MIRACLE
SOFTWARE SYSTEMS

Push Notifications

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OverView:

A **push notification** is a message that pops up on a mobile device. **Push notifications** look like SMS text messages and mobile alerts, but they only reach users who have installed your app.

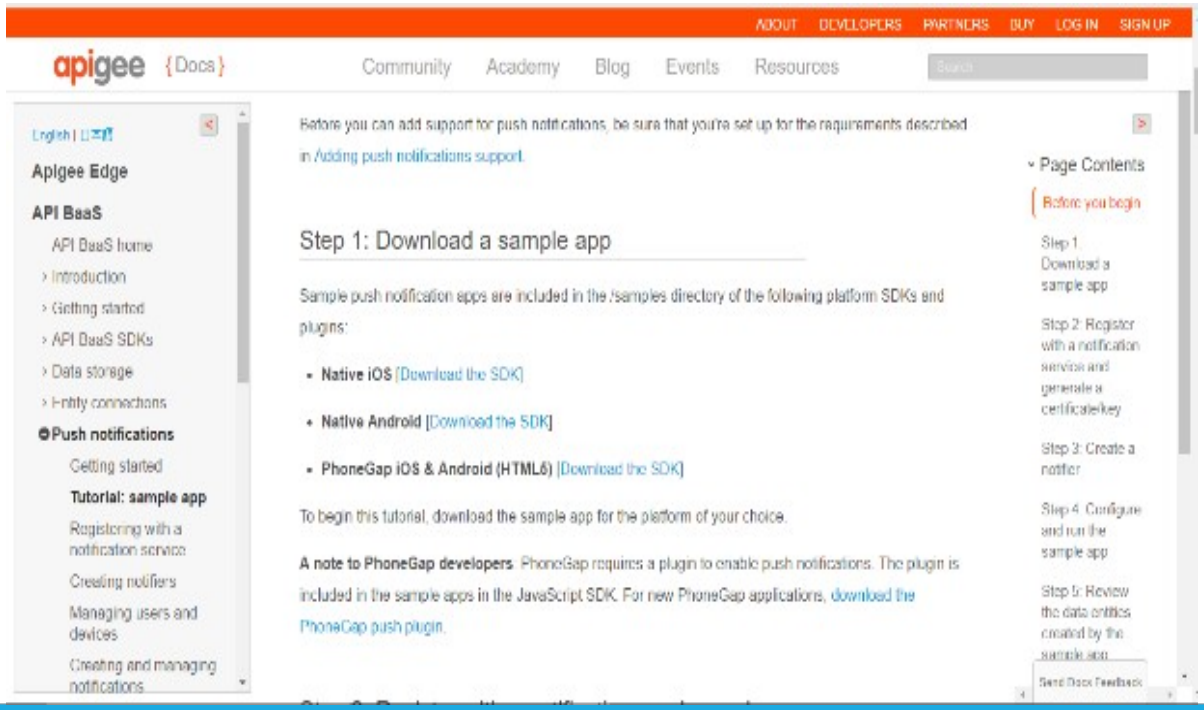
Description:

you'll use a sample app (iOS, Android, or PhoneGap) to send yourself a push notification with the API BaaS push notification API. You'll register with a push notification services (Apple APNs or Google GCM) to create the required security certificate or key, create the required API BaaS notifier to send a message, then modify, compile and run the sample app to see push notifications in action.

- Push notifications can be achieved in 5 steps.

Step1:

Download the android sdk sample app:



Step2:

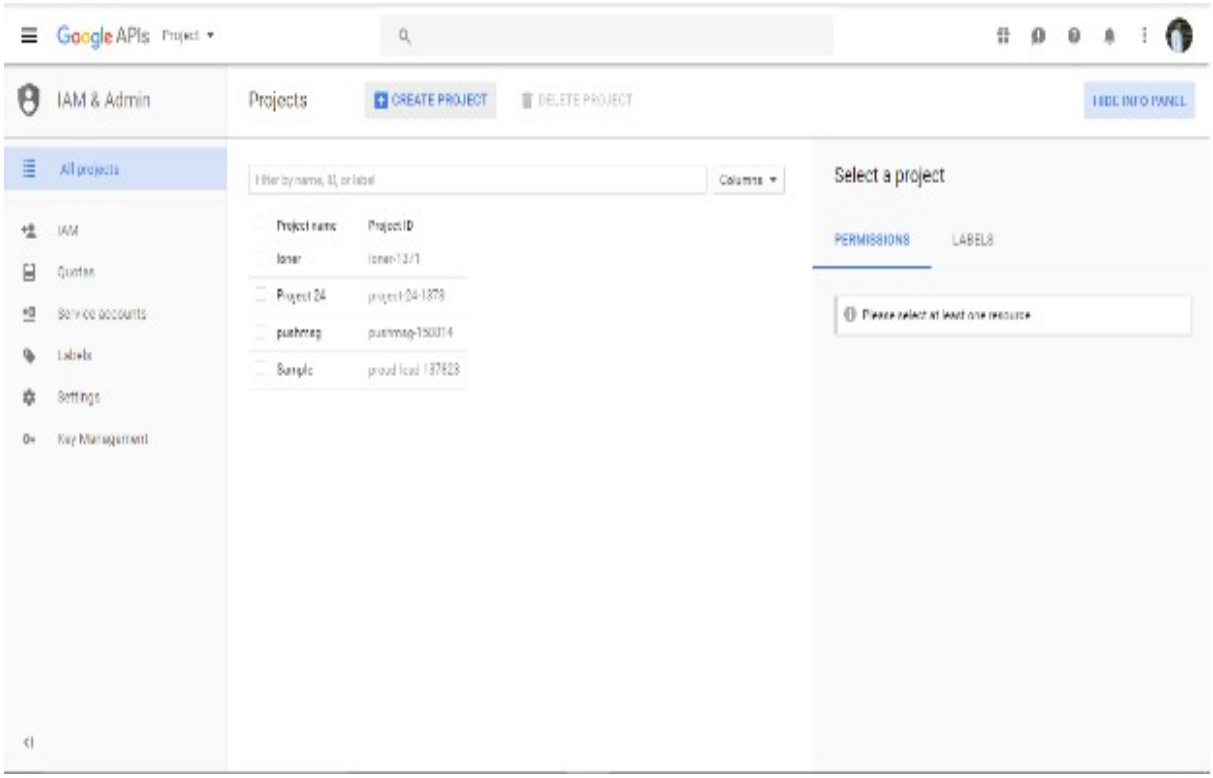
Register with a notification service and generate key:

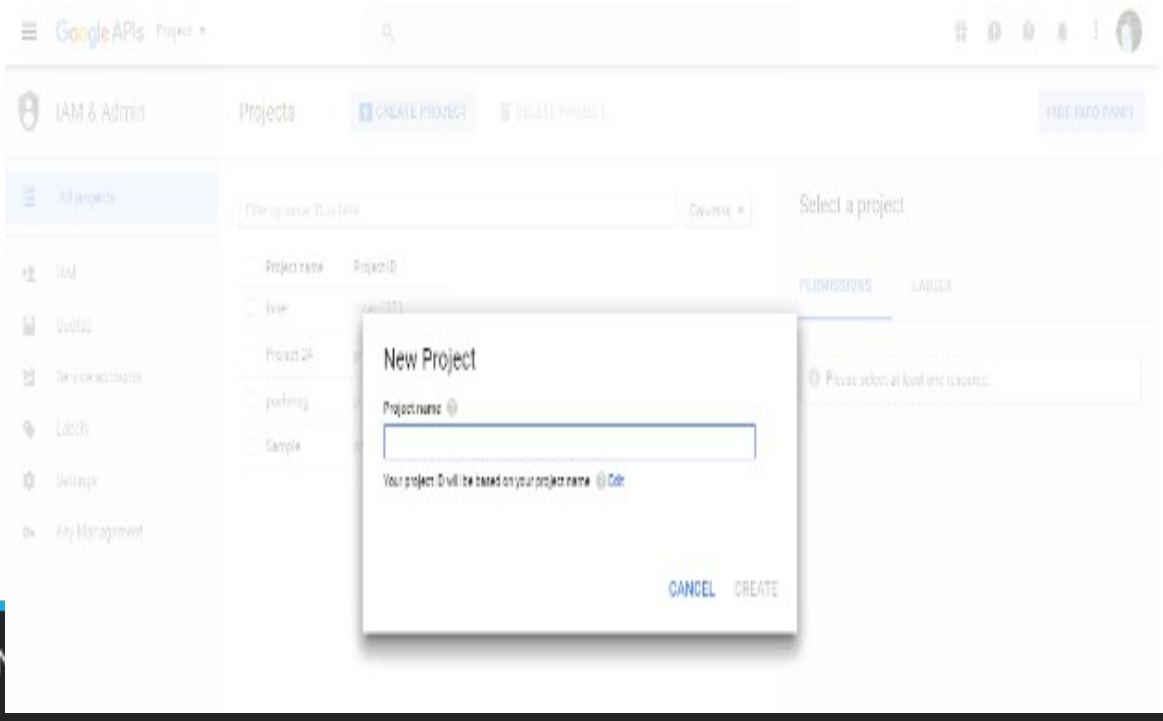
To create a notifier for sending notifications, you'll need a Google API project and register your app as part of that project. The project's identifier (project number) will become the sender ID your client code will send when registering. Registering your app will give you an API key you'll use to create a notifier. (For more information see "How the pieces connect" in Adding push notifications support.)

