

Danh ba

Adapter

```
package com.example.b1906314_buichihai_danhba

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 com.bumptech.glide.Glide

class Adapter(private val dataset: ArrayList<Result>): RecyclerView.Adapter<Adapter.ViewHolder>() {
    class ViewHolder(view: View): RecyclerView.ViewHolder(view) {
        val tvEmail: TextView
        val tvTen: TextView
        val tvAddress: TextView
        val tvPhone: TextView
        val img : ImageView
        init {
            tvEmail = view.findViewById(R.id.Email_b1906314)
            tvTen = view.findViewById(R.id.Name_b1906314)
            tvAddress = view.findViewById(R.id.Address_b1906314)
            tvPhone = view.findViewById(R.id.Phone_b1906314)
            img = view.findViewById(R.id.image1_b1906314)
        }
    }

    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ViewHolder {
        val view = LayoutInflater.from(parent.context).inflate(R.layout.contact_activity_items, null)
        return ViewHolder(view)
    }

    override fun getItemCount(): Int {
        return dataset.size
    }

    override fun onBindViewHolder(holder: ViewHolder, position: Int) {
        holder.tvTen.setText(dataset[position].name.title + ". "+dataset[position].name.first + " " +
dataset[position].name.last)
        holder.tvEmail.setText(dataset[position].email)
        holder.tvPhone.setText(dataset[position].phone)
    }
}
```

```

        holder.tvAddress.setText(dataset[position].location.city)

Glide.with(holder.itemView.context).load(dataset[position].picture.thumbnail).circleCrop().into(holder.imageView)
    }
    holder.itemView.setOnClickListener {
        val intent = Intent(holder.itemView.context, ContactActivity::class.java)
        intent.putExtra("name", dataset[position].name.first)
        intent.putExtra("email", dataset[position].email)
        intent.putExtra("phone", dataset[position].phone)
        intent.putExtra("city", dataset[position].location.city)
        intent.putExtra("img", dataset[position].picture.thumbnail)
        holder.itemView.context.startActivity(intent)
    }
}
}

```

Contact_Activity

```

package com.example.b1906314_buichihai_danhba

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.bumptech.glide.Glide
import com.example.b1906314_buichihai_danhba.databinding.ActivityContactBinding

class ContactActivity : AppCompatActivity() {
    lateinit var binding: ActivityContactBinding
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityContactBinding.inflate(layoutInflater)
        setContentView(binding.root)

        val name = intent.getStringExtra("name")
        val email = intent.getStringExtra("email")
        val city = intent.getStringExtra("city")
        val phone = intent.getStringExtra("phone")

        val img = intent.getStringExtra("img")
        Glide.with(this).load(img).circleCrop().into(binding.image2B1906314)

        binding.tvHotenB1906314.text = name
        binding.tvEmailB1906314.text = email
        binding.tvAddressB1906314.text = city
        binding.tvPhoneB1906314.text = phone
    }
}

```

Contat_Activiti_item

Package com.example.b1906314_buichihai_danhba

```
Import android.app.Activity;
Public class ContactActivity_items extends Activity{
}
```

Interface

package com.example.b1906314_buichihai_danhba

```
import retrofit2.Call
import retrofit2.http.GET

interface Interface {
    @GET("api/?results=10")
    fun getQuotes(): Call<ResponsesData>
}
```

MainActivity

package com.example.b1906314_buichihai_danhba

```
import android.os.Bundle
import android.util.Log
import android.view.View
import androidx.appcompat.app.AppCompatActivity
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
import com.example.b1906314_buichihai_danhba.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.RVB1906314.layoutManager = LinearLayoutManager(this, RecyclerView.VERTICAL,
false)

        CoroutineScope(Dispatchers.IO).launch {
            getQuotes();
        }
    }

suspend fun getQuotes() {
    val contact = Retrofit.Builder()
        .baseUrl("https://randomuser.me/")
        .addConverterFactory(GsonConverterFactory.create())
        .build().create(Interface::class.java)
    val response = contact.getQuotes().awaitResponse()
    val data = response.body()!!
    Log.i("ctu: size", data.results.size.toString())
    withContext(Dispatchers.Main) {
        binding.RVB1906314.visibility = View.VISIBLE
        var adapter = Adapter(data.results)
        binding.RVB1906314.adapter = adapter
    }
}
}

