IONIC 3 FIREBASE 3 SHOPPING CART APP

Introduction

Ionic 3 FireBase 3 Shopping cart app is eCommerce mobile app for managing products and selling products online integrated with PayPal and Stripe payment systems. This app is integrated with firebase and there is no requirement of hosting server. This app has two parts of admin and customer that can be separated to separate apps of admin and customers

You can also read online updated documents

Admin Features:

1. Add and manage categories
2. Add and manage products
3. Add and manage customers
4. Add and manage vendors
5. Add and manage brands
6. Add and manage images
7. Create and manage orders
8. Configure and Manage PayPal payment method
9. Configure and Manage Stripe payment method
10. Manage Banners and Currency

Customer Features:

1. Browse categories and products
2. Create account
3. Login with Google Authentication, Facebook Authentication, Twitter Authentication, FireBase Authentication
4. Add products to cart
5. Manage cart
6. Checkout

7. Make payment
8. View and edit profile

Installation

Summary

1. Setup ionic environment
2. Create an ionic App
3. Install Firebase
4. Connect your App and Firebase
5. Firebase Authentication

1. Setup ionic environment

Skip this if you have already setup ionic environment

Before we begin we need a recent version of Node.js. Download the installer for Node.js 6 or greater

We need to install the latest version of the CLI and Cordova. Install the Ionic CLI and Cordova for native app development

```
$ npm install -g ionic cordova
```

2. Create an ionic App

```
$ ionic start myApp
```

```
$ cd myApp
```

Replace myApp/src folder with downloaded src folder. Better delete src folder in myApp/ directory. Copy and paste downloaded src folder in its place myApp/ directory

3. Install Plugins:

Social Sharing:

```
ionic cordova plugin add cordova-plugin-x-socialsharing
npm install --save @ionic-native/social-sharing
```

Native Storage:

```
ionic cordova plugin add cordova-plugin-nativestorage
npm install --save @ionic-native/native-storage
```

Paypal:

```
ionic cordova plugin add com.paypal.cordova.mobilesdk
npm install --save @ionic-native/paypal
```

Stripe:

```
ionic cordova plugin add cordova-plugin-stripe
npm install --save @ionic-native/stripe
```

Translate:

```
npm install @ngx-translate/core @ngx-translate/http-loader --save
```

3. Install Firebase

```
npm install firebase --save
npm install promise-polyfill --save-exact
```

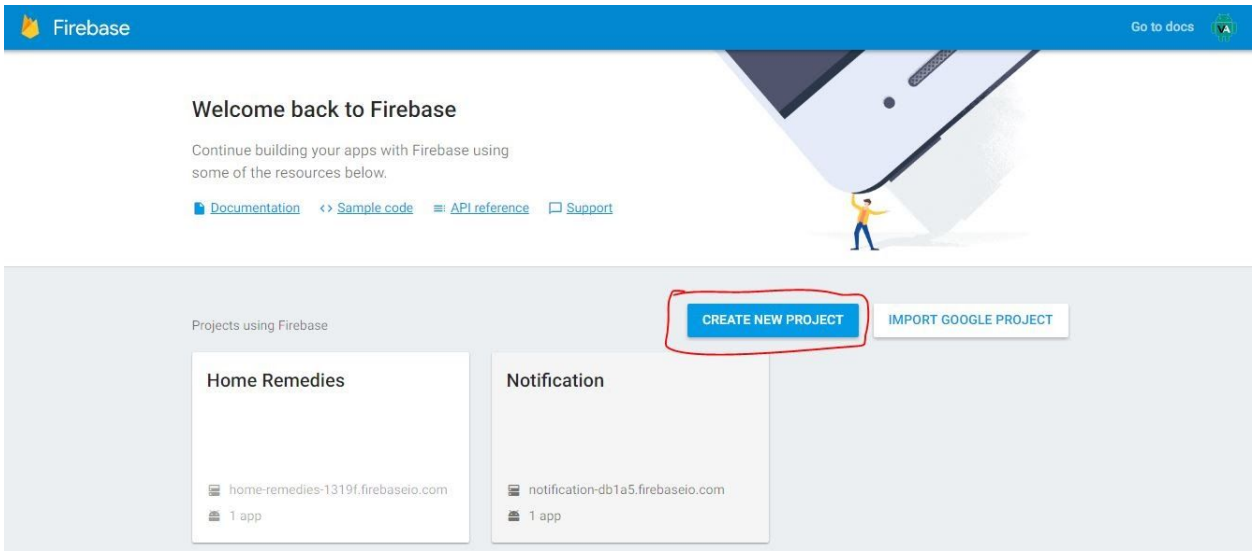
4. Connect your App and Firebase

Go to app.component.ts and initialize Firebase, for that you need following config data from firebase console:

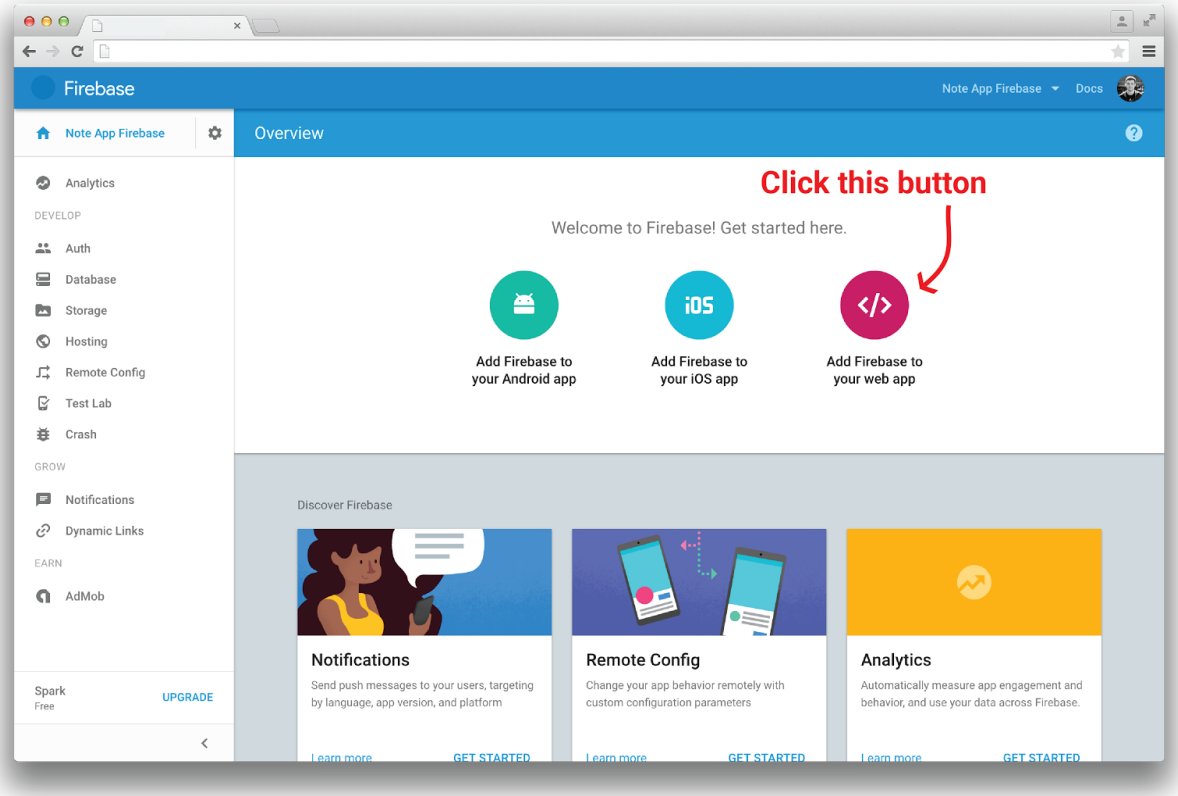
```
apiKey: "<API_KEY>",
authDomain: "<PROJECT_ID>.firebaseapp.com",
databaseURL: "https://<DATABASE_NAME>.firebaseio.com",
storageBucket: "<BUCKET>.appspot.com",
messagingSenderId: "<SENDER_ID>",
```

You can get that data inside your Firebase console***:***

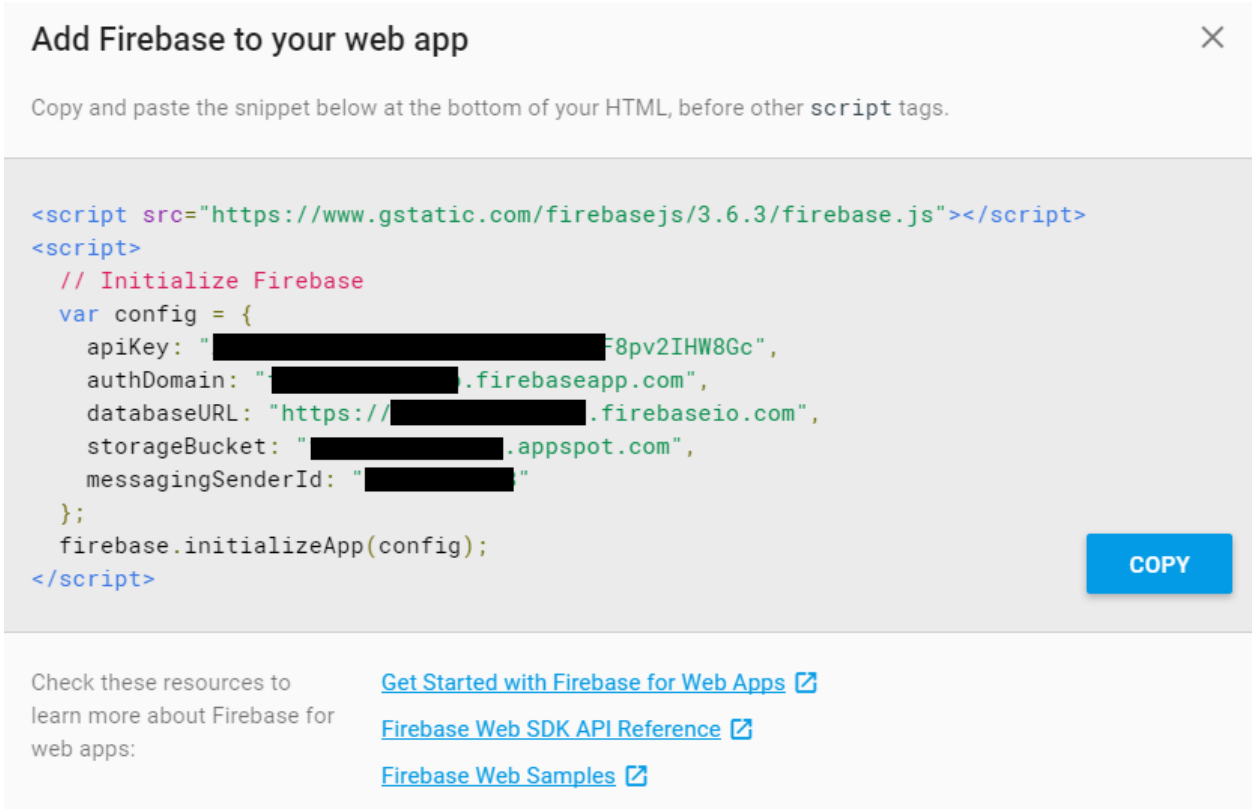
1. We need to create firebase project in the Firebase console. If you already have a Firebase project, click Add App from the project overview page.



