# 多个项目共同新增

**新增 app\src\main\res\drawable\delete\_2.png**

**新增 app\src\main\res\drawable\face\_1.jpg**

**新增 app\src\main\res\drawable\face\_2.jpg**

**新增 app\src\main\res\drawable\face\_3.jpg**

**新增 app\src\main\res\drawable\face\_me.jpg**

**新增 app\src\main\res\drawable\home.png**

**新增 app\src\main\res\drawable\message\_left.9.png**

**新增 app\src\main\res\drawable\message\_right.9.png**

**新增 app\src\main\res\drawable\options\_2.png**

**新增 app\src\main\res\drawable\star.png**

**新增 app\src\main\res\drawable\user\_friend.png**

# ChatAPP

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import androidx.recyclerview.widget.LinearLayoutManager

+ import androidx.recyclerview.widget.RecyclerView

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ // 消息队列

+ val dataMsgList = ArrayList<Msg>()

+ // recyclerview视图

+ lateinit var recyclerView: RecyclerView

+ var adapter: MsgAdapter? = null

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

- ) {

- Greeting("Android")

- }

- }

- }

+ setContentView(R.layout.activity\_main)

+ // 初始化数据列表

+ dataMsgList.add(Msg("Hello", Msg.TYPE\_RECEIVE, R.drawable.face\_2))

+ dataMsgList.add(Msg("你好",Msg.TYPE\_SENT, R.drawable.face\_3))

+ dataMsgList.add(Msg("再见", Msg.TYPE\_RECEIVE, R.drawable.face\_2))

+ // 使用转换器Adapter生成recyclerview的对象

+ adapter = MsgAdapter(dataMsgList)

+ recyclerView = findViewById(R.id.recyclerView)

+ val layoutManager = LinearLayoutManager(this)

+ recyclerView.layoutManager = layoutManager

+ recyclerView.adapter = adapter

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\java\com\example\myapplication\Msg.kt**

+ package com.example.myapplication

+

+ data class Msg(

+ val content: String,

+ val type: Int,

+ val friendId: Int,

+ ) {

+ companion object {

+ const val TYPE\_SENT = 0

+ const val TYPE\_RECEIVE =1

+ }

+ }

**新增 app\src\main\java\com\example\myapplication\MsgAdapter.kt**

+ package com.example.myapplication

+

+ import android.view.LayoutInflater

+ import android.view.View

+ import android.view.ViewGroup

+ import android.widget.ImageView

+ import android.widget.TextView

+ import androidx.recyclerview.widget.RecyclerView

+

+ class MsgAdapter(val msgList: List<Msg>):

+ RecyclerView.Adapter<RecyclerView.ViewHolder>(){

+

+ inner class LeftViewHolder(view: View):

+ RecyclerView.ViewHolder(view) {

+ val friendFace: ImageView = view.findViewById(R.id.friend\_face\_msg\_item)

+ val content: TextView = view.findViewById(R.id.msg\_text\_left)

+ }

+

+ inner class RightViewHolder(view: View):

+ RecyclerView.ViewHolder(view){

+ val myFace: ImageView = view.findViewById(R.id.my\_face\_msg\_item)

+ val content: TextView = view.findViewById(R.id.msg\_text\_right)

+ }

+

+ // 用于判断使用的view holder类型

+ // 用于多类别数据显示

+ override fun getItemViewType(position: Int): Int {

+ val msg = msgList[position]

+ return msg.type

+ }

+

+

+ override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): RecyclerView.ViewHolder {

+ if (viewType == Msg.TYPE\_RECEIVE) {

+ val view = LayoutInflater.from(parent.context).inflate(R.layout.msg\_text\_left\_item, parent, false)

+ return LeftViewHolder(view)

+ } else {

+ val view = LayoutInflater.from(parent.context).inflate(R.layout.msg\_text\_right\_item, parent, false)

+ return RightViewHolder(view)

+ }

+ }

+

+ override fun getItemCount() = msgList.size

+

+ override fun onBindViewHolder(holder: RecyclerView.ViewHolder, position: Int) {

+ val msg = msgList[position]

+ if (holder is LeftViewHolder) {

+ holder.friendFace.setImageResource(msg.friendId)

+ holder.content.text = msg.content

+ } else if (holder is RightViewHolder) {

+ holder.myFace.setImageResource(msg.friendId)

+ holder.content.text = msg.content

+ } else {

+ throw java.lang.IllegalArgumentException()

+ }

+ }

+ }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <androidx.recyclerview.widget.RecyclerView

+ android:id="@+id/recyclerView"

+ android:layout\_width="match\_parent"

+ android:layout\_height="match\_parent"/>

+

+ </LinearLayout>

**新增 app\src\main\res\layout\msg\_text\_left\_item.xml**

+ <?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="wrap\_content">

+ <ImageView

+ android:id="@+id/friend\_face\_msg\_item"

+ android:src="@drawable/face\_1"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_marginStart="20dp"

+ android:layout\_width="70dp"

+ android:layout\_height="70dp" />

+ <!-- 聊天气泡框 -->

+ <LinearLayout

+ android:background="@drawable/message\_left"

+ android:layout\_marginTop="15dp"

+ android:layout\_marginEnd="15dp"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content" >

+ <TextView

+ android:id="@+id/msg\_text\_left"

+ android:text="hellohellohellohellohellohellohello"

+ android:textSize="20sp"

+ android:textColor="#FFF"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content" />

+

+ </LinearLayout>

+

+ </LinearLayout>

**新增 app\src\main\res\layout\msg\_text\_right\_item.xml**

+ <?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="wrap\_content">

+

+ <!-- 聊天气泡框 -->

+ <LinearLayout

+ android:background="@drawable/message\_right"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="wrap\_content" >

+ <TextView

+ android:id="@+id/msg\_text\_right"

+ android:text="hellohelloh"

+ android:textSize="20sp"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content" />

+

+ </LinearLayout>

+

+ <ImageView

+ android:id="@+id/my\_face\_msg\_item"

