# **Android Study Jams Bonus Materials - GDSC NIT Hamirpur**



GDSC NIT Hamirpur: gdsc-nith

Android Docs: <a href="https://d.android.com/docs">https://d.android.com/docs</a>

Android Courses Directory: <a href="https://d.android.com/courses">https://d.android.com/courses</a> Android Developer Guides: <a href="https://d.android.com/guide">https://d.android.com/guide</a>

Android Samples: <a href="https://d.android.com/samples">https://d.android.com/samples</a>

Android Associate Developer Certification: <a href="https://grow.google/androiddev">https://grow.google/androiddev</a>

Android Udacity Nanodegree (Paid):

https://www.udacity.com/course/android-kotlin-developer-nanodegree--nd940

## **# Bonus Content**

Unit 1: All about Kotlin

#### Materials:

- Get Started with Kotlin
- Learn Kotlin
- Kotlin style guide
- Kotlin-Java interop guide
- Add Kotlin to an existing app

#### Articles:

- #31DaysOfKotlin
- Collections and sequences in Kotlin
- Kotlin Standard Functions Cheat-Sheet
- Migrating an Android project to Kotlin
- Learn Kotlin through Unit Tests
- Adopting Kotlin

#### Videos:

- typealias
- inline classes
- sealed classes
- enums and R8
- inline functions
- operator overloading
- suspend modifier

## **Unit 2: Layouts & List**

#### Guides:

- Create a List with a RecyclerView
- Material tutorials in Kotlin
- Material Components for Android
- Responsive Layouts in Android

#### Articles:

Display List using RecyclerView

## Samples:

- More Kotlin samples

#### Videos:

- Material Design Components - MAD Skills series

## **Unit 3: Navigation**

## **Guides:**

- Get started with the Navigation component | Navigation overview
- Create destinations
- Navigate to a destination
- Update UI components with NavigationUI
- Pass data between destinations
- Global actions
- Conditional destinations
- Custom destination types

#### Articles:

- Navigation Component: An Overview | Navigating with SafeArgs
- Navigating with Deep Links
- Deep thoughts on deep links

## Samples:

- More Kotlin samples

#### Videos:

Navigation - MAD Skills | More Navigation

#### Unit 4 & 5: Coroutines & Database

## **Guides:**

- Best Practices for Coroutines
- Create a Room Database

#### Articles:

- Coroutines
- Database Relations with Room

## Samples:

- More Kotlin samples
- Curated Kotlin samples
- Android Room with a View
- Use Kotlin Coroutines in your App

## Videos:

- Kotlin Coroutines 101 Android Conference Talks
- Coroutines Playlist
- MAD Skills Using Room Kotlin APIs

# Unit 6: Work manager

## **Guides:**

- Core App Quality Guide
- Build for Billions
- Test your apps

#### Articles:

- Follow the Launch Checklist
- Workmanager Kotlin APIs
- <u>Jetpack Curated Blogs</u>

#### Videos:

- Android Jetpack: Introducing WorkManager
- WorkManager MAD Series

# # Android Basics Pathway

We hope that you completed Android Basics through the Android Study Jams program. If not, you can start with these links

Link: <a href="https://g.co/android/basics">https://g.co/android/basics</a>

#### Content:

- Unit 1: Kotlin Basics
- Unit 2: Layouts
- Unit 3: Navigation
- <u>Unit 4: Connect to the internet</u>
- <u>Unit 5: Data persistence</u>
- Unit 6: Work Manager

## Additional perks:

- Virtual Badges

# # Android Advanced Pathway

Next learning pathway after Android Basics

Link: <a href="https://developer.android.com/courses/kotlin-fundamentals/course">https://developer.android.com/courses/kotlin-fundamentals/course</a>

## Content:

- Unit 1
- <u>Unit 2</u>

## Additional perks:

- Virtual Badges

# **# Udacity Courses**

- Developing Android Apps (Intermediate)
- Advanced Android Apps (Intermediate)
- Udacity Google

