

java\tp3ex2.java

```
1 public class MainActivity extends AppCompatActivity implements Fragment1.OnNameSendListener {
2     TextView textView;
3     @Override
4     protected void onCreate(Bundle savedInstanceState) {
5         super.onCreate(savedInstanceState);
6         setContentView(R.layout.activity_main);
7         textView = findViewById(R.id.textView);
8     }
9     // This is triggered from Fragment1
10    @Override
11    public void onNameSend(String name) {
12        textView.setText("Your name is " + name);
13    }
14 }
15
16 <?xml version="1.0" encoding="utf-8"?>
17 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
18     android:layout_width="match_parent" android:layout_height="match_parent"
19     android:orientation="vertical" android:padding="20dp">
20     <TextView android:id="@+id/textView" android:text="Enter your name"
21         android:layout_width="wrap_content" android:layout_height="wrap_content" android:textSize="20sp"
22         android:layout_marginBottom="20dp"/>
23     <fragment android:id="@+id/fragment1" android:name="com.example.tp3_ex2.Fragment1"
24         android:layout_width="match_parent" android:layout_height="wrap_content" />
25 </LinearLayout>
```

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23 public class Fragment1 extends Fragment {
24     EditText editText;
25     Button showButton;
26     OnNameSendListener listener;
27     public interface OnNameSendListener {
28         void onNameSend(String name);
29     }
30     @Override
31     public void onAttach(@NonNull Context context) {
32         super.onAttach(context);
33         if (context instanceof OnNameSendListener) {
34             listener = (OnNameSendListener) context;
35         } else {
36             throw new RuntimeException(context.toString() + " must implement OnNameSendListener");
37         }
38     }
39     @Override
40     public View onCreateView(LayoutInflater inflater, ViewGroup container,
41                             Bundle savedInstanceState) {
42         View view = inflater.inflate(R.layout.fragment1, container, false);
43         editText = view.findViewById(R.id.editTextName);
44         showButton = view.findViewById(R.id.buttonShow);
45         showButton.setOnClickListener(v -> {
46             String name = editText.getText().toString().trim();
47             if(name.isEmpty()){
48                 Toast.makeText(getActivity(), "Please enter a name", Toast.LENGTH_SHORT).show();
49                 return;
50             }

```

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51         listener.onNameSend(name);
52     });
53     return view;
54 }
55 }
56
57 <?xml version="1.0" encoding="utf-8"?>
58 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
59     android:layout_width="match_parent" android:layout_height="wrap_content"
60     android:orientation="vertical" android:padding="16dp">
61     <EditText android:id="@+id/editTextName" android:layout_width="match_parent"
62     android:layout_height="wrap_content" android:hint="Enter name" />
63     <Button android:id="@+id/buttonShow" android:layout_width="wrap_content"
64     android:layout_height="wrap_content" android:text="Show" android:layout_marginTop="10dp"/>
65 </LinearLayout>
```