```

BMI Calculatror

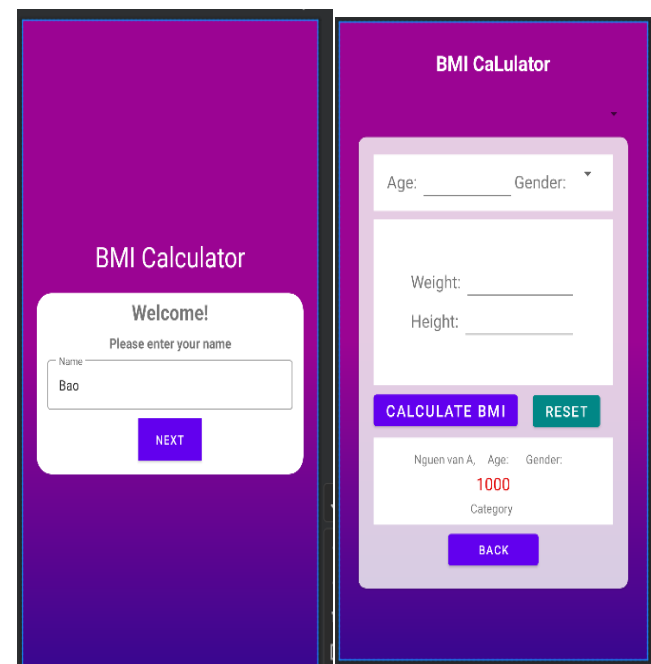
BMI_Activity

```
package com.example.b1906314_buichihai_ktra
```

```

import android.R
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.AdapterView
import android.widget.AdapterView.OnItemClickListener
import android.widget.ArrayAdapter
import android.widget.Toast
import com.example.b1906314_buichihai_ktra.databinding.ActivityBmiBinding
import com.example.b1906314_buichihai_ktra.databinding.ActivityMainBinding
import kotlin.math.roundToInt

```



```

class BMI_Activity : AppCompatActivity() {
    lateinit var binding: ActivityBmiBinding
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityBmiBinding.inflate(layoutInflater)
        setContentView(binding.root)

        addEvents()
    }

    private fun addEvents() {
        val options =
            arrayOf("Weight in Kg & Height in Cm", "Weight in Pounds (lb) & Height in Inch (in)")
        val adapter = ArrayAdapter(this, R.layout.simple_spinner_item, options)
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item)
        binding.SPB1906314.adapter = adapter

        binding.SPB1906314.onItemSelectedListener = object : AdapterView.OnItemSelectedListener {
            override fun onItemSelected(p0: AdapterView<*>?, p1: View?, position: Int, p3: Long) {
                val selected = options[position]
                Toast.makeText(this@BMI_Activity, "you selected $selected", Toast.LENGTH_LONG)
                    .show()
            }

            override fun onNothingSelected(p0: AdapterView<*>?) {

            }
        }
    }

    val options1 = arrayOf("Male", "Female", "Unknown")
    val adapter1 = ArrayAdapter(this, R.layout.simple_spinner_item, options1)
    adapter1.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item)
    binding.SpinnerGenderB1906314.adapter = adapter1

    binding.SpinnerGenderB1906314.onItemSelectedListener =
        object : AdapterView.OnItemSelectedListener {
            override fun onItemSelected(
                p0: AdapterView<*>?,
                p1: View?,
                position: Int,
                p3: Long
            ) {
                val selected = options1[position]
                Toast.makeText(this@BMI_Activity, "you selected $selected", Toast.LENGTH_LONG)
                    .show()
            }
        }