2. Click Add Firebase to your web app.



3. Note the initialization config variables, which you will use in a minute.



3. Copy and paste the config variables from the snippet to inside the constructor in app.component.ts file

```
firebase.initializeApp({
      apiKey: "",
      authDomain: "",
      databaseURL: "",
      storageBucket: "",
      messagingSenderId: ""
});
```

4. Firebase Authentication

We have used 4 authentication methods in our app.

1. **Google Login**
2. **Facebook Login**
3. **Twitter Login**
4. **Firebase Login**

1. Google Authentication:

Step #1: Get your credentials from Google.

Step #2: Install the Google native plugin.

Step #3: LogIn using Google and Firebase**.**

Step #1: Get your credentials from Google.

For IOS:

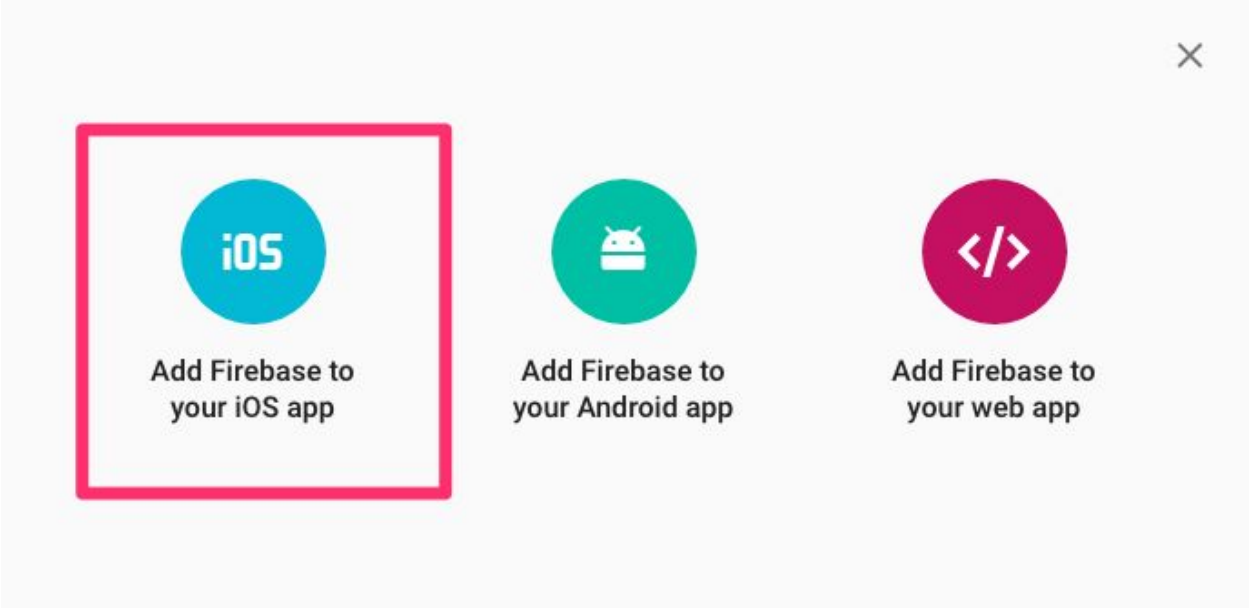
We need to create both ios and android app in firebase console.

let's start with the iOS one,

Go to console.firebase.google.com.

Choose your project.

Inside your project Add ios app.



It will ask you an iOS Bundle ID, to get it, go into your app's config.xml file and copy the package id you're using, it's the one that looks like (id="com.ionicframework.something").

Click REGISTER APP. It will generate GoogleService-Info.plist file

Click on Download GoogleService-Info.plist file, which is a config file for iOS.

After downloading GoogleService-Info.plist file click on Continue > Continue > FINISH

Copy GoogleService-Info.plist file to your project root directory

For Android:

Once we add iOS app, we need to add Android app.

Click ADD APP

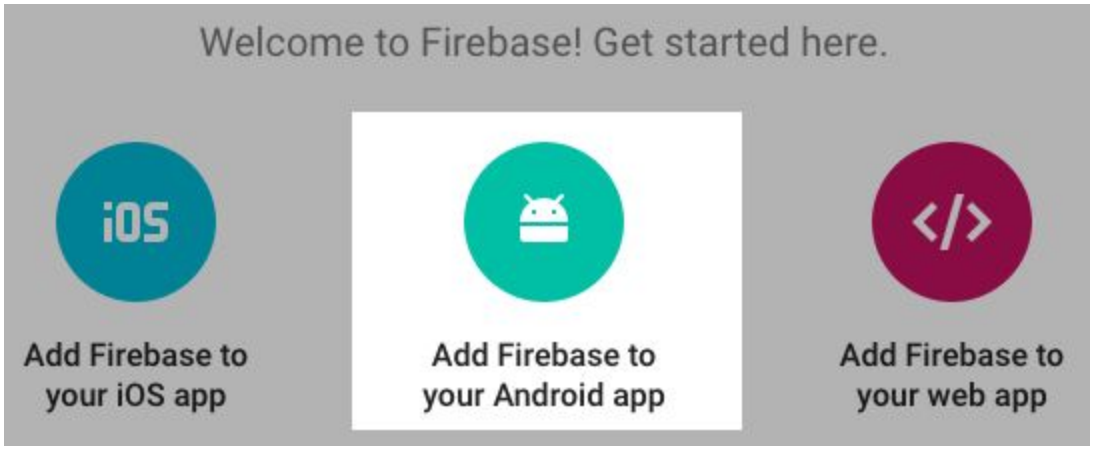
It will ask you an Android Bundle ID, to get it, go into your app's config.xml file and copy the package id you're using, it's the one that looks like (id="com.ionicframework.something").

Click REGISTER APP. It will generate google-services .json file

Click on Download google-services .json file, which is a config file for Android.

After downloading google-services .json file click on Continue > FINISH

Copy google-services .json file to your project root directory



Step #2: Install the Googleplus Cordova Plugin.

Note: We will get **CLIENT_ID** in google-services .json file

Run following command to install Googleplus cordova plugin.

```
$ ionic cordova plugin add cordova-plugin-googleplus --variable
REVERSED_CLIENT_ID=CLIENT_ID
$ npm install --save @ionic-native/google-plus

$ cordova prepare.
```

Step #3: Ionic Google Login with Firebase.

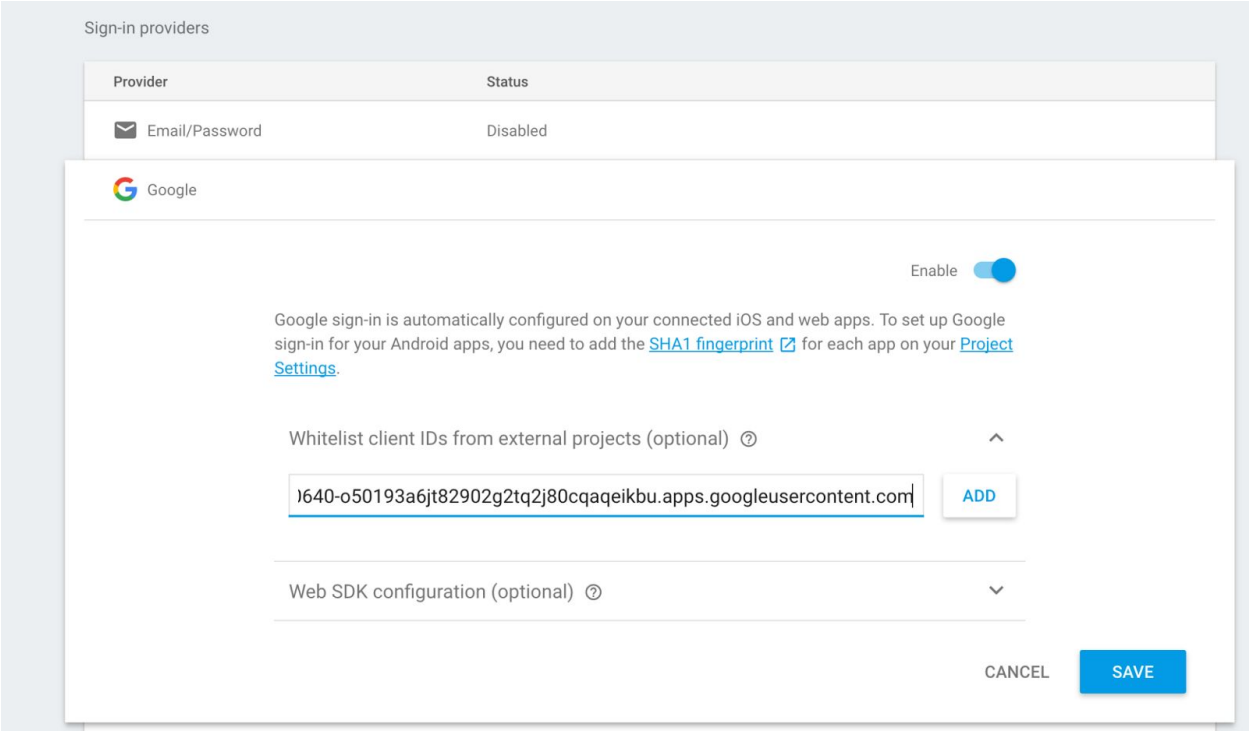
Add client id in login.ts file ('<Your web client ID>').

```
loginUser(): void {
  this.googlePlus.login({
```

```
        'webClientId': '<Your web client ID>',
         'offline': true
    }).then( res => {
firebase.auth().signInWithCredential(firebase.auth.GoogleAuthProvider.credential(res.idToken))
        .then( success => {
                console.log("Firebase success: " + JSON.stringify(success));
        }).catch( error => console.log("Firebase failure: " + JSON.stringify(error)));
    }).catch(err => console.error("Error: ", err));   }
```

Go to Firebase console-

Add client id here.