+ android:src="@drawable/face\_1"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_width="70dp"

+ android:layout\_height="70dp" />

+

+ </LinearLayout>

# DemoLinearLayout20250325

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import android.view.View

+ import android.widget.Button

+ import android.widget.ImageView

+ import android.widget.LinearLayout

+ import android.widget.TextView

+ import android.widget.Toast

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ // 生成Monster数据

+ private val monsterList = mutableListOf(

+ Monster("火焰龙", 2600, R.drawable.ic\_launcher\_background),

+ Monster("雷电虎", 2400,R.drawable.ic\_launcher\_foreground),

+ Monster("冰龙", 2200,R.drawable.ic\_launcher\_foreground),

+ )

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

- ) {

- Greeting("Android")

- }

+ setContentView(R.layout.activity\_main)

+

+ // 获取框架

+ val container:LinearLayout = findViewById(R.id.monsterContainer)

+ // 循环添加monster到container中

+ monsterList.forEach { monster ->

+ // 获取monster模板

+ val card = layoutInflater.inflate(R.layout.monster\_card, container,false)

+

+ val image: ImageView = card.findViewById(R.id.monsterImage)

+ val name: TextView = card.findViewById(R.id.monsterName)

+ val power: TextView = card.findViewById(R.id.monsterPower)

+ val result: TextView = card.findViewById(R.id.result)

+ val button: Button = card.findViewById(R.id.challengeBtn)

+

+ name.text = monster.name

+ power.text = monster.power.toString()

+ button.setOnClickListener {

+ val content = if(monster.power > 2500) "你输了" else "你赢了"

+ result.text = content

+ result.visibility = View.VISIBLE

+ Toast.makeText(this, content, Toast.LENGTH\_SHORT).show()

}

+ container.addView(card)

+

}

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\java\com\example\myapplication\Monster.kt**

+ package com.example.myapplication

+

+ data class Monster(

+ val name:String,

+ val power:Int,

+ val imageRes: Int

+ )

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <ScrollView

+ android:layout\_width="match\_parent"

+ android:layout\_height="match\_parent">

+ <LinearLayout

+ android:id="@+id/monsterContainer"

+ android:layout\_width="match\_parent"

+ android:layout\_height="match\_parent"

+ android:orientation="vertical"

+ android:padding="16dp" />

+ </ScrollView>

+

+ </LinearLayout>

**新增 app\src\main\res\layout\monster\_card.xml**

+ <?xml version="1.0" encoding="utf-8"?>

+ <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

+ android:orientation="horizontal"

+ android:background="@android:drawable/dialog\_holo\_light\_frame"

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content">

+ <ImageView

+ android:id="@+id/monsterImage"

+ android:layout\_width="80dp"

+ android:layout\_height="80dp"

+ android:src="@drawable/ic\_launcher\_foreground" />

+ <LinearLayout

+ android:orientation="vertical"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="wrap\_content">

+ <TextView

+ android:id="@+id/monsterName"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"

+ android:textSize="18sp"

+ android:textStyle="bold" />

+ <TextView

+ android:id="@+id/monsterPower"

+ android:textSize="14sp"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content" />

+ <Button

+ android:id="@+id/challengeBtn"

+ android:text="挑战"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"/>

+ <TextView

+ android:id="@+id/result"

+ android:visibility="gone"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"/>

+ </LinearLayout>

+

+

+ </LinearLayout>

# FriendList

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**新增 app\src\main\java\com\example\myapplication\Friend.kt**

+ package com.example.myapplication

+

+ data class Friend(

+ val id: Int,

+ val name: String,

+ val faceId: Int

+ ) {

+ }

**新增 app\src\main\java\com\example\myapplication\FriendAdapter.kt**

+ package com.example.myapplication

+

+ import android.text.Layout

+ import android.view.LayoutInflater

+ import android.view.View

+ import android.view.ViewGroup

+ import android.widget.ImageView

+ import android.widget.TextView

+ import androidx.recyclerview.widget.RecyclerView

+

+ class FriendAdapter(val friendList: List<Friend>):

+ RecyclerView.Adapter<FriendAdapter.ViewHolder>(){

+ inner class ViewHolder(view: View):

+ RecyclerView.ViewHolder(view){

+ val friendName: TextView = view.findViewById(R.id.friendName)

+ val friendFace: ImageView = view.findViewById(R.id.friendFace)

+ }

+

+ // 这里找item视图，创建一个view holder。

+ override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ViewHolder {

+ val view = LayoutInflater.from(parent.context).inflate(R.layout.friend\_item, parent, false)

+ return ViewHolder(view)

+ }

+

+ override fun getItemCount() = friendList.size

+

+ // 根据创建的view holder，将指定数据显示在item模板之中

+ override fun onBindViewHolder(holder: ViewHolder, position: Int) {

+ val friend = friendList[position]

+ holder.friendName.text = friend.name

+ holder.friendFace.setImageResource(friend.faceId)

+ }

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import androidx.recyclerview.widget.LinearLayoutManager

+ import androidx.recyclerview.widget.RecyclerView

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ private val friendList = ArrayList<Friend>()

+ private var adapter: FriendAdapter? = null

+ private lateinit var recyclerView: RecyclerView

+

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

- ) {

- Greeting("Android")

- }

- }

- }

+ setContentView(R.layout.activity\_main)

+ friendList.add(Friend(0,"John", R.drawable.face\_1))

+ friendList.add(Friend(1,"Tom", R.drawable.face\_2))

+ friendList.add(Friend(2,"张三", R.drawable.face\_3))

+

+ recyclerView = findViewById(R.id.friendList)

+ val layoutManager = LinearLayoutManager(this)

+ recyclerView.layoutManager = layoutManager

+ adapter = FriendAdapter(friendList)

+ recyclerView.adapter = adapter

+

+

+

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <!-- recyclerView控件-->

+ <!-- item视图（朋友列表模板） -->

+ <!-- data class -->

+ <!-- adapter!!! -->

+ <!-- 视图对应Activity中配置-->

+ <androidx.recyclerview.widget.RecyclerView

+ android:id="@+id/friendList"

