

# LESSON 3 NOTES

## Mobile App Development Part I



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# Picking a Programming Language

It's Important right from the get-go to understand that programming is not for everyone. Don't expect your first app to be world-class, professional quality that other developers make it look so easy to pump out each week. Beginning Mobile App Development means taking the time to understand the concepts of Programming, learning a new language and then creating an App that you find value in.

## Terminology

Development is known as an “**Iterative**” **Process**

- MVP** - Minimal Viable Product
- Coding** - Writing Instructions to tell a computer what to do
- App** - A Program that executes instructions step-by-step
- UI** - User Interface
- Java** - Most Commonly used in Android App Dev
- Swift** - Latest Coding Language for iOS App Dev
- C#** - Most Commonly used in Windows App Dev
- Computational Thinking** - Learning to “Think” Like a Computer.

Of course, Computers do not think, but they do act. How you tell them to act will be the difference between creating your first successful app and accidentally pushing the big red button on Skynet! (I know I've come close on a few occasions!)

# The Coding Languages

**Cost - Effort - Comfort**

Depending on what you are willing to put into your app will define exactly where you should begin. For instance, if you already have your App Idea and are ready to get started Inventing – Android is the place for you. It is the easiest platform to develop for with little restrictions over what your Final Product must look like. It also has access to the World’s Largest Market of Mobile Device Users.

Learning Java can take a little longer than using an App Creation Tool however it will provide you with a lot of options as a Developer - who are in constant demand. Pre-written code is available online and with sites like StackOverflow where communities of developers are happy to answer any java-related queries, it’s no wonder that Java is available on over 3 Billion Devices worldwide.

If you don’t mind reinventing the Wheel and want to win big, perhaps iOS is the platform for you. Apple Developers are a little costlier but generally, iOS Apps generate more revenue. You can start by learning the brand-new Swift 3 Language and get started with XCode right away. Unfortunately, you will need to be in possession of a Mac or Macbook to run XCode as it is Apple specific software.

Windows Phone Enthusiasts might be surprised to find that Apps are developed in C#, a language that has been used for Game Development and is the most commonly used language for Microsoft Products, sadly, the Market for Windows Apps is considerably smaller, while costs remain quite high.

# App Inventor 2

To Get Started with App Inventor 2 head on over to:

<http://appinventor.mit.edu/explore>

All you need is:

**A Computer**

**An Internet Connection**

**A Google Account**

**Good ideas and a little patience**

Android Phone (optional)

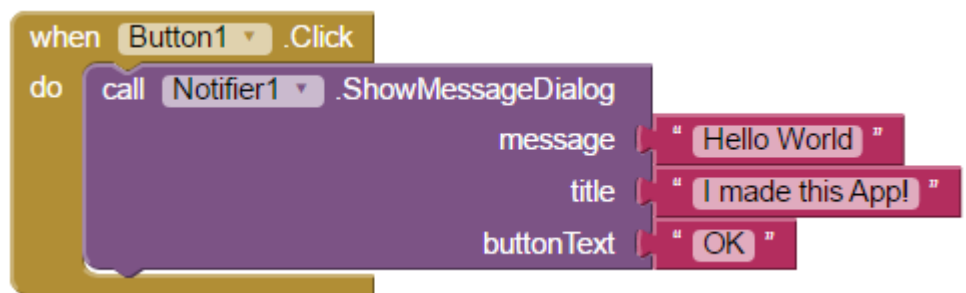
## App Inventor Designer

Set up a New Project and get started Designing it straight away. Designing it means deciding what the layout should look like and what components you'll need to make the App work – things like buttons, notifiers and sounds.

Add a Button to your Hello World App and Change the Text to say Click me! - You can find this in the Component Properties Section of the Design View

## App Inventor Blocks

Once you have a beautifully intricate Screen Designed, you can start telling the App what to do.



# App Inventor Testing Options

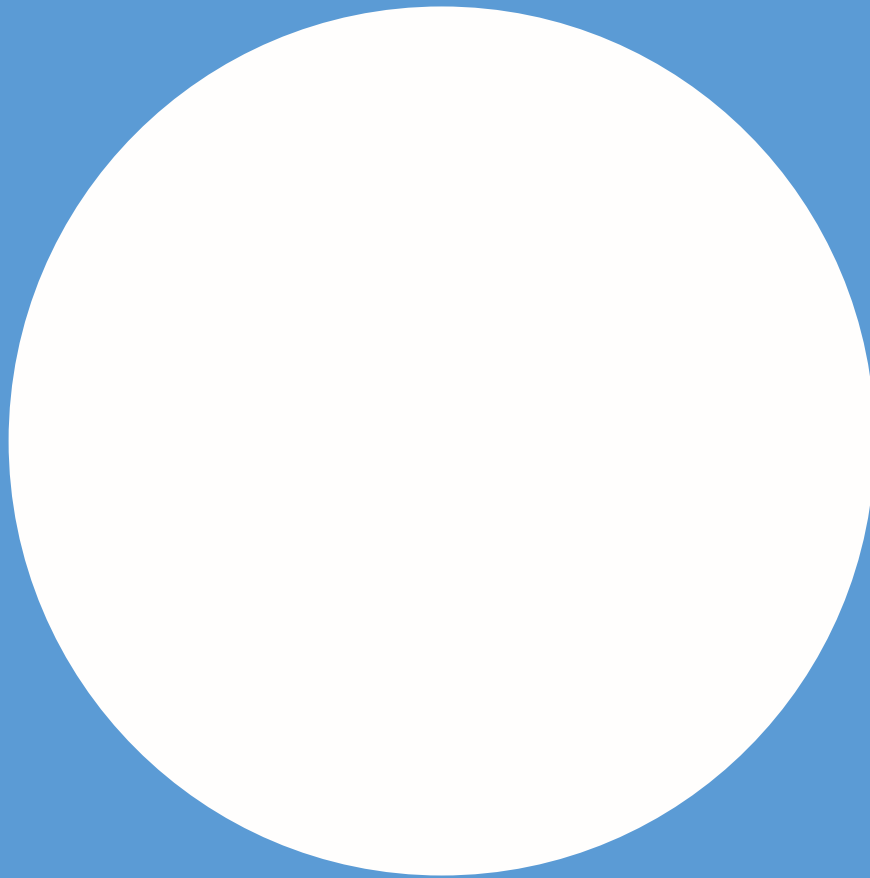
There are more than 3 ways to Test if your App is working on an Android Mobile Device. Option 1 is to use the On-Screen Emulator. This is the preferred option if you do not own an Android Device.

Option 2 is to use the AI Companion App on an Android Device. You can download the companion App from the Play Store and get started by scanning the QR Code or entering the 6 Digit code to physically link the phone to your App.

**Note:** For this option to work both your PC/Laptop & Mobile Device must be connected to the same WiFi Network.

Option 3 is for connecting your App to your Phone via USB cable. The advantage here is that you can charge your phone while you work. You'll need to install the Device Driver Software to the computer as well as the latest software for Setup with App Inventor.

You can follow up on these steps from the App Inventor Website at any time.



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