Facebook Authentication:

Create a Facebook App

We need to register for a Facebook application, Go to https://developers.facebook.com

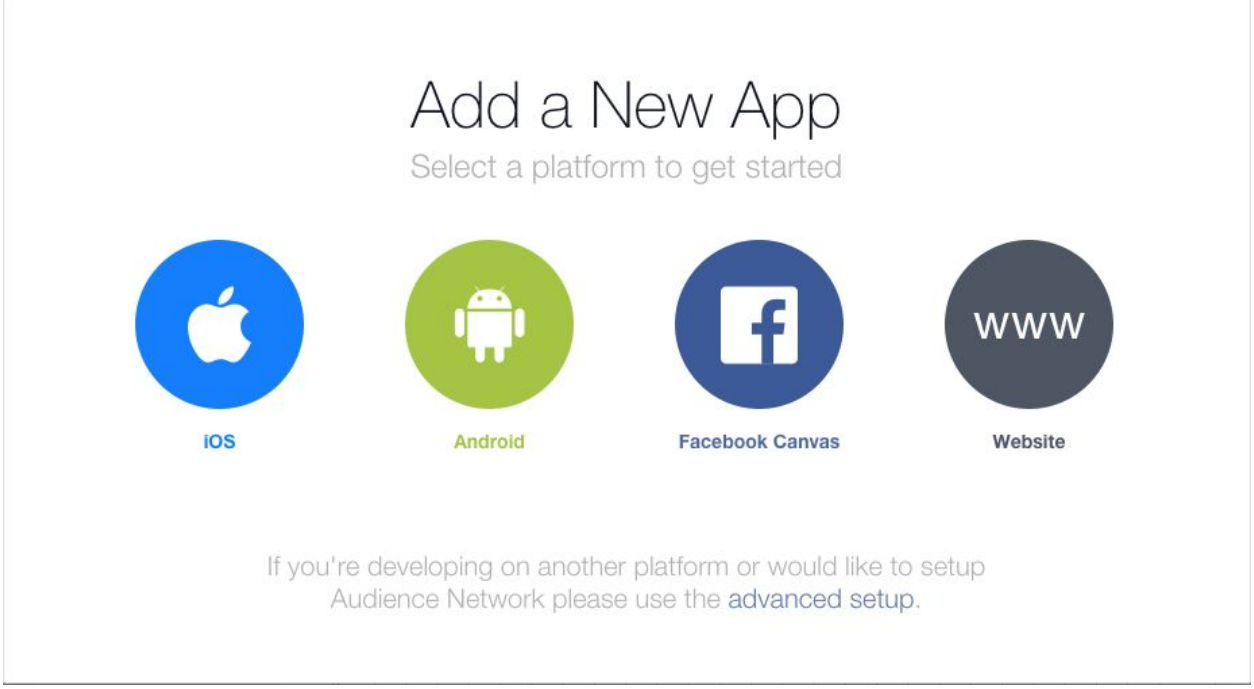
Create a Facebook for Developers account

click on the button Create a New App

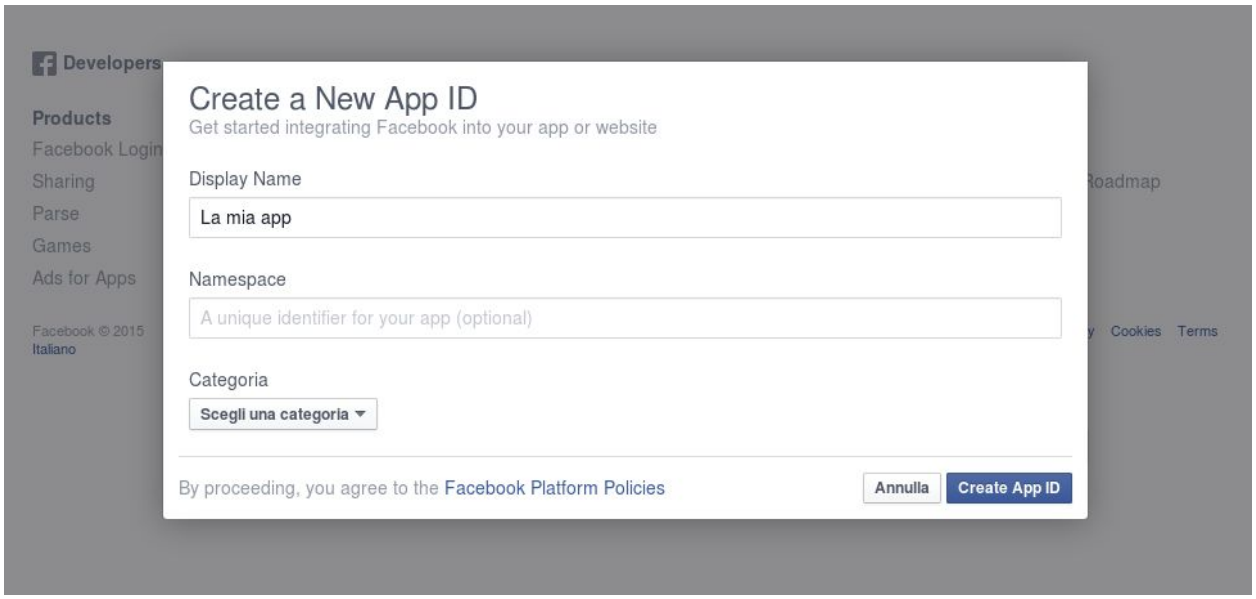
It will ask which kind of app you want to create

we just need the ID for the plugin.

You will name your app and generate an ID

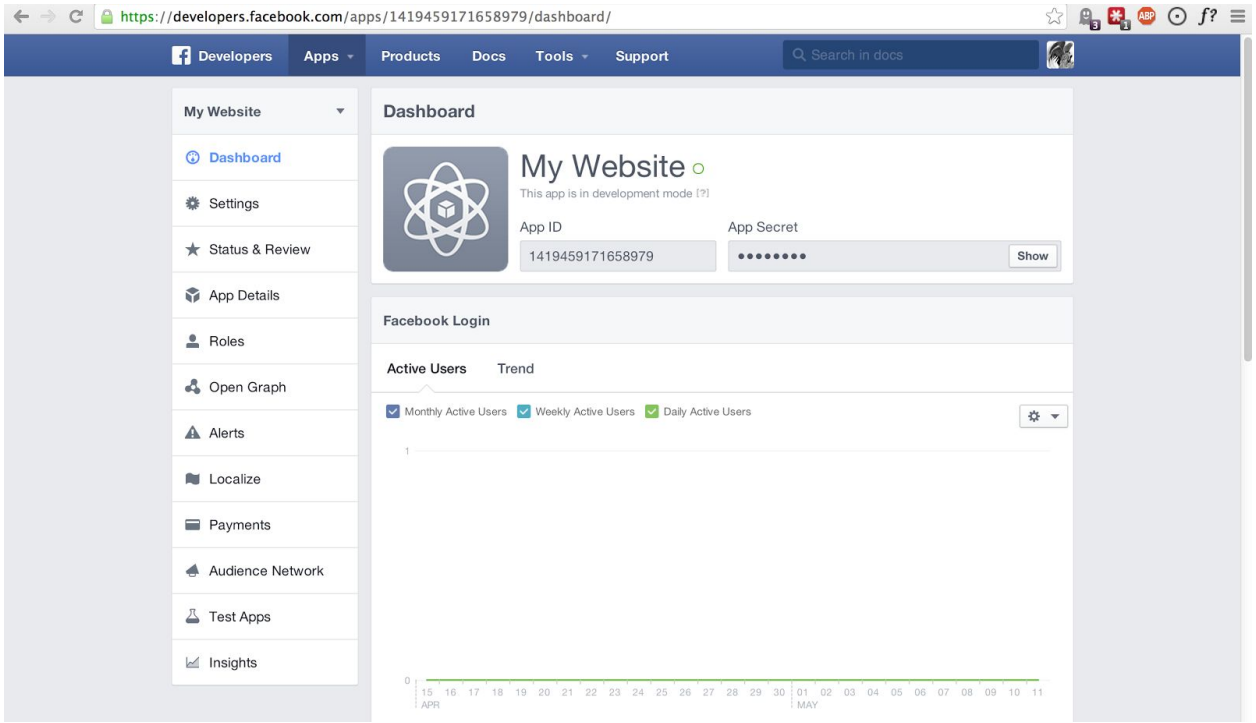


Facebook Create new App



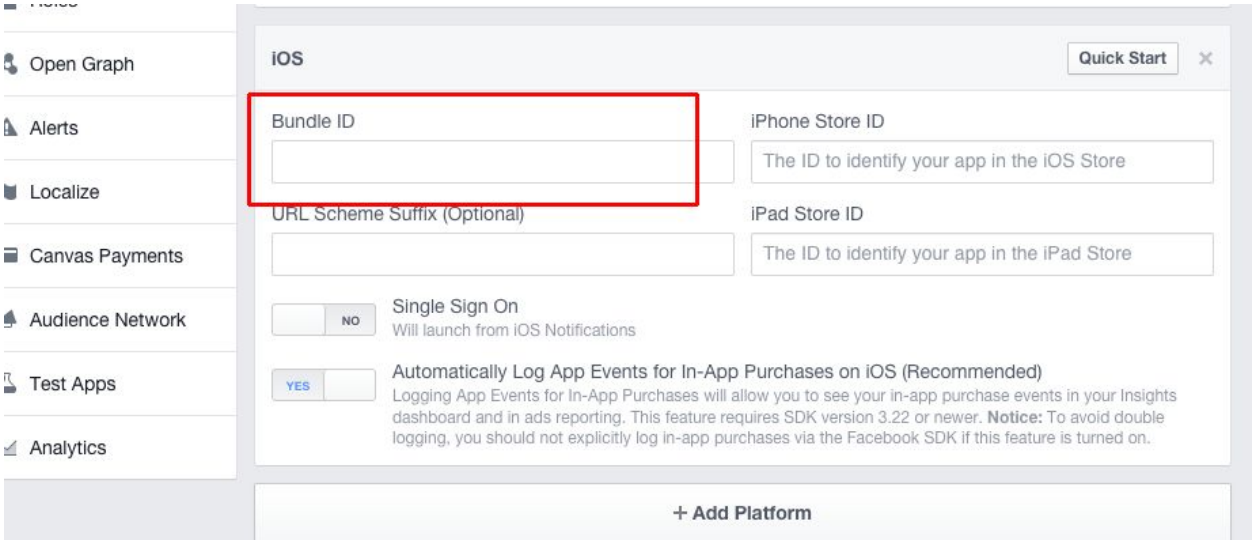
Facebook App Id.

