

핸들러와 visible, invisible을 사용한 가위바위보 게임

Game1Activity생성



이렇게 레이아웃 구성

activity_game1.xml정의

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#000000"
    android:orientation="vertical" >
```

```
<LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:orientation="horizontal" >
```

```
<TextView
    android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:gravity="center"
        android:text="COM"
        android:textColor="#ff0000"
        android:textSize="30dp" />
```

```
<TextView
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:text="USER"
    android:textColor="#0000ff"
    android:textSize="30dp" />
```

```
</LinearLayout>
```

```
<LinearLayout
```

```
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:gravity="center"
    android:orientation="horizontal" >
```

```
<FrameLayout
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" >
```

```
<ImageView
```

```
    android:id="@+id/comR"
    android:layout_width="100dp"
    android:layout_height="100dp"
    android:src="@drawable/cr" />
```

```
<ImageView
```

```
    android:id="@+id/comS"  
    android:layout_width="100dp"  
    android:layout_height="100dp"  
    android:src="@drawable/cs"  
    android:visibility="invisible" />
```

```
<ImageView
```

```
    android:id="@+id/comP"  
    android:layout_width="100dp"  
    android:layout_height="100dp"  
    android:src="@drawable/cp"  
    android:visibility="invisible" />
```

```
</FrameLayout>
```

```
<TextView
```

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:text="VS"  
    android:textSize="30dp" />
```

```
<FrameLayout
```

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content" >
```

```
<ImageView
```

```
    android:id="@+id/userR"  
    android:layout_width="100dp"  
    android:layout_height="100dp"  
    android:src="@drawable/ur" />
```

```
<ImageView
```

```
    android:id="@+id/userS"  
    android:layout_width="100dp"
```

```
        android:layout_height="100dp"
        android:src="@drawable/us"
        android:visibility="invisible" />
```

```
    <ImageView
        android:id="@+id/userP"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:src="@drawable/up"
        android:visibility="invisible" />
```

```
</FrameLayout>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:gravity="center"
    android:orientation="horizontal" >
```

```
<Button
    android:id="@+id/btnS"
    android:layout_width="70dp"
    android:layout_height="50dp"
    android:text="scissors" />
```

```
<Button
    android:id="@+id/btnR"
    android:layout_width="70dp"
    android:layout_height="50dp"
    android:layout_marginLeft="20dp"
    android:text="rock" />
```

```
<Button
```

```
        android:id="@+id/btnP"  
        android:layout_width="70dp"  
        android:layout_height="50dp"  
        android:layout_marginLeft="20dp"  
        android:text="paper" />  
</LinearLayout>
```

```
<LinearLayout  
    android:layout_width="fill_parent"  
    android:layout_height="wrap_content"  
    android:gravity="center"  
    android:orientation="horizontal" >
```

```
<Button  
    android:id="@+id/btnStart"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_marginTop="7dp"  
    android:text="Game Start"  
    android:textColor="#0000ff" />
```

```
<Button  
    android:id="@+id/btnExit"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_marginTop="7dp"  
    android:text="Game Exit"  
    android:textColor="#0000ff" />
```

```
</LinearLayout>
```

```
</LinearLayout>
```

Game1Activity에 내용 추가

```
public class Game1Activity extends Activity {

    ImageView com[] = new ImageView[3];
    ImageView user[] = new ImageView[3];
    Button btnStart, btnExit;
    Button selectR, selectS, selectP;

    int count = 0; //그림을 움직이기 위한 변수
    int rot = 0; //그림을 움직이기 위한 변수
    int comRand = 0; //컴퓨터 난수발생

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_game);

        com[0] = (ImageView)findViewById(R.id.comR);
        com[1] = (ImageView)findViewById(R.id.comS);
        com[2] = (ImageView)findViewById(R.id.comP);

        user[0] = (ImageView)findViewById(R.id.userR);
        user[1] = (ImageView)findViewById(R.id.userS);
        user[2] = (ImageView)findViewById(R.id.userP);

        selectR = (Button) findViewById(R.id.btnR);
        selectS = (Button) findViewById(R.id.btnS);
        selectP = (Button) findViewById(R.id.btnP);

        btnStart = (Button)findViewById(R.id.btnStart);
        btnExit = (Button)findViewById(R.id.btnExit);

        //버튼 이벤트 감지자 등록
        btnStart.setOnClickListener(myBtn);
        btnExit.setOnClickListener(myBtn);

        //버튼 이벤트 감지자 등록
        selectR.setOnClickListener(selectButton);
        selectS.setOnClickListener(selectButton);
        selectP.setOnClickListener(selectButton);
    }
}
```

```
}
```

```
OnClickListener myBtn = new OnClickListener() {
```

```
    @Override
```

```
    public void onClick(View v) {
```

```
        switch (v.getId()) {
```

```
            case R.id.btnStart:
```

```
                //핸들러 호출
```

```
                mHandler.sendMessage(0);
```

```
                break;
```

```
            case R.id.btnExit:
```

```
                finish();
```

```
                break;
```

```
        }
```

```
    }
```

```
};
```

```
Handler mHandler = new Handler(){
```

```
    public void handleMessage(android.os.Message msg) {
```

```
        moving();
```

```
        mHandler.sendMessageDelayed(0, 50);
```

```
    }
```

```
};
```

```
//이미지를 움직이게 하는 함수
```

```
void moving() {
```

```
    count++;
```

```
    rot = count % 3;
```

```
    visible(rot, rot);
```

```
    if(count == 3)
```

```
        count = 0;
```

```
}
```

//유저와 컴퓨터 이미지의 숨김처리를 하는 메서드

```
void visible(int c, int u){

    com[c].setVisibility(View.VISIBLE);
    user[u].setVisibility(View.VISIBLE);

    for(int i = 0; i < com.length; i++){

        if(i != c)
            com[i].setVisibility(View.INVISIBLE);

        if(i != u)
            user[i].setVisibility(View.INVISIBLE);
    }
}
```

```
OnClickListener selectButton = new OnClickListener() {
```

```
    @Override
    public void onClick(View v) {
        comRand = new Random().nextInt(3);
        mHandler.removeMessages(0);
```

//유저의 결과

```
int uResult = 0;

    if(v == selectR)
        uResult = 0;
    else if(v == selectS)
        uResult = 1;
    else
        uResult = 2;
```

```
    visible(comRand, uResult);
```

```
}
```

```
};
```

```
@Override
```

```
public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.game, menu);
    return true;
}
```


}
}