Intro to Android: Hackpack

September 13, 2021 / 6:30 PM - 7:30 PM ET

Description

In this introductory workshop on the workings of Android, learn the guiding principles behind Android development and how to approach it. By the end you'll know how Android Studio projects are structured and how to create simple applications. You might not leave knowing how to create the next Uber, but I'll try my best to get you started on the right foot and point you in the right direction!

Learning Outcomes

This is what you will walk away from the workshop able to do:

- Explain the various components of the "Hello World!" Android Studio Project
- Understand the key ideas of working with the Android OS
- Create a simple app
- Know where to learn more about Android development
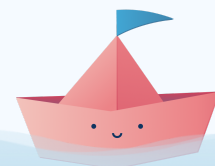
Prerequisite Knowledge

In order to get the most out of this workshop you should be comfortable with the following concepts:

- Basic programming knowledge (preferably Java or Kotlin)
- Have Android Studio installed and running!
- Optional: Knowledge of Git

Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:
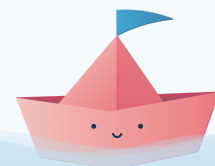
- Brush up on prerequisite knowledge
- Please have Android Studio installed and updated

- Make sure you are set up to <u>run the project</u> on an emulated or real phone. Basically clicking on run should not cause any errors
- Optional: Clone <u>this GitHub repository</u> which has solution code. This is optional as we will be creating everything from scratch
- Go get some water! Stay hydrated!

Timeline (1 hour)

Time	Module	Description
5 min	Who I am & the goal of this workshop	
5 min	What Android is all about	A high level overview of how Android ticks and now Android projects are structured. The 3 components of any Android project will be explained.
10 min	How does Android know the app structure?	This module will go over the first of three components in detail. By the end, you should understand how Android gets the project structure of your app.
10 min	How does Android know the screen layouts?	The second module covers how Android gets the screens and layouts of your app.
10 min	How does Android know the screen behaviour?	The third and final is telling Android how your screens should behave.
5 min	Putting it all together and questions	I'll summarize the three components and go over how the Android OS turns your code into an app.
5 min	Closing remarks	
5 min	Q&A	

Workshop Lead Contact

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Additional Resources

Hack the North Resources

Hack the North 2021 Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

Android Development Guides

Official Android guides for accomplishing or understanding a wide variety of Android topics.

Android Package References

Official Android reference for the Android API packages. Useful if you're already using something and you need to know more about it.

Guide to Material Design

Guides by Google to understand good mobile/Android UX design

Material Design Resources

Resources by Google such as downloadable fonts and icons

Guide to Android Studio

Understanding Android Studio and how to use it as an IDE