Here you will get AppId and Appsecret



You'll get a prompt asking you which platform, just choose iOS and you'll see this

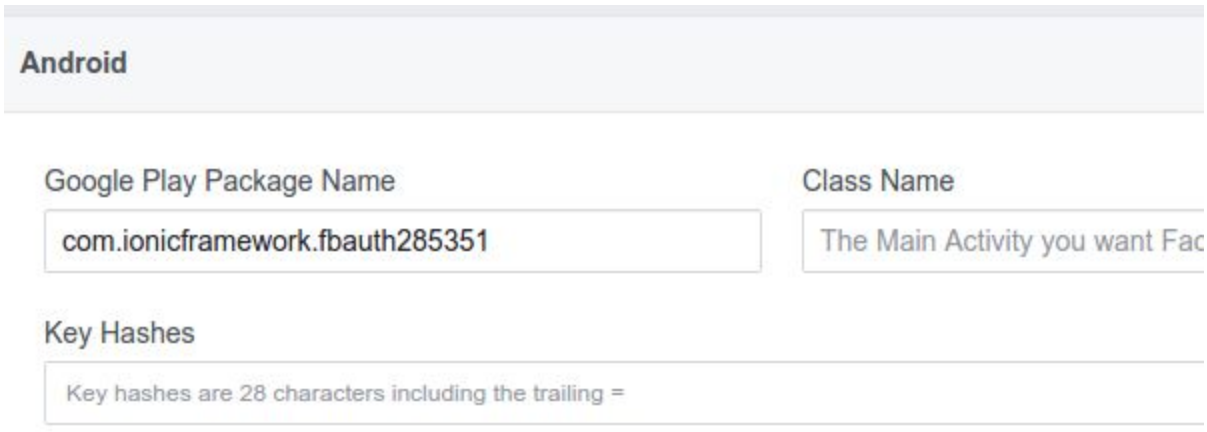
Now go back to your app's dashboard on Facebook and click under settings click on add platform.



Go to your app's config.xml file and copy bundle I'd paste it Bundle I'D field and save

Android

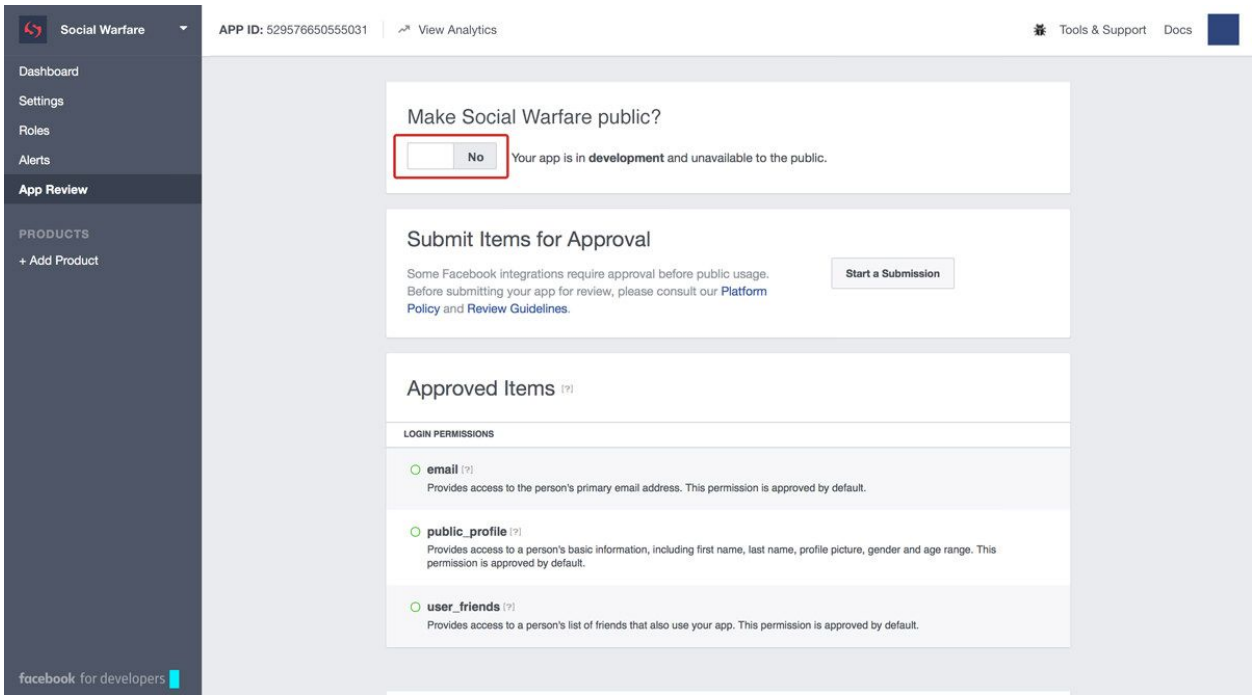
Now go back to your app's dashboard on Facebook and click under settings click on add platform



Go to your app's config.xml file and copy bundle I'd paste it Bundle I'D field and save

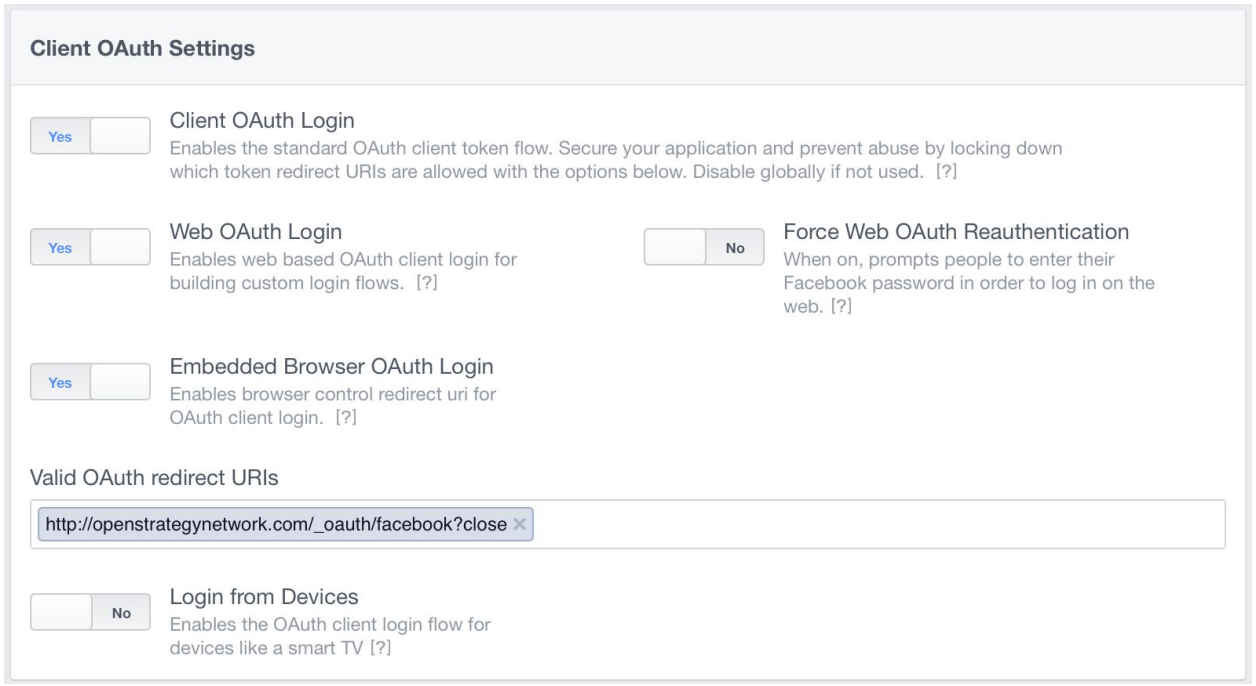
After that you need make your app public. Go to App review inside you have enable it.

Enable Firabase

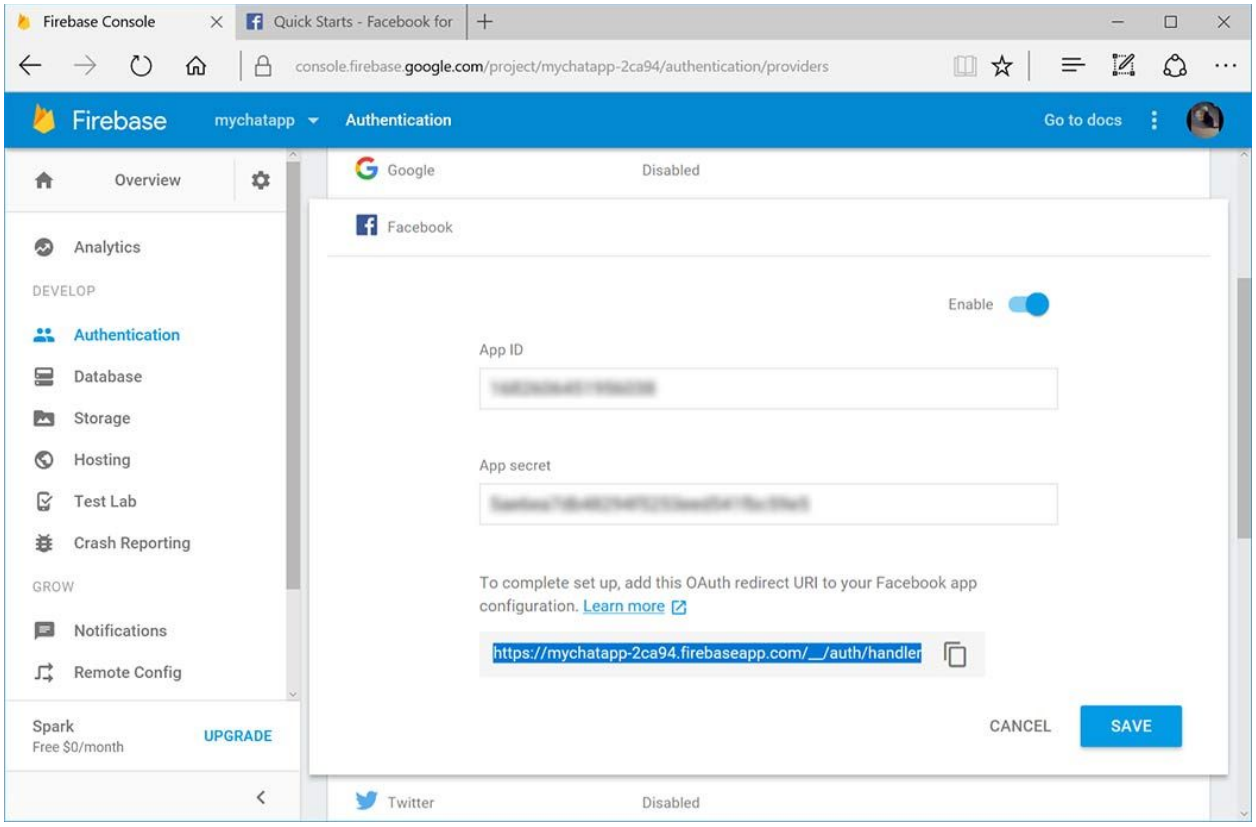


Now you need to go add product inside that choose Facebook Login.

