RETROFIT

1)what is Retrofit?

It's a simple network library that used for network transactions. By using this library, we can seamlessly capture JSON response from web service/web API. It's easy and fast library to retrieve and upload the data (JSON or any other structured data) via a REST based web service.

2)Need of Retrofit in Android?

We have a lot of network libraries that used to fetch and send the data from/to server. we use Volley library for network transactions but Retrofit is an ultimate replacement of Volley and all other libraries. Retrofit is better alternative of other libraries in terms of performance, ease of use, extensibility and others.

3)Differences between Retrofit and Other libraries?

In Android, retrofit library is different from other network libraries because it gives us an easy to use platform through which we don't need to parse JSON responses as they are done by library itself. It used GSON library in the background to parser the response data. What we need to do is define a POJO (Plain Old Java Object) to parse the response.

Here is the main difference between our three mainly used techniques for implementing API's is our android app. You can see the difference in performance that for one discussion means for one network request and response they will take how much time.

1AsyncTask:
one(1)discussion:941ms
Seven(7)discussions:4539ms
Twenty Five(25) discussions: 13957 ms

2.Volley:
one(1)discussion:560ms
Seven(7)discussions:2202ms
Twenty Five(25) discussions: 4275 ms

3.Retrofit:
one(1)discussion:312ms
Seven(7)discussions:889ms
Twenty Five(25) discussions: 1059