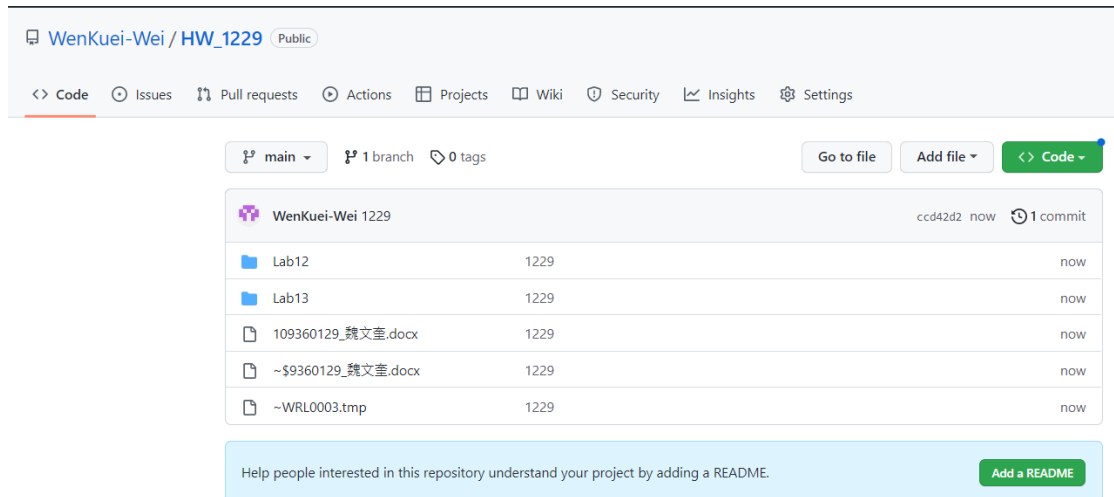


Kotlin HW0104:

