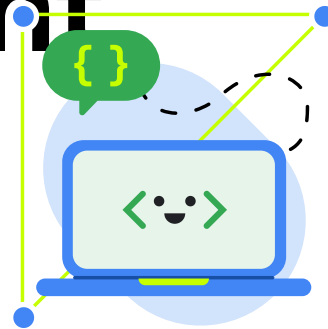# Teach Android Development

Shape the knowledge for learners to build apps for Android, a platform with billions of active Android devices in the world.

Teach a Class (#teach-a-class)

Lead a Study Jam (#lead-a-study-jam)

Motivate students with tangible, relevant examples

Android development is Kotlin-first

Kotlin is the recommended

Prepare students for exciting career opportunities

There are over 2.6 billion active Android users in the world. As the mobile industry continues to grow globally, there has never been a better time for students to learn how to create and influence the technology they use in their daily lives.

programming language for building new Android apps. For students who are learning programming for the first time, Kotlin's code safety features and concise syntax allows them to focus on learning core programming fundamentals.

Android development is a valuable skill set that is in-demand around the world. There are a variety of careers within the Android ecosystem, and opportunities to create new businesses.

Hear from professors who are already teaching Kotlin (https://www.youtube.com/watch?v=MQPeEOf3G7A) as part of their curriculum.

Teach a Class

The Android Development with Kotlin course is designed for educators to teach the fundamentals of Android development with the Kotlin programming language in a classroom setting.

Prerequisites

Learners are expected to be familiar with object-oriented programming language, how to use an IDE, and how to use GitHub. No prior experience with Kotlin or Android is necessary. It is recommended that educators complete the course content before teaching it.

Lecture Slides and Code Samples

The course is 13 lessons long with each lecture being approximately 1 hour long. Each lecture is accompanied by 2 hours of hands-on codelabs for learners to complete on their own. If you're ready to start teaching Android, use these materials to get started today. We have lessons covering the Kotlin language, introduction to Android development, UI basics, Android app architecture, and many others. Use the following slides to deliver lectures in a classroom setting.

Lecture Slides and Code Samples

Lesson	View Slides	View App Sam

Note: Lessons 1 to 3 cover the Kotlin language, and you
Android app in Lesson 4.

Introduction	Android Development with Kotlin (https://goo.gle/3sPw3Fz)	–
Lesson 1	Kotlin Basics (https://goo.gle/3sSg7lK)	–
Lesson 2	Functions (https://goo.gle/2Y5Pv2D)	–
Lesson 3	Classes and Objects (https://goo.gle/2Y2S8SO)	–
Lesson 4	Build your first Android app (https://goo.gle/3caByJb)	Dice Roller App (https://github.co training/android- roller-with-butto
Lesson 5	Layouts (https://goo.gle/2NqsrcN)	Tip Calculator Ap (https://github.co training/android- app-solution)
Lesson 6	App Navigation (https://goo.gle/3sONg1R)	AndroidTrivia App (https://github.co training/android- apps/tree/master
Lesson 7	Activity and Fragment Lifecycle (https://goo.gle/3o43QHu)	DessertClicker A (https://github.co training/android- apps/tree/master

Lesson 8	App Architecture (UI Layer) (https://goo.gle/3iL0iJ5)	Unscramble App (https://github.co training/android- app/tree/starter)
Lesson 9	App Architecture (Persistence Layer) (https://goo.gle/3iLIWvO)	TrackMySleepQu (https://github.co training/android- apps/tree/maste
Lesson 10	Advanced RecyclerView use cases (https://goo.gle/3qIPcqP)	RecyclerView Ap (https://github.co training/android- apps/tree/maste
Lesson 11	Connect to the Internet (https://goo.gle/2Nlr9jc)	MarsRealEstate A (https://github.co training/android- apps/tree/maste
Lesson 12	Repository pattern and WorkManager (https://goo.gle/365eUOa)	WorkManager Ap (https://github.co workmanager/)
Lesson 13	App UI Design (https://goo.gle/3qMZ4A2)	Shrine App (https://github.co components/mat codelabs/tree/m
	Download all slides (https://goo.gle/3iKdGx4)	–

Learning Pathways

In parallel with the slides, use these learning pathways (https://g.co/android/student) as assignments for learners. Once completed,

learners can take quizzes and earn badges for each lesson.

Professor Testimonials

"

As it's mostly a hands-on course, students learn implementations which helps them in their placements in Mobile app companies.

—

Dr. Kavita S. Oza
Shivaji University

"

Students should learn an app development language for [developing] mobile apps. Kotlin is most suitable to be learned.

—

Dr. Satvir Singh
I. K. Gujral Punjab Technical University

"

Compared to other languages a student may learn, Kotlin is better to understand and good for implementation.

—

Dr. Priyank Singhal
Teerthanker Mahaveer University

For additional resources, check out the JetBrains Kotlin for Education (https://kotlinlang.org/education/) page.

Lead a Study Jam

The Android Study Jams program is designed for a group of people in the community to come together to learn how to build Android apps.

Prerequisites

No prior experience with programming is necessary. For Study Jams organizers, it is not required to be an expert on the material or to deliver lectures because participants work through a self-paced online curriculum provided by Google. However, we recommend that organizers complete the content before leading the group.

Guides

These materials can be used in a meetup group, after-school program, or among any group of peers. At the end of the program, you can offer a fun challenge for participants to create an Android app that tackles a local community problem.

- Organizer guide (https://goo.gle/3sUY5Sw) – A thorough guide on how to run Android Study Jams, complete with tips on recruiting participants

- Presenter guide (https://goo.gle/3zoiI1) – Tips on how to engage your audience and create slides for sessions

- Sample slides for Sessions 1 & 2 (https://goo.gle/3pvR4V0) - Slides you can adapt and use to facilitate the initial sessions of Study Jams

- Download all slides (https://bit.ly/AndroidStudyJamsSlides)

Learning Pathways

Explore the learning pathways from the Android Basics in Kotlin course (https://g.co/android/basics) that your participants will be going through as part of Study Jams.

Facilitator Testimonials

Students were lined up two hours before entering the computer lab... all of whom were eager for the program and knew they were going to learn something new today.

——

Sorosh Shiwa
DSC Lead of Aria University

Introducing people to Kotlin and being by their side at this first step which could touch their lives created great happiness and excitement for us.

——

Ceren Tunay and Serkan Alc
DSC Turkey, Android Core Mentor Team

Follow [#AndroidStudyJams](https://twitter.com/search?q=%23AndroidStudyJams&src=typed_query) (https://twitter.com/search?q=%23AndroidStudyJams&src=typed_query) on Twitter

How two developers learned Android and launched their careers

Android Developer Story: Two developers launch their car...

▶