

Plusultra Pharma - Marketing Application

This Smartphone application is for marketing of Plusultra Pharma in Germany and UK. This application makes the products' up-to-date information quickly visible to the customers.



Figure 1: Application Overview

Development

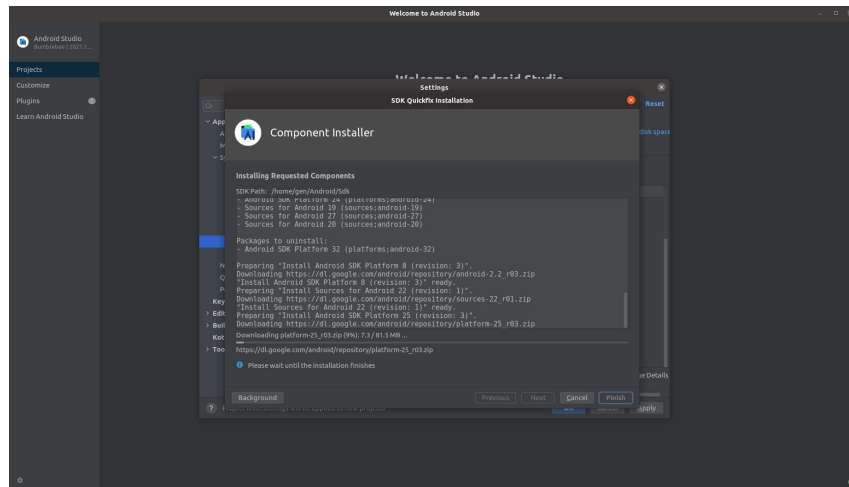
Development/Build Environment

- OS: Ubuntu 20.04
- Platform: Node.js v14.19.0, Ionic v5.4.16, Cordova v11.0.0
- Android: v6, v5, v.4
- iOS: ?

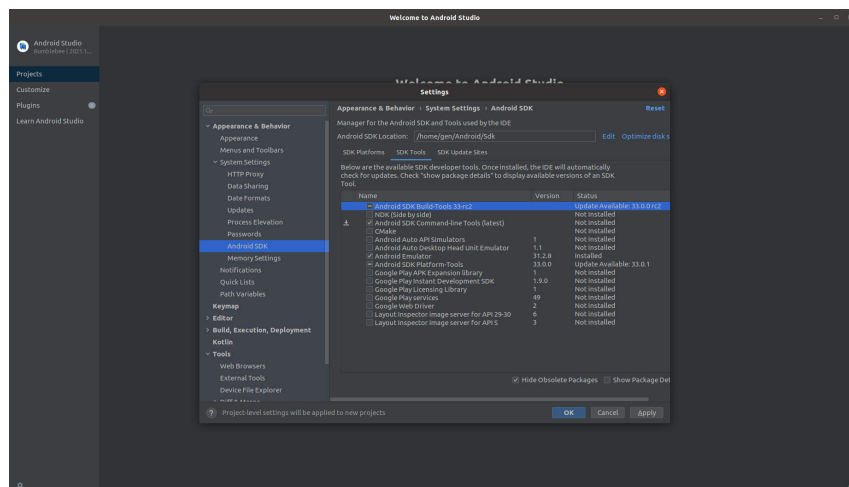
```
$ sudo npm install -g cordova@11.0.0
$ sudo npm install -g ionic@5.4.16
$ sudo npm install -g native-run cordova-res
$ sudo npm install -g @angular/cli
```

Installing Android SDK or Android Studio

- Download Android Studio: <https://developer.android.com/studio/index.html#downloads>
\$ tar zxvf android-studio-2021.1.1.22-linux.tar.gz
- Reference: Android Studio with Ionic <https://ionicframework.com/docs/v5/developing/android>
- Configuring Android Emulator



First of all, installing Android SDK.



Secondly, installing Android SDK Command Line Tools

Finally, creating an emulator on AVD (<https://developer.android.com/studio/run/managing-avds>).

How to build the application

Installing environments

```
$ ionic cordova platform add android@8.0.0
```

```
$ ng add @ionic/cordova-builders
```

```
$ ionic cordova plugin add cordova-plugin-inappbrowser
```

```
$ npm install --save @awesome-cordova-plugins/in-app-browser
```

```
$ npm install --save @awesome-cordova-plugins/core
```

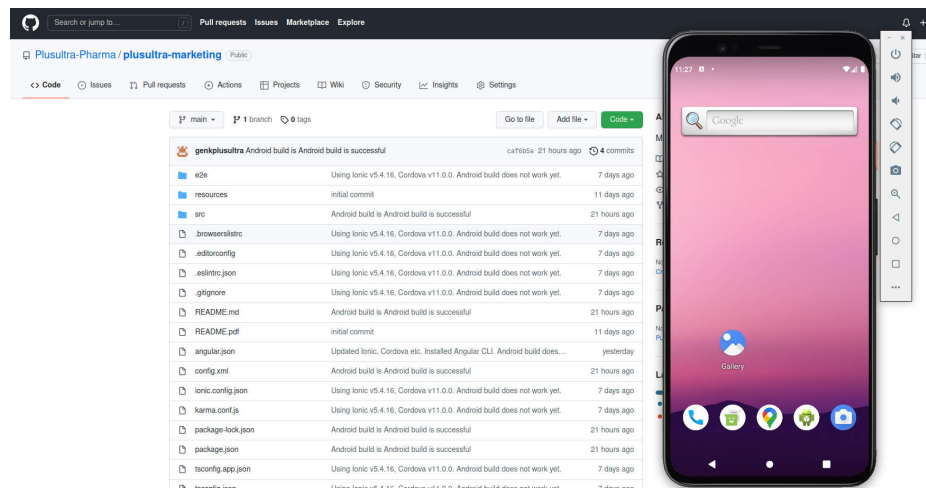


Figure 2: Android Emulator

Building Debug Application

```
$ ionic cordova build android
```

```
=> platforms/android/app/build/outputs/apk/debug/app-debug.apk
```

Launching test instance

```
$ ionic serve -d -b -a -s -p 11111
```