+ android:layout\_width="match\_parent"

+ android:layout\_height="match\_parent" />

+

+ </LinearLayout>

**新增 app\src\main\res\layout\friend\_item.xml**

+ <?xml version="1.0" encoding="utf-8"?>

+ <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

+ android:orientation="horizontal"

+ android:layout\_width="match\_parent"

+ android:layout\_height="60dp">

+ <!-- 左侧是朋友头像，右侧是朋友昵称-->

+ <ImageView

+ android:id="@+id/friendFace"

+ android:src="@drawable/face\_1"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_marginStart="5dp"

+ android:layout\_width="50dp"

+ android:layout\_height="50dp"/>

+ <!-- 朋友昵称 -->

+ <TextView

+ android:id="@+id/friendName"

+ android:text="John"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_marginStart="20dp"

+ android:textSize="20sp"

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"/>

+

+

+ </LinearLayout>

# HappyChat

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.happychat'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.happychat"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**新增 app\src\main\java\com\example\happychat\ChatActivity.kt**

+ package com.example.happychat

+

+ import androidx.appcompat.app.AppCompatActivity

+ import android.os.Bundle

+ import android.widget.TextView

+

+ class ChatActivity : AppCompatActivity() {

+ override fun onCreate(savedInstanceState: Bundle?) {

+ super.onCreate(savedInstanceState)

+ setContentView(R.layout.activity\_chat)

+

+ val id = intent.getIntExtra("friend\_id", 0)

+ val name = intent.getStringExtra("name")

+ val face = intent.getIntExtra("face", R.drawable.face\_1)

+ val testContent:TextView = findViewById(R.id.test\_content)

+ testContent.text = "$id, $name, $face"

+ }

+ }

**新增 app\src\main\java\com\example\happychat\DBHelper.kt**

+ package com.example.happychat

+

+ import android.content.Context

+ import android.database.sqlite.SQLiteDatabase

+ import android.database.sqlite.SQLiteOpenHelper

+

+ class DBHelper(val context: Context, val name: String, val ver: Int):

+ SQLiteOpenHelper(context, name, null, ver) {

+

+ private val createFriend = "create table Friend (" +

+ "id integer primary key autoincrement, " +

+ "friend\_id integer, " +

+ "name text, " +

+ "face integer)"

+

+ private val createChat = "create table chat (" +

+ "id integer primary key autoincrement, " +

+ "friend\_id integer, " +

+ "content text, " +

+ "type integer )"

+

+

+ override fun onCreate(db: SQLiteDatabase) {

+ db.execSQL(createFriend)

+ db.execSQL(createChat)

+ }

+

+ override fun onUpgrade(db: SQLiteDatabase, oldVer: Int, newVer: Int) {

+ TODO("Not yet implemented")

+ }

+

+ companion object {

+ const val DB\_NAME = "ChatApp"

+ const val DB\_VERSION = 1

+ }

+ }

**新增 app\src\main\java\com\example\happychat\Friend.kt**

+ package com.example.happychat

+

+ data class Friend(

+ val friendId: Int,

+ val name: String,

+ val face: Int

+ ) {

+ fun getVipName(): String{

+ return "VIP【${name}】"

+ }

+ }

**新增 app\src\main\java\com\example\happychat\FriendAdapter.kt**

+ package com.example.happychat

+

+ import android.content.Context

+ import android.content.Intent

+ import android.view.LayoutInflater

+ import android.view.View

+ import android.view.ViewGroup

+ import android.widget.ImageView

+ import android.widget.TextView

+ import androidx.recyclerview.widget.RecyclerView

+ import org.w3c.dom.Text

+

+ class FriendAdapter(val friendList: List<Friend>, val context: Context):

+ RecyclerView.Adapter<FriendAdapter.ViewHolder>() {

+

+ inner class ViewHolder(val view:View):

+ RecyclerView.ViewHolder(view) {

+ val friendName: TextView = view.findViewById(R.id.friend\_list\_name)

+ val friendFace: ImageView = view.findViewById(R.id.friend\_list\_face)

+ }

+

+ override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ViewHolder {

+ val view = LayoutInflater

+ .from(parent.context)

+ .inflate(R.layout.friend\_list\_item, parent, false)

+ return ViewHolder(view)

+ }

+

+ override fun getItemCount() = friendList.size

+

+ override fun onBindViewHolder(holder: ViewHolder, position: Int) {

+ val friend = friendList[position]

+ holder.friendName.text = friend.name

+ holder.friendFace.setImageResource(friend.face)

+ // 跳转事件

+ holder.view.setOnClickListener {

+ // 跳转到聊天界面

+ val intent = Intent(context, ChatActivity::class.java)

+ // 打包数据

+ intent.putExtra("friend\_id", friend.friendId)

+ intent.putExtra("name", friend.name)

+ intent.putExtra("face", friend.face)

+ context.startActivity(intent)

+ }

+

+

+ }

+ }

**新增 app\src\main\java\com\example\happychat\MainActivity.kt**

+ package com.example.happychat

+

+ import android.annotation.SuppressLint

+ import android.content.ContentValues

+ import androidx.appcompat.app.AppCompatActivity

+ import android.os.Bundle

+ import androidx.recyclerview.widget.LinearLayoutManager

+ import androidx.recyclerview.widget.RecyclerView

+ import androidx.recyclerview.widget.RecyclerView.LayoutManager

+

+ class MainActivity : AppCompatActivity() {

+

+ lateinit var friendListRV: RecyclerView

+ lateinit var dbHelper: DBHelper

+ val friendList = ArrayList<Friend>() // 朋友数据列表

+ lateinit var friendAdapter: FriendAdapter

+

+ @SuppressLint("Range")

+ override fun onCreate(savedInstanceState: Bundle?) {

+ super.onCreate(savedInstanceState)

+ setContentView(R.layout.activity\_main)

