**Polling** is when the device regularly calls up the server to see if anything has changed. **Pushing** is when the server calls the device to say something has changed. Polling has a lesser implementation cost, but can end up wasting a lot of bandwidth and networking effort to check in with a server that doesn't change very often.

See what Google Cloud Messaging has to offer in the [Android Documentation](https://developer.android.com/google/gcm/index.html).

<https://developers.google.com/cloud-messaging/>

ID: sunshine-1117 (#221495239775)

API key

AIzaSyB8P-6pRQJcGBkLDDbTC1ROzNlCXStQKBU

APA91bGJzpofs1qoQdib4TBUtStiOQ0mMW8hhjYCyGbZJx4zOEm8wgt3rFuDnODhRJ2IcsWDkuSl5DXnf95VBFmnHCWzzYktcBl9ob\_3UjoCiRGpe\_SDn2iewmDPDrRRMtuxJ2mM7CoPXpZ9VJitDwZNcyS0qJu2xA

# To create a Google API project:

* Open the [Google Developers Console](https://cloud.google.com/console).
* Click on "Create Project".
* Supply a project name and click "Create".
* Once the project has been created, a page appears that displays your project ID and project number. For example, Project Number: 670330094152.
* Copy down your project number. You will use it later on as the GCM sender ID.

# To enable the GCM service:

* In the sidebar on the left, select APIs & auth.
* In the displayed list of APIs, turn the Google Cloud Messaging for Android toggle to ON.

# To obtain an API key:

* In the sidebar on the left, select APIs & auth > Credentials.
* Under Public API access, click Create new key.
* In the Create a new key dialog, click Server key.
* In the resulting configuration dialog, supply your server's IP address. For testing purposes, you can use 0.0.0.0/0.
* Click Create.
* In the refreshed page, copy the API key. You will need the API key later on to perform authentication in your app server.

Cannot reload AVD list: cvc-enumeration-valid: Value '280dpi' is not facet-valid with respect to enumeration '[ldpi, mdpi, tvdpi, hdpi, xhdpi, 400dpi, xhdpi, 560 dpi, xxxhdpi]'. It must be a value from the enumeration.