# Plusultra Pharma - Marketing Application

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

# Development

# Development/Build Environment

- OS: Ubuntu 20.04
- Platform: Node.js v12.22.11, Ionic CLI v6.19.0, Capacitor v3.4.3
- 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

#### 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

#### Android Emulator

1. Configuring Android Emulator

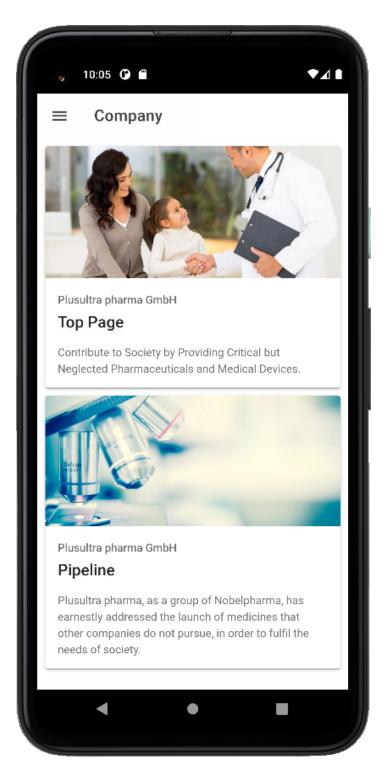
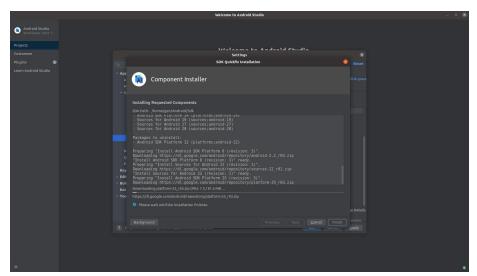
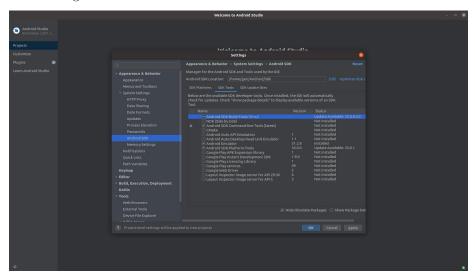


Figure 1: Application Overview  $\frac{1}{2}$ 



2. Installing Android SDK.



- 3. Installing Android SDK Command Line Tools
  - 4. creating an emulator on AVD (https://developer.android.com/studio/run/managing-avds).
  - 5. Patching SDK 33
    - \$ cd Android/Sdk/build-tools/33.0.0-rc2
    - \$ ln -vs d8 dx; cd lib; ln -vs d8.jar dx.jar

# **Ionic Tutorials**

• Ionic Icons: https://ionicframework.com/docs/v3/ionicons/

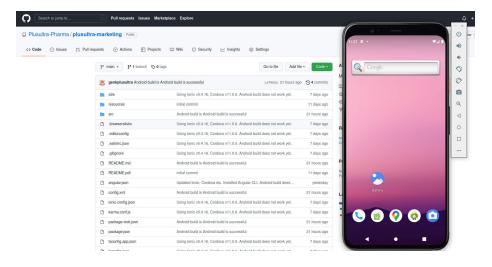


Figure 2: Android Emulator

• Ionic Modal: https://www.youtube.com/watch?v=8Sv2Nubc5MQ

## How to build the application

```
## Installing environments
$ npm install --save ion2-calendar@next moment
$ npm install @capacitor/browser

## Updating splash screen (edit resources/*.png)
$ npm install cordova-res
$ ionic cordova resources

## Building Environment
$ ionic cap sync
```

## **Testing Application**

Testing in emulator
 \$ ionic cap run android -l -external

## Usage of the Marketing Application

The structure of the marketing application is like our company website. But, we can see the web pages using DocList Check and any authentication. We can put any preferable pages to the application preliminary.

#### Side Menu

Clicking the top-left button can open the side menu. One can select one of the menus.