+ // 初始化对象

+ friendListRV = findViewById(R.id.friend\_list\_rv)

+ // 初始化数据库

+ dbHelper = DBHelper(this, DBHelper.DB\_NAME, DBHelper.DB\_VERSION)

+ // 插入初始数据,真实情况下，这里需要通过api获取数据

+ //initData()

+ // 通过数据库查询，生成adapter需要的朋友列表

+ val db = dbHelper.writableDatabase

+ // 查询数据库中的Friend表

+ // select \* from Friend

+ val cursor = db.rawQuery("select \* from Friend", null)

+ if (cursor.moveToFirst()) {

+ do {

+ val id = cursor.getInt(cursor.getColumnIndex("friend\_id"))

+ val name = cursor.getString(cursor.getColumnIndex("name"))

+ val face = cursor.getInt(cursor.getColumnIndex("face"))

+ friendList.add(Friend(id, name, face))

+ } while (cursor.moveToNext())

+ }

+

+ // 显示视图

+ friendAdapter = FriendAdapter(friendList, this)

+ friendListRV.adapter = friendAdapter

+ val layoutManager = LinearLayoutManager(this)

+ friendListRV.layoutManager = layoutManager

+

+ }

+

+ private fun initData() {

+ val db = dbHelper.writableDatabase

+ repeat(2) {

+ val value = ContentValues().apply {

+ put("friend\_id", 1\*it)

+ put("name", "张三")

+ put("face", R.drawable.face\_1)

+ }

+ db.insert("Friend", null, value)

+ val value2 = ContentValues().apply {

+ put("friend\_id", 5\*it)

+ put("name", "李四")

+ put("face", R.drawable.face\_2)

+ }

+ db.insert("Friend", null, value2)

+ }

+ }

+ }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\activity\_chat.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"

+ tools:context=".ChatActivity">

+ <TextView

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/test\_content" />

+

+ </LinearLayout>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+ <androidx.recyclerview.widget.RecyclerView

+ android:id="@+id/friend\_list\_rv"

+ android:layout\_width="match\_parent"

+ android:layout\_height="0dp"

+ android:layout\_weight="1"/>

+

+

+

+ </LinearLayout>

**新增 app\src\main\res\layout\friend\_list\_item.xml**

+ <?xml version="1.0" encoding="utf-8"?>

+ <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

+ android:orientation="horizontal"

+ android:layout\_width="match\_parent"

+ android:layout\_height="80dp">

+

+ <ImageView

+ android:layout\_width="60dp"

+ android:layout\_height="60dp"

+ android:id="@+id/friend\_list\_face"

+ android:src="@drawable/face\_1"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_marginStart="10dp" />

+ <TextView

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/friend\_list\_name"

+ android:text="张三张三张三张三张三"

+ android:textSize="20sp"

+ android:layout\_gravity="center\_vertical"

+ android:layout\_marginStart="10dp"/>

+

+ </LinearLayout>

# HappyWeatherAPP

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.happyweatherapp'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.happyweatherapp"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ implementation 'com.squareup.okhttp3:okhttp:4.9.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**新增 app\src\main\java\com\example\happyweatherapp\MainActivity.kt**

+ package com.example.happyweatherapp

+

+ import androidx.appcompat.app.AppCompatActivity

+ import android.os.Bundle

+ import android.widget.TextView

+ import androidx.recyclerview.widget.RecyclerView

+ import okhttp3.OkHttpClient

+ import okhttp3.Request

+ import org.json.JSONObject

+ import kotlin.concurrent.thread

+

+ class MainActivity : AppCompatActivity() {

+

+ val tempList = ArrayList<Weather>()

+

+ lateinit var cityName: TextView

+ lateinit var tempNow: TextView

+ lateinit var tempList15days: RecyclerView

+

+ lateinit var adapter: WeatherAdapter

+

+ override fun onCreate(savedInstanceState: Bundle?) {

+ super.onCreate(savedInstanceState)

+ setContentView(R.layout.activity\_main)

+ cityName = findViewById(R.id.city\_name)

+ tempNow = findViewById(R.id.temp\_now)

+ tempList15days = findViewById(R.id.temp\_list\_15days)

+

+ // 初始化数据

+ initData()

+ }

+

+ private fun initData() {

+ thread {

+ try {

+ val client = OkHttpClient()

+ val request = Request.Builder()

+ .url("http://t.weather.sojson.com/api/weather/city/101030100")

+ .build()

+ val response = client.newCall(request).execute()

+ val responseData = response.body?.string().toString()

+

+ showWeatherData(responseData)

+ } catch (e: Exception) {

+ e.printStackTrace()

+ }

+ }

+ }

+

+ private fun showWeatherData(responseData: String) {

+ runOnUiThread {

+ try {

+ // 解包顶层数据

+ val jsonData = JSONObject(responseData)

+ val cityName = jsonData.getJSONObject("cityInfo").getString("city")

+ val data = jsonData.getJSONObject("data")

+ val tempNow = data.getString("wendu")

+ // 未来15天

+ val allTemp = data.getJSONArray("forecast")

+ for (i in 1 until allTemp.length()) {

+ val now = allTemp.getJSONObject(i)

+ val day = now.getString("date")

+ val low = now.getString("low")

+ val high = now.getString("high")

+ val type = now.getString("type")

+ tempList.add(Weather(day, low, high, type))

+ }

+

+ } catch (e: Exception) {

+ e.printStackTrace()

+ }

+ }

+ }

+ }

**新增 app\src\main\java\com\example\happyweatherapp\Weather.kt**

+ package com.example.happyweatherapp

+

+ data class Weather(

+ val day: String,

+ val low: String,

+ val high: String,

+ val type: String

+ ) {

+ }

**新增 app\src\main\java\com\example\happyweatherapp\WeatherAdapter.kt**

+ package com.example.happyweatherapp

+

+ import android.content.Context

+ import android.view.LayoutInflater

+ import android.view.View

+ import android.view.ViewGroup

+ import android.widget.ImageView

+ import android.widget.TextView

+ import androidx.recyclerview.widget.RecyclerView

+

+ class WeatherAdapter(val tempList: List<Weather>, val context: Context):

