## 📁 Contents of ./

📝 Java File: ./java/FinalGameFragment.java

package com.example.tp4\_ex2;  
  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.TextView;  
import androidx.fragment.app.Fragment;  
  
public class FinalGameFragment extends Fragment {  
  
 private static final String ARG\_WINNER\_NAME = "winner\_name";  
 private static final String ARG\_DATE = "date";  
  
 public static FinalGameFragment newInstance(String winnerName, String date) {  
 FinalGameFragment fragment = new FinalGameFragment();  
 Bundle args = new Bundle();  
 args.putString(ARG\_WINNER\_NAME, winnerName);  
 args.putString(ARG\_DATE, date);  
 fragment.setArguments(args);  
 return fragment;  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 View view = inflater.inflate(R.layout.fragment\_final\_game, container, false);  
  
 String winnerName = getArguments().getString(ARG\_WINNER\_NAME);  
 String date = getArguments().getString(ARG\_DATE);  
  
 TextView tvFinalGame = view.findViewById(R.id.tv\_final\_game);  
 tvFinalGame.setText(winnerName + " plays the final game on " + date);  
  
 return view;  
 }  
}

📝 Java File: ./java/MainActivity.java

package com.example.tp4\_ex2;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.fragment.app.Fragment;  
import androidx.fragment.app.FragmentTransaction;  
  
import android.os.Bundle;  
import android.widget.FrameLayout;  
  
public class MainActivity extends AppCompatActivity  
 implements MatchFragment.OnMatchResultListener, WinnerFragment.OnDateSubmittedListener {  
  
 private FrameLayout fragmentContainer;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
  
 fragmentContainer = findViewById(R.id.fragment\_container);  
  
 // Load the initial match fragment  
 loadFragment(new MatchFragment());  
 }  
  
 private void loadFragment(Fragment fragment) {  
 FragmentTransaction transaction = getSupportFragmentManager().beginTransaction();  
 transaction.replace(R.id.fragment\_container, fragment);  
 transaction.addToBackStack(null);  
 transaction.commit();  
 }  
  
 @Override  
 public void onMatchResult(String winnerName) {  
 // Called when a player wins both sets  
 loadFragment(WinnerFragment.newInstance(winnerName));  
 }  
  
 @Override  
 public void onDateSubmitted(String winnerName, String date) {  
 // Called when date is submitted  
 loadFragment(FinalGameFragment.newInstance(winnerName, date));  
 }  
}

📝 Java File: ./java/MatchFragment.java

package com.example.tp4\_ex2;  
  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
import androidx.fragment.app.Fragment;  
  
public class MatchFragment extends Fragment {  
  
 private EditText etPlayer1Name, etPlayer2Name;  
 private EditText etPlayer1Set1, etPlayer1Set2;  
 private EditText etPlayer2Set1, etPlayer2Set2;  
 private Button btnResult;  
  
 private OnMatchResultListener listener;  
  
 public interface OnMatchResultListener {  
 void onMatchResult(String winnerName);  
 }  
  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 if (getActivity() instanceof OnMatchResultListener) {  
 listener = (OnMatchResultListener) getActivity();  
 }  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 View view = inflater.inflate(R.layout.fragment\_match, container, false);  
  
 // Initialize all EditText fields  
 etPlayer1Name = view.findViewById(R.id.et\_player1\_name);  
 etPlayer2Name = view.findViewById(R.id.et\_player2\_name);  
 etPlayer1Set1 = view.findViewById(R.id.et\_player1\_set1);  
 etPlayer1Set2 = view.findViewById(R.id.et\_player1\_set2);  
 etPlayer2Set1 = view.findViewById(R.id.et\_player2\_set1);  
 etPlayer2Set2 = view.findViewById(R.id.et\_player2\_set2);  
 btnResult = view.findViewById(R.id.btn\_result);  
  
 btnResult.setOnClickListener(v -> checkResult());  
  
 return view;  
 }  
  
 private void checkResult() {  
 String player1Name = etPlayer1Name.getText().toString().trim();  
 String player2Name = etPlayer2Name.getText().toString().trim();  
  
