HackerU

Introduction to Android Application Development

MD104

48
Academic Hours

Introduction to Android Application Development

Outline

This technical course introduces programming android applications. It is suitable for programmers starting new projects on Android, or for those maintaining existing applications. Based on Linux, Android has rapidly emerged as the platform of choice for a wide range of mobile devices. In the RST time since its RST distribution in 2007, it has become one of the most widely used and Pro Line operating systems. Applications for Android are mostly written in the popular programming language Java and Google provides a well-developed SDK, together with an emulator for development on the desktop. This is an instructor led presentation with hands on exercises course using the Android development environment on Microsoft Windows, but is equally applicable to other platforms, such as IOS or Linux.

Target Audience

This course is for programmers with existing knowledge of Java. It is assumed that the student has a complete understanding of basic programming concepts; basic Java and object oriented programming principles. Front-end developers with good knowledge in O.O JavaScript.

Prerequisites

Previous knowledge and experience of Java is assumed, and some knowledge of XML is required. For those without a previous knowledge of Java, the first day of the course (optional) will cover basic Java topics Experience of using Android at a user level is not assumed but will be an advantage, as will previous experience of Android Studio.

Content

Module 01
Programming in Java

- Java Class Design
- Advanced Class Design
- OOP Design Principles
- Generics and Collections
- String processing
- I/O
- Threads

Module 02
Android Fundamentals

- Development Environment
- Android Project Structure
- Switching between Activities
- Passing Data between Activities
- Sending and Receiving Broadcasts
- Communicating with other Apps
- Activity Lifecycle

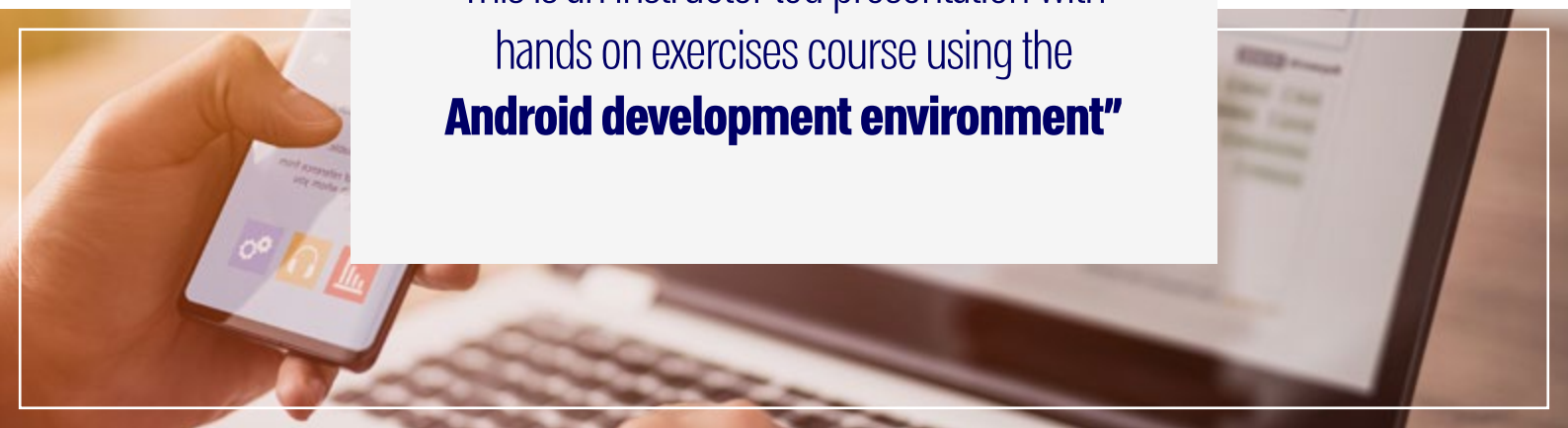
Module 03
Android UI

- Understanding Views
- Using Buttons
- Using Check Boxes
- Autocomplete
- Displaying Web Pages
- Picking Time and Date
- Layouts
- Scroll View
- Displaying Dialogs
- Paging

Module 04
Displaying Lists

- List View
- Customized List View
- Recycling Views
- Grid View

"This is an instructor led presentation with hands on exercises course using the **Android development environment"**



Module 05
Using Google Maps

- Displaying a map
- Zooming
- Changing Modes
- Navigate to location
- Adding Markers
- Reverse Geocoding

Module 06
GPS

- Get user's location
- Logging Location in the Background

Module 07
Network and Communication

- Communicating using HTTP
- JSON

Module 08
Persistent Data

- Saving Key-Value Data

The HackerU

Advantage

We have unparalleled experience in building advanced training programs for companies and organizations around the world – Talk to one of our experts and find out why.

01

Handcrafted Training Programs

02

State-Of-The-Art Learning Materials

03

Israel's Premier Training Center

04

Fueled by Industry Leading Experts

05

Over 20 Years of Proven IT-Education Success

info@hackerupro.com

www.hackerupro.com