To generate a project number and API key, do the following:

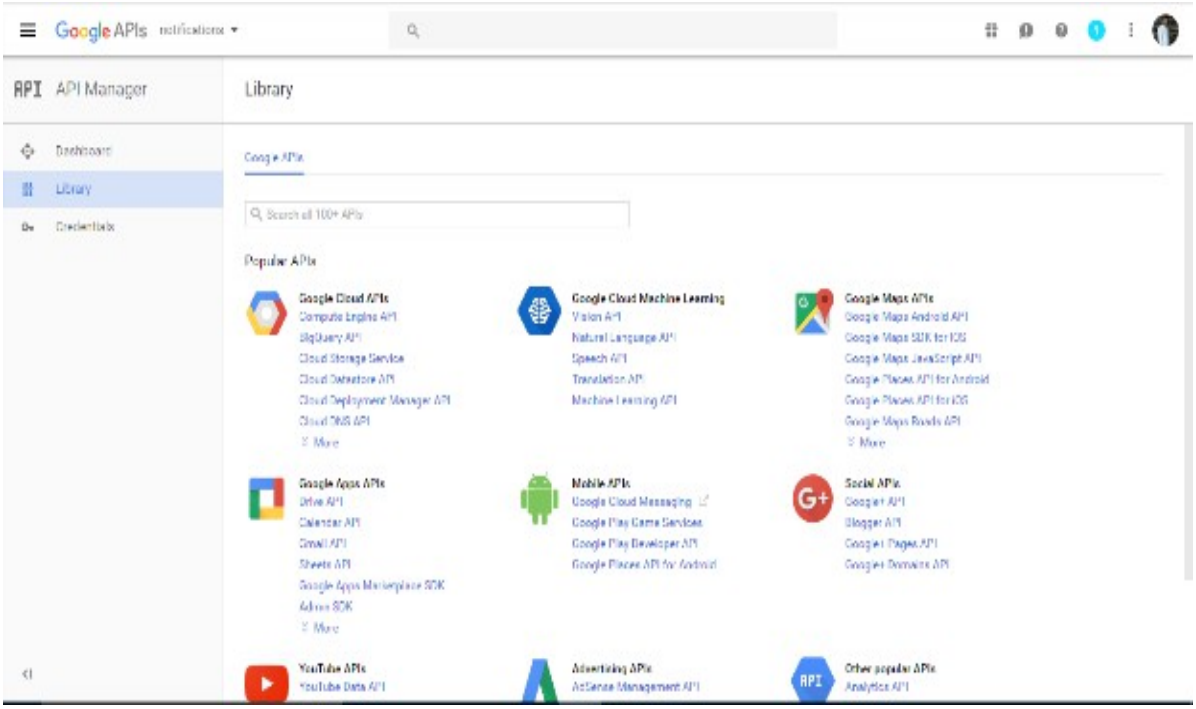
1. Go to the(Google API developer web site)and log in with your Google ID.
2. Click **Create Project**, enter a project name and ID, then follow the steps required to verify.

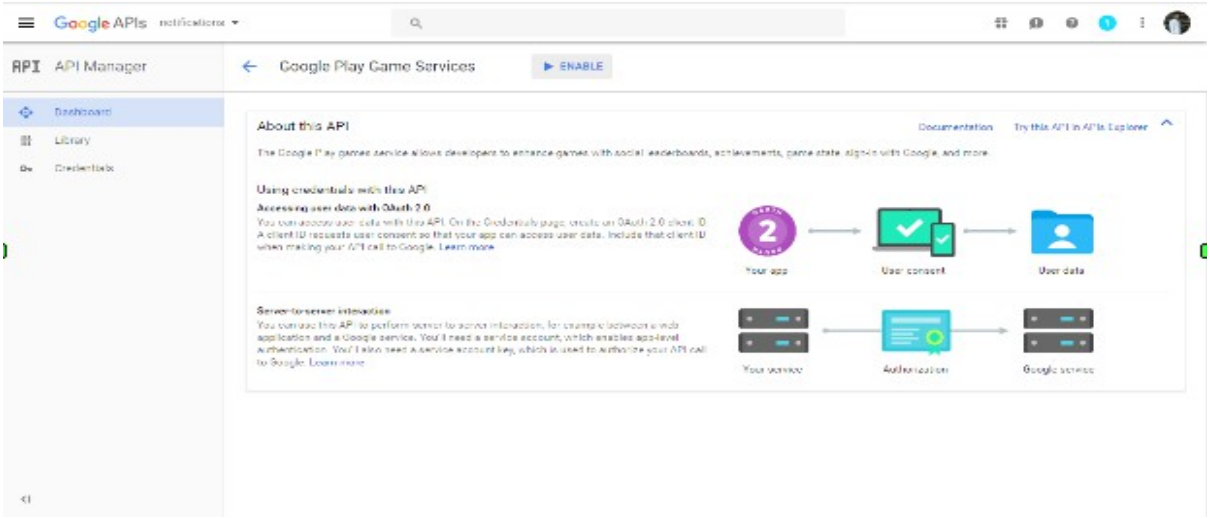
These are the following screenshots that to register a device with notification service name the project with a name and click create. This will take you to the list of projects menu.


Google APIs
IAM & Admin
Projects
CREATE PROJECT
DELETE PROJECT
HIDE INFO PANEL
All projects
IAM
Quotas
Service accounts
Labels
Settings
Key Management
Project name
Project ID
Select a project
PERMISSIONS
LABELS


Google APIs
IAM & Admin
Projects
New Project
Project name
CANCEL
CREATE

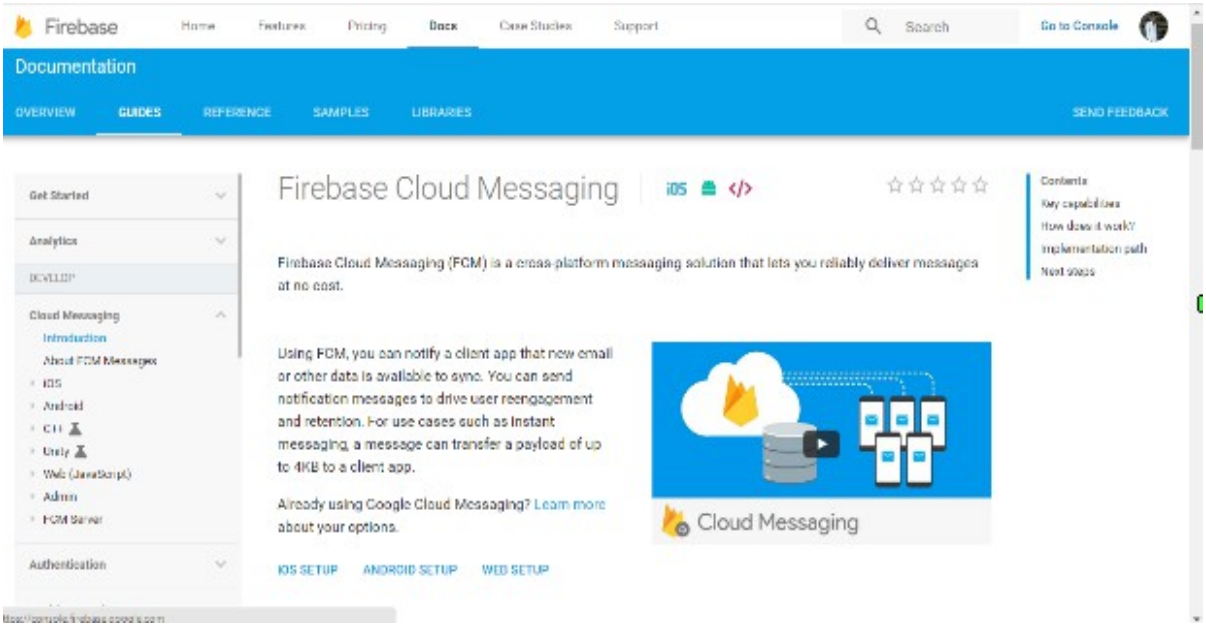
- Go libraries and select the required APIs. As if now I am going with mobile Apis in that google cloud messaging.



