

Assignment #4 - Analytics & Push notification

In the following assignment you should extend the application that you have created in the previous assignment to include the following analytics & push notification capabilities:

Analytics:

- Add to your app at least 7 custom events that will track the main feature of the apps that you would like to measure. Each event should include the relevant event properties/
- Add to your app at least 5 user properties.
- Integrate your analytics implementation with Firebase analytics and also one more 3rd party analytics tool from the following option:
 - Mixpanel www.mixpanel.com
 - Appsee www.appsee.com
 - Flurry <https://y.flurry.com/>

Push notification:

- Extend your app to support push notification handling
- Implement 3 different push notification campaigns make sure to apply to your campaigns advanced PN capabilities to improve the overall effectiveness of the campaign

Submission Guidelines:

1. A Video clip that demonstrates the main use case of the app.
2. A presentation file in PDF format that include a summary of the main insights from the analytics data that was gathered and the actions (push campaigns) that you plan to take based on them
3. A zip file that contains the project's source code (Note: Make sure to execute 'gradlew clean' command before zipping the project folder).
4. **Due date: 08/01 by 23:59 PM**

Postman App:

It is recommended to use postman (<https://www.getpostman.com/>) app to simulate send of data push message. The send message format is illustrated in below screenshots:

The screenshot shows the Postman interface for a POST request to `https://fcm.googleapis.com/fcm/send`. The 'Headers' tab is selected, showing two headers: 'Content-Type' with value 'application/json' and 'Authorization' with value 'key=AlzaSyBEGnSVaCZVpN_3sfXFy_VBNsPp_RoQ69M'. A 'Send' button is visible on the right.

Key	Value	Description
Content-Type	application/json	
Authorization	key=AlzaSyBEGnSVaCZVpN_3sfXFy_VBNsPp_RoQ69M	

POST : `https://fcm.googleapis.com/fcm/send`

Header:

Key: Content-Type Value: application/json

Authorization: key=AlzaSyBEGnSVaCZVpN_3sfXFy_VBNsPp_RoQ69M

Note: the key should be taken from the Firebase settings of cloud messaging (see below screen shot)

The screenshot shows the Postman interface for a POST request to `https://fcm.googleapis.com/fcm/send`. The 'Body' tab is selected, showing a JSON body. The 'Send' button is visible on the right.

```
1 {
2   "to": "eb4gshz0Ts0:APA91bF97fnc2LeDDCEwCsF0C8Zy-chnB7ytfqZXv_jyfoqzPULZWxiwZxI7ZRQmNX_G4XAmSbjtNx
   -PRgOKLlrIuNn5RBH_OMCfq0iUdMAN6XmS0nXMn-T3q86IY46aFraXaMXaf8N5",
3   "data": {
4     "title": "Summer fdfdfd!",
5     "body": "Get 25% off for all summer collection!!! ",
6     "small_icon": "notification",
7     "sound": "alert",
8     "action": "go to sale"
9   }
10 }
```

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```
{
  "to" :
"ezN-ygeyooA:APA91bErcjc_1l5LdD3wBahIKXgxKLglU-qQSG0zQYbr-9fSCvEiPKe0ubYNh3-4z_Y2K3JSc0sEK2tWZPT3UjphVFxiCEGhS2SMul8T1qqLGDYCD_3Wb73TU6RIeTcLXo6CjsVfv
oz"
  "data" : {
    "title": "New Year Sale!"
    "body" : "Get 50% off from all of our products"
    "small_icon" : "notification"
    "sound" : "alert"
    "action" : "share"
  }
}
```

Settings

[General](#)[Cloud Messaging](#)[Integrations](#)[Service accounts](#)[Data privacy](#)[Users and permissions](#)

Project credentials

Add server key

Key	Token
Server key	AAAAhYnZq54:APA91bF_crCYN600lpsZEXc-mZ_lFBd_C3lN90ru-jgmt1chMT1bFbd1ptXxcdZjgZ-77B14tz7DC-WOQUPE_ZToMPPr9OwdqCw8q1dyxF7GXSDqHyWn4DTKmFVR6NYTELNnEonVKDeEF
Legacy server key ⓘ	AlzaSyBEGnSVaCZVpN_3sFXfy_VBNsPp_RoQ69M
Sender ID ⓘ	
573543394206	

Goodluck!