Ionic Firebase Analytics - Tutorial

1. Create a new app and add firebase plugin:

ionic start ionicFbAnalytics blank --type=angular --capacitor --package-id=com.bscoutinho.ionicanalytics

npm install @capacitor-community/firebase-analytics

ionic build

ionic capacitor add android

ionic capacitor add ios

2. Create a project in firebase console

https://console.firebase.google.com/







3. Configure a project in firebase console



3.1. <u>Web</u>



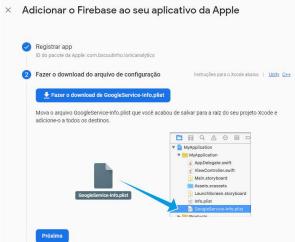
3.2. Android





3.3. <u>IOS</u>





4. Configure firebase-analytics in the ionic project

4.1. Web

src > environment > environment.ts

```
export const environment = {
  production: false,
  firebaseConfig: {
    apiKey: 'AIzaSyAjmfTJEapCdtzCcIYMSnlCosfYCapMy7g',
    authDomain: 'ionicanalytics-ab626.firebaseapp.com',
    projectId: 'ionicanalytics-ab626',
    storageBucket: 'ionicanalytics-ab626.appspot.com',
    messagingSenderId: '695250783708',
    appId: '1:695250783708:web:1024ed69f2ea8a647e5319',
```

```
measurementId: '${config.measurementId}'
};
```

4.2. Android

- Copy file "google-services.json" to android > app
- Initialize plugin in "MainActivity.java"

```
package com.devdactic.analytics;
import android.os.Bundle;
import com.getcapacitor.BridgeActivity;
import com.getcapacitor.Plugin;
import com.getcapacitor.community.firebaseanalytics.FirebaseAnalytics;

import java.util.ArrayList;

public class MainActivity extends BridgeActivity {
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

    // Initializes the Bridge
    this.init(
        savedInstanceState,
        new ArrayList<Class<? extends Plugin>>() {{
        // Additional plugins you've installed go here
        add(FirebaseAnalytics.class);
     }});
    }
}
}
```

4.3. IOS

Copy file "GoogleService-info.plist" to ios > App > App

5. Add a firebase-analytics logic in Ionic

Change "<a href="home.page.ts" file to initialize firebase-analytics logic:

```
import { Component } from '@angular/core';
import { environment } from './../environments/environment';
import { FirebaseAnalytics } from '@capacitor-community/firebase-analytics';
```

```
import { Capacitor } from '@capacitor/core';
@Component({
  selector: 'app-home',
  templateUrl: 'home.page.html',
  styleUrls: ['home.page.scss'],
export class HomePage {
  enabled = true;
  constructor() {
    if (Capacitor.getPlatform() === 'web') {
     FirebaseAnalytics.initializeFirebase(environment.firebaseConfig);
  setUser() {
    FirebaseAnalytics.setUserId({
      userId: 'test_123',
    });
   setProperty() {
   FirebaseAnalytics.setUserProperty({
      name: 'framework',
     value: 'angular',
   });
   logEvent() {
    FirebaseAnalytics.logEvent({
      name: 'login',
      params: {
        method: 'email'
   });
   toggleAnalytics() {
    this.enabled = !this.enabled;
    FirebaseAnalytics.setCollectionEnabled({
      enabled: this.enabled,
    });
```

}

Change "home.page.html" file to add buttons to trigger actions:

```
<ion-header>
  <ion-toolbar color="primary">
    <ion-title>
      Ionic Firebase Analytics
    </ion-title>
  </ion-toolbar>
</ion-header>
<ion-content class="ion-padding">
  <ion-button expand="full" (click)="setUser()">Set User ID</ion-button>
  <ion-button expand="full" (click)="setProperty()">Set User Property</ion-</pre>
  <ion-button expand="full" (click)="logEvent()">Log Event</ion-button>
  <ion-button expand="full" routerLink="/second">Go to second page</ion-button>
  <ion-button expand="full" (click)="toggleAnalytics()">Toggle Data
collection</ion-button>
  Analytics enabled: {{ enabled }}
</ion-content>
```

6. Debugging in development mode

6.1. Web

Install Google Analytics Debugger extension: https://chrome.google.com/webstore/detail/google-analytics-debugger/jnkmfdileelhofjcijamephohjechhna?hl=pt

6.2. Android

All we need to to for Android to enable the debug mode is calling this from your command line while your device is connected:

adb shell setprop debug.firebase.analytics.app <package_name>

^{*} The extension need to be ON to debugger works.

To later disable it

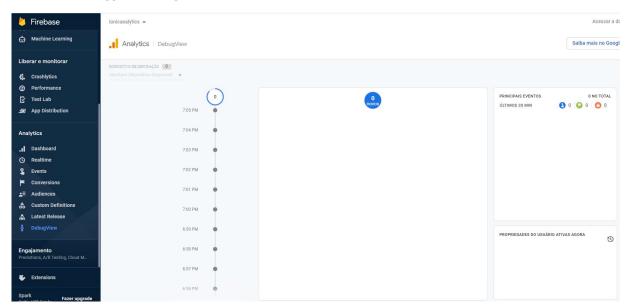
adb shell setprop debug.firebase.analytics.app .none.

6.3. IOS

To start your iOS app in debug mode, all we need to do is add a flag to the launch arguments of your app. You can do this within Xcode by going to Product -> Scheme -> Edit Scheme in the top bar, and then add this flag to the launch arguments within the Run section:

-FIRDebugEnabled

6.4. Check Debugger working on firebase console.



Note: this tutorial is based on this articles:

https://devdactic.com/firebase-analytics-ionic/

https://www.youtube.com/watch?v=_mks8zECJ7A&list=WL&index=36&t=31s