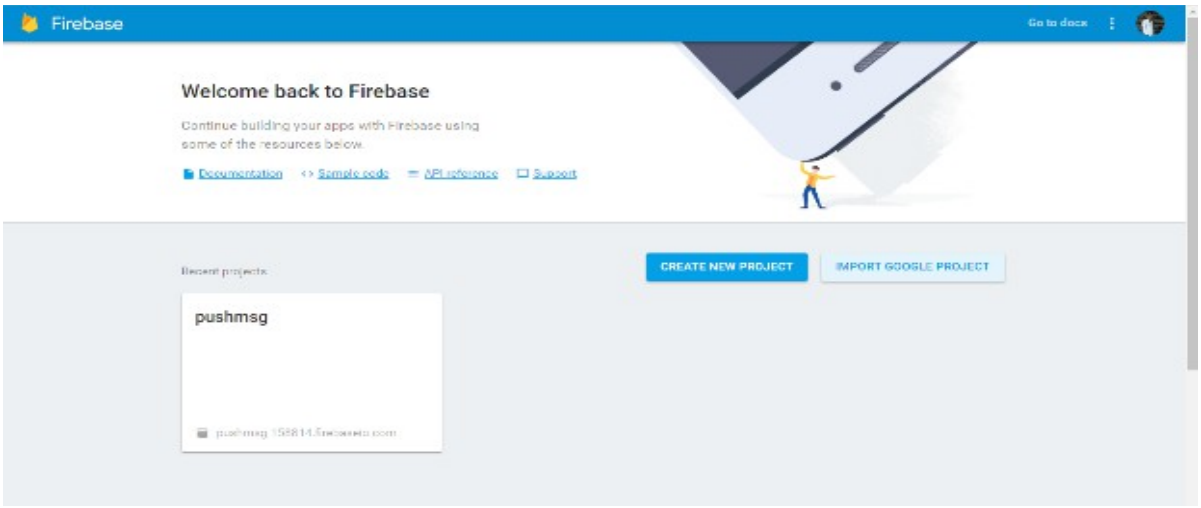


- Enable the list of APIs that you want.

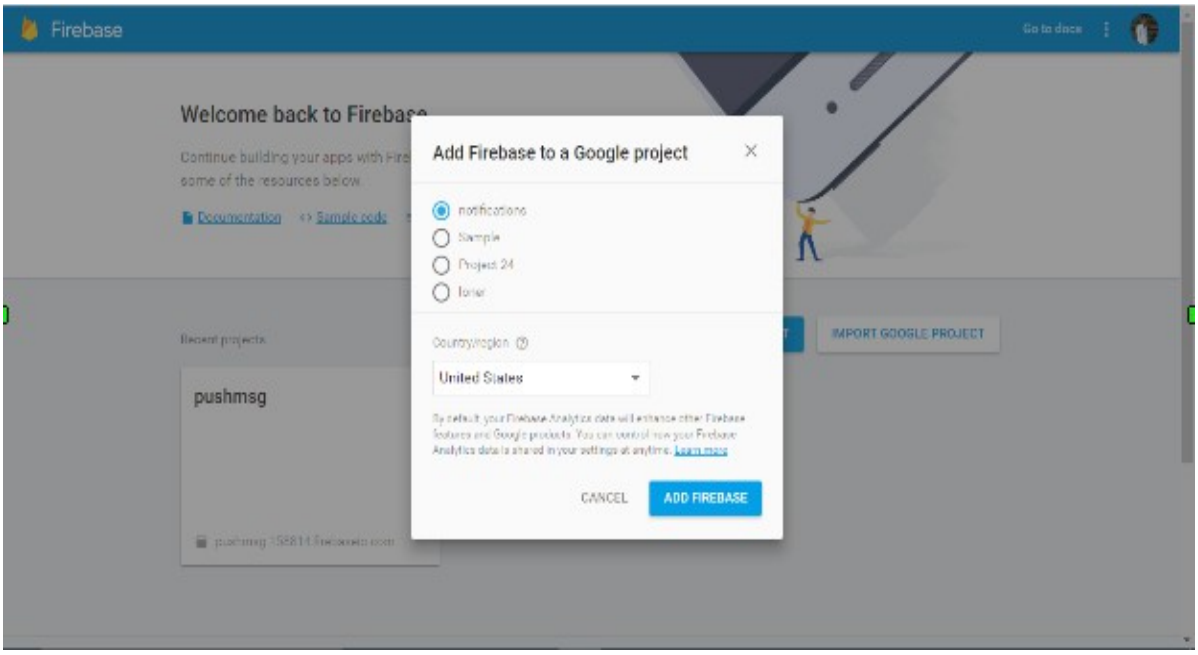
- Then click on Google Cloud Messaging in the android menu
- And click on Go to console in the right upper menu.



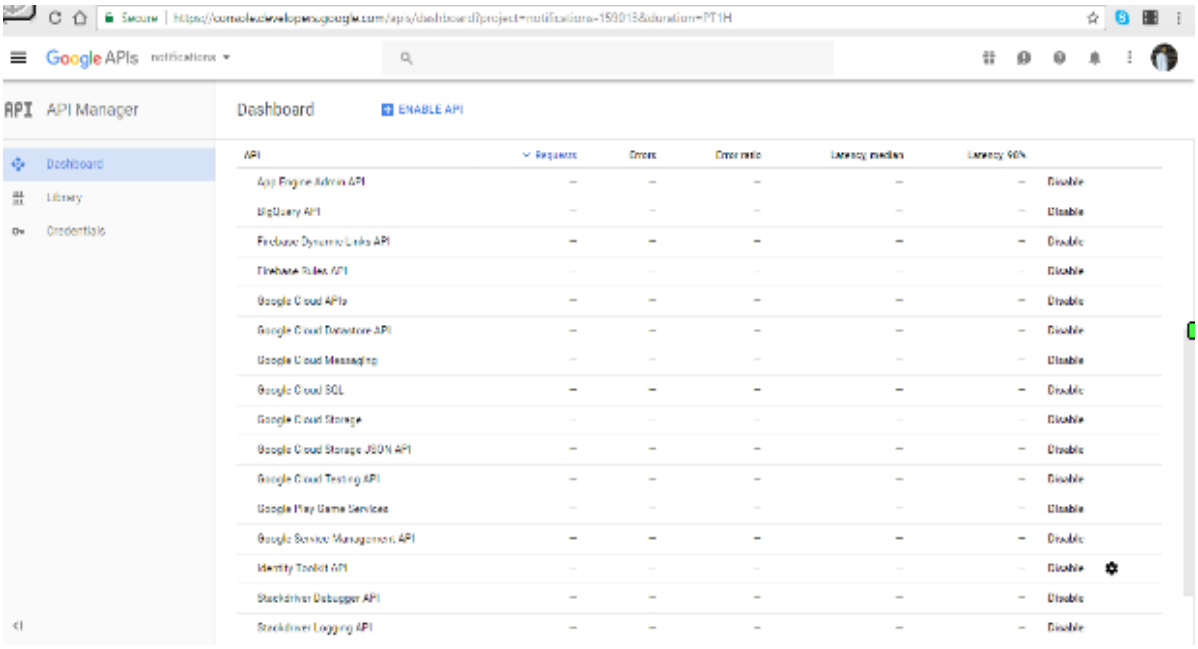
- This will takes you to the window where we can import our google project.