```

```

    }

    override fun onNothingSelected(p0: AdapterView<*>?) {

    }
}

// reset dữ liệu
binding.btnResetB1906314.setOnClickListener {

    binding.SPB1906314.setSelection(0)
    binding.SpinnerGenderB1906314.setSelection(0)

    binding.etAgeB1906314.setText("")
    binding.etWeightB1906314.setText("")
    binding.etHeightB1906314.setText("")
    // binding.tvNameB1906314.setText("")
    binding.AgeeB1906314.setText("")
    binding.tvGenderB1906314.setText("")
    binding.tvResulB1906314.setText("")
    binding.tvCategoryB1906314.setText("")

}

binding.btnCalculateBMIB1906314.setOnClickListener {

    val age = binding.etAgeB1906314.text.toString()
    val gender = binding.SpinnerGenderB1906314.selectedItem.toString()
    val position = binding.SPB1906314.selectedItemPosition.toString().toInt()
    val weight = binding.etWeightB1906314.text.toString().toInt()
    val height = binding.etHeightB1906314.text.toString().toInt()
    var kq = 0.2f

    binding.AgeeB1906314.setText(age)
    binding.tvGenderB1906314.setText(gender)

    if (position == 0) {
        var temp = height.toDouble() / 100
        kq = (weight / (temp * temp)).toFloat()
    } else {
        kq = 703 * (weight.toFloat()) / (height * height).toFloat()
    }

}

binding.tvResulB1906314.setText(kq.toString())

```

```

    if (kq < 16) {
        binding.tvCategoryB1906314.setText("Severe Thinness")
    } else if (kq > 16 && kq <= 17) {
        binding.tvCategoryB1906314.setText("Moderate Thinness")
    } else if (kq > 17 && kq <= 18.5) {
        binding.tvCategoryB1906314.setText("Mild Thinness")
    } else if (kq > 18.5 && kq <= 25) {
        binding.tvCategoryB1906314.setText("Normal")
    } else if (kq > 25 && kq <= 30) {
        binding.tvCategoryB1906314.setText("Overweight")
    } else if (kq > 30 && kq <= 35) {
        binding.tvCategoryB1906314.setText("Obese Class I")
    } else if (kq > 35 && kq <= 40) {
        binding.tvCategoryB1906314.setText("Obese Class II")
    } else if (kq > 40) {
        binding.tvCategoryB1906314.setText("Obese Class III")
    }
}

// Hiển thị tên
val username = intent.getStringExtra(Constants.USER_NAME)
binding.tvNameB1906314.text = username

// chờ về giao diện trước
binding.btnBackB1906314.setOnClickListener {
    startActivities(arrayOf(Intent(this, MainActivity::class.java)))
}
}
}

```

Main_Activity

```

package com.example.b1906314_buichihai_ktra

import android.R
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.AdapterView
import android.widget.AdapterView.OnItemClickListener
import android.widget.Toast
import com.example.b1906314_buichihai_ktra.databinding.ActivityMainBinding

class MainActivity : AppCompatActivity() {

```

```

lateinit var binding: ActivityMainBinding
override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)

    binding = ActivityMainBinding.inflate(layoutInflater)

    setContentView(binding.root)
    addEvents()

}

private fun addEvents() {
    binding.btnButtonB1906314.setOnClickListener {
        if(binding.editNameB1906314.text?.isEmpty() == true){
            Toast.makeText(this, "Please enter your name", Toast.LENGTH_LONG).show()
        }
        else{
            val intent = Intent(this, BMI_Activity::class.java)
            intent.putExtra("username", binding.editNameB1906314.text?.toString())
            startActivity(intent)
        }
    }
}
}

```

Constants

```

package com.example.b1906314_buichihai_ktra

object Constants {
    const val USER_NAME: String = "username"
}

```

Question

```

package com.example.b1906314_buichihai_ktra

class Question (
    val Weight: Float,
    val Height: Float
)