1. GitHub 連結&截圖

https://github.com/WenKuei-Wei/HW_0104.git



2. 讀書會

組員：109360129_魏文奎、109360122_洪哲正、109360121_吳維澈

討論時間：111/12/29 – 19:26

地點：LINE 線上視訊聊天室



3. 心得報告

上次 Java 轉成 Kotlin 的作業，我發生了相當尷尬的問題，就是我筆電的

Android Studio 版本太舊了，導致 gradle 版本出大問題，上網查不到解決

辦法，於是就連絡助教了。助教最後跟我說是版本問題，也就是網站上給的

Android Studio 版本跟電腦教室不一樣，所以課堂 lab 才不能直接移植過

來，於是我就重新安裝花栗鼠版本後，才終於正常 QQ。

這次還好和夥伴一同分工合作，才順利的把兩個單元產出來！真是驚險

以下是兩種語法的比較：

```
package com.example.hwl020

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import android.widget.Button
import android.widget.EditText
import android.widget.RadioGroup
import android.widget.TextView
import android.widget.Toast

class MainActivity : AppCompatActivity() {
    @Override()
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        //連結UI元素
        var ed_name = findViewById<EditText>(R.id.gamer)
        //ed_name = findViewById(R.id.gamer);
        var tv_text = findViewById<TextView>(R.id.status)
        //tv_text = findViewById(R.id.status);
        var tv_name = findViewById<TextView>(R.id.name)
        var tv_winner = findViewById<TextView>(R.id.winner)
        var tv_mmora = findViewById<TextView>(R.id.our)
        var tv_cmora = findViewById<TextView>(R.id.their)
        var btn_scissor = findViewById<RadioButton>(R.id.Button1)
        var btn_stone = findViewById<RadioButton>(R.id.Button2)
        var btn_paper = findViewById<RadioButton>(R.id.Button3)
        var btn_mmora = findViewById<Button>(R.id.play)
        //宣告、連結完成

        //按下PLAY按鈕
        btn_mmora.setOnClickListener(object : View.OnClickListener {
            override fun onClick(p0: View?) {
                //判斷字串是否空白:
                if (ed_name.length() < 1) tv_text.text = "趕快輸入名字啊 !!! "
                else {
                    tv_name.text = String.format("名字%s", ed_name.text.toString())
                    if (btn_scissor.isChecked)
                        tv_mmora.text = "我方出拳\n剪刀"
                    else if (btn_stone.isChecked)
                        tv_mmora.text = "我方出拳\n石頭"
                    else if (btn_paper.isChecked)
                        tv_mmora.text = "我方出拳\n布"
                }
                //Random 電腦出的拳:
                //Random 電腦出的拳:
                val com = (Math.random() * 3).toInt()
                if (com == 0)
                    tv_cmora.text = "電腦出拳\n剪刀"
                else if (com == 1)
                    tv_cmora.text = "電腦出拳\n石頭"
                else if (com == 2)
                    tv_cmora.text = "電腦出拳\n布"
                //判斷結果:
                if (btn_paper.isChecked && com == 1 || btn_stone.isChecked && com == 0 || btn_scissor.isChecked && com == 2) {
                    tv_winner.text = "勝利者\n你贏了!!!"
                    tv_text.text = "你贏了!!!"
                }
                else if (btn_paper.isChecked && com == 2 || btn_stone.isChecked && com == 1 || btn_scissor.isChecked && com == 0) {
                    tv_winner.text = "勝利者\n你輸了!!!"
                    tv_text.text = "你輸了!!!"
                }
                else if (btn_paper.isChecked && com == 0 || btn_stone.isChecked && com == 2 || btn_scissor.isChecked && com == 1) {
                    tv_winner.text = "平手!!!"
                    tv_text.text = "平手!!!"
                }
            }
        })
    }
}
```

```
package com.example.lab2;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity2 extends AppCompatActivity {

    private EditText ed_name;
    private TextView tv_text, tv_name, tv_winner, tv_mmora, tv_cmora;
    private RadioButton btn_scissor, btn_stone, btn_paper;
    private Button btn_mmora;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        //連結UI元素
        ed_name = findViewById(R.id.gamer);
        tv_text = findViewById(R.id.status);
        tv_name = findViewById(R.id.name);
        tv_winner = findViewById(R.id.winner);
        tv_mmora = findViewById(R.id.our);
        tv_cmora = findViewById(R.id.their);
        btn_scissor = findViewById(R.id.Button1);
        btn_stone = findViewById(R.id.Button2);
        btn_paper = findViewById(R.id.Button3);
        btn_mmora = findViewById(R.id.play);
        btn_mmora.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getApplicationContext(), "test", Toast.LENGTH_SHORT).show();
                //判斷字串是否空白:
                if (ed_name.length() < 1)
                    tv_text.setText("趕快輸入名字啊 !!! ");
                else {
                    tv_name.setText(String.format("名字%s", ed_name.getText().toString()));
                    if (btn_scissor.isChecked())
                        tv_mmora.setText("我方出拳\n剪刀");
                    else if (btn_stone.isChecked())
                        tv_mmora.setText("我方出拳\n石頭");
                    else if (btn_paper.isChecked())
                        tv_mmora.setText("我方出拳\n布");
                }
                //Random 電腦出的拳:
                int com = (int)(Math.random()*3);
                if (com==0)
                    tv_cmora.setText("電腦出拳\n剪刀");
                else if (com==1)
                    tv_cmora.setText("電腦出拳\n石頭");
                else if (com==2)
                    tv_cmora.setText("電腦出拳\n布");
                //判斷結果:
                if (btn_paper.isChecked() && com == 1 || btn_stone.isChecked() && com == 0 || btn_scissor.isChecked() && com == 2) {
                    tv_winner.setText("勝利者\n你贏了!!!" + ed_name.getText().toString());
                    tv_text.setText("你贏了!!!" + ed_name.getText().toString());
                }
                else if (btn_paper.isChecked() && com == 2 || btn_stone.isChecked() && com == 1 || btn_scissor.isChecked() && com == 0) {
                    tv_winner.setText("勝利者\n你輸了!!!" + ed_name.getText().toString());
                    tv_text.setText("你輸了!!!" + ed_name.getText().toString());
                }
                else if (btn_paper.isChecked() && com == 0 || btn_stone.isChecked() && com == 2 || btn_scissor.isChecked() && com == 1) {
                    tv_winner.setText("平手!!!" + ed_name.getText().toString());
                    tv_text.setText("平手!!!" + ed_name.getText().toString());
                }
            }
        });
    }
}
```

下面舉例：(Java => kotlin)

a. 宣告(var 可變變數、val 則不可變)

Private ed_name; ed_name = findViewById(R.id.gamer);

➤ var ed_name = findViewById<EditText>(R.id.gamer)

b. 判斷按鈕

```
btn_mora.setOnClickListener(new View.OnClickListener() {.....
```

```
➤ btn_mora.setOnClickListener(object : View.OnClickListener{.....
```

c. 宣告並隨機產生亂數

```
int com = (int)(Math.random()*3);
```

```
➤ val com = (Math.random() * 3).toInt()
```

d. 調變數

```
tv_text.setText("趕快輸入名字啊 !!! ");
```

```
➤ tv_text.text = "趕快輸入名字啊 !!! "
```

.....

這次特別感謝助教支援我，他們真的都好強，謝謝你們！