CIS 3515 Lab

Worksheet 5

Instructions: Add an icon to your last application and generate a signed APK that is ready to be distributed

1. How you complete this first step is really up to you. Your job is to find, borrow, or create an icon for the application you built in the previous lab. There are many rules when it comes to designing icons (you can read about them here: https://www.google.com/design/spec/style/icons.html) however we are only concerned with having a basic icon. For simplicity we will use Android's Asset Studio as the final step to create our app icon.

    If you would like to create an icon from scratch you have many options:

    1. Free vector tools such as GIMP (http://www.gimp.org/) or proprietary tools like Adobe Illustrator

    2. Online tools such as Method Draw (http://editor.method.ac/)

    3. Android Studio's very basic icon creator – Asset Studio: right-click on the drawable or mipmap folder and select New → Image Asset

    If you decide to search for an icon image, try to find one that is under a creative commons license (https://creativecommons.org/about).

    Once you've created or downloaded the file you would like to use for your icon, use Android's Asset Studio to create the final product. Right-click on the drawable or mipmap folder and select New → Image Asset, then select your source image for Image File. Play around with the settings until you have the icon looking the way you want it.

2. Once you have created an icon for your app, its time to create the APK

    1. Click on **Build** and select **Generate Signed APK**

    2. On the presented dialog, click on **Create New** and fill in the requested information. You can (and should) use different passwords for the key store and the key. You will be asked for both each time you use the key to sign an application.

        ▪ Under *Certificate*, you only need to enter a single identifying item, such as your name.

    3. Select the destination folder of the APK and set Build Type to **release**

4. Click on *Finish*

5. Upload your generated APK file to Blackboard. It will be called **app-release.apk**

3. **You have one week to complete this assignment. Upload your APK to Blackboard <u>BEFORE</u> the beginning of next week's lab**.

   Notes:

   Store your generated certificate in a cool, dry place and keep it safe. Once your application is deployed you will need to use the same certificate if you wish to make any updates, or to utilize certain Google services. A lost certificate means you will have to sign newer versions of your app with a different certificate. If this happens, Android, and all distribution platforms, will treat your application as a completely different app and incompatibilities will ensue.