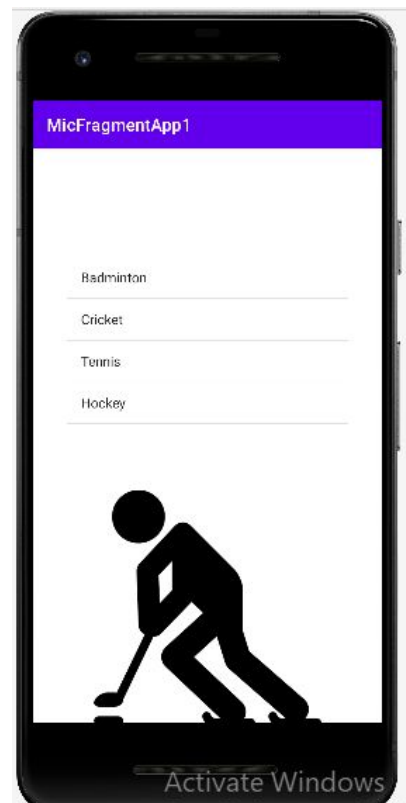
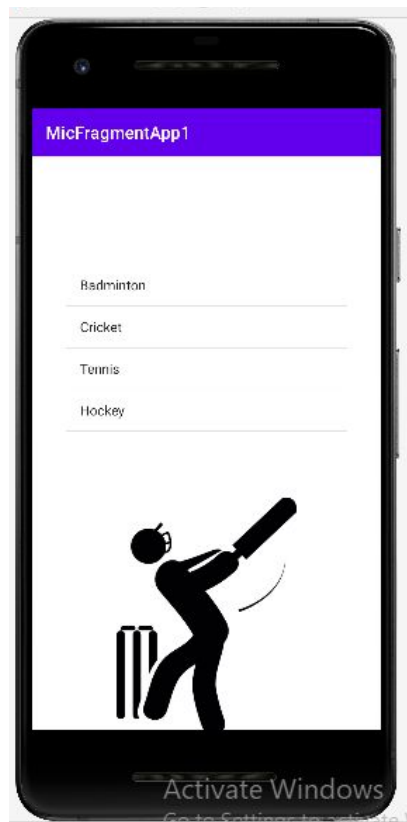
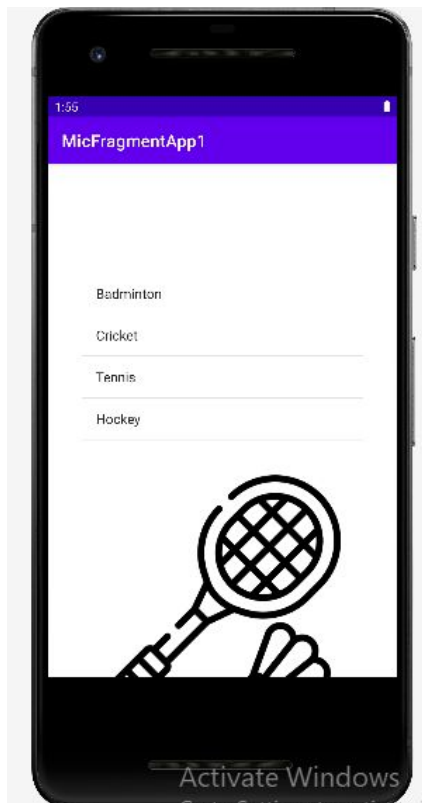
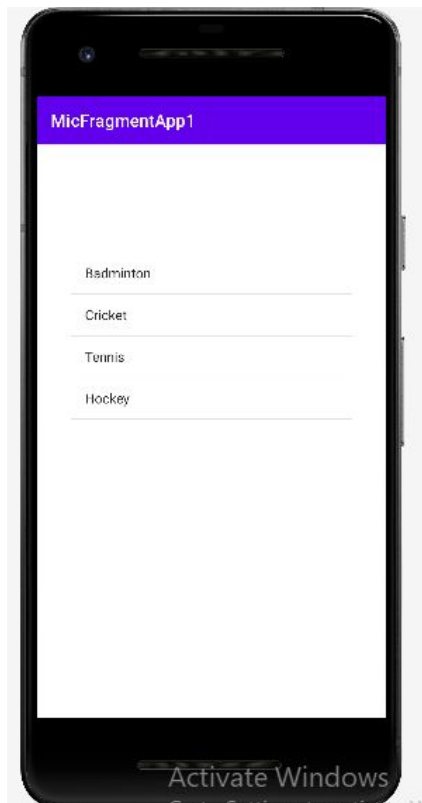
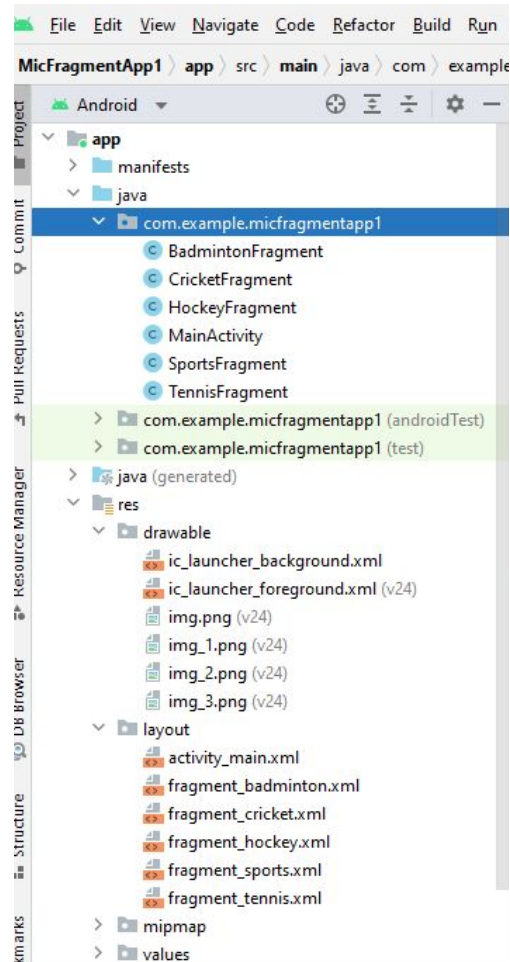