+ RecyclerView.Adapter<WeatherAdapter.ViewHolder>() {

+

+ inner class ViewHolder(val view: View): RecyclerView.ViewHolder(view) {

+ val day: TextView = view.findViewById(R.id.temp\_list\_day)

+ val low: TextView = view.findViewById(R.id.temp\_list\_low)

+ val high: TextView = view.findViewById(R.id.temp\_list\_high)

+ val type: ImageView = view.findViewById(R.id.temp\_list\_type)

+ }

+

+ override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): WeatherAdapter.ViewHolder {

+ val view = LayoutInflater.from(parent.context)

+ .inflate(R.layout.temp\_list\_item, parent, false)

+ return ViewHolder(view)

+ }

+

+ override fun onBindViewHolder(holder: WeatherAdapter.ViewHolder, position: Int) {

+ val temp = tempList[position]

+ holder.day.text = temp.day

+ holder.low.text = temp.low

+ holder.high.text = temp.high

+ var imgType: Int = 0

+ if (temp.type == "晴") {

+ imgType = R.drawable.sunny

+ } else if (temp.type == "多云") {

+ imgType = R.drawable.cloudy

+ } else {

+ imgType = R.drawable.rainy

+ }

+ holder.type.setImageResource(imgType)

+ }

+

+ override fun getItemCount() = tempList.size

+ }

**新增 app\src\main\res\drawable\cloudy.png**

[二进制文件内容已修改]

**新增 app\src\main\res\drawable\rainy.png**

[二进制文件内容已修改]

**新增 app\src\main\res\drawable\snowy.png**

[二进制文件内容已修改]

**新增 app\src\main\res\drawable\sunny.png**

[二进制文件内容已修改]

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+ <!--城市名称-->

+ <TextView

+ android:id="@+id/city\_name"

+ android:layout\_width="match\_parent"

+ android:layout\_height="120dp"

+ android:gravity="center"

+ android:textSize="30sp"

+ android:text="北京"/>

+ <!--当前气温-->

+ <TextView

+ android:id="@+id/temp\_now"

+ android:layout\_width="match\_parent"

+ android:layout\_height="80dp"

+ android:gravity="center"

+ android:textSize="25sp"

+ android:text="29度"/>

+ <!-- 未来15天天气-->

+ <androidx.recyclerview.widget.RecyclerView

+ android:id="@+id/temp\_list\_15days"

+ android:layout\_width="match\_parent"

+ android:layout\_height="0dp"

+ android:layout\_weight="1" />

+

+ </LinearLayout>

**新增 app\src\main\res\layout\temp\_list\_item.xml**

+ <?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="60dp">

+ <TextView

+ android:id="@+id/temp\_list\_day"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="wrap\_content"

+ android:layout\_gravity="center"

+ android:text="03日"/>

+ <TextView

+ android:id="@+id/temp\_list\_low"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="wrap\_content"

+ android:layout\_gravity="center"

+ android:text="10度"/>

+ <TextView

+ android:id="@+id/temp\_list\_high"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="wrap\_content"

+ android:layout\_gravity="center"

+ android:text="28度"/>

+ <ImageView

+ android:id="@+id/temp\_list\_type"

+ android:layout\_width="0dp"

+ android:layout\_weight="1"

+ android:layout\_height="50dp"

+ android:src="@drawable/cloudy"/>

+

+

+ </LinearLayout>

**新增 app\src\main\res\xml\network\_security\_config.xml**

+ <?xml version="1.0" encoding="utf-8" ?>

+ <network-security-config>

+ <base-config cleartextTrafficPermitted="true"/>

+ </network-security-config>

# HttpConn

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ implementation 'com.squareup.okhttp3:okhttp:4.9.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import android.widget.Button

+ import android.widget.TextView

+ import okhttp3.OkHttpClient

+ import okhttp3.Request

+ import java.io.BufferedReader

+ import java.io.InputStreamReader

+ import java.net.HttpURLConnection

+ import java.net.URL

+ import kotlin.concurrent.thread

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ lateinit var sendButton: Button

+ lateinit var contentArea: TextView

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

+ setContentView(R.layout.activity\_main)

+ contentArea = findViewById(R.id.content\_area)

+ sendButton = findViewById(R.id.enter\_url\_btn)

+ sendButton.setOnClickListener {

+ //sendRequestWithHttpURLConn()

+ sendRequestWithOkHttp()

+ }

+ }

+

+ private fun sendRequestWithOkHttp() {

+ thread {

- ) {

+ try {

- Greeting("Android")

- }

+ val client = OkHttpClient()

+ val request = Request.Builder()

+ .url("http://202.198.198.11:8000/api/v2/friends")

+ .build()

+ val response = client.newCall(request).execute()

+ showResponse(response.body?.string().toString())

+ } catch (e: Exception) {

+ e.printStackTrace()

}

}

}

- }

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

+ // 网络请求方法

+ private fun sendRequestWithHttpURLConn() {

+ // 快速开启一个线程

+ thread {

+ // 定义连接对象

+ var connection:HttpURLConnection? = null

+ try {

+ val response = StringBuilder()

+ val url = URL("http://202.198.198.11:8000/api/v2/friends")

+ connection = url.openConnection() as HttpURLConnection

+ connection.connectTimeout = 8000

+ connection.readTimeout = 8000

+ val input = connection.inputStream

+ // 读取输入流

+ val reader = BufferedReader(InputStreamReader(input))

+ reader.use {

+ reader.forEachLine {

+ response.append(it)

+ }

+ }

+ showResponse(response.toString())

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

+ } catch (e: Exception) {

+

+ }

+ }

+ }

+

+ private fun showResponse(content: String) {

+ runOnUiThread {

+ contentArea.text = content

+ }

}

}

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/enter\_url\_btn"

+ android:text="访问网站" />

+ <ScrollView

+ android:layout\_width="match\_parent"

