

```

1 package com.example.heroes
2
3 import androidx.appcompat.app.AppCompatActivity
4 import android.os.Bundle
5 import android.util.Log
6 import android.view.Menu
7 import android.view.MenuInflater
8 import android.view.MenuItem
9 import androidx.recyclerview.widget.LinearLayoutManager
10 import com.example.heroes.databinding.ActivityHeroesDetailsBinding
11 import com.example.heroes.databinding.ActivityHeroesListBinding
12 import com.google.gson.Gson
13 import com.google.gson.reflect.TypeToken
14
15 class HeroesListActivity : AppCompatActivity() {
16     companion object {
17         val TAG = "HeroesListActivity"
18     }
19
20     private lateinit var binding: ActivityHeroesListBinding
21     private lateinit var adapter: HeroAdapter
22
23     override fun onCreate(savedInstanceState: Bundle?) {
24         super.onCreate(savedInstanceState)
25         binding = ActivityHeroesListBinding.inflate(layoutInflater)
26         setContentView(binding.root)
27         loadHeroes()
28     }
29
30     private fun loadHeroes(){
31
32         val inputStream = resources.openRawResource(R.raw.heroes)
33         val jsonString = inputStream.bufferedReader().use {
34             // the last line of the use function is returned
35             it.readText()
36         }
37
38         Log.d(TAG, "onCreate: $jsonString")
39         val gson = Gson()
40         val type = object : TypeToken<List<Hero>>() { }.type
41         val heroes = gson.fromJson<List<Hero>>(jsonString, type)
42         // heroes = heroes.sorted()
43         // heroes = heroes.sortedBy {
44         // it.superpower.length
45         // }
46         adapter = HeroAdapter(heroes)
47         binding.recyclerViewHerosList.adapter = adapter
48         binding.recyclerViewHerosList.layoutManager = LinearLayoutManager(this)
49     }
50     override fun onCreateOptionsMenu(menu: Menu): Boolean {
51         val inflater: MenuInflater = menuInflater
52         inflater.inflate(R.menu.herolist_menu, menu)
53         return true
54     }
55     override fun onOptionsItemSelected(item: MenuItem): Boolean {
56         return when (item.itemId) {
57             R.id.sort_by_name -> {
58                 adapter.dataSet = adapter.dataSet.sortedBy{
59                     it.name
60                 }
61                 adapter.notifyDataSetChanged()
62                 true
63             }
64             R.id.sort_by_rank -> {
65                 adapter.dataSet = adapter.dataSet.sortedBy{
66                     it.ranking
67                 }
68                 adapter.notifyDataSetChanged()
69                 true
70             }
71             R.id.sort_by_description ->{
72                 adapter.dataSet = adapter.dataSet.sortedBy {
73                     it.description
74                 }

```

```
75         adapter.notifyDataSetChanged()
76         true
77     }
78
79
80     else -> super.onOptionsItemSelected(item)
81 }
82 }
83
84 }
```