After that facebook login setting add Valid OAuth redirect URIs



You can get this one from here. Copy this Valid OAuth redirect URIs and paste it there.



Now go back to your app's dashboard on Facebook and note down App I'D and App Secret

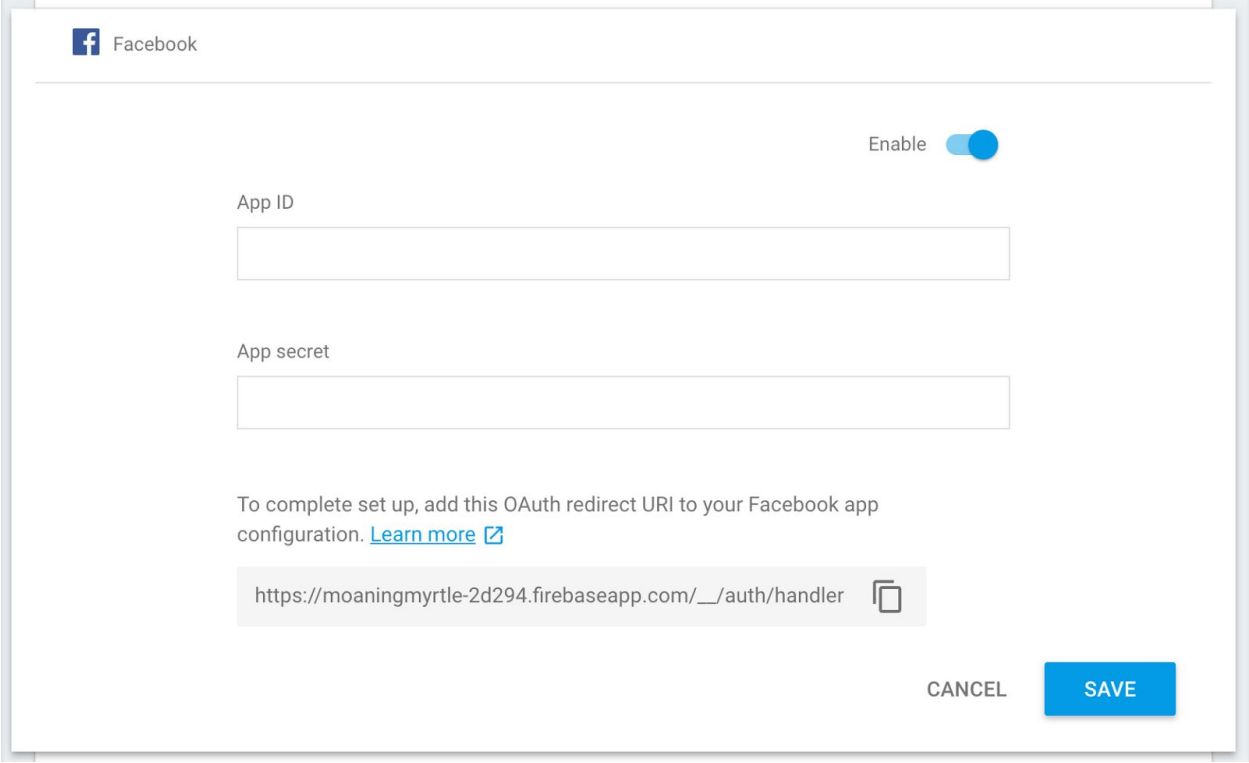
Go to your Firebase Console and enable Facebook Authentication

Go to -

console.firebase.google.com/project/YOURPROJECTNAMEHERE/authentication/providers

Enable Facebook, it's going to ask you for your App I'D and App Secret. Copy and paste it from your app's dashboard on Facebook

Install Cordova Facebook Plugin



APP_NAME and APP_ID From Facebook Dashboard

$ ionic cordova plugin add cordova-plugin-facebook4 --variable APP_ID="123456789"

--variable APP_NAME="myApplication"

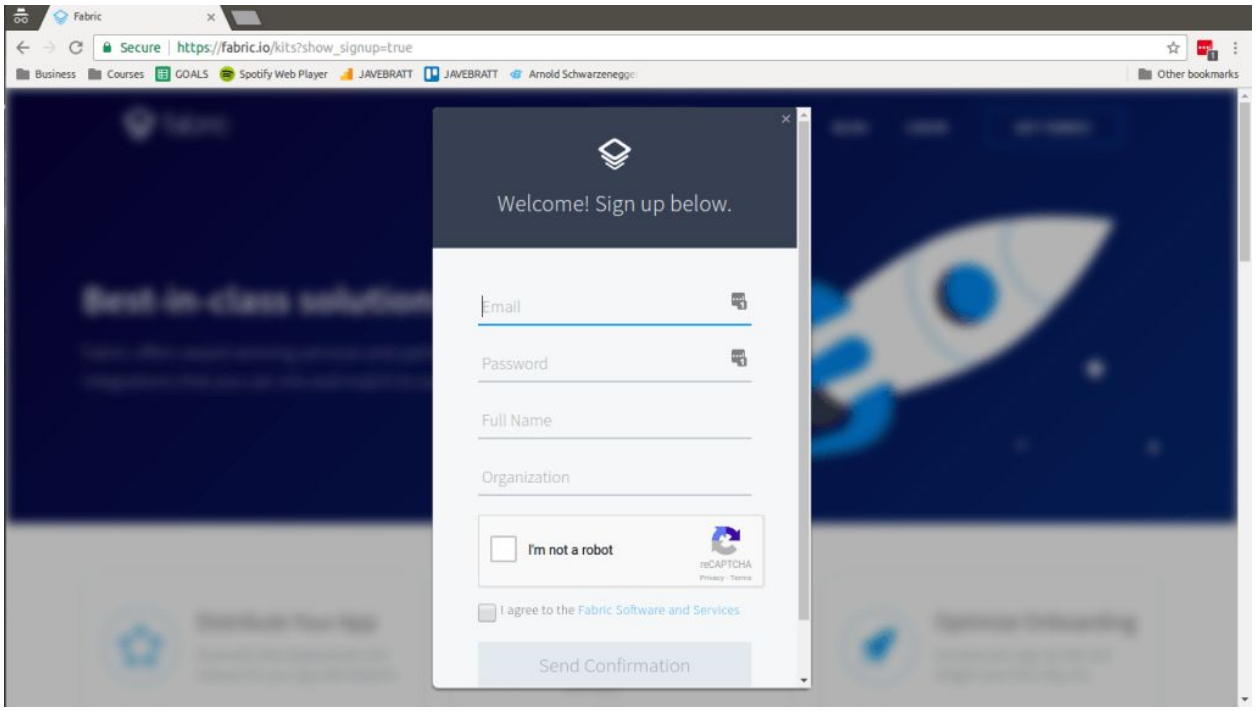
$ npm install --save @ionic-native/facebook

Twitter Authentication:

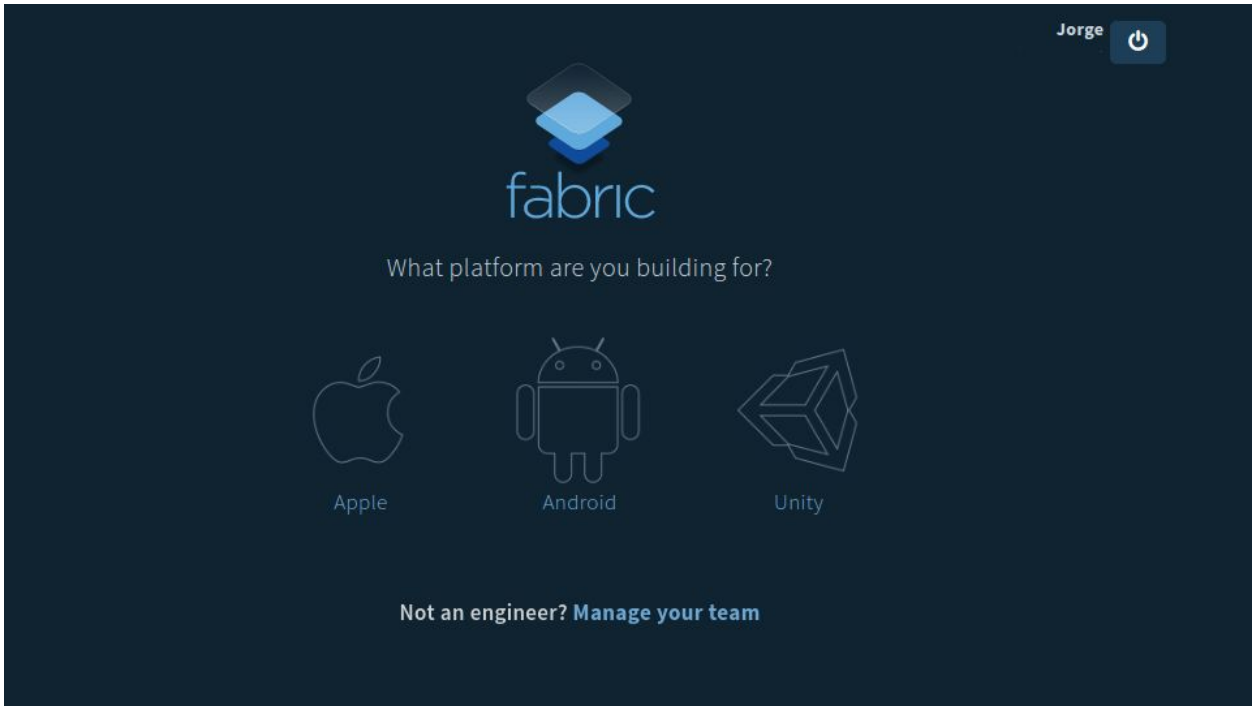
- Step #1: Set up your Fabric Account.
- Step #2: Get your Fabric API Key.
- Step #3: Create your app in Fabric.
- Step #4: Install the Twitter Connect Plugin
- Step #5: Enable Twitter Authentication in Firebase.

