

```

1 package pt.ipleiria.estg.dei.psi.amsi.myapprest;
2
3 import androidx.appcompat.app.AppCompatActivity;
4
5 import android.content.Context;
6 import android.net.ConnectivityManager;
7 import android.net.NetworkInfo;
8 import android.os.Bundle;
9 import android.view.View;
10 import android.widget.TextView;
11 import android.widget.Toast;
12
13 import com.android.volley.Request;
14 import com.android.volley.RequestQueue;
15 import com.android.volley.Response;
16 import com.android.volley.VolleyError;
17 import com.android.volley.toolbox.JsonArrayRequest;
18 import com.android.volley.toolbox.JsonObjectRequest;
19 import com.android.volley.toolbox.Volley;
20
21 import org.json.JSONArray;
22 import org.json.JSONObject;
23
24 public class MainActivity extends AppCompatActivity {
25     // definir um atributo que represente a RequestQueue do Volley.
26     private RequestQueue queue;
27     //atributo para aceder à TextView que apresentará o resultado
28     private TextView textViewResultado;
29
30     @Override
31     protected void onCreate(Bundle savedInstanceState) {
32         super.onCreate(savedInstanceState);
33         setContentView(R.layout.activity_main);
34
35         textViewResultado = findViewById(R.id.textViewResultado);
36         textViewResultado.setText("");
37
38         //Instanciar a RequestQueue
39         queue = Volley.newRequestQueue(this);
40     }
41
42     public void onClickJSONRequest(View view) {
43         if(isLigadoInternet()){
44             // Request a JSON response from the provided URL.
45             String url = "https://jsonplaceholder.typicode.com/posts/1";
46
47             Toast.makeText(this, "Ligado à internet", Toast.LENGTH_LONG).show();
48
49             JsonObjectRequest jsonObjectRequest =
50                 new JsonObjectRequest(
51                     Request.Method.GET, url, null,
52                     new Response.Listener<JSONObject>() {
53                         @Override
54                         public void onResponse(JSONObject response) {
55                             textViewResultado.setText(
56                                 response.toString());
57                         }
58                     }
59                 );
60             queue.add(jsonObjectRequest);
61         }
62     }
63 }

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57         }
58     },
59     new Response.ErrorListener() {
60         @Override
61         public void onErrorResponse(VolleyError error) {
62             textViewResultado.setText(
63                 "Erro ao efetuar o pedido JSon!!");
64         }
65     }
66 );
67 //Adding JsonObject request to request queue
68 queue.add(jsonObjectRequest);
69 } else {
70     Toast.makeText(this,
71         "Erro de Ligação! Não está ligado à internet",
72         Toast.LENGTH_SHORT).show();
73 }
74 }
75
76 public void onClickJSONArrayRequest(View view) {
77     if(isLigadoInternet()) {
78         //Efetuar o pedido de um JSONArray
79         // para obter a resposta a partir do URL definido
80         String url = "https://jsonplaceholder.typicode.com/posts";
81         JSONArrayRequest jsonArrayRequest = new JSONArrayRequest(
82             Request.Method.GET, url, null,
83             new Response.Listener<JSONArray>() {
84                 @Override
85                 public void onResponse(JSONArray response) {
86                     Toast.makeText(getApplicationContext(),
87                         "Array com " + response.length() +
88                         " elementos", Toast.LENGTH_SHORT).show();
89                     textViewResultado.setText(response.toString());
90                 }
91             },
92             new Response.ErrorListener() {
93                 @Override
94                 public void onErrorResponse(VolleyError error) {
95                     textViewResultado.setText(
96                         "Erro ao efetuar o pedido JSonArray!!");
97                 }
98             }
99         );
100         //Adding JSONArrayRequest to request queue
101         queue.add(jsonArrayRequest);
102     } else {
103         Toast.makeText(this,
104             "Erro de Ligação! Não está ligado à internet",
105             Toast.LENGTH_SHORT).show();
106     }
107 }
108
109
110
111
112

```

```
113     private boolean isLigadoInternet(){
114         ConnectivityManager cm = (ConnectivityManager)
115             this.getSystemService(Context.CONNECTIVITY_SERVICE);
116
117         //necessita de permissões de acesso à internet
118         // e acesso ao estado da ligação
119         NetworkInfo activeNetwork = cm.getActiveNetworkInfo();
120
121         return activeNetwork != null &&
122             activeNetwork.isConnectedOrConnecting();
123     }
124 }
```