

## Deployment Document

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We are using Android Studio to develop our app, and as a result we will need to make a few adjustments before releasing it to the public. We will take the following steps below in order to ship it to the Google Play store:

**-NomNet requires an Android mobile device that runs Android 4.1 Jelly Bean-**

### Code Cleaning

1. Remove all Log calls in our code
2. In the AndroidManifest.xml set android:debuggable="false"
3. Insert values for android:versionCode and android:versionName (located in the <manifest> element)

### Project Cleaning

1. Double check our jni/, lib/, and src/ directories and make sure they contain the appropriate file types.
2. Remove unused datafiles, such as files in the res/ directory
3. Check lib/ directory for test libraries and remove unnecessary or unused libraries
4. Review our assets/ directory, checking the res/raw directory for raw assets, and removing unnecessary or unused files.

### Gradle Build Settings

1. Set the necessary <uses-permission> element
2. Specify values for android:icon and android:label (in <application> element)

### External Servers

1. Set up a hosting service like Amazon Web Services, Digital Ocean, or Azure. For this specific element we will use Digital Ocean.
2. We will deploy a Ubuntu server droplet from Digital Ocean.
3. Have mySQL prepared on the server. Start by installing MySQL:
4. Run: sudo apt-get update
5. Run: sudo apt-get install mysql-server
6. Then do: sudo mysql\_install\_db
7. Fix insecure settings: sudo mysql\_secure\_installation
8. Configure for remote access: sudo nano /etc/mysql/my.cnf
9. Bind to an IP Address
10. Restart database: sudo service mysql restart
11. Make sure the database is set up properly to our needs.

12. Ensure that our server is online and prepared for user input

#### Set Application Version

1. In the manifest, add the element `<uses-sdk>`
  - a. Set the `androidminSdkVersion` attribute to Android 4.1 Jelly Bean

#### Signing and Exporting Project from Android Studio

1. In the top menu, go to Build>Generate Signed APK
2. Click Create New and fill out the signing details, then press OK
3. Complete information for keystore, private key, and passwords, then hit Next
4. Choose a destination for the completed APK and press Finish

#### Installing APK on Android

1. Transfer file to Android File Systems through USB, Google Play, or email.
2. Go to File Systems or Downloads, depending on how you imported the APK. If email, go to the downloads folder. If from USB, see where the file was imported in the file systems. If Google Play, it automatically installs. If your operating system does not have a default file system, you can find one on the Google Play Store. Launch APK on phone to install/launch by touching on the APK. It will pull up a installer and you will be able to install the APK.