger 2:** A fast dependency injector for Java and Android.
 - <https://github.com/google/dagger>

Libraries



Utilities

- **EasyPermissions**: a wrapper library in order to simplify basic system permissions login when targeting Android M or higher
 - <https://github.com/googlesamples/easypermissions>
- **Objectbox**: an object-oriented embedded database and the right alternative for SQLite
 - <https://github.com/objectbox/objectbox-java>
- **EventBus**: support multiple active components communicating with each other by using the publisher/subscriber pattern.
 - <https://github.com/greenrobot/EventBus>

Libraries



Custom Views

- **Lottie**: the Android animation libraries.
 - <https://github.com/airbnb/lottie-android>
- **Glide**: image loading library
 - <https://github.com/bumptech/glide>
- **Zxing**: a barcode image processing library
 - <https://github.com/zxing/zxing>
- **ExoPlayer**: a media player library developed by Google
 - <https://github.com/google/ExoPlayer>

Machine Learning - KIT



- **KALDI**: a toolkit for speech recognition
 - <https://kaldi-asr.org/>
 - <https://github.com/alphacep>
 - <https://github.com/alphacep/vosk-android-demo>

Machine Learning - KIT

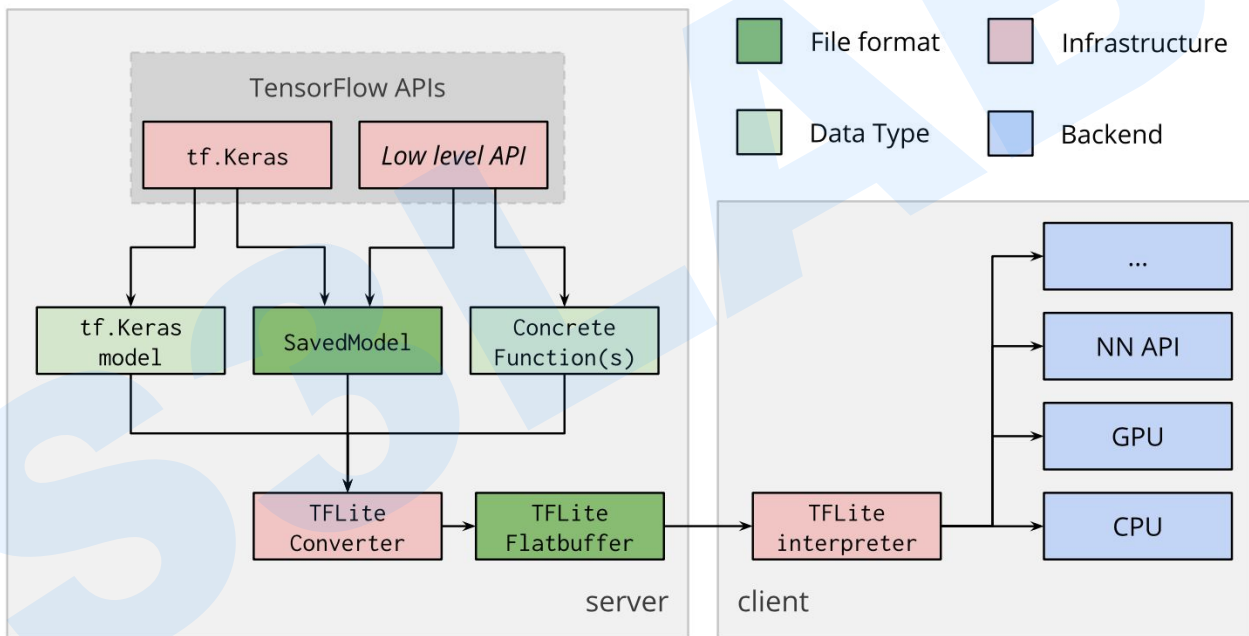


<https://developer.android.com/ml>

- **TensorFlow Lite:** TensorFlow Lite lets you run TensorFlow machine learning (ML) models in your Android apps
 - <https://www.tensorflow.org/lite/android>
 - <https://tfhub.dev/>
 - <https://developer.android.com/codelabs/digit-classifier-tflite#0>
 - <https://developers.google.com/codelabs/tflite-object-detection-android#0>
 - https://www.tensorflow.org/lite/models/modify/model_maker
 - <https://www.msystechnologies.com/blog/how-to-build-an-ai-app-using-tensorflow-and-android/>
 - <https://codelabs.developers.google.com/?cat=Android>
 - <https://www.youtube.com/watch?v=HQXwGs-IJR8>

Machine Learning - KIT

- TensorFlow Lite

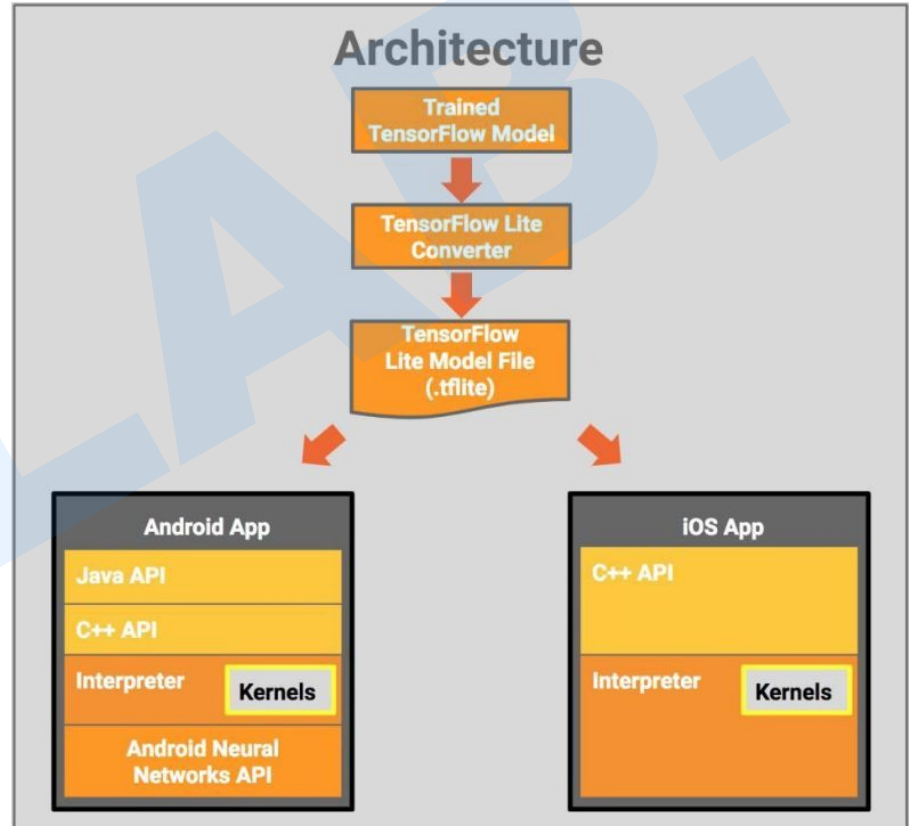


Source:

https://www.tensorflow.org/lite/convert/index#device_deployment

Machine Learning - KIT

- TensorFlow Lite



Machine Learning - KIT



- **ML Library:** A Machine learning for mobile developers by Google
 - <https://developers.google.com/ml-kit/>
 - <https://www.youtube.com/watch?v=CQ8iEqblWtY>
 - <https://www.youtube.com/watch?v=CSJMxEOgiJQ>

Q & A



Thank you for listening

*"Coming together is a beginning;
Keeping together is progress;
Working together is success."
- HENRY FORD*