



Android App Development Internship

Course Objectives

1. Understand Android architecture and core components.
2. Learn to design and implement various Android UI layouts and controls.
3. Master activity lifecycle management and fragment usage.
4. Develop skills in handling user inputs, dialogs, and notifications.
5. Perform data storage and retrieval using SQLite and Firebase Authentication.
6. Implement animations, multimedia features, and manage app resources effectively.

Prerequisites

- Basic knowledge of Java programming or any object-oriented language.
- Familiarity with programming concepts such as variables, functions, and classes.
- Basic understanding of XML for UI design is helpful but not mandatory.

Tools & Environment

- Android Studio IDE for app development.
- Java Development Kit (JDK).
- Android SDK and Emulator or physical Android device for testing.
- Firebase Console for backend services and authentication setup.

Beyond Objectives Learning

- Build complete, functional Android applications with interactive UI and smooth user experience.
- Manage app lifecycle and state efficiently to optimize performance and battery use.
- Integrate backend services such as Firebase for authentication and data storage.
- Explore advanced Android concepts including custom adapters, animations, and multimedia integration.
- Prepare for entry-level Android developer roles by gaining practical, hands-on experience.

Sr.	Title	Topic	Objective
1	Tutorial 01: Introduction to Android from Scratch Hindi	Android Architecture	Understand Android architecture and basic concepts
2	Tutorial 02: Android Activity Lifecycle Complete in Hindi/Urdu	Activity Lifecycle	Learn the complete lifecycle of an Android Activity and its methods
3	Tutorial 03: Android core building blocks in Hindi/Urdu	Android Core Components	Get familiar with the 8 core building blocks of Android
4	Tutorial 04: Dalvik Virtual Machine Android in Hindi	Dalvik VM and Setup	Understand Dalvik Virtual Machine and how to install Android Studio with JDK
5	Tutorial 05: Android folder hierarchy in Hindi/Urdu	Project Structure	Learn the folder hierarchy of an Android project and create Hello World app
6	Tutorial 06: Linear layout in android using Horizontal and vertical orientation in Hindi/Urdu	Layouts: LinearLayout	Use LinearLayout with horizontal and vertical orientation
7	Tutorial 07: Relative layout tutorial android in hindi	Layouts: RelativeLayout	Learn RelativeLayout with examples



Sr.	Title	Topic	Objective
8	Tutorial 08: Table layout in Android Studio in Urdu / Hindi	Layouts: TableLayout	Understand and implement TableLayout in Android
9	Tutorial 09: Grid layout in android studio in Urdu/hindi	Layouts: GridLayout	Learn to use GridLayout in Android Studio
10	Tutorial 10: Frame Layout tutorial in android studio 2020 in Urdu/Hindi	Layouts: FrameLayout	Understand FrameLayout and its uses
11	Tutorial 11: Absolute layout in android studio in Urdu/Hindi	Layouts: AbsoluteLayout	Learn AbsoluteLayout and usage of layout_x and layout_y
12	Tutorial 12: Constraint Layout in android studio in Urdu/Hindi	Layouts: ConstraintLayout	Understand ConstraintLayout for advanced UI layouts
13	Tutorial 13: What is Toast in Android Studio	UI Elements: Toast	Learn how to create and use Toast messages
14	Tutorial 14: Custom Toast in Android Studio using ImageView and TextView	UI Elements: Custom Toast	Create custom Toast messages with images and text
15	Tutorial 15: Toggle Button in Android Studio	UI Elements: Toggle Button	Implement Toggle Buttons and Push Buttons
16	Tutorial 16: Switch Toggle Button in Android Studio	UI Elements: Switch Button	Understand difference between Toggle and Switch Buttons
17	Tutorial 17: Checkboxes in Android using basic example	UI Elements: Checkboxes	Learn how to use Checkboxes in Android
18	Tutorial 18: Date Picker and DatePickerDialog in Android Studio	UI Elements: Date Picker	Implement DatePicker and DatePickerDialog with click listeners
19	Tutorial 19: TimePicker and TimePicker dialog using Analog and Digital Clock	UI Elements: Time Picker	Learn to use TimePicker dialog with analog and digital clock
20	Tutorial 20: AnalogClock DigitalClock and TextClock In Android With Example	UI Elements: Clock Widgets	Understand AnalogClock, DigitalClock, and TextClock widgets
21	Tutorial 21: RatingBar in Android Studio using Click Event	UI Elements: RatingBar	Create RatingBar with click event
22	Tutorial 22: ProgressBar in Android Studio Hindi/Urdu	UI Elements: ProgressBar	Use Horizontal and Circular Progress Bars
23	Tutorial 23: SeekBar & SeekBar Discrete in Android	UI Elements: SeekBar	Learn difference between SeekBar and SeekBar Discrete
24	Tutorial 24: Adapter in Android All types of Adapter	Adapters	Understand all types of Adapters and BaseAdapter with GridView
25	Tutorial 25: SimpleAdapter in Android using ListView	Adapters	Use SimpleAdapter with ListView
26	Tutorial 26: Simple Custom Adapter for listview in Android	Adapters	Create custom SimpleAdapter for ListView



