Android Network Operations

**MOBILE**

**Server**

**Service APIs**

**URLs**

**URLs**

1. HTTP Client: Older version
2. HTTP URL Connection: Crud version
3. EasyHttp
4. Ok HTTP: Better than second, but still crud (Read by own)
5. Retrofit (Read by own) (It is faster than Volley)
6. Volley

# HTTP URL Connection

## Steps

1. Internet and Network State Permissions
2. Check the network state
3. Include a try-catch block otherwise URL creation may throw an error
4. Create a URL object
5. Create a thread and add the following code in its run method
6. Create a connection with a URL
7. Read or write with the given connection
8. If data is returned in JSON format, use the GSON library to decode it into data class format. You must have to add its dependency.
9. Close the connection
10. Start the thread

Read data from URL using HTTP URL Connect with GSON

We will be reading the posts data from the open API

<https://jsonplaceholder.typicode.com/posts>

Add the GSON to the Android project manifest file.

GSON is a Java/Kotlin library for converting JSON strings to an equivalent Java/Kotlin object. Open build.gradle file and add the Gson library.



Add Internet Request in Manifest file



Code



Method to get JSON data from source URL



Method to convert JSON string data into list object



Testing of above methods with data class Post



UI code



## Download image using Http URL Connection

Must execute this code in another thread



# Volley

Add the following dependency in the file “build.gradle”



Use following code to get the data from source link