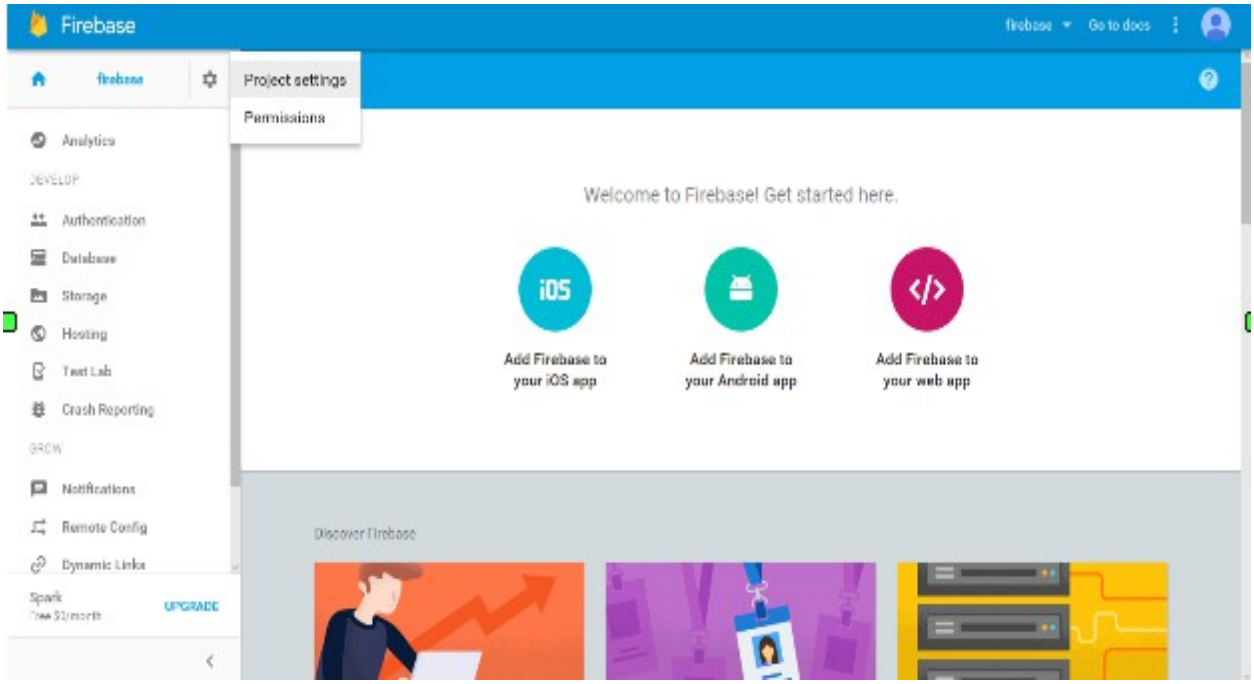
- Select the Import Google project to import created project in the developer console.



- Then select your project and region.click on ADD FireBase.
- If want to see the enabled api's go to dashboard in the developer console.

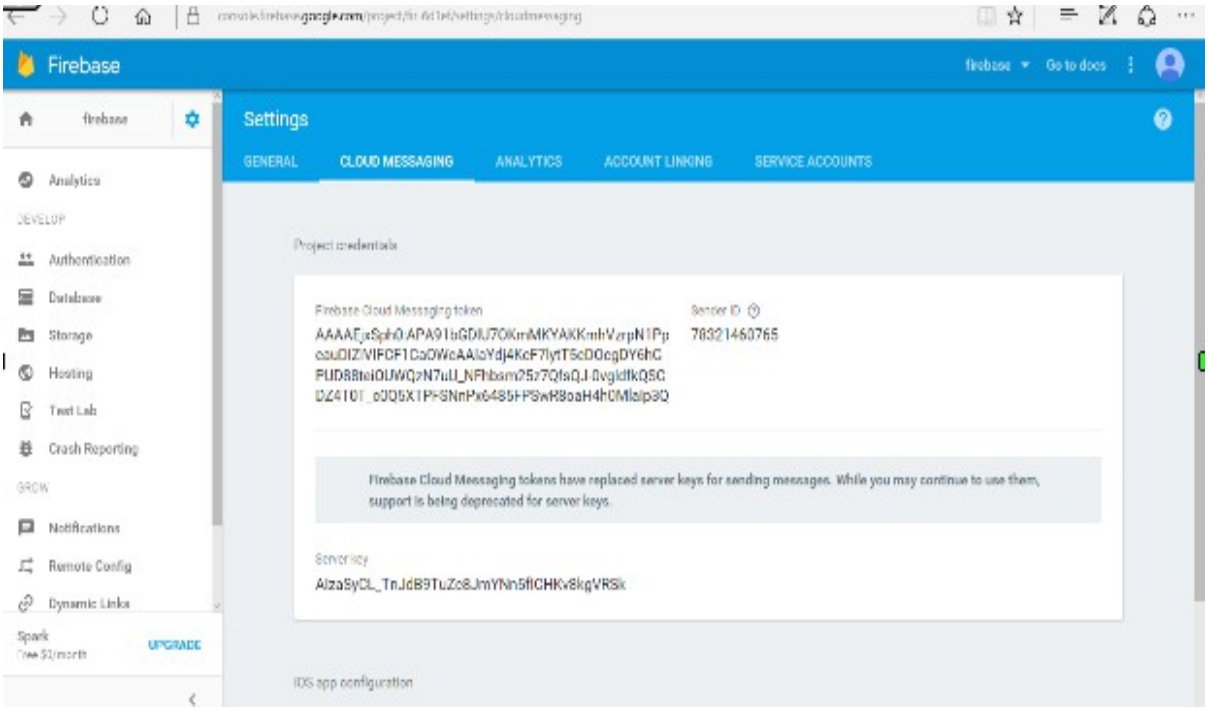


- After that go to settings in FireBase and select project settings.



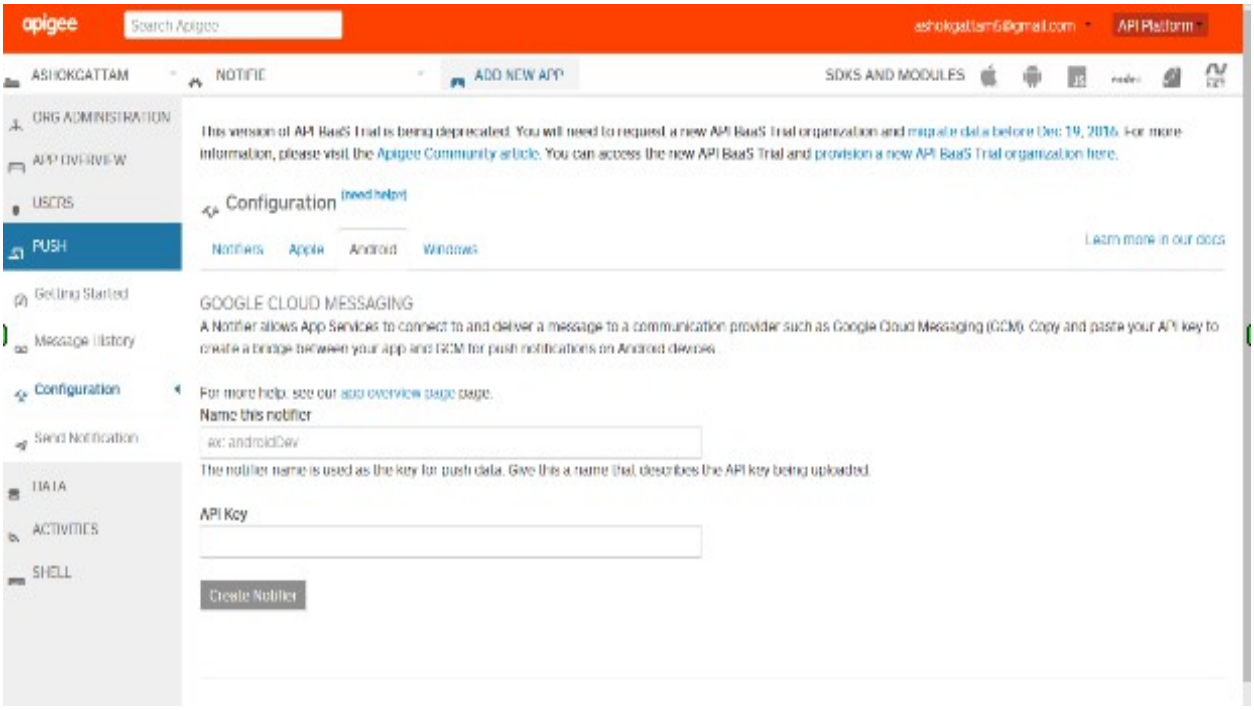
- Now select cloud messaging.In that to see the server key of your project

And sender Id. And server key is used to create notifier as api key.