Step#1: Set up your Fabric Account.

Create an account in [Fabric website]

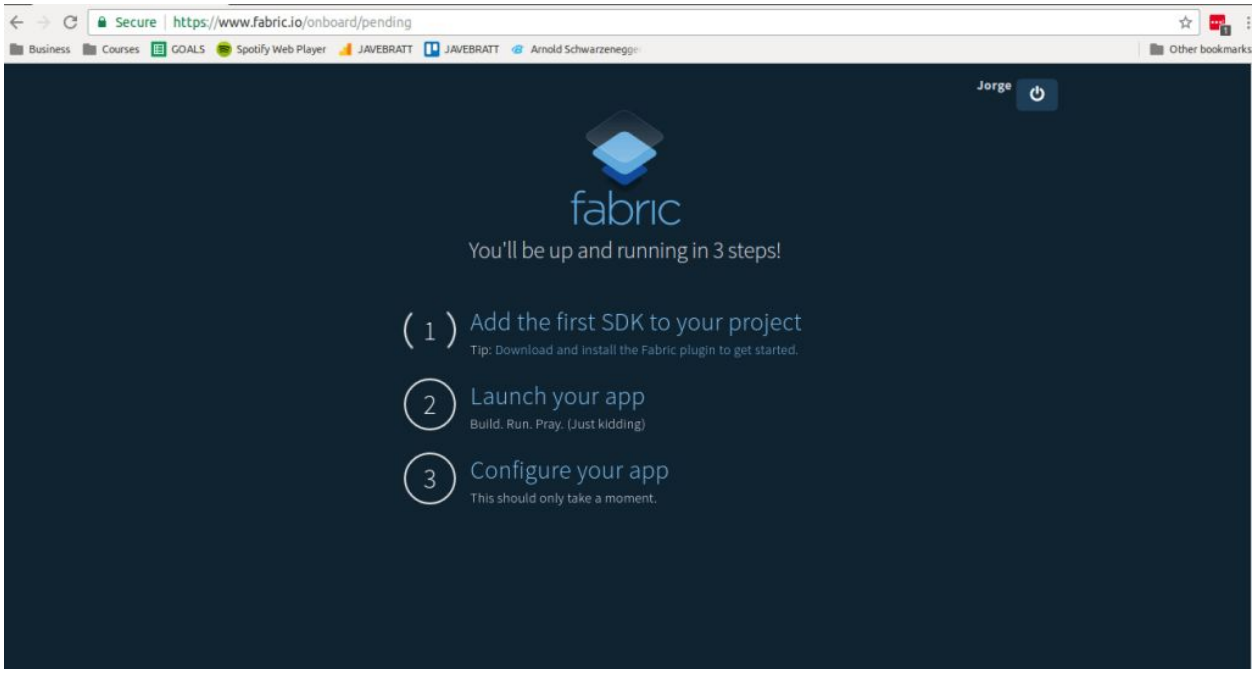


Select either iSO or android platform



When you pick the platform you'll go through an on-boarding process (*yup, they actually think this is good*), just read through every single message and follow the instructions step by step

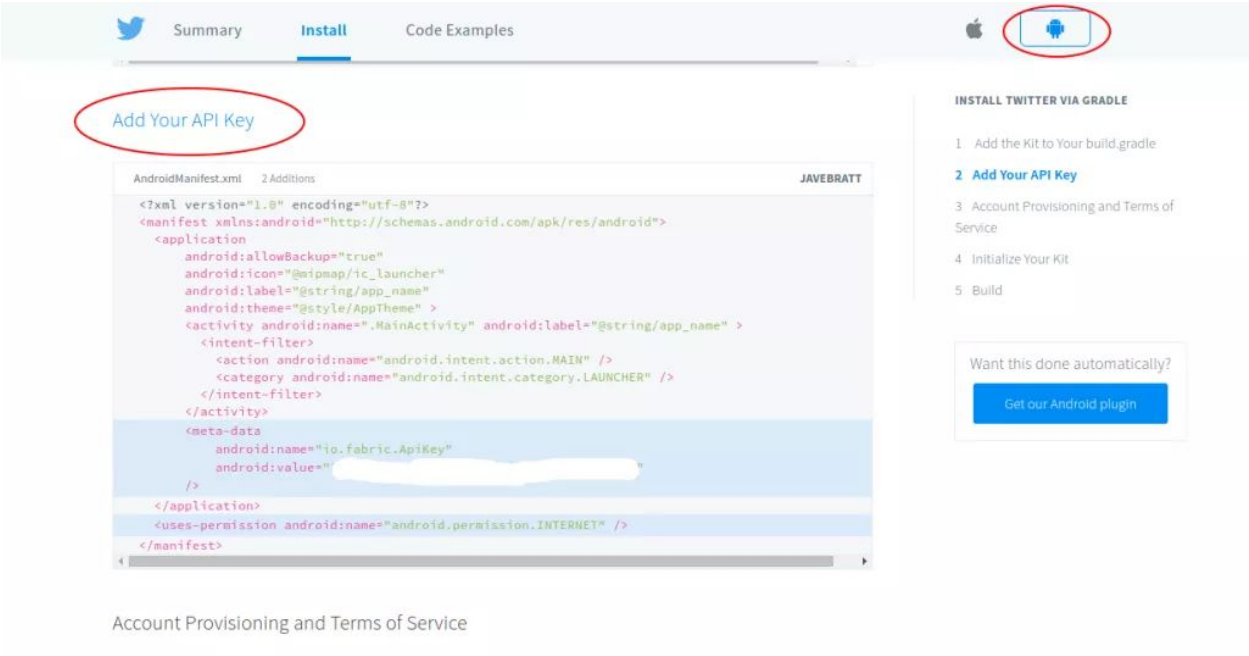
Once everything is installed, you need to build and run the app, once you do, it will send a signal to Fabric letting them know that you have successfully installed and ran the SDK, which will let you pass this "pending" page



Step #2: Get your Fabric API key

Fabric uses an API key and build secret to authenticate your app:

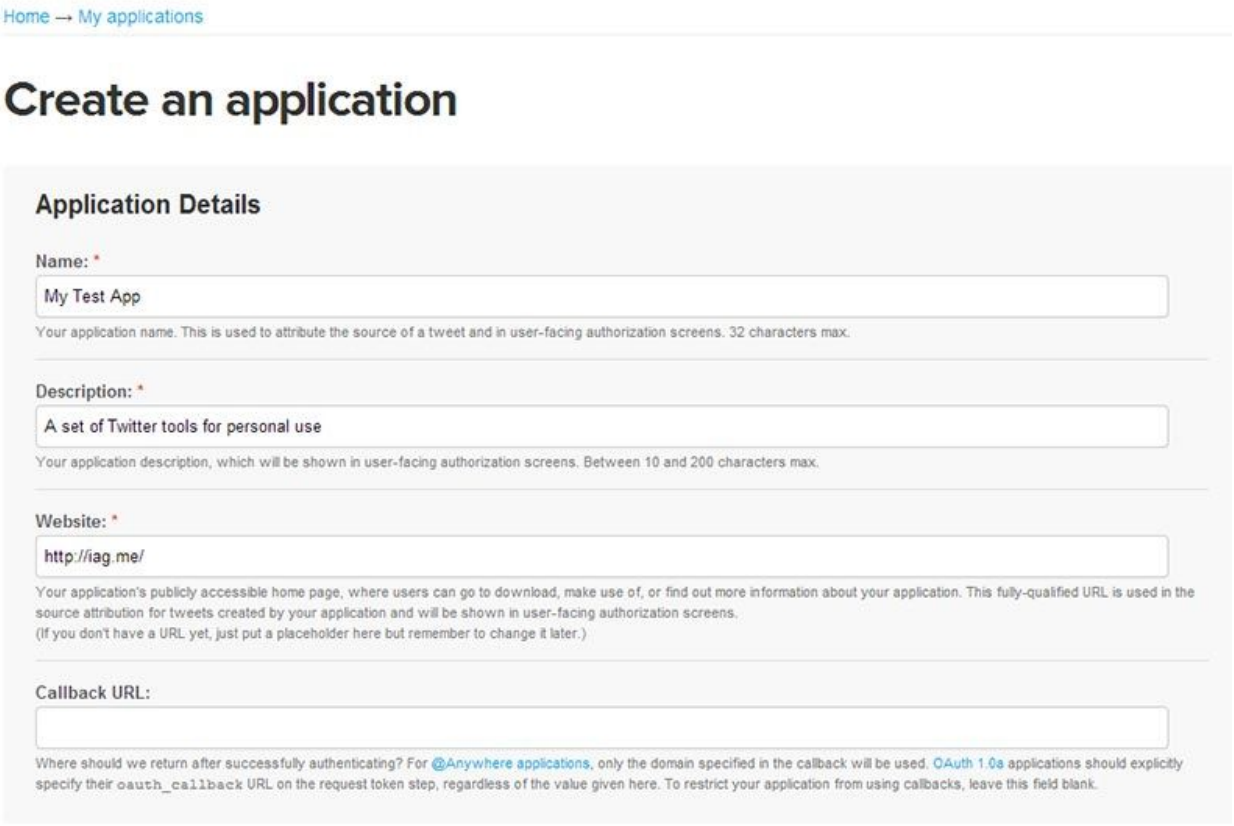
1. Login to Fabric account and open https://fabric.io/kits/android/crashlytics/install
2. Find the metadata code block in AndroidManifest.xml
3. Find your API Key pre filled in the code.