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27	Tutorial 27: ArrayAdapter with ListView in Android Studio	Adapters	Implement ArrayAdapter with ListView
28	Tutorial 28: Custom ArrayAdapter in Android Studio using ImageView and GridView	Adapters	Create custom ArrayAdapter with ImageView and GridView
29	Tutorial 29: Intent and its types EXPLICIT INTENT IMPLICIT INTENT in Android Studio	Intents	Learn about explicit and implicit intents in Android
30	Tutorial 30: What is Fragment and its Life Cycle in Android with example	Fragments	Understand Fragment and its lifecycle
31	Tutorial 31: Primary Classes of fragment fragmentmanager fragmenttransaction fragmentactivity	Fragments	Learn core classes used in fragments
32	Tutorial 32: Spinner in Android Studio with Text and Images	UI Elements: Spinner	Work with Spinner showing text and images
33	Tutorial 33: Custom Spinner in Android Studio using Images	UI Elements: Custom Spinner	Create custom Spinner using ArrayAdapter
34	Tutorial 34: GridView using BaseAdapter in Android Studio using basic example	UI Elements: GridView	Learn GridView using BaseAdapter
35	Tutorial 35: Part 2 – GridView using BaseAdapter in Android with Images and activity	UI Elements: GridView	Continue GridView implementation with images
36	Tutorial 36: Horizontal and Vertical ScrollView in Android Studio basic example	UI Elements: ScrollView	Implement Horizontal and Vertical ScrollViews
37	Tutorial 37: WebView in Android Studio	UI Elements: WebView	Display HTML and websites in Android app using WebView
38	Tutorial 38: Android Alert Dialog Box	Dialogs	Create Alert Dialog with Yes, No, and image options
39	Tutorial 39: Custom Alert Dialog Box in Android	Dialogs	Create Custom AlertDialog with icon, title, and message
40	Tutorial 40: Recyclerview in Android Studio	RecyclerView	Implement RecyclerView with RecyclerView.Adapter
41	Tutorial 41: CardView using Recyclerview and Toolbar in Android Studio	RecyclerView + CardView	Use CardView inside RecyclerView with Toolbar
42	Tutorial 42: SIMPLE CALCULATOR APP in Android Studio with FREE Source Code	App Development	Build a simple calculator app
43	Tutorial 43: Scientific CALCULATOR APP in Android Studio FREE Source Code	App Development	Build a scientific calculator app



Sr.	Title	Topic	Objective
44	Tutorial 44: Full Page Slider using ViewPager and PagerAdapter in Android Studio	UI Components	Create a full page slider with ViewPager and PagerAdapter
45	Tutorial 45: Slider using ViewAnimator ImageAdapter in Android Studio	UI Components	Implement image slider using ViewAnimator and ImageAdapter
46	Tutorial 46: Tween Animation in Android Studio Zoom In/Out, Clockwise rotate, Blink, Move, Slide	Animations	Learn Tween animations like zoom, rotate, blink, move, slide
47	Tutorial 47: Text to Speech in Android using TextToSpeech.OnInitListener OnItemSelectedListener	Multimedia	Implement Text to Speech functionality
48	Tutorial 48: Age calculator in Android	App Development	Calculate age in years, months, and days
49	Tutorial 49: Countdown Timer in Android Studio	Timers	Create Countdown Timer app
50	Tutorial 50: Smart Alarm System in Android	App Development	Build a simple alarm app using AlarmManager
51	Tutorial 51: [Android Built in Layout] – Basic Activity in Android Studio using Snackbar example	UI Components	Use basic activity with Snackbar
52	Tutorial 52: [Android Built in Layout] Bottom Navigation Bar With Activities	UI Components	Implement Bottom Navigation Bar with activities
53	Tutorial 53: [Validation in Android] – Registration Form with Validation in Android	Form Validation	Create registration form with validation
54	Tutorial 54: Part 1 – Registration and Login Form in Android Studio using SQLite Database Source Code	Databases	Implement registration and login using SQLite
55	Tutorial 55: Part 2 – Registration and Login Form in Android with Validation using SQLite Database	Databases	Add validation to registration and login with SQLite
56	Tutorial 56: Part 1–CRUD using Sqlite in Android	Databases	Perform Create, Read, Update, Delete operations using SQLite
57	Tutorial 57: Part 2–CRUD using Sqlite in Android	Databases	Continue CRUD operations with SQLite
58	Tutorial 58: Part 1–CRUD with image in android Studio	Databases + Media	CRUD operations including image handling
59	Tutorial 59: Part 2–CRUD with image in android Studio	Databases + Media	Continue CRUD with image handling
60	Tutorial 60: Firebase Authentication in Android	Firebase Authentication	Implement Firebase Authentication in Android



Minimum Completion Criteria:

- Complete all modules and MCQs
- Attempt weekly marathons
- Submit at least 2 out of 5 projects in the final level
- Attend minimum 80% of lessons

Certificate Details

- Upon successful completion of the Internship, learners will receive a Government-Recognized Certificate from Vidyawan, a registered MSME enterprise (*Udyam Registration No: UDYAM-WB-14-0205610*).



One Month Internship Certificate



Weekly Marathon Participation Certificate

Performance-Based Badge System

- Gold Badge – For Top Performers (90%+ score, completed 4+ projects)
- Silver Badge – For consistent performance (70–89%)
- Copper/Participant Badge – For all learners who complete the program

Contact Information

For queries, registration, or collaboration, feel free to contact us:

Vidyawan – Internship & Skill Development Platform

(A Government-registered MSME – UDYAM-WB-14-0205610)

- Email: contact.vidyawan@gmail.com
- Website: www.vidyawan.in (Get in touch section)
- Location: West Bengal, India
- Follow us for updates and upcoming internships