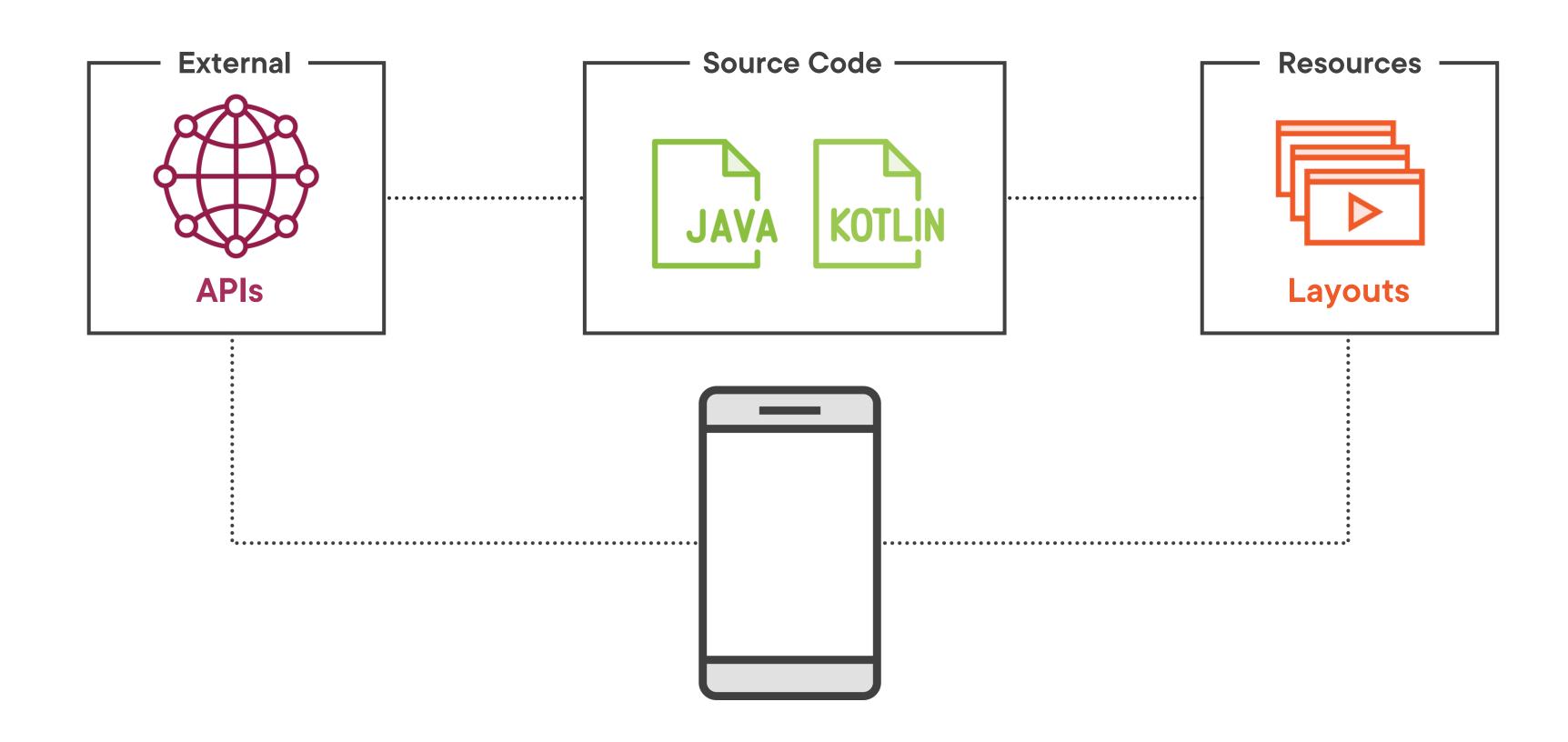
Building an Android App with Kotlin



Markus Neuhoff Android Developer

Android Architecture



Overview



UI - Material Design

External APIs - Google APIs

Source Code - Android Jetpack

Android Studio Features

Building Great Uls with Material Design

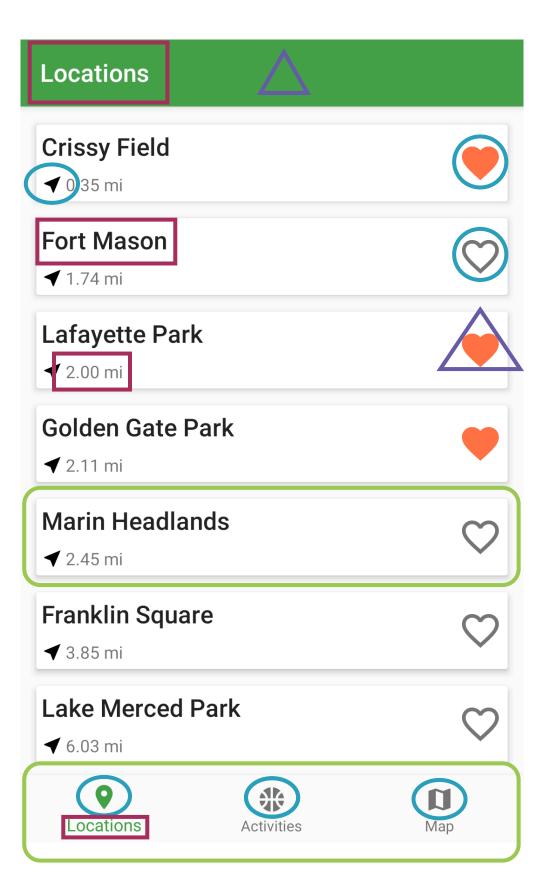
Material Design

Vectors

Fonts

Components

Colors





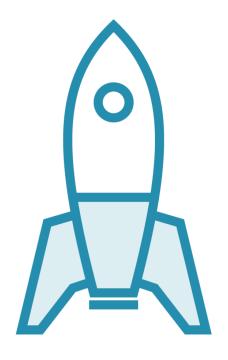
material.io

Adding Functionality with Google APIs

Firebase



Build
Authentication
Databases
Notifications



Release & Monitor
Remote Config
Device Test Lab
Google Analytics



Engage
Dynamic Links
Predictions
A/B Testing

Google Maps Platform

Maps

Google Map

Blue Dot

Street View

Routes

Directions

Distance Matrix

Roads

Places

Place Search

Place Details

Utilities

Any RESTful API can easily be integrated into a native Android app

Better and Faster Code with Android Jetpack

Locations **Crissy Field √** 0.35 mi Fort Mason **◀** 1.74 mi **Lafayette Park ✓** 2.00 mi **Golden Gate Park ✓** 2.11 mi Marin Headlands **✓** 2.45 mi Franklin Square **◀** 3.85 mi Lake Merced Park **◀** 6.03 mi Locations Activities Мар

Build UI

- Cards
- Bottom navigation

App structure

- Activities
- Fragments
- Navigate within app

Get location data

Store user favorites

Dependency injection

Unit testing

Material Design Components

Activity

Fragment

Navigation

Firestore

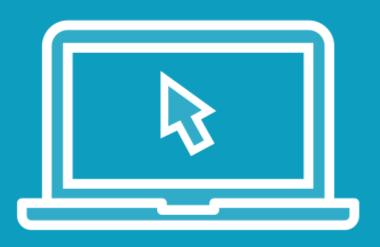
Room

Hilt

Test

Using libraries balances reduced boilerplate with having to follow specific patterns

Demo



Adding vector icons

Inspecting databases

Managing in-app navigation

Course Summary



Why develop native Android apps?
What is Kotlin and why does it matter?
How to develop native Android apps



Thank you!