As long as there is McDonalds there will be Burge King. As long as there is Pepsi there will be Coke. And as long as there is Apple iOS there will be Android. Fans of either operating system typically do not waiver and that goes into the reaches of developers.

It was important to note that dependent on the language chosen, there were different suggested tools. Android development could be completed with Java, Kotlin (like Java), C/C++, and C#. Due to the familiarity with Java in most computer science/software development programs, that was the language chosen that the tool needed to support. Secondly, as will be further discussed, Java is the official language supported by Google. Through all of that research the tool that stood out the most was Android Studio.

A simple Google search for Android Development Tools and one of the first options that comes up is Android Studio. This should come as no surprise as this is most likely one of the most popular tools. Additionally Android Studio is the official IDE for Google’s android operating system similar to Apples XCode. Android Studio is so popular and widely known that I was aware of this tool simply by name before conducting further research.

Android Studio was announced in May of 2013 at the Google I/O conference and was released in December 2014 based on JetBrains IntelliJ IDEA. An IDE that Java developers should be familiar with. Since then there have been 16 different version releases with the latest, version 3.5, being released of February of this year.

Android Studio is available for essentially any platform with downloads available for Windows, Mac, and even Linux. Something that can’t be said about all android development tools. But what makes Android Studio stand out and rank at the top of almost every list? The following are a few of its best features:

Visual Layout Editor

A proper user interface (UI) can mean the success or demise of an application. Often times an otherwise good application falls by the wayside because of bad UI. Android Studios Visual Layout Editor enables you to quickly build layouts by dragging UI elements into a visual design editor instead of writing layout XML by hand. The design editor can preview your layout on different Android devices and versions, and you can dynamically resize the layout to be sure it works well on different screen sizes. This makes testing the application process faster and easier.

Fast Emulator

Nothing replaces being able to see or use your application on an actual device you built it for. With the cost of mobile devices and the vast array of devices from phones, tablets, and watches (not to mention different models and manufactures) it can be almost impossible to test your application on these devices. Android Studio’s Fast Emulator feature simulates Android devices on your computer so that you can test your application on a variety of devices and Android API levels without needing to have each physical device. The emulator provides almost all of the capabilities of a real Android device. You can simulate incoming phone calls and text messages, specify the location of the device, simulate different network speeds, simulate rotation and other hardware sensors, access the Google Play Store, and much more.

Intelligence Code Editor

Last but not least is the, a developer’s favorite domain. The editor itself. Like previously mentioned Android Studio was built on the Jetbrains IntelliJ platform. This is important for two reasons. One, the platform is familiar to Java developers. It doesn’t require developers, for the most part, to learn new tools or platforms. Secondly, because of its development from Jetbrains and support from Google it can be trusted as a robust and stable platform. This will give developers confidence they are working with a well-developed and supported tool.

Although Android Studio is among the most popular Android Development Tools, it is not the only option and other options should not be discarded so lightly. Like mentioned at the beginning, the tools required for a job are dependent on the langue used and each developers’ particular needs. As Android’s popularity continues to rival that of Googles there will certainly be a need for Android development and developers.

Resources

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