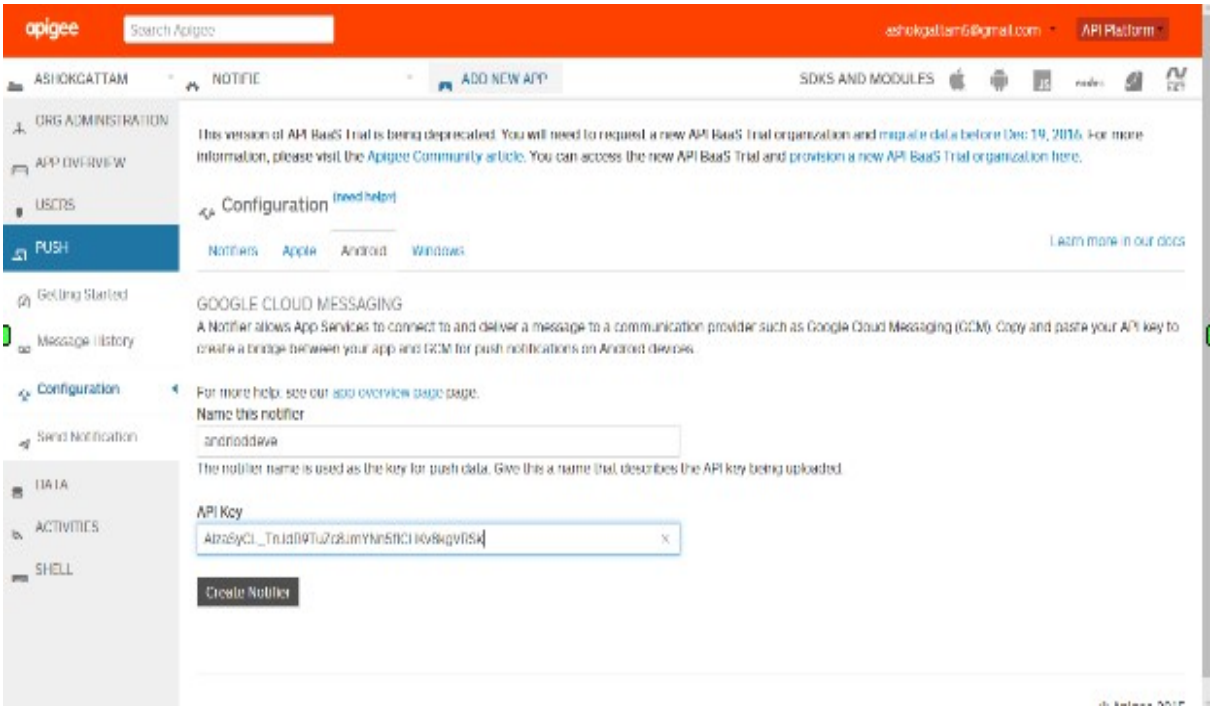


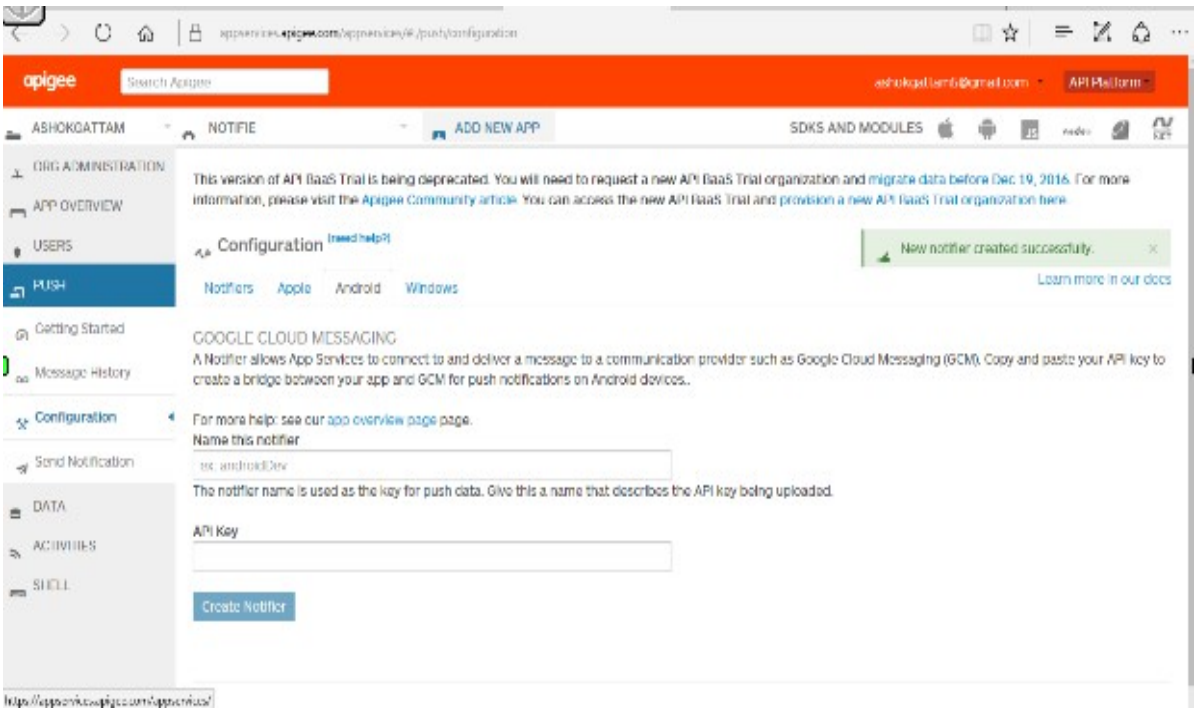
Step3:

create a notifier:



- To create a notifier go to API baas and then go to push and then to configuration.
- Select android button and name the notifier and give the server key in the api key and click create notifier button.





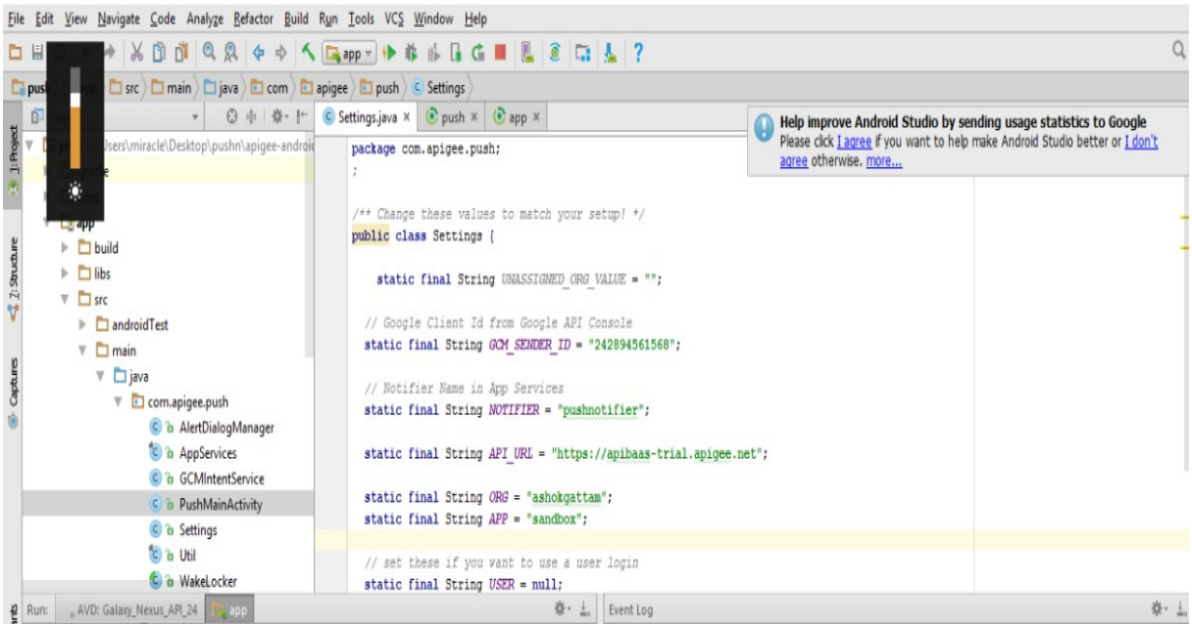
Step4:

Configure And Run the Sample App:

