**Fetch data from server using retrofit**

process

1. Create Post Class according to JSON Data
2. Interface which return Retrofit call Post class type.
3. Retrofit Object Creation.
4. Convert JSON data to Model Class.
5. Create a call of Model class and Enqueue for processing receive.
6. Receive Responce Data in Simple Model type List.

**STEPS :**

1. Serch : Retrofit Converter Dependency :
2. Add dependency in gradle app level module
3. Search Json PlaceHolder
4. Click : POST - Server Data
5. Give Android Internet Permission in Manifest File.
6. Create Layout
7. “**MainActivity.xml” - Recyclerview**
8. **“Singleview.xml” (Create Layout Resource File) 4 TExtview - [ID : title, ied, userid, body]**
9. **Create a “Post.java” class.**
10. declare variable - title, id, userid, body
11. Generate getter

**public class** post {  
 **private** String **userId** , **id**, **title**, **body**;  
  
 **public** String getUserId() {  
 **return userId**;  
 }  
  
 **public** String getId() {  
 **return id**;  
 }  
  
 **public** String getTitle() {  
 **return title**;  
 }  
  
 **public** String getBody() {  
 **return body**;  
 }  
}

1. Create Interface for Retrofit
2. Retrofit not have on Method. It’s just declaring method, which return call of Retrofit.
3. **Create “JavaplaceHolder.interface” Class.**

**public interface** JsonPlaceHolder {  
  
 @GET(**"posts"**)  
 Call<List<post>> getpost();  
}

1. Go to MainAvctivity
2. Find ID.
3. Create Retrofit Object

Retrofit retrofit = **new** Retrofit.Builder()  
 .baseUrl(**"https://jsonplaceholder.typicode.com/"**)”url of dataplaceholder”  
 .addConverterFactory(GsonConverterFactory.*create*())  
 .build();

1. Convert Json Data to Model Class Object
2. Create Json PlaceHolder Object

JsonPlaceHolder jsonPlaceHolder = retrofit.create(JsonPlaceHolder.**class**);

1. Create Call Model class to enqueue for processing

Call<List<post>> call = jsonPlaceHolder.getpost();  
  
call.enqueue(**new** Callback<List<post>>() {  
 @Override  
 **public void** onResponse(Call<List<post>> call, Response<List<post>> response) {  
  
 **if**(!response.isSuccessful())  
 {  
 Toast.*makeText*(MainActivity.**this**,response.code(),Toast.***LENGTH\_LONG***).show();  
 **return**;  
 }  
 List<post> postList = response.body();  
 postAdapter postAdapter = **new** postAdapter(MainActivity.**this**, postList);  
 **recyclerView**.setAdapter(postAdapter);  
  
 }  
  
 @Override  
 **public void** onFailure(Call<List<post>> call, Throwable t) {  
  
 Toast.*makeText*(MainActivity.**this**,t.getMessage(),Toast.***LENGTH\_LONG***).show();  
 }  
});

1. Crerate PostAdapter to Store data in List or View

**public class** postAdapter **extends** RecyclerView.Adapter<postAdapter.postViewHolder> {  
  
 *//Create List* List<post> **postList**;  
 Context **context**;  
  
 *//constructor* **public** postAdapter(Context context, List<post> posts){  
 **this**.**context** =context;  
 **postList** =posts;  
 }  
 @NonNull  
 @Override  
 **public** postViewHolder onCreateViewHolder(@NonNull ViewGroup parent, **int** viewType) {  
 View view = LayoutInflater.*from*(**context**).inflate(R.layout.***item***, parent, **false**);  
 **return new** postViewHolder(view);  
 }  
  
 @Override  
 **public void** onBindViewHolder(@NonNull postViewHolder holder, **int** position) {  
  
 post post = **postList**.get(position);  
 holder.**id**.setText(post.getId());  
 holder.**userid**.setText(post.getUserId());  
 holder.**title**.setText(post.getTitle());  
 holder.**body**.setText(post.getBody());  
 }  
  
 @Override  
 **public int** getItemCount() {  
 **return postList**.size();  
  
 }  
  
 **public class** postViewHolder **extends** RecyclerView.ViewHolder{  
  
 TextView **title**, **id**, **userid**, **body**;  
  
 **public** postViewHolder(@NonNull View itemView) {  
 **super**(itemView);  
 **title** = itemView.findViewById(R.id.***title***);  
 **id**= itemView.findViewById(R.id.***id***);  
 **userid** = itemView.findViewById(R.id.***userid***);  
 **body** = itemView.findViewById(R.id.***body***);  
  
  
 }  
 }  
}