Step #3:Create a Twitter app

Go to this link https://apps.twitter.com/. Here you need to sign up.

After you need to create app.



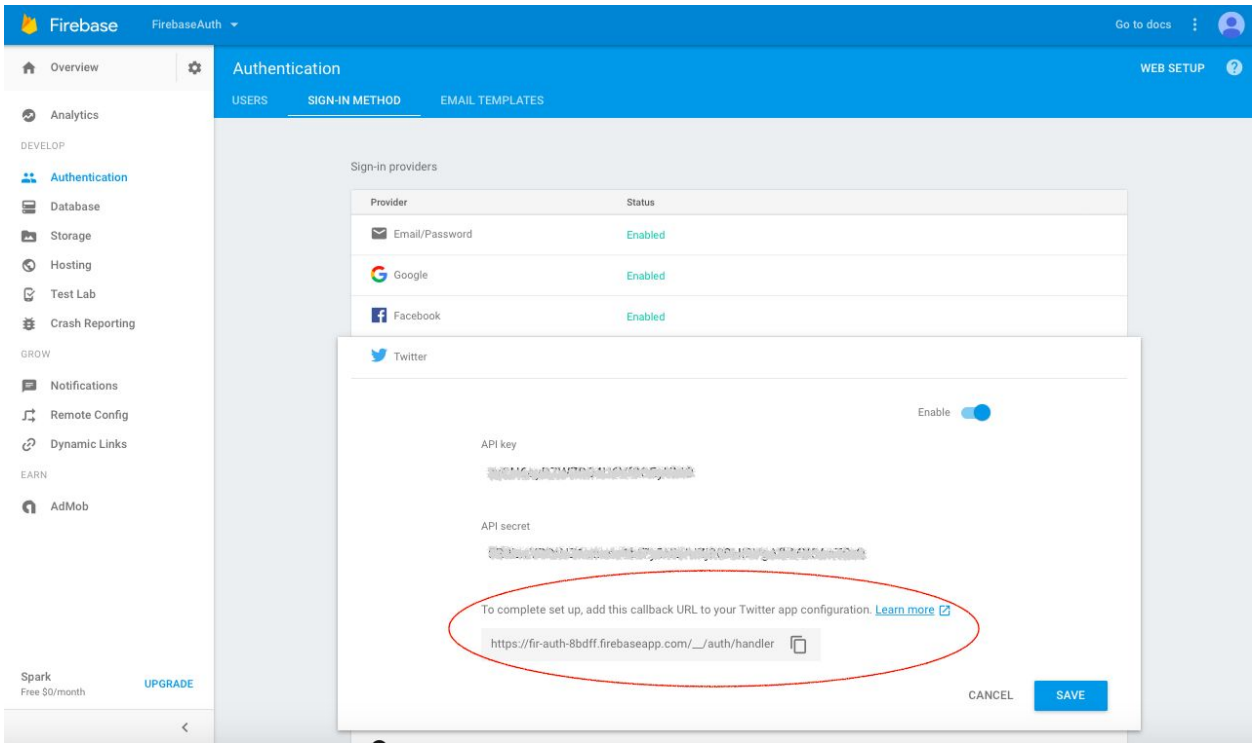
Add your app name.

Add description.

Website URL.

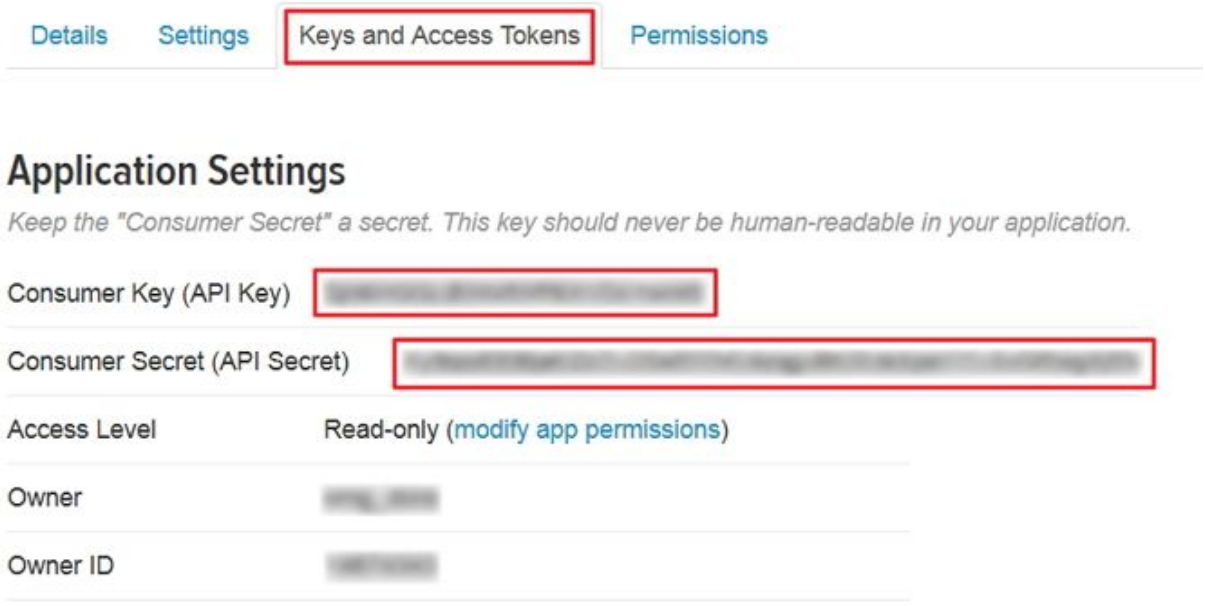
Callback URL

Note:- Callback URL get from firebase



Copy this URL and it Callback URL.

And you can get the consumer key and consumer secret from app Keys And Access Tokens.



Step #4: Install the Twitter Connect Plugin

$ ionic cordova plugin add twitter-connect-plugin --variable FABRIC_KEY=fabric_API_key

$ npm install --save @ionic-native/twitter-connect

Note:- How you will get fabric API key in above tutorial is there

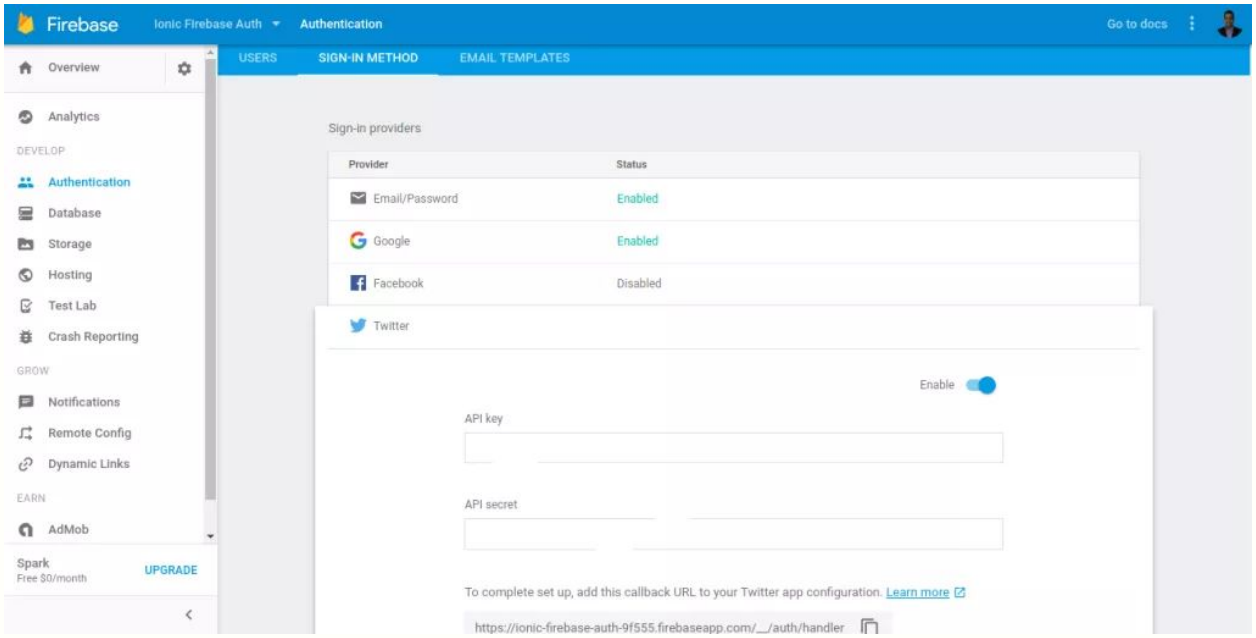
Once the plugin is installed, you'll need to do some configuration, go ahead and open the **config.xml** file that's in the project root, and **right before the closing </widget> tag**, add this:

```
<preference name="TwitterConsumerKey" value="<Twitter Consumer Key>" />
<preference name="TwitterConsumerSecret" value="<Twitter Consumer Secret>"
```

Step #5: Enable Twitter Authentication in Firebase.

Now you need to tell your Firebase app to allow users to Sign-In with Twitter, for that go to your Firebase Console

Choose your app and inside the Authentication Tab go to "Sign-In Method" and enable Twitter, it's going to ask you for an API Key and Secret, you'll use the same you just used, the ones for the app you created in Fabric.