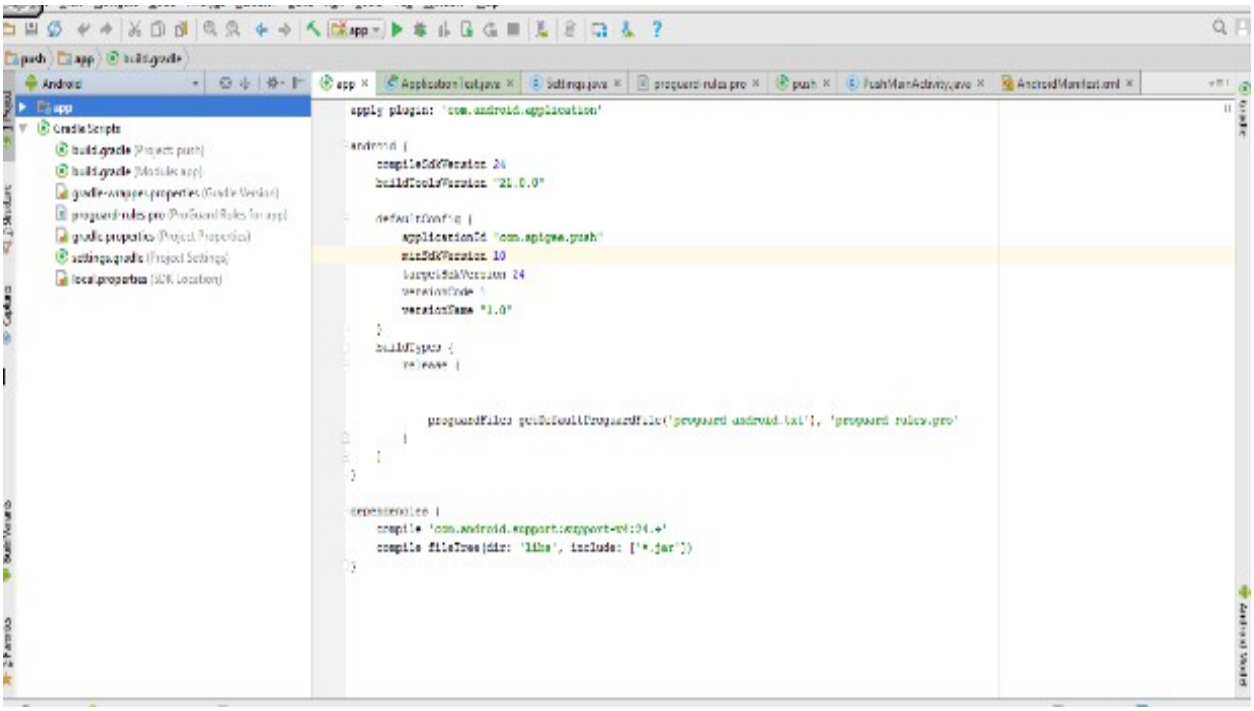
- Now import the sample app into android studio. Which is downloaded in step 1

- Change the given code in settings.java to required field in the app.

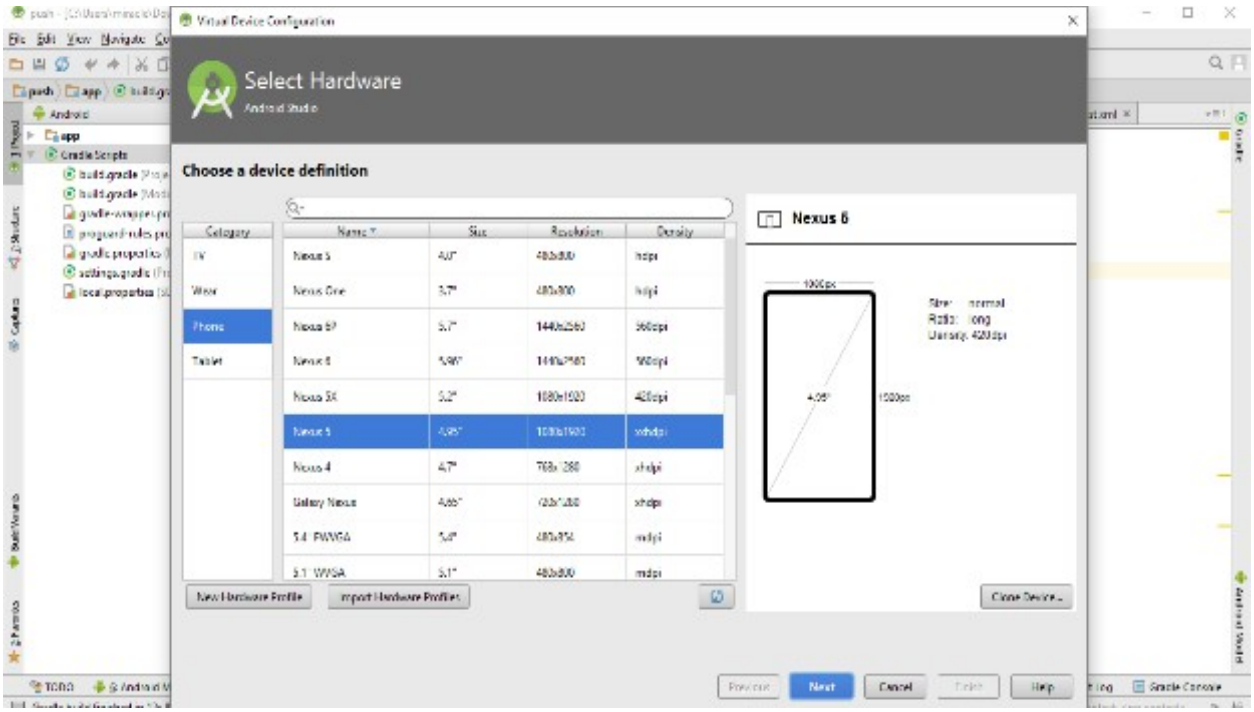
Follow the below figure for better understanding.



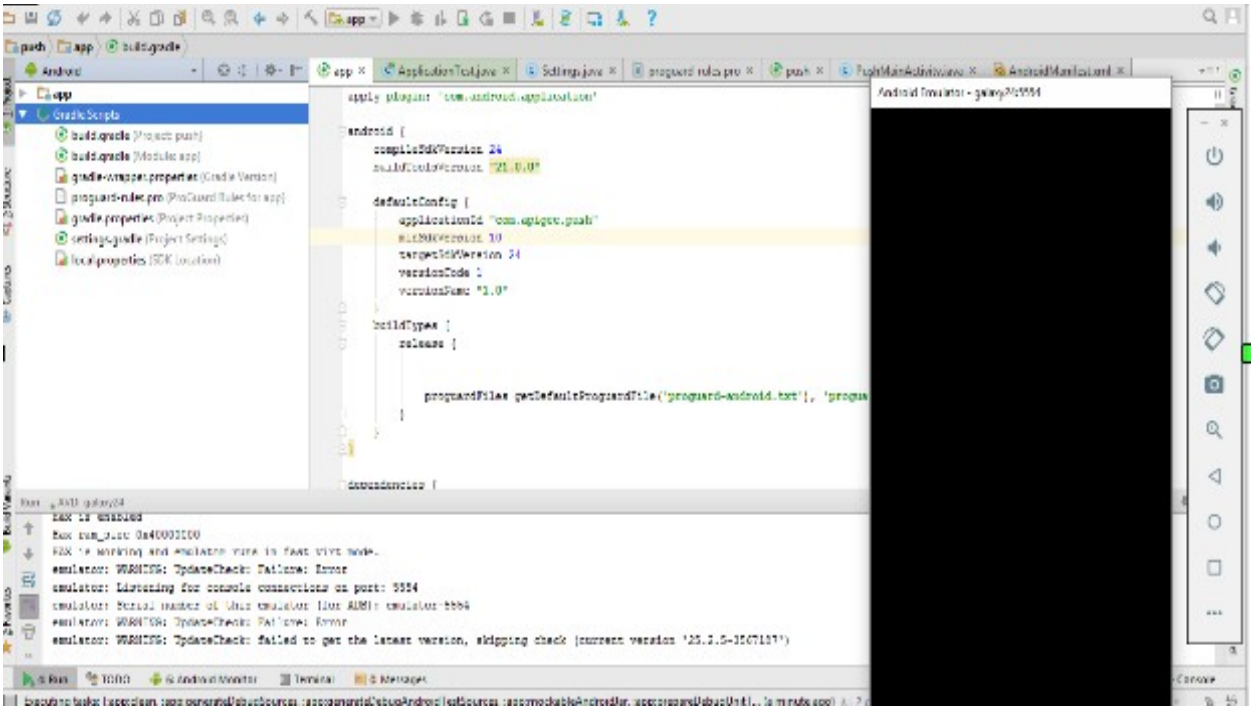
- Now we need to start the emulator which will helps us to install the app in the emulator.



