



GDG Developer Camp 2015

At National Advanced School of Posts & Telecommunications of Yaoundé (ENSPT)

August, 2015

Agenda of DevCamp

Day 1: 08/04/2015

3pm-6pm

Android Training: [Lesson 1: Create Project with a Simple UI \(part 1\)](#)

Starting by installing Android Studio, you'll create your first project with a simple list-based user interface and built and deploy it to virtual and actual devices. You'll also discover what makes mobile - and Android in particular - a unique environment for app development.

- Android Studio, Gradle, and debugging tools
- Life cycle of activity

3pm-6pm

Day 2: 08/05/2015

Android Training: [Lesson 1: Create Project with a Simple UI \(part 2\)](#)

- User Interface and Layout managers
- ListViews and Adapters Array

5pm-7pm

Day 3: 08/06/2015

App Engine Training: [App Engine Architecture and Optimization](#)

- Life of a Request
- App Engine Design Principles
- Hands-On Lab Exercise

Day 4: 08/07/2015

3pm-7pm

Android Training: [Lesson 2: Create New Activities and Navigate Apps with Intents](#)

Give your app structure and create more complex Activities. You'll learn about Android's Intent framework, and how to use Intents to navigate between Activities, both within your app and as a way to add 3rd party functionality.

- App navigation with Explicit Intents
- Share Intent and the Android sharing framework

Day 5: 08/08/2015

8am-10am

App Engine Training: [Managing Your App](#)

- Admin Console
- Billing and Quotas
- SLA and Premium Account
- Hands-On Lab Exercise

10am-12pm

App Engine Training: [User APIs and Authentication](#)

- OAuth2
- Configuring Your App's Authentication
- Hands-On Lab Exercise

1pm-5pm

Coaching & Mentoring Session

- Challenge Time
- Idea Week

5pm-6pm

Lunch*

Day 6: 08/11/2015

3pm-6pm

Android Training: [Lesson 3: SQLite databases \(part 1\)](#)

Learn how to create databases, use Android's Content Providers to provide an abstraction layer between your data and your UI implementation, and use Loaders to efficiently load stored data.

- SQLite database
- Creating and using a Content Provider as an abstraction layer

Day 7: 08/12/2015

3pm-6pm

Android Training: [Lesson 3: SQLite databases \(part 2\)](#)

- Creating Adapters "BaseAdapter" to bind UI 'listView' components to Content Providers

Day 8: 08/13/2015

5pm-7pm

App Engine Training: [Datastore](#)

- Basic Concepts
- Datastore internals
- API
- Query
- Index
- Transaction
- Hands-On Lab Exercise

Day 9: 08/14/2015

3pm-7pm

Android Training: [Lesson 4: Implement Rich and Responsive Layouts \(part 1\)](#)

Create rich, responsive user interfaces that work across a variety of different hardware types and screen sizes.

- Fundamental Android design principles
- Optimizing tablet UIs using Fragments

Day 10: 08/15/2015

8am-9am

App Engine Training: [Memcache Basics](#)

9am-12pm

Cloud Training: [Cloud EndPoints](#)