+ android:layout\_height="0dp"

+ android:layout\_weight="1">

+ <TextView

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/content\_area" />

+ </ScrollView>

+

+ </LinearLayout>

**新增 app\src\main\res\xml\network\_security\_config.xml**

+ <?xml version="1.0" encoding="utf-8" ?>

+ <network-security-config>

+ <base-config cleartextTrafficPermitted="true"/>

+ </network-security-config>

# JsonData

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ implementation 'com.squareup.okhttp3:okhttp:4.9.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

+ import android.util.Log

+ import android.widget.Button

+ import android.widget.TextView

+ import okhttp3.OkHttpClient

+ import okhttp3.Request

+ import org.json.JSONArray

+ import org.json.JSONObject

+ import java.io.BufferedReader

+ import java.io.InputStreamReader

+ import java.net.HttpURLConnection

+ import java.net.URL

+ import kotlin.concurrent.thread

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ lateinit var sendButton: Button

+ lateinit var contentArea: TextView

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

+ setContentView(R.layout.activity\_main)

+ contentArea = findViewById(R.id.content\_area)

+ sendButton = findViewById(R.id.enter\_url\_btn)

+ sendButton.setOnClickListener {

+ //sendRequestWithHttpURLConn()

+ sendRequestWithOkHttp()

+ }

+ }

+

+ private fun sendRequestWithOkHttp() {

+ thread {

- ) {

+ try {

- Greeting("Android")

+ val client = OkHttpClient()

+ val request = Request.Builder()

+ .url("http://t.weather.sojson.com/api/weather/city/101060301")

+ .build()

+ val response = client.newCall(request).execute()

+ showResponse(response.body?.string().toString())

+ // 解析Json数据

+ //parseJSONWithJsonObject(response.body?.string().toString())

+ } catch (e: Exception) {

+ e.printStackTrace()

+ }

+ }

+ }

+

+ private fun parseJSONWithJsonObject(jsonData: String) {

+ runOnUiThread {

+ try {

+ // 解包最外层[]

+ val jsonArray = JSONArray(jsonData)

+ // 开始遍历数据

+ for (i in 0 until jsonArray.length()) {

+ val friendInfo = jsonArray.getJSONObject(i)

+ val id = friendInfo.getInt("id")

+ val name = friendInfo.getString("name")

+ val face = friendInfo.getInt("face")

+ Log.d("MainActivity - Json", "第${i}条记录，id=$id,name=$name,face=$face")

}

+ } catch (e: Exception) {

+ e.printStackTrace()

+ }

+ }

+ }

+

+ // 网络请求方法

+ private fun sendRequestWithHttpURLConn() {

+ // 快速开启一个线程

+ thread {

+ // 定义连接对象

+ var connection:HttpURLConnection? = null

+ try {

+ val response = StringBuilder()

+ val url = URL("http://202.198.198.11:8000/api/v2/friends")

+ connection = url.openConnection() as HttpURLConnection

+ connection.connectTimeout = 8000

+ connection.readTimeout = 8000

+ val input = connection.inputStream

+ // 读取输入流

+ val reader = BufferedReader(InputStreamReader(input))

+ reader.use {

+ reader.forEachLine {

+ response.append(it)

+ }

+ }

+ showResponse(response.toString())

+

+ } catch (e: Exception) {

+

+ }

+ }

+ }

+

+ private fun showResponse(content: String) {

+ runOnUiThread {

+ contentArea.text = content

+ }

+ //parseJSONWithJsonObject(content)

+ parseJSONWithWeather(content)

+ }

+

+ private fun parseJSONWithWeather(jsonData: String) {

+ runOnUiThread {

+ try {

+ // 解析第一层

+ val weatherData = JSONObject(jsonData)

+ // 状态值 status

+ val status = weatherData.getInt("status")

+ val dateInfo = weatherData.getString("date")

+ Log.d("MainActivity - weather", "状态:$status, 日期: $dateInfo")

+ // 获取第二层 cityinfo

+ val cityInfo = weatherData.getJSONObject("cityInfo")

+ val city = cityInfo.getString("city")

+ val cityCode = cityInfo.getString("citykey")

+ val parent = cityInfo.getString("parent")

+ Log.d("MainActivity - weather", "城市:$city, 编码:$cityCode, 省份:$parent")

+ // 获取第二层 data

+ val data = weatherData.getJSONObject("data")

+ val shidu = data.getString("shidu")

+ val pm25 = data.getString("pm25")

+ // 获取昨天信息（第三层)

+ val yesterday = data.getJSONObject("yesterday")

+ val yDate = yesterday.getString("date")

+ val yHigh = yesterday.getString("high")

+ // 获取未来15天信息（第三层)

+ val data\_15 = data.getJSONArray("forecast")

+ for (i in 0 until data\_15.length()) {

+ val dayInfo = data\_15.getJSONObject(i)

+ val dayDate = dayInfo.getInt("date")

+ val high = dayInfo.getString("high")

+ val low = dayInfo.getString("low")

+ val week = dayInfo.getString("week")

+ Log.d("MainActivity - weather", "$dayDate 日，$week，气温: $low ~ $high")

+ }

+

+ } catch (e: Exception) {

+ e.printStackTrace()

}

}

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/enter\_url\_btn"

+ android:text="访问网站" />

+ <ScrollView

+ android:layout\_width="match\_parent"

+ android:layout\_height="0dp"

+ android:layout\_weight="1">

+ <TextView

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/content\_area" />

+ </ScrollView>

+

+ </LinearLayout>

**新增 app\src\main\res\xml\network\_security\_config.xml**

+ <?xml version="1.0" encoding="utf-8" ?>

+ <network-security-config>

+ <base-config cleartextTrafficPermitted="true"/>

+ </network-security-config>

# MyApplication20250401

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import android.graphics.Color

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import android.widget.ArrayAdapter

+ import android.widget.ListView

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+ // #1 生成数据类

+ data class Score(val name: String, val score: Int)

+ data class Question(val text: String, val isCorrect: Boolean)