```

Data

Main_Activity

```
package com.example.b1906314_bui_chi_hai_ct274
```

```
import android.content.ContentValues
import android.database.Cursor
import android.database.sqlite.SQLiteDatabase
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import
```

```
com.example.b1906314_bui_chi_hai_ct274.databinding.ActivityMainBinding
```

```
class MainActivity : AppCompatActivity() {
    lateinit var binding: ActivityMainBinding
    lateinit var helper: MyDB
    lateinit var db: SQLiteDatabase
    lateinit var rs: Cursor
    var selectedId = 0

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityMainBinding.inflate(layoutInflater)
        setContentView(binding.root)

        helper = MyDB(applicationContext)
        db = helper.readableDatabase
        rs = db.rawQuery("select * from users_b1906314", null)
        if (rs.moveToFirst())
            updateData()
        binding.btnBackB1906314.setOnClickListener {
            if (!rs.moveToPrevious())
                rs.moveToFirst()
            updateData()
        }

        binding.btnNextB1906314.setOnClickListener {
            if (!rs.moveToNext())
                rs.moveToFirst()
            updateData()
        }
    }
}
```

My Contacts!

Họ Tên nhập họ tên

Email nhập email

Số điện thoại nhập số điện thoại

BACK NEXT ADD

SAVE DELETE

Total:

```

binding.btnDeleteB1906314.setOnClickListener {
    db.delete("users_b1906314","id=?", arrayOf(selectedId.toString()))
    reloadData()
}

binding.btnSaveB1906314.setOnClickListener {
    var cv = ContentValues()
    cv.put("fullname", binding.edtHoTenB1906314 .text.toString())
    cv.put("email", binding.edtEmailB1906314.text.toString())
    cv.put("phone", binding.edtSoDTB1906314.text.toString())
    db.update("users_b1906314", cv, "id=?", arrayOf(selectedId.toString()))
    reloadData()
}

binding.btnAddB1906314.setOnClickListener {
    val cv = ContentValues()
    cv.put("fullname", binding.edtHoTenB1906314.text.toString())
    cv.put("email", binding.edtEmailB1906314.text.toString())
    cv.put("phone", binding.edtSoDTB1906314.text.toString())
    db.insert("users_b1906314", null, cv)
    reloadData()
}
}

private fun reloadData() {
    rs = db.rawQuery("select * from users_b1906314", null)
    rs.moveToLast()
    updateData()
}

private fun updateData() {
    selectedId = rs.getString(0).toInt()
    binding.edtHoTenB1906314.setText(rs.getString(1))
    binding.edtEmailB1906314.setText(rs.getString(2))
    binding.edtSoDTB1906314.setText(rs.getString(3))
    binding.tvTotalB1906314.setText("Total: ${rs.count} users_b1906314")
}

override fun onDestroy() {
    super.onDestroy()
    rs.close()
}
}