	<ul style="list-style-type: none"> ▪ Basic concept ▪ Add Cloud Backend in Android App ▪ Create Entity Class and EndPoint Class ▪ Generation Client API ▪ Hands-On Lab Exercise
1pm-3pm	Coaching & Mentoring Session
	<ul style="list-style-type: none"> • Presentation of each project (5/10 min by candidate) • Q/A
3pm-5pm	MTN Startup: #LeanStartup
5pm-6pm	Lunch*
Day 11: 08/16/2015	
9am-12pm	Android Training: Lesson 4: Implement Rich and Responsive Layouts (part 2)
	<ul style="list-style-type: none"> • Custom views • Completion of the project with deployment of the application in Google Play.
Day 12: 08/17/2015	
5pm-5:45pm	Code Lab/Android: Profiling GPU Rendering Codelab
	In this codelab you will learn how to turn on Profile GPU Rendering on your mobile device. Profile GPU Rendering gives you a quick visual representation of how much time it takes to render the frames of a UI window relative to the 16-ms-per-frame benchmark.
6pm-7pm	Code Lab/Android: Unit and UI Testing in Android Studio
	In this codelab, you'll learn how to set up your project in Android Studio for testing, write a Unit Test and run it locally on your development machine and also how to do functional UI testing on the device
Day 13: 08/18/2015	
5pm-7pm	Code Lab/Cloud Platform: Google Compute Engine: Compute the Cosmos
	Use a VM instance to process public astronomical data to generate a viewable image.
Day 14: 08/19/2015	
6pm-7pm	Coaching & Mentoring Session
	Idea - Design - Q/A
Day 15: 08/20/2015	
5pm-6pm	Code Lab/Geo: Going Places with Android
	Check-In apps are so last year. Let's build a simple Check-Out app using the Android Places API and Firebase to find the hottest places people are leaving.
6pm-7pm	Code Lab/Geo: Building GeoFences into your Android App
	In this codelab you'll learn how to use geo fences in an Android app.
Day 16: 08/21/2015	
5pm-6pm	Code Lab/Search: Add Voice Interactions to Your App
	In this codelab, you'll learn how to add voice interactions to your app with the Voice Interaction API. You'll build a voice-powered camera app that responds to the voice command "take a photo" and prompts you for confirmation before taking the photo.
6pm-7pm	Code Lab/Search: Get Search Autocomplete from Deep Links
	In this codelab, you'll learn how to add deep links from your website to your app.
Day 17: 08/22/2015	
9am-12pm	Coaching & Mentoring Session
	<ul style="list-style-type: none"> • Presentation of each project (5/10 min by candidate) • Q/A
1pm-4pm	MTN Startup: #LeanStartup
4pm-5pm	Lunch*
Day 18: 08/24/2015	
5pm-5:30pm	Code Lab/Android: Building Apps that Sign In with Google
	In this codelab, you'll learn how to add a Sign In with Google button to your Android App and use it to allow your users to sign in with the Google ID
5:30pm-6pm	Code Lab/Android: Visualizing Debug GPU Overdraw Codelab
	In this codelab you will learn how to visualize overdraw on your mobile device by color-coding interface elements based on how often they are drawn underneath.
6pm-7pm	Code Lab/Web: Building data-rich web apps with Lovefield
	In this codelab, developers will learn how to build a web application that uses Lovefield as its data query and access layer.
Day 19: 08/25/2015	
5pm-6:20pm	Code Lab/Cloud Platform: Building a gRPC service with Node.js
	In this codelab, you will learn how to build a Node.js service which exposes an API via gRPC. Then you will write a Node.js command-line client for your gRPC service.
6:25pm-7pm	Code Lab/Search: Enable Deep Linking to your App
	In this codelab, you'll learn how to get your Android app indexed by Google Search.
Day 20: 08/26/2015	
2pm-6pm	Coaching & Mentoring Session
	Idea - Design - Q/A MTN Startup : #PolishWeek

Day 21: 08/27/2015	
5pm-6:20pm	Code Lab/Cloud Platform: node.js: Build a Web App using Google Cloud Platform
	In this codelab, you will learn how to integrate Google Cloud Platform services into a Node.js web application to store data, upload images, and authenticate users.
6:20pm-7pm	Code Lab/Web: Web Animations Transitions and Playback Control
	In this codelab, you'll learn how to use the Web Animations API to enhance a single-page HTML website with transitions and a scroll effect.
Day 22: 08/28/2015	
5pm-7pm	Code Lab/Unity: Cardboard Unity Codelab
	In this codelab, you'll learn how to add voice interactions to your app with the Voice Interaction API. You'll build a voice-powered camera app that responds to the voice command "take a photo" and prompts you for confirmation before taking the photo.
Day 23: 08/29/2015	
9am-12pm	Coaching & Mentoring Session
	<ul style="list-style-type: none"> • Presentation of each project (5/10 min by candidate) • Q/A
1pm-4pm	MTN Startup: #SUBMIT
4pm-5pm	Lunch*
5:30pm	End of GDG DevCamp