+ // #2 控件定义

+ private lateinit var scoreListView: ListView

+ //private val QuestionListView: ListView = TODO()

+ private lateinit var questionListView: ListView

+

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

+ setContentView(R.layout.activity\_main)

+

+ // #3 实例化控件

+ scoreListView = findViewById(R.id.scoreListView)

+ questionListView = findViewById(R.id.questionListView)

+

+ // #4 生成成绩列表

+ val scores = listOf(

+ Score("张三", 80),

+ Score("李四", 95),

+ Score("John", 85)

+ )

+

+ // #5 生成Adapter

+ val adapterScore = ArrayAdapter(

+ this,

+ android.R.layout.simple\_list\_item\_1,

+ scores.map { "姓名:${it.name}, 成绩:${it.score}" }

+ )

+ // #6 显示列表数据

+ scoreListView.adapter = adapterScore

+

+ // #7 生成问答数据

+ val questions = listOf(

+ Question("A.Kotlin是一门静态语言", true),

+ Question("B.Java是Kotlin的子集", false),

+ Question("C.Kotlin没有类", false),

+ Question("D.Android是用C++写的", false)

+ )

+ val questionAdapter = ArrayAdapter(

+ this,

+ android.R.layout.simple\_list\_item\_1,

+ questions.map { "${it.text}" }

+ )

+ questionListView.adapter = questionAdapter

+

+ // \*\*交互\*\*

+ questionListView.setOnItemClickListener{

+ parent, view, postion,\_ ->

+ val item = questions[postion]

+ if (item.isCorrect) {

+ view.setBackgroundColor(Color.parseColor("#A5D6A7"))

- ) {

+ } else {

- Greeting("Android")

+ view.setBackgroundColor(Color.parseColor("#ef9a9a"))

- }

+ }

+

+

+ }

+ scoreListView.setOnItemClickListener{

+ parent, view, position, \_ ->

+ val item = scores[position]

+ if (item.score >= 85) {

+ view.setBackgroundColor(Color.parseColor("#A5D6A7"))

+ } else {

+ view.setBackgroundColor(Color.parseColor("#ef9a9a"))

}

}

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <ListView

+ android:id="@+id/scoreListView"

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"/>

+ <ListView

+ android:id="@+id/questionListView"

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"/>

+

+ </LinearLayout>

# SQLite

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import android.annotation.SuppressLint

+ import android.content.ContentValues

+ import android.database.sqlite.SQLiteOpenHelper

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import android.util.Log

+ import android.widget.Button

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ lateinit var createDbBtn: Button

+ lateinit var insertDataBtn: Button

+ lateinit var selectDataBtn: Button

+

+ lateinit var db: SQLiteOpenHelper

+

+ @SuppressLint("Range")

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

+ setContentView(R.layout.activity\_main)

+ // 初始化控件

+ createDbBtn = findViewById(R.id.create\_db\_btn)

+ insertDataBtn = findViewById(R.id.insert\_data\_btn)

+ selectDataBtn = findViewById(R.id.select\_data\_btn)

+

+ // 初始化数据库

+ db = MyDatabaseHelper(this, "Book", MyDatabaseHelper.DB\_VER)

+ val dbObj = db.writableDatabase

+ createDbBtn.setOnClickListener {

+ //db.writableDatabase

+ }

+

+ // 添加数据

+ insertDataBtn.setOnClickListener {

+ val value1 = ContentValues().apply {

+ put("name", "达芬奇密码")

+ put("author", "Dan brown")

+ put("pages", 454)

+ put("price", 16.96)

+ }

+ dbObj.insert("Book", null, value1)

+ }

+

+ selectDataBtn.setOnClickListener {

+ //val cursor = dbObj.query("Book",null,null,null,null,null,null)

+ val cursor = dbObj.rawQuery("select \* from Book", null)

+ if (cursor.moveToFirst()) {

- ) {

+ do {

- Greeting("Android")

- }

+ val name = cursor.getString(cursor.getColumnIndex("name"))

+ Log.d("db debug", name)

+ } while (cursor.moveToNext())

}

}

+

+

}

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\java\com\example\myapplication\MyDatabaseHelper.kt**

+ package com.example.myapplication

+

+ import android.content.Context

+ import android.database.sqlite.SQLiteDatabase

+ import android.database.sqlite.SQLiteOpenHelper

+ import android.widget.Toast

+

+ class MyDatabaseHelper(val context: Context, name: String, version: Int):

+ SQLiteOpenHelper(context, name, null,version){

+

+ private val createBook = "create table Book (" +

+ "id integer primary key autoincrement," +

+ "author text, " +

+ "price real, " +

+ "pages integer, " +

+ "name text)"

+ private val createCategory = "create table Category (" +

+ "id integer primary key autoincrement, " +

+ "category\_name text, " +

+ "category\_code integer)"

+

+

+ override fun onCreate(db: SQLiteDatabase) {

+ db.execSQL(createBook) // ver 1

+ db.execSQL(createCategory) // ver 2

+ Toast.makeText(context,

+ "创建成功!!!",

+ Toast.LENGTH\_SHORT).show()

+ }

+

+ override fun onUpgrade(db: SQLiteDatabase, oldVer: Int, newVer: Int) {

+ if (oldVer == 1) {

+ db.execSQL(createCategory)

+ }

+

+ //db.execSQL("drop table if exists Book")

+ //db.execSQL("drop table if exists Category")

+ //onCreate(db)

+ }

+ companion object {

+ const val DB\_VER = 2

+ }

+ }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/create\_db\_btn"

+ android:text="创建数据库" />

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/insert\_data\_btn"

+ android:text="添加数据" />

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/select\_data\_btn"

+ android:text="查询数据" />

+

+ </LinearLayout>

# xmlFile

**新增 app\build.gradle**

+ plugins {

+ id 'com.android.application'

+ id 'org.jetbrains.kotlin.android'

+ }

+

+ android {

+ namespace 'com.example.myapplication'