```

MyDatabase

```
package com.example.b1906314_bui_chi_hai_ct274

import android.content.Context
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class MyDB (context: Context): SQLiteOpenHelper(context, "users_b1906314",null,1) {
    override fun onCreate(p0: SQLiteDatabase?) {
        p0?.execSQL("create table users_b1906314(id integer primary key autoincrement not null,
fullname text, email text, phone text)")
        p0?.execSQL("insert into users_b1906314(fullname,email, phone) values ('Bui chi
hai','hai@gmail.com', '0987645678')")
        p0?.execSQL("insert into users_b1906314(fullname,email, phone) values ('Hai
b1906314','b1906314@gmail.com', '0987564321')")
    }

    override fun onUpgrade(p0: SQLiteDatabase?, p1: Int, p2: Int) {

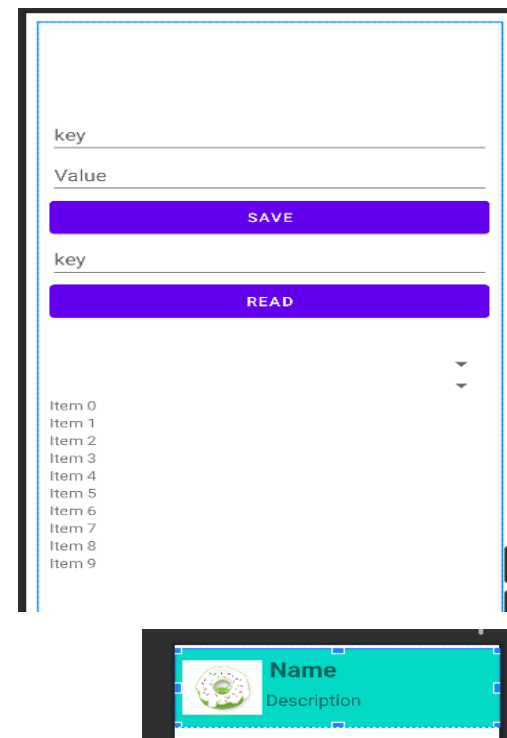
    }
}
```

Tuan 9

Main_Activity

```
package com.example.b1906314_bt_tuan_9

import android.content.Context
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.AdapterView
import android.widget.AdapterView.OnItemClickListener
import android.widget.ArrayAdapter
import android.widget.Toast
import androidx.datastore.core.DataStore
import androidx.datastore.preferences.core.Preferences
import androidx.datastore.preferences.core.edit
import androidx.datastore.preferences.core.stringPreferencesKey
import androidx.datastore.preferences.preferencesDataStore
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
```



```

import com.example.b1906314_bt_tuan_9.databinding.ActivityMainBinding
import kotlinx.coroutines.CoroutineScope
import kotlinx.coroutines.Dispatchers
import kotlinx.coroutines.flow.Flow
import kotlinx.coroutines.flow.first
import kotlinx.coroutines.flow.map
import kotlinx.coroutines.launch

val Context.dataStore: DataStore<Preferences> by preferencesDataStore(name = "settings")

class MainActivity : AppCompatActivity() {
    lateinit var binding: ActivityMainBinding
    val items = ArrayList<MyAndroid>()
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

        binding = ActivityMainBinding.inflate(layoutInflater)
        setContentView(binding.root)

        addEvents()
        binding.rvListItems.layoutManager = LinearLayoutManager(this, RecyclerView.VERTICAL, false)
        val adapter = MyAndroidRVAdapter(this, items)
        binding.rvListItems.adapter = adapter
    }

    private fun addEvents() {

        binding.myCustomSpinner.adapter = MyAndroidAdater(this, items)

        items.add(MyAndroid(1, R.drawable.cupcake, "Cupcake", "Cupcake"))
        items.add(MyAndroid(2, R.drawable.donut, "Donut", "Donut"))
        items.add(MyAndroid(3, R.drawable.eclairs, "Eclairs", "Eclairs"))
        items.add(MyAndroid(4, R.drawable.froyo, "Froyo", "Froyo"))
        items.add(MyAndroid(5, R.drawable.gingerbread, "Gingerbread", "Gingerbread"))
        items.add(MyAndroid(6, R.drawable.honeycomb, "Honeycomb", "Honeycomb"))
        items.add(MyAndroid(7, R.drawable.icecream, "Icecream", "Icecream"))
        items.add(MyAndroid(8, R.drawable.jellybean, "Jellybean", "Jellybean"))

        val options = arrayOf("Option 1", "Option 2", "Option 3", "Option 4")
        val adapter = ArrayAdapter(this, android.R.layout.simple_spinner_item, options)
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item)
        binding.mySpinner.adapter = adapter

        binding.mySpinner.onItemSelectedListener = object : AdapterView.OnItemSelectedListener{