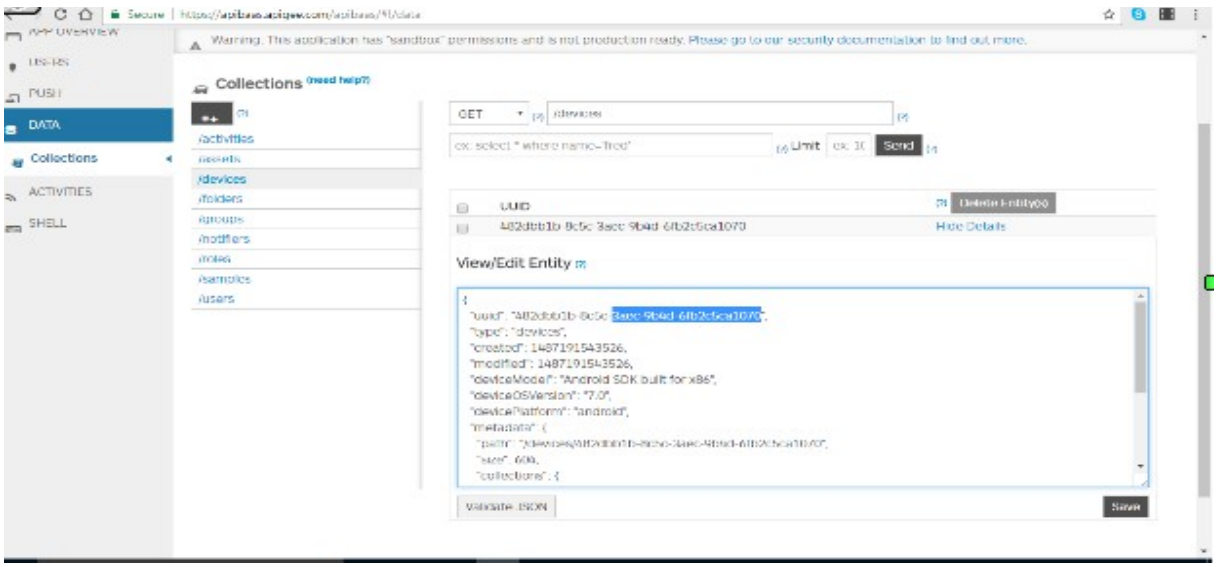
- Go to Tool bar and click on android then go to SDK manager and install latest android os .Then again back to android select Android Virtual Device(AVD) to launch a emulator.

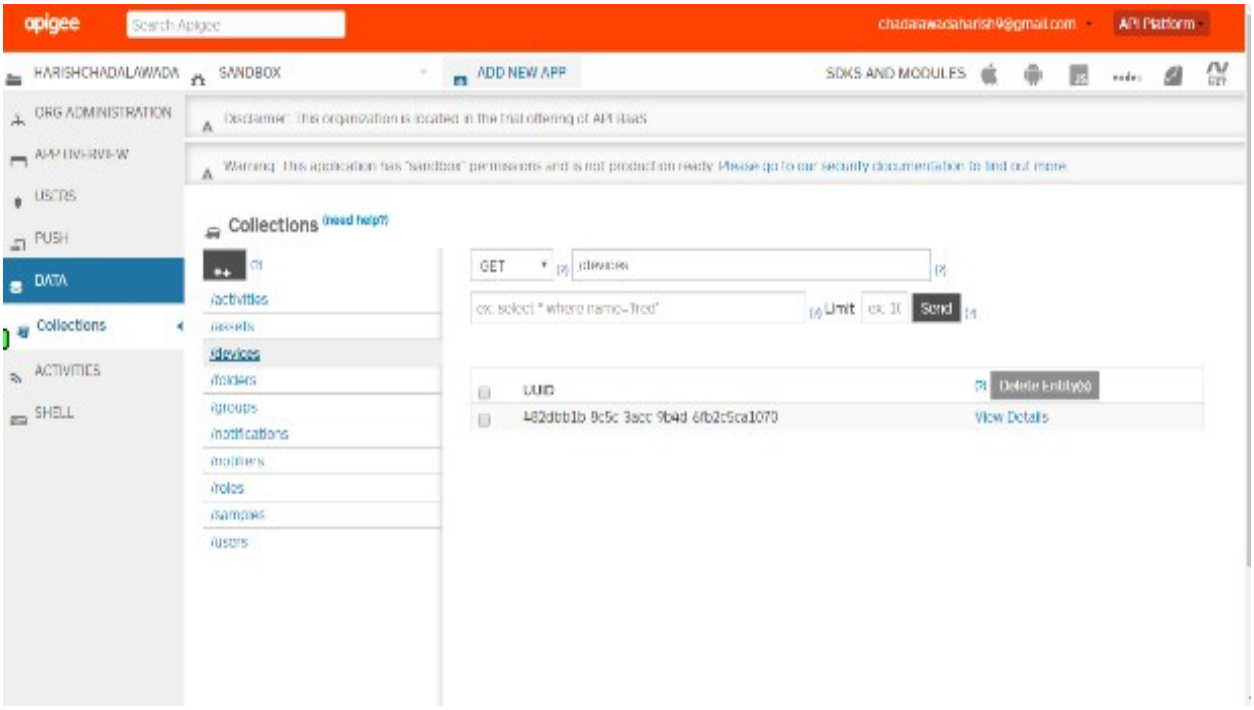


- And click on next button.
- Click on Run the sample app. And select created virtual device.
- If you got any error at the run time go to gradle app change the minimum sdk is upper 8.and built version is 21.0.0. and clear the run proguard rule.

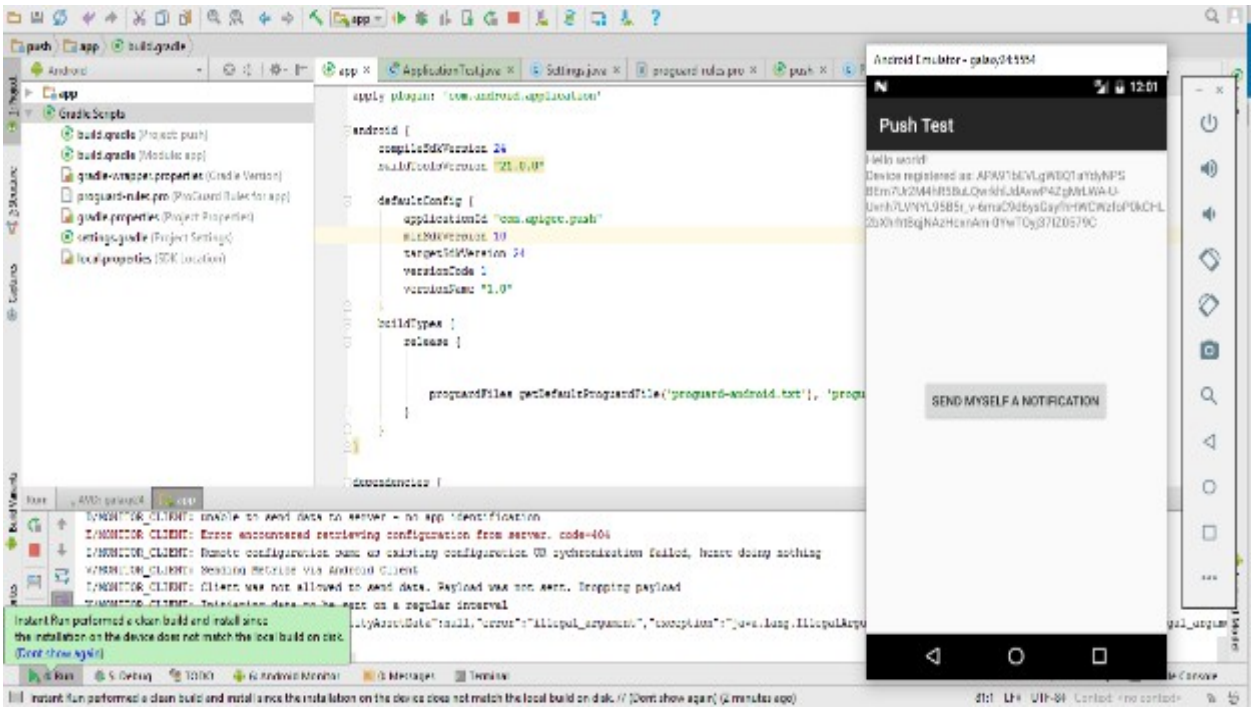


- After starting the emulator we can see that the device is registered with the baas. We can see that in devices bar as shown below. We can also find the device .In this UUID is used for send notification.