#### Sales

#### **Customer Info**

## Daily Update

### **Tutorial**

#### Company Screen

The "Company" menu corresponds to the company website's top category, "Home". Once one clicks the "Company" menu, the application shows the main screen of "Company Cards", which are the links to the web pages under the "Home" category.

### Web Page

A "Company Card" links to a webpage. So, one can immediately see the webpage.

#### About Screen

The "Company" menu corresponds to the company website's top category, "About".

### **Impressum**

The Impressum page contains our company information and responsible people and license information of this application.

# **Change History**

- Ver. 0.1 Side menu. Cordova v11.0.0, Ionic v5.4.16. Android only. Using Nobelpharma US website as a test-bed.
- Ver. 0.2 Using Plusultra GmbH Website
- Ver. 0.3 Using Capacitor framework and added many new menus such as Sales, Congress Info, Customer Info and so on

# License

• Apache 2.0 License

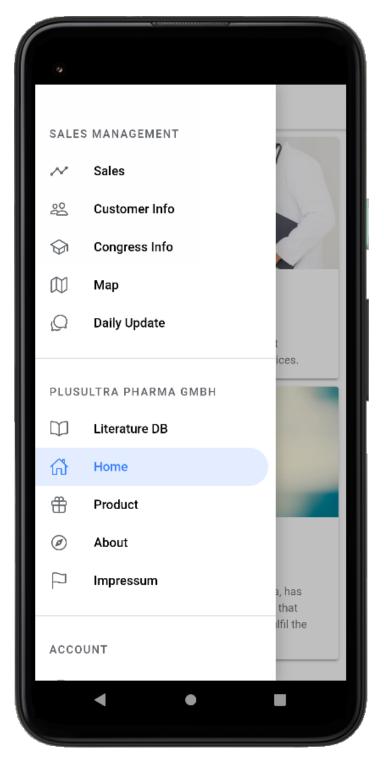


Figure 3: Side Menu $^{6}$ 

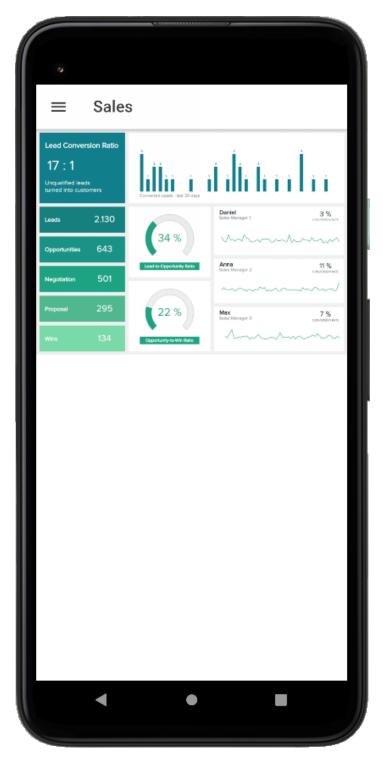


Figure 4: Sales

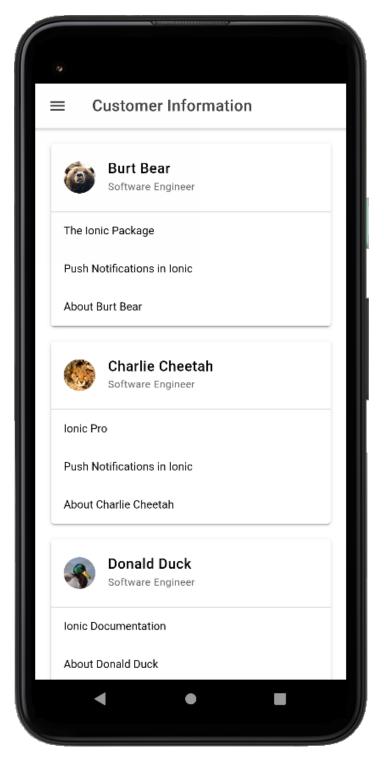


Figure 5: Customer Info8



Figure 6: Daily Update

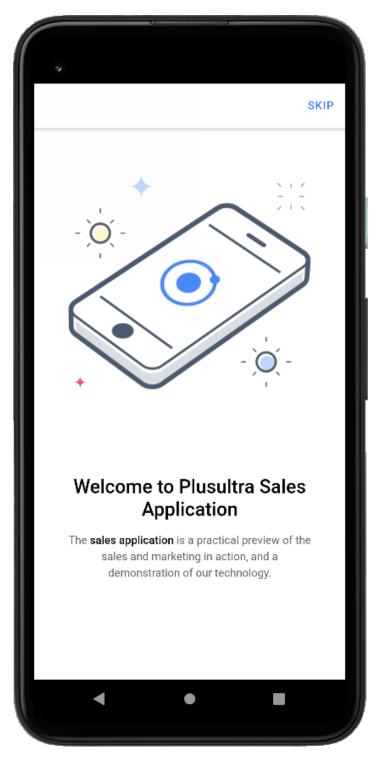


Figure 7: Tutorial 10

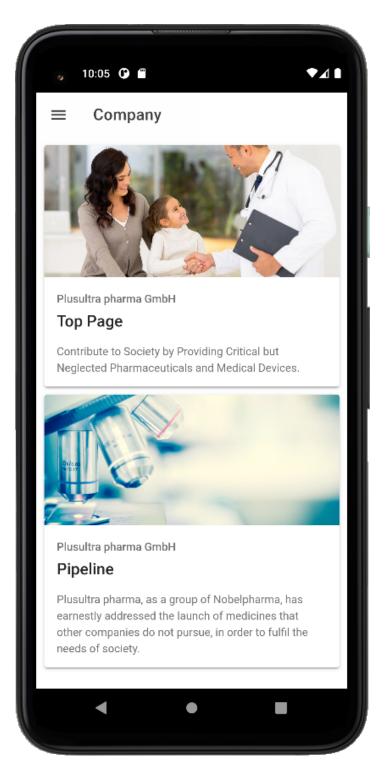


Figure 8: Company Screen 11

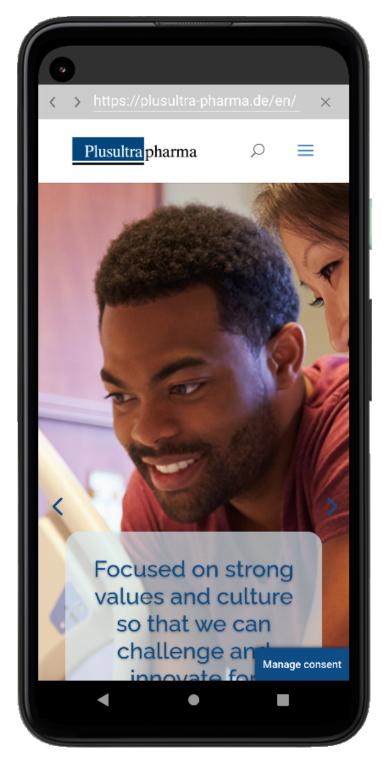


Figure 9: Company Webpage 12

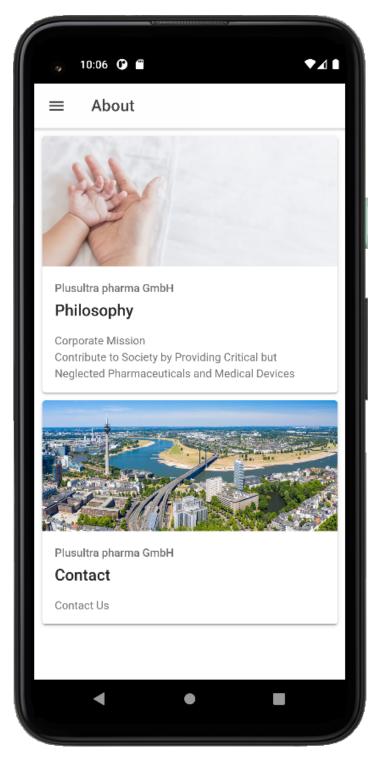


Figure 10: About Screen 13



Figure 11: Impressum 14