**RaiderNAV Platform Document**

**Description of Platform**

RaiderNAV operates on the following platform:

* Android version >= 4.0.3 (android-15 with ABI armeabi-v7a) to support approximately 100% of Android devices.

**IDE**

The following IDEs are used for convenience, but are not strictly necessary for development.

* Android Studio version >= 3.1.0

**Frameworks**

The RaiderNAV application uses the following frameworks:

* Google Maps API <= 9.2.0. No later version will work properly on Android 4.0.3

**Non-original Artifacts and Changes Made**

The RaiderNAV application uses the following libraries:

* Google Gson 2.8.2 is used to store/retrieve schedule objects in JSON format.

# GoogleDirectionLibrary 1.0.4 is used to facilitate generating map directions; It is available at <https://github.com/akexorcist/Android-GoogleDirectionLibrary>; Some later versions do not work properly with Android 4.0.3 and expect higher versions of Google Maps API than 9.2.0.

**Installation Instructions**

To install RaiderNAV on an Android device or emulator, proceed as follows:

1. Download release APK file from <https://github.com/aluminiumi/RaiderNAV/tree/master/app/release/app-release.apk> to Android device or emulator.

2. Open app-release.apk file from within Android device or emulator.

If a menu is presented asking with which tool you would like to open the APK file, choose the package installer.

3. Confirm choice to install, if confirmation is required.

**Configuration and Compile Instructions**

Compilation and dependency management is handled by Gradle version >= 3.1.0. In Android Studio, all compile tasks are done automatically as files are updated.

**Compiling Without Android Studio**

To compile without using Android Studio, proceed as follows. Instructions assume a Linux environment; adapt as appropriate for Windows and Mac OS X environments.

1. Download the repository if necessary

cd /place/to/save/code

git clone https://github.com/aluminiumi/RaiderNAV.git

2. Build

cd RaiderNAV

./gradlew assembleRelease

Resulting app will be found at:

RaiderNAV/app/build/outputs/apk/release/app-release-unsigned.apk

**Running Instructions**

In order to run the RaiderNAV application after it has been installed, proceed as follows:

1. On Android device or emulator, navigate to installed application listing.

2. Select RaiderNAV entry on screen.

**Usernames/Passwords Needed**

**Google Maps API Keys**

Google Maps API requires that applications have unique keys.

The Google Maps key for this application is:

AizaSyAoEB-siN9KvZrDYHwhCQnd8ixgS5SG3as

The Google Maps Directions key for this application is:

AIzaSyBPv46SlN7xdVRr62stX4roZi\_2Afb65u0

The keys are stored in:

RaiderNAV/app/src/debug/res/values/google\_maps\_api.xml

RaiderNAV/app/src/release/res/values/google\_maps\_api.xml

In the event that the key no longer works and must be updated, navigate to <https://console.developers.google.com/apis/credentials> and follow the instructions to create a new private keystore and a new key tied to a Google account. Insert the key into the above-listed files.