Links

Getting a github access token - <https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token>

Kotlin – released in 2016

* Compatible with Java
* Works on many different programs
* Easy to learn (readable and concise
* Kotlin apps are null safe (no segmentation faults)
* Open source – released by JetBrains

Why Android?

* The majority of phones are android (75%)
* High demand for android developers (low supply)
* What is needed to build a good android app

Components of an App

1. Show data (Views) View = UI components drawn on the screen of a device
   * TextView = Text
   * ImageView = Image
2. User flows
3. Databases
4. User Interface

Files:

MainActivity.kt – handles user interaction and setups views

Activity\_main.xml = markup language used in setting up views

*Every activity has a corresponding layout file that’s set with it*

Listeners:

Ways of listening to user actions (most common type is OnClickListener which sets off chain of code when click on view detected)

Apps take long to build on Android Studio using Windows

**Shortcuts:**

Shift+ Shift = Search for anything (command palette)

Ctrl + Click = Go into another function or class

Ctrl + G = Jump to a line of code

Ctrl + Shift + N = Navigate to a file

**Tips and tricks:**

* Go to file 🡪 invalidate caches, if you are having build issues
* Strings should never be hard-coded 🡪 Instead should go into string:resource file
* Make sure to include “@+id” when creating a new view
* Use *dp* rather that *px* as *dp (density pixels)* so you want your app to look nice on all types of devices
* Do not use Gone (as that would completely remove the view from the view hierarchy)

**Kotlin**

* Val = values
  + Val name = “Elijah”
* Var = variable
  + Var age = 18

Kotlin has *type inferencing,* although you can specify the type if you want

Lab: Spend next hour building flashcard app

**Debugging**