# Day 1 Introduction

This session will focus on teaching attendees the basics of Android through simple examples.

# Session Objectives / Key Learning Points

# By the end of the session students should –

# Understand how a basic project structure in Android looks like, and what are the basic components.

# Understand what Activities and layouts are, how they work, and how to make a basic application.

# Be able to implement a simple application to add two numbers.

# Understand what Intents are, and how two Android components interact via Intents.

# Be able to use Intents to navigate from one Activity to another.

# Session Overview

# The whole session can be covered in 2:00 hours.

|  |  |  |
| --- | --- | --- |
| Activity | Time | Elapsed Time (hh:mm) |
| Make sure the system is setup | 00:05 | 00:05 |
| Introduce the Agenda | 00:02 | 00:07 |
| Introduce the basics of an Android project, and show them how activities and layouts work | 00:13 | 00:20 |
| Assignment 1 | 00:20 | 00:40 |
| Discuss Assignment 1 solution | 00:10 | 00:50 |
| Introduce Intents and explain Navigation using Intents | 00:10 | 01:00 |
| Assignment 2 | 00:20 | 01:20 |
| Discuss Assignment 2 solution | 00:10 | 01:30 |
| Assignment 3 | 00:15 | 01:45 |
| Discuss Assignment 3 solution and explain Intents again | 00:10 | 01:55 |
| Recap of things covered | 00:05 | 01:55 |

# Session Notes

# Android basics -

# The Android basic project structure consists of src, res and Android Manifest.

# All pages are represented by Activities.

# Android provides an easy way to define Layouts and Views in Xml files.

# Intents in Android -

# Communication between any two components happens via Intents.

# Intents can be implicit or explicit.

# Intents have Action and Data.

# Assignment 1-

# Problem Statement

# Show the result of two input numbers into an output field on the click of a button.

# Solution

# Create another EditText.

# Parse the inputs into Integers.

# On Click of the button, show the result in a TextView

# Assignment 1-

# Problem Statement

# Show the result of the addition in a new Activity.

# Solution

# Create a new Activity and register it in the Manifest file.

# Navigate to the new Activity and pass the result as Extras.

# Show the result in the new Activity.

# Assignment 3-

# Problem Statement

# Subtract 10 from the result in the new Activity, and show it in the result box of the previous Activity.

# Solution

# Pass the result back using Intent.

# Show the result in onActivityResult.