```

```

        override fun onItemSelected(p0: AdapterView<*>?, p1: View?, position: Int, p3: Long) {
            val selected = options[position]
            Toast.makeText(this@MainActivity, "you selected $selected",
Toast.LENGTH_LONG).show()
        }

        override fun onNothingSelected(p0: AdapterView<*>?) {

        }
    }

    binding.rvListItems.layoutManager = LinearLayoutManager(this, RecyclerView.VERTICAL, false)
    val adapter1 = MyAndroidRVAdapter(this, items)
    binding.rvListItems.adapter = adapter1

    binding.btnSave.setOnClickListener {
        CoroutineScope(Dispatchers.IO).launch {
            savePrefs(binding.edtKey.text.toString(), binding.edtValue.text.toString())
        }
    }
    binding.btnRead.setOnClickListener {
        CoroutineScope(Dispatchers.IO).launch {
            binding.tvReadValue.text = readPrefs(binding.edtReadKey.text.toString())
        }
    }
}

suspend fun savePrefs(key: String, value: String) {
    val _key = stringPreferencesKey(key)
    datastore.edit { settings ->
        settings[_key] = value
    }
}

suspend fun readPrefs(key: String): String {
    val _key = stringPreferencesKey(key)
    val _value: Flow<String> = datastore.data.map { settings ->

        settings[_key] ?: "No value"
    }
    return _value.first().toString()
}
}

```

MyAndroid

```
package com.example.b1906314_bt_tuan_9
```

```
data class MyAndroid(  
    val id: Int,  
    val image: Int,  
    val name: String,  
    val description: String  
)
```

MyAndroidAdater

```
package com.example.b1906314_bt_tuan_9
```

```
import android.content.Context  
import android.view.LayoutInflater  
import android.view.View  
import android.view.ViewGroup  
import android.widget.BaseAdapter  
import android.widget.ImageView  
import android.widget.TextView
```

```
class MyAndroidAdater(val context: Context, val items: ArrayList<MyAndroid>) :  
    BaseAdapter()  
{  
    override fun getCount(): Int {  
        return items.size  
    }  
  
    override fun getItem(p0: Int): Any? {  
        return null  
    }  
  
    override fun getItemId(p0: Int): Long {  
        return 0  
    }  
  
    override fun getView(i: Int, p1: View?, p2: ViewGroup?): View {  
        val view = LayoutInflater.from(context).inflate(R.layout.spinner_item, null)  
        val icon = view.findViewById<ImageView>(R.id.iv_spinner)  
        val name = view.findViewById<TextView>(R.id.tv_spinner)  
        icon.setImageResource(items[i].image)  
        name.text = items[i].name  
        return view  
    }  
}
```

MyAndroidRVAdapter

```
package com.example.b1906314_bt_tuan_9
```

```
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 MyAndroidRVAdapter(val context: Context, val items: ArrayList<MyAndroid>) :
    RecyclerView.Adapter<MyAndroidRVAdapter.MyAndroidViewHolder>() {
```

```
    class MyAndroidViewHolder(val view: View): RecyclerView.ViewHolder(view){
        fun binding(item: MyAndroid){
            val ivImage = view.findViewById<ImageView>(R.id.rv_iv_image)
            val tvName = view.findViewById<TextView>(R.id.rv_tv_name)
            val tvDescription = view.findViewById<TextView>(R.id.rv_tv_dec)

            ivImage.setImageResource(item.image)
            tvName.text = item.name
            tvDescription.text = item.description
        }
    }
}
```

```
    override fun onCreateViewHolder(
        parent: ViewGroup,
        viewType: Int
    ): MyAndroidRVAdapter.MyAndroidViewHolder {
        val view = LayoutInflater.from(parent.context).inflate(R.layout.item, parent, false)
        return MyAndroidViewHolder(view)
    }
```

```
    override fun onBindViewHolder(holder: MyAndroidRVAdapter.MyAndroidViewHolder, position: Int)
    {
        holder.binding(items[position])
    }
```

```
    override fun getItemCount(): Int {
        return items.size
    }
}
```