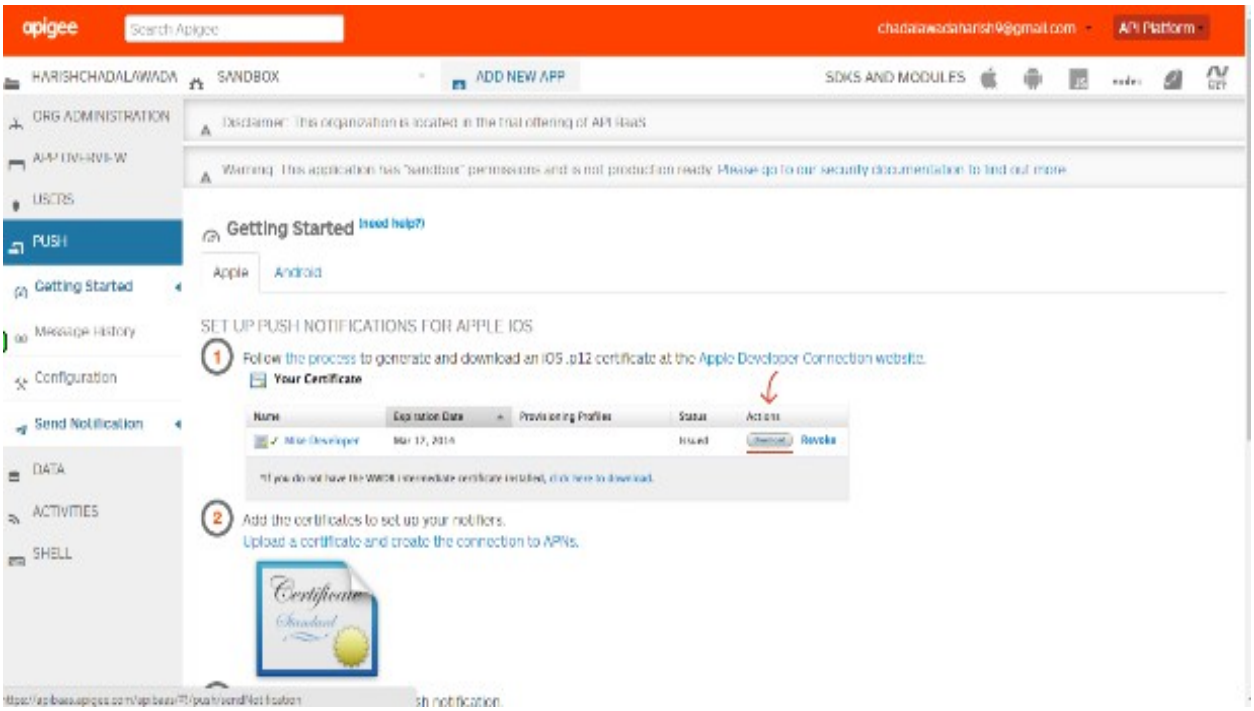
- This is how we can see in the emulator after connecting the device.

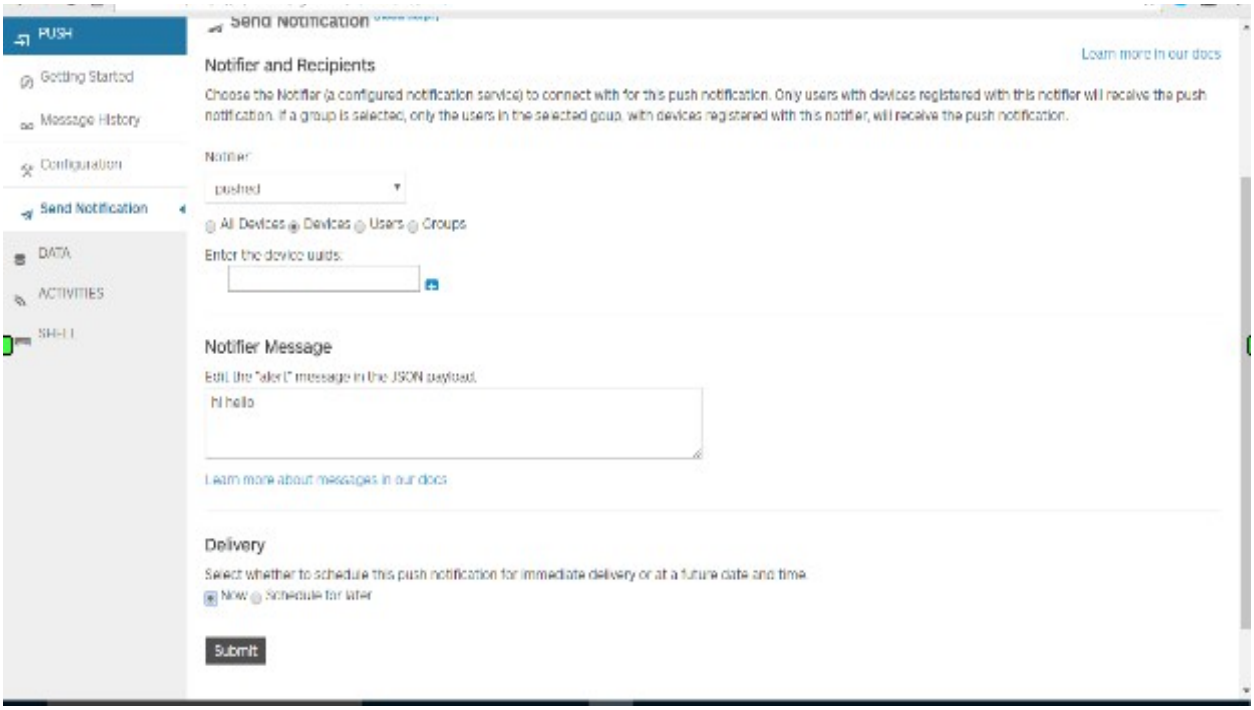


- Click send myself a notification

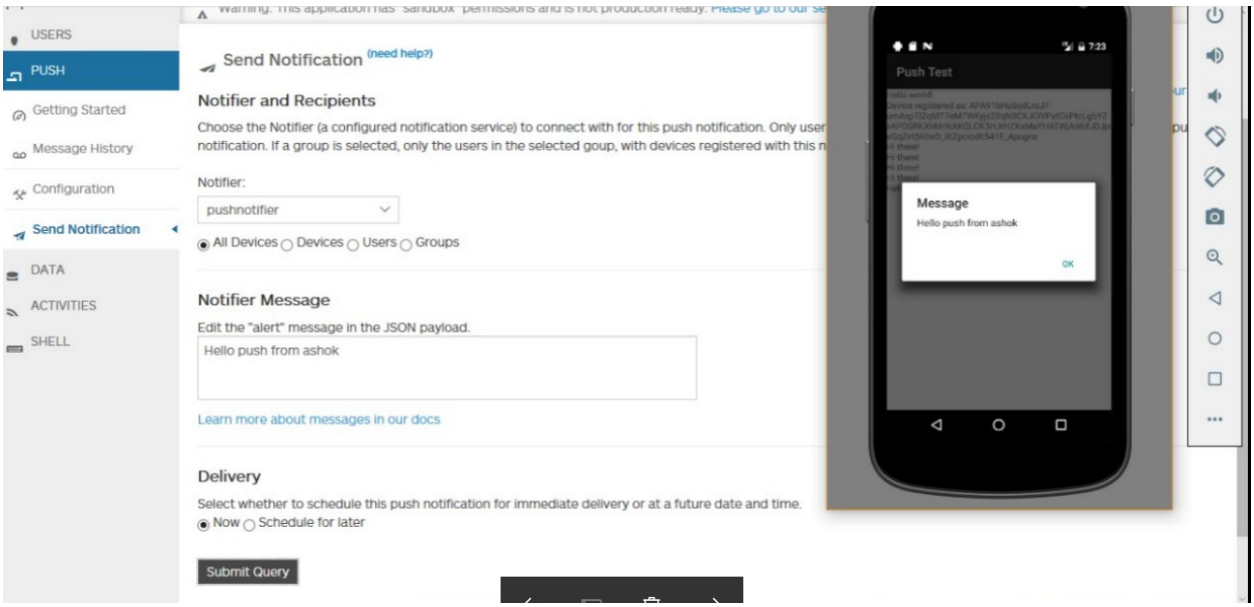
- Now go api baas to send notifications to the registered device.

- And select push then click send notification.





- And select Enter the device uuid in the check box. And click + button
- Click on submit button. And see the output in the emulator.



- Send the message in the form of notification.
- To see send notification list go to push and message history in the api baas.
- Here is status of our message.