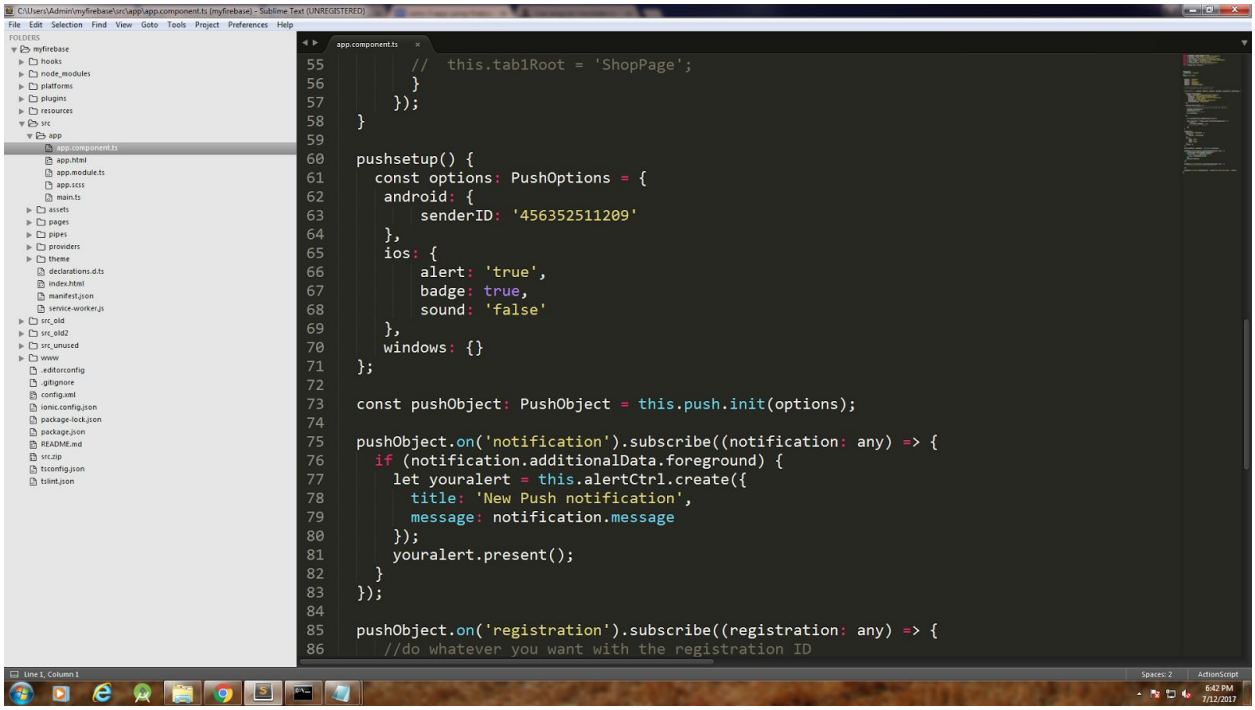


Add Push Notification:

Install this plugin:

Note:- You will get `SENDER_ID from` **GoogleService-Info.plist** file.

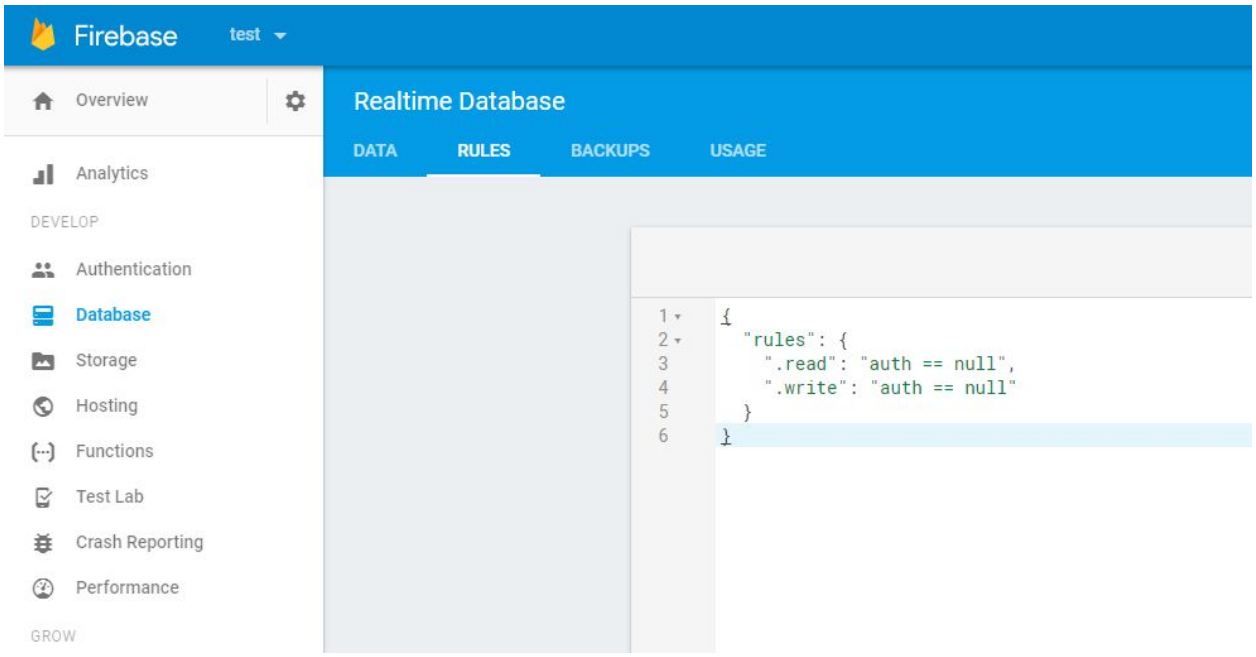
```
ionic cordova plugin add phonegap-plugin-push --variable
SENDER_ID=XXXXXXXXX

npm install --save @ionic-native/push

Add sender Id in app.component.ts file.
```



Firebase rules:

Change Firebase database rules to make contents available for customers

```
{
  "rules": {
    ".read": true,
    ".write": true
  }
}
```



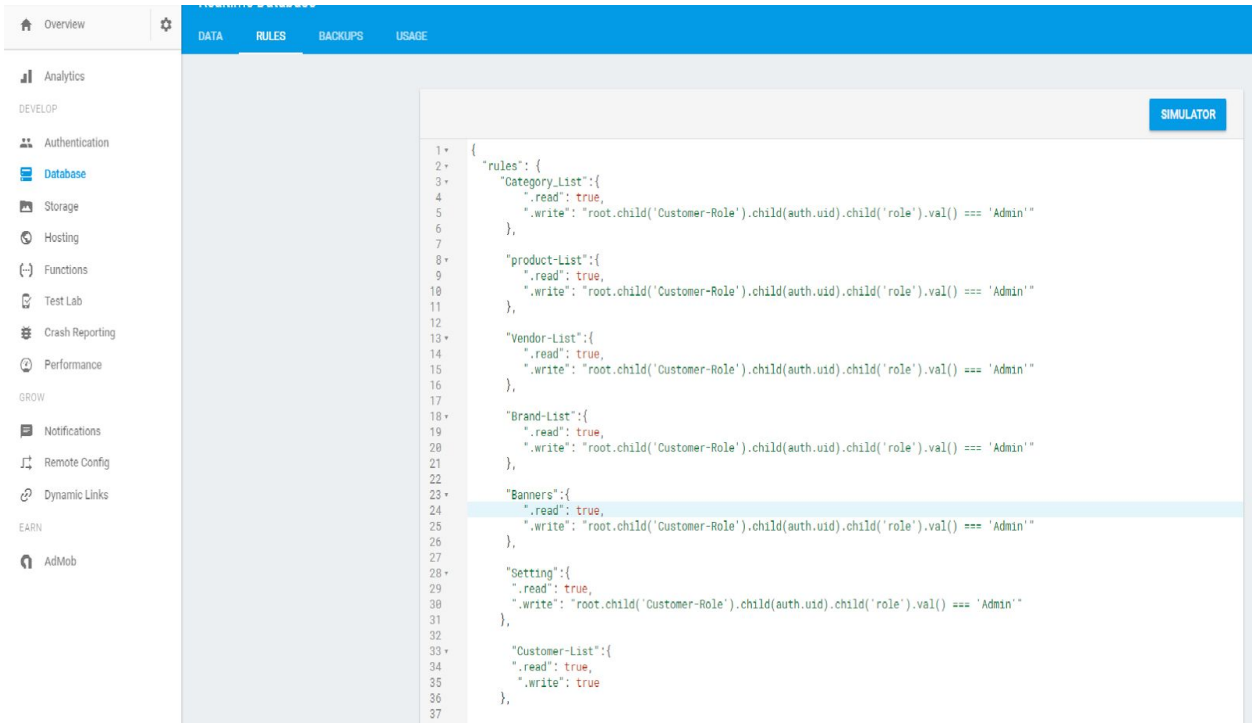
If you want secure you data you can also use firebase rule we have created. Here write permission is disable for users other than admin

You have to register and make registered user as admin before using below firebase below rule. Replace **Admin UID** in below firebase rule with actual Admin User uid

```
{
  "rules": {
    "Category_List":{
        ".read": true,
                                ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() ===
'Admin'"
    },
```

```
    "product-List":{
      ".read": true,
                        ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() ===
'Admin'"
    },

    "Vendor-List":{
      ".read": true,
                        ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() ===
'Admin'"
    },

    "Brand-List":{
      ".read": true,
                        ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() ===
'Admin'"
    },

    "Banners":{
      ".read": true,
                        ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() ===
'Admin'"
    },

    "Setting":{
     ".read": true,
```

```
      ".write": "root.child('Customer-Role').child(auth.uid).child('role').val() === 'Admin'"
    },

     "Customer-List":{
     ".read": true,
      ".write": true
    },

     "Customer-Role":{
       ".read": true,
      ".write": "auth.uid === 'Admin UID'"
    },

    "Order-List":{
     ".read": true,
     ".write": true
    }
  }
}
```



Admin Panel

You can build separate app with admin functionality for managing your shop. With this you can do following activities

1. Add and manage categories
2. Add and manage products
3. Add and manage customers
4. Add and manage vendors
5. Add and manage brands
6. Add and manage images
7. Create and manage orders
8. Configure and Manage PayPal payment method
9. Configure and Manage Stripe payment method
10. Manage Banners and Currency

Add and manage categories

Add and manage products

Add and manage customers

Add and manage vendors

Add and manage brands

Add and manage images

Create and manage orders

Configure and manage payments

Manage banners and currency

Separating customer app

1. Delete admin folder
2. Remove **tab4Root = 'AdminPage';** in src/app/app.component.ts file
3. Remove **<ion-tab [root]="tab4Root" tabTitle="Admin" tabIcon="person"></ion-tab>** in src/app/app.html file
4. Delete End Admin Only Functions section in src/providers/service.ts file. This is optional and you will find any error if this is not deleted

Integrating Wordpress Blog

1. Upload the json-api folder to the /wp-content/plugins/directory or install directly through the plugin installer. JSON API By Dan Phiffer (You have to upload attached json-api to show author image in blog post)
2. Activate the plugin through the 'Plugins' menu in WordPress or by using the link provided by the plugin installer.
3. Activate Controllers Wordpress Settings->JSON API->Controllers. (core, post, respond, widgets)
4. To integrate wordpress blog add wordpress website url in myApp/src/providers/config.ts file