**API\_QUOTE**

**I. AndroidManifest.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 package="com.example.api\_quote">  
 <uses-permission android:name="android.permission.INTERNET"/>

<application  
 android:allowBackup="true"  
 android:dataExtractionRules="@xml/data\_extraction\_rules"  
 android:fullBackupContent="@xml/backup\_rules"  
 android:icon="@mipmap/ic\_launcher"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:label="@string/app\_name"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.API\_Quote"  
 android:usesCleartextTraffic="true"  
 tools:targetApi="31">  
 <activity  
 android:name=".MainActivity"  
 android:exported="true">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 </application>  
</manifest>

**II. Build.gradle (Module :app)**

buildFeatures **{** viewBinding true  
**}**

dependencies **{**  
 implementation 'com.squareup.retrofit2:retrofit:2.9.0'  
 implementation 'com.squareup.retrofit2:converter-gson:2.9.0'  
**}**

**III. Java**

1. **MainActivity**

package com.example.api\_quote  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.util.Log  
import android.view.View  
import androidx.recyclerview.widget.LinearLayoutManager  
import androidx.recyclerview.widget.RecyclerView  
import com.example.api\_quote.databinding.ActivityMainBinding  
import kotlinx.coroutines.CoroutineScope  
import kotlinx.coroutines.Dispatchers  
import kotlinx.coroutines.launch  
import kotlinx.coroutines.withContext  
import retrofit2.Retrofit  
import retrofit2.awaitResponse  
import retrofit2.converter.gson.GsonConverterFactory  
  
class MainActivity : AppCompatActivity() {  
 lateinit var binding: ActivityMainBinding  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 binding = ActivityMainBinding.inflate(*layoutInflater*)  
 setContentView(binding.*root*)  
 binding.rvQuotes.*layoutManager* = LinearLayoutManager(this, RecyclerView.*VERTICAL*, false)  
 binding.layoutGenerateFact.setOnClickListener **{** binding.pbLoading.*visibility* = View.*VISIBLE* binding.rvQuotes.*visibility* = View.*GONE  
 CoroutineScope*(Dispatchers.IO).*launch* **{** getQuotes();  
 **}  
 }** }  
  
 suspend fun getQuotes() {  
 val api = Retrofit.Builder()  
 .baseUrl("https://api.quotable.io/")  
 .addConverterFactory(GsonConverterFactory.create())  
 .build().create(ApiRequest::class.*java*)  
 val response = api.getQuotes().awaitResponse()  
 val data = response.body()!!  
 Log.i("ctu: size", data.size.toString())  
 withContext(Dispatchers.Main) **{** binding.pbLoading.*visibility* = View.*GONE* binding.rvQuotes.*visibility* = View.*VISIBLE* var adapter = QuoteAdapter(data)  
 binding.rvQuotes.*adapter* = adapter  
 **}** }  
}

1. **Quote (data class)**

package com.example.api\_quote  
  
data class Quote(  
 val \_id: String,  
 val author: String,  
 val authorSlug: String,  
 val content: String,  
 val dateAdded: String,  
 val dateModified: String,  
 val length: Int,  
 val tags: List<String>  
)

1. **QuoteAdapter**

package com.example.api\_quote  
  
import android.view.LayoutInflater  
import android.view.View  
import android.view.ViewGroup  
import android.widget.TextView  
import androidx.recyclerview.widget.RecyclerView  
  
class QuoteAdapter(private val dataset: ArrayList<Quote>): RecyclerView.Adapter<QuoteAdapter.ViewHolder>() {  
 class ViewHolder(view: View): RecyclerView.ViewHolder(view) {  
 val tvContent: TextView  
 val tvAuthor: TextView  
 init {  
 tvContent = view.findViewById(R.id.*tvContent*)  
 tvAuthor = view.findViewById(R.id.*tvAuthor*)  
 }  
 }  
  
 override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ViewHolder {  
 val view = LayoutInflater.from(parent.*context*).inflate(R.layout.*quote\_item*, null)  
 return ViewHolder(view)  
 }  
  
 override fun getItemCount(): Int {  
 return dataset.size  
 }  
  
 override fun onBindViewHolder(holder: ViewHolder, position: Int) {  
 holder.tvAuthor.setText(dataset[position].author)  
 holder.tvContent.setText(dataset[position].content)  
 }  
}

1. **ResponeData**

package com.example.api\_quote  
  
class ResponeData : ArrayList<Quote>()

1. **ApiRequest (interface)**

package com.example.api\_quote  
  
import retrofit2.Call  
import retrofit2.http.GET  
  
interface ApiRequest {  
 @GET("quotes/random?limit=3")  
 fun getQuotes(): Call<ResponeData>  
}

**IV. Res -> Layout**

1. **activity\_main.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:layout\_margin="10dp"  
 tools:context=".MainActivity">  
  
 <ProgressBar  
 android:id="@+id/pbLoading"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:visibility="gone"  
 android:layout\_gravity="center"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:visibility="visible" />  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/rvQuotes"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"/>  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:id="@+id/layout\_generate\_fact"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
 </androidx.constraintlayout.widget.ConstraintLayout>  
</LinearLayout>

1. **quote\_item**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:layout\_margin="5dp">  
  
 <TextView  
 android:id="@+id/tvContent"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Content"  
 android:textSize="20sp"  
 android:textColor="@color/purple\_500"/>  
  
 <TextView  
 android:id="@+id/tvAuthor"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textColor="#F44336"  
 android:text="Author"/>  
</LinearLayout>