+ compileSdk 33

+

+ defaultConfig {

+ applicationId "com.example.myapplication"

+ minSdk 24

+ targetSdk 33

+ versionCode 1

+ versionName "1.0"

+

+ testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

+ }

+

+ buildTypes {

+ release {

+ minifyEnabled false

+ proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

+ }

+ }

+ compileOptions {

+ sourceCompatibility JavaVersion.VERSION\_1\_8

+ targetCompatibility JavaVersion.VERSION\_1\_8

+ }

+ kotlinOptions {

+ jvmTarget = '1.8'

+ }

+ }

+

+ dependencies {

+

+ implementation 'androidx.core:core-ktx:1.7.0'

+ implementation 'androidx.appcompat:appcompat:1.4.1'

+ implementation 'com.google.android.material:material:1.5.0'

+ implementation 'androidx.constraintlayout:constraintlayout:2.1.3'

+ testImplementation 'junit:junit:4.13.2'

+ androidTestImplementation 'androidx.test.ext:junit:1.1.3'

+ androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'

+ }

**修改 app\src\main\java\com\example\myapplication\MainActivity.kt**

package com.example.myapplication

+ import android.content.Context

+ import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

+ import android.widget.Button

+ import android.widget.CheckBox

+ import android.widget.EditText

- import androidx.activity.ComponentActivity

- import androidx.activity.compose.setContent

- import androidx.compose.foundation.layout.fillMaxSize

- import androidx.compose.material3.MaterialTheme

- import androidx.compose.material3.Surface

- import androidx.compose.material3.Text

- import androidx.compose.runtime.Composable

- import androidx.compose.ui.Modifier

- import androidx.compose.ui.tooling.preview.Preview

- import com.example.myapplication.ui.theme.MyApplicationTheme

- class MainActivity : ComponentActivity() {

+ class MainActivity : AppCompatActivity() {

+

+ lateinit var userName: EditText

+ lateinit var userPass: EditText

+ lateinit var saveBtn: Button

+ lateinit var rmbPass: CheckBox

+

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

- setContent {

- MyApplicationTheme {

- // A surface container using the 'background' color from the theme

- Surface(

- modifier = Modifier.fillMaxSize(),

- color = MaterialTheme.colorScheme.background

- ) {

- Greeting("Android")

- }

- }

+ setContentView(R.layout.activity\_main)

+ userName = findViewById(R.id.user\_name)

+ userPass = findViewById(R.id.user\_pass)

+ saveBtn = findViewById(R.id.save\_btn)

+ rmbPass = findViewById(R.id.rmb\_pass)

+

+ saveBtn.setOnClickListener {

+ val editor = getSharedPreferences("info", Context.MODE\_PRIVATE).edit()

+ editor.putString("user\_name", userName.text.toString())

+ editor.putString("user\_pass", userPass.text.toString())

+ editor.putBoolean("rmb\_pass", rmbPass.isChecked)

+ editor.apply()

}

}

+

+ override fun onStart() {

+ super.onStart()

+ val reader = getSharedPreferences("info", Context.MODE\_PRIVATE)

+ // 获取保存密码状态

+ val status = reader.getBoolean("rmb\_pass", false)

+ rmbPass.isChecked = status

+ if (status) {

+ userName.setText(reader.getString("user\_name", ""))

+ userPass.setText(reader.getString("user\_pass", ""))

+ }

+ }

+

+ override fun onDestroy() {

+ super.onDestroy()

+ val editor = getSharedPreferences("info", Context.MODE\_PRIVATE).edit()

+ editor.putString("user\_name", userName.text.toString())

+ editor.putString("user\_pass", userPass.text.toString())

+ editor.putBoolean("rmb\_pass", rmbPass.isChecked)

+ editor.apply()

+ }

+

+ override fun onStop() {

+ super.onStop()

+ }

+

}

-

- @Composable

- fun Greeting(name: String, modifier: Modifier = Modifier) {

- Text(

- text = "Hello $name!",

- modifier = modifier

- )

- }

-

- @Preview(showBackground = true)

- @Composable

- fun GreetingPreview() {

- MyApplicationTheme {

- Greeting("Android")

- }

- }

**新增 app\src\main\res\drawable-v24\ic\_launcher\_foreground.xml**

+ <vector xmlns:android="http://schemas.android.com/apk/res/android"

+ xmlns:aapt="http://schemas.android.com/aapt"

+ android:width="108dp"

+ android:height="108dp"

+ android:viewportWidth="108"

+ android:viewportHeight="108">

+ <path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z">

+ <aapt:attr name="android:fillColor">

+ <gradient

+ android:endX="85.84757"

+ android:endY="92.4963"

+ android:startX="42.9492"

+ android:startY="49.59793"

+ android:type="linear">

+ <item

+ android:color="#44000000"

+ android:offset="0.0" />

+ <item

+ android:color="#00000000"

+ android:offset="1.0" />

+ </gradient>

+ </aapt:attr>

+ </path>

+ <path

+ android:fillColor="#FFFFFF"

+ android:fillType="nonZero"

+ android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"

+ android:strokeWidth="1"

+ android:strokeColor="#00000000" />

+ </vector>

**新增 app\src\main\res\layout\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"

+ tools:context=".MainActivity">

+

+ <TextView

+ android:layout\_width="wrap\_content"

+ android:layout\_height="wrap\_content"

+ android:text="Hello World!"

+ app:layout\_constraintBottom\_toBottomOf="parent"

+ app:layout\_constraintEnd\_toEndOf="parent"

+ app:layout\_constraintStart\_toStartOf="parent"

+ app:layout\_constraintTop\_toTopOf="parent" />

+ <EditText

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/user\_name"/>

+ <EditText

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/user\_pass" />

+ <CheckBox

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/rmb\_pass"

+ android:text="记住登录状态" />

+ <Button

+ android:layout\_width="match\_parent"

+ android:layout\_height="wrap\_content"

+ android:id="@+id/save\_btn"

+ android:text="save"/>

+

+ </LinearLayout>