 // Validate that all score fields are filled  
 if (etPlayer1Set1.getText().toString().trim().isEmpty() ||  
 etPlayer1Set2.getText().toString().trim().isEmpty() ||  
 etPlayer2Set1.getText().toString().trim().isEmpty() ||  
 etPlayer2Set2.getText().toString().trim().isEmpty() ||  
 player1Name.isEmpty() || player2Name.isEmpty()) {  
 Toast.makeText(getActivity(), "All fields are required", Toast.LENGTH\_SHORT).show();  
 return;  
 }  
  
 int player1Set1 = Integer.parseInt(etPlayer1Set1.getText().toString());  
 int player1Set2 = Integer.parseInt(etPlayer1Set2.getText().toString());  
 int player2Set1 = Integer.parseInt(etPlayer2Set1.getText().toString());  
 int player2Set2 = Integer.parseInt(etPlayer2Set2.getText().toString());  
  
 boolean player1WinsSet1 = player1Set1 > player2Set1;  
 boolean player1WinsSet2 = player1Set2 > player2Set2;  
  
 boolean player1DrawsSet1 = player1Set1 == player2Set1;  
 boolean player2DrawsSet1 = player1Set2 == player2Set2;  
  
 if (player1DrawsSet1 || player2DrawsSet1) {  
 Toast.makeText(getActivity(), "It's a draw in one of the sets!", Toast.LENGTH\_SHORT).show();  
 return;  
 }  
  
 if (player1WinsSet1 && player1WinsSet2) {  
 listener.onMatchResult(player1Name);  
 } else if (!player1WinsSet1 && !player1WinsSet2) {  
 listener.onMatchResult(player2Name);  
 } else {  
 Toast.makeText(getActivity(), "Only one Player must win", Toast.LENGTH\_SHORT).show();  
 }  
 }  
}

📝 Java File: ./java/WinnerFragment.java

package com.example.tp4\_ex2;  
  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
import androidx.fragment.app.Fragment;  
  
public class WinnerFragment extends Fragment {  
  
 private static final String ARG\_WINNER\_NAME = "winner\_name";  
  
 public static WinnerFragment newInstance(String winnerName) {  
 WinnerFragment fragment = new WinnerFragment();  
 Bundle args = new Bundle();  
 args.putString(ARG\_WINNER\_NAME, winnerName);  
 fragment.setArguments(args);  
 return fragment;  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 View view = inflater.inflate(R.layout.fragment\_winner, container, false);  
  
 String winnerName = getArguments().getString(ARG\_WINNER\_NAME);  
  
 TextView tvWinner = view.findViewById(R.id.tv\_winner);  
 EditText etDate = view.findViewById(R.id.et\_date);  
 Button btnOk = view.findViewById(R.id.btn\_ok);  
  
 tvWinner.setText("The winner is " + winnerName);  
  
 btnOk.setOnClickListener(v -> {  
 String date = etDate.getText().toString().trim();  
 if (date.isEmpty()) {  
 etDate.setError("Please enter a date");  
 return;  
 }  
  
 if (getActivity() instanceof OnDateSubmittedListener) {  
 ((OnDateSubmittedListener) getActivity()).onDateSubmitted(winnerName, date);  
 }  
 });  
  
 return view;  
 }  
  
 public interface OnDateSubmittedListener {  
 void onDateSubmitted(String winnerName, String date);  
 }  
}

📋 XML File: ./xml/activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools" android:id="@+id/fragment\_container" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".RolandGarrosActivity" />

📋 XML File: ./xml/fragment\_final\_game.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="match\_parent"  
 android:orientation="vertical"  
 android:padding="16dp">  
 <TextView android:id="@+id/tv\_final\_game"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="18sp" />  
</LinearLayout>

📋 XML File: ./xml/fragment\_match.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="match\_parent"  
 android:orientation="vertical"  
 android:padding="16dp">  
 <TableLayout android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content">  
 <TableRow>  
 <TextView android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:text="Player Name" />  
 <TextView android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:text="Set 1" />  
 <TextView android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:text="Set 2" />  
 </TableRow>  
 <TableRow>  
 <EditText android:id="@+id/et\_player1\_name"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:hint="Player 1" />  
 <EditText android:id="@+id/et\_player1\_set1"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:inputType="number" />  
 <EditText android:id="@+id/et\_player1\_set2"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:inputType="number" />  
 </TableRow>  
 <TableRow>  
 <EditText android:id="@+id/et\_player2\_name"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:hint="Player 2" />  
 <EditText android:id="@+id/et\_player2\_set1"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:inputType="number" />  
 <EditText android:id="@+id/et\_player2\_set2"  
 android:layout\_width="0dp"  
 android:layout\_weight="1"  
 android:inputType="number" />  
 </TableRow>  
 </TableLayout>  
 <Button android:id="@+id/btn\_result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="16dp"  
 android:text="RESULT" />  
</LinearLayout>

📋 XML File: ./xml/fragment\_winner.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="match\_parent"  
 android:orientation="vertical"  
 android:padding="16dp">  
 <TextView android:id="@+id/tv\_winner"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="18sp" />  
 <TextView android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="The Date of the final game is:"  
 android:layout\_marginTop="16dp" />  
 <EditText android:id="@+id/et\_date"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="8dp"  
 android:hint="Enter date" />  
 <Button android:id="@+id/btn\_ok"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="16dp"  
 android:text="Ok" />  
</LinearLayout>