Mobile application to demonstrate Dynamic Fragment

Experiment - 6



File Structure in the app



vity_main.xml × MainActivity.java × SportsFragment.java × BadmintonFragment.java × CricketFragment.java × fragment_badminton.xml × frag

```
public class MainActivity extends AppCompatActivity
{
    FragmentManager fmgr;
    FragmentTransaction ft;
    SportsFragment csef;
    ListView lv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        try {
            csef = new SportsFragment();
            fmgr = getSupportFragmentManager();
            fmgr.setFragmentManager(requestKey: "requestKey", lifecycleOwner: this, new FragmentResultListener() {
                @Override
                public void onFragmentResult(@NonNull String requestKey, @NonNull Bundle result)
                {
                    ft=fmgr.beginTransaction();
```

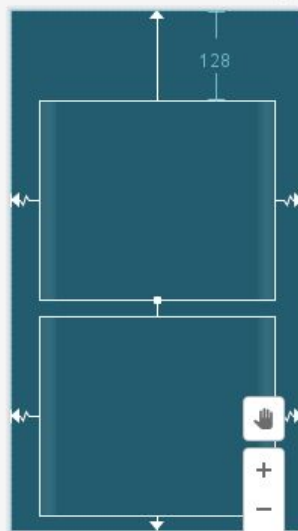
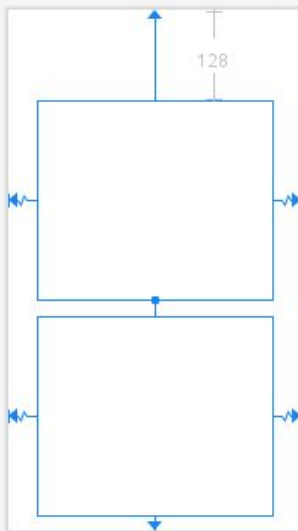
Main Activity

```
ft=fmgr.beginTransaction();
int option=result.getInt( key: "SelectedItemIndex");
switch(option)
{
    case 0:ft.replace(R.id.ll_bottom,new BadmintonFragment());
           break;
    case 1:ft.replace(R.id.ll_bottom,new CricketFragment());
           break;
    case 2:ft.replace(R.id.ll_bottom,new TennisFragment());
           break;
    case 3:ft.replace(R.id.ll_bottom,new HockeyFragment());
           break;
    default:ft.replace(R.id.ll_bottom,new HockeyFragment());
}
ft.commit();
});
ft = fmgr.beginTransaction();
ft.add(R.id.ll_top,csef);ft.commit();
}
catch (Exception ex)
{
    Log.d( tag: "INITIAL ERROR:->", msg: "onCreate: "+ex.getMessage());
    Toast.makeText( context: this, ex.getMessage(), Toast.LENGTH_SHORT).show();
}
}
```

```
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:id="@+id/main_activity_layout">
    <LinearLayout
        android:id="@+id/ll_top"
        android:layout_width="331dp"
        android:layout_height="279dp"
        android:layout_marginTop="128dp"
        android:orientation="horizontal"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"></LinearLayout>
    <LinearLayout
        android:id="@+id/ll_bottom" android:layout_width="331dp"
        android:layout_height="279dp" android:orientation="horizontal"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/ll_top"></LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```



activity_main.xml



Component Tree

Activate Windows

Sports Fragment - display a list in top Linear Layout of activity

The screenshot displays the Android Studio IDE with the `SportsFragment.java` file open. The left pane shows the XML layout code, and the right pane shows the visual design of the fragment.

XML Layout Code:

```
<?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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".SportsFragment">

    <!-- TODO: Update blank fragment layout -->

    <ListView
        android:id="@+id/lv_fragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:entries="@array/Sports" />
</FrameLayout>
```

Visual Design:

The design view shows a vertical list of 11 items, each with a title and a subtitle:

- Item 1
Sub Item 1
- Item 2
Sub Item 2
- Item 3
Sub Item 3
- Item 4
Sub Item 4
- Item 5
Sub Item 5
- Item 6
Sub Item 5
- Item 7
Sub Item 7
- Item 8
Sub Item 3
- Item 9
Sub Item 9
- Item 10
Sub Item 10
- Item 11
Sub Item 11

The fragment is represented by a blue rectangle labeled `lv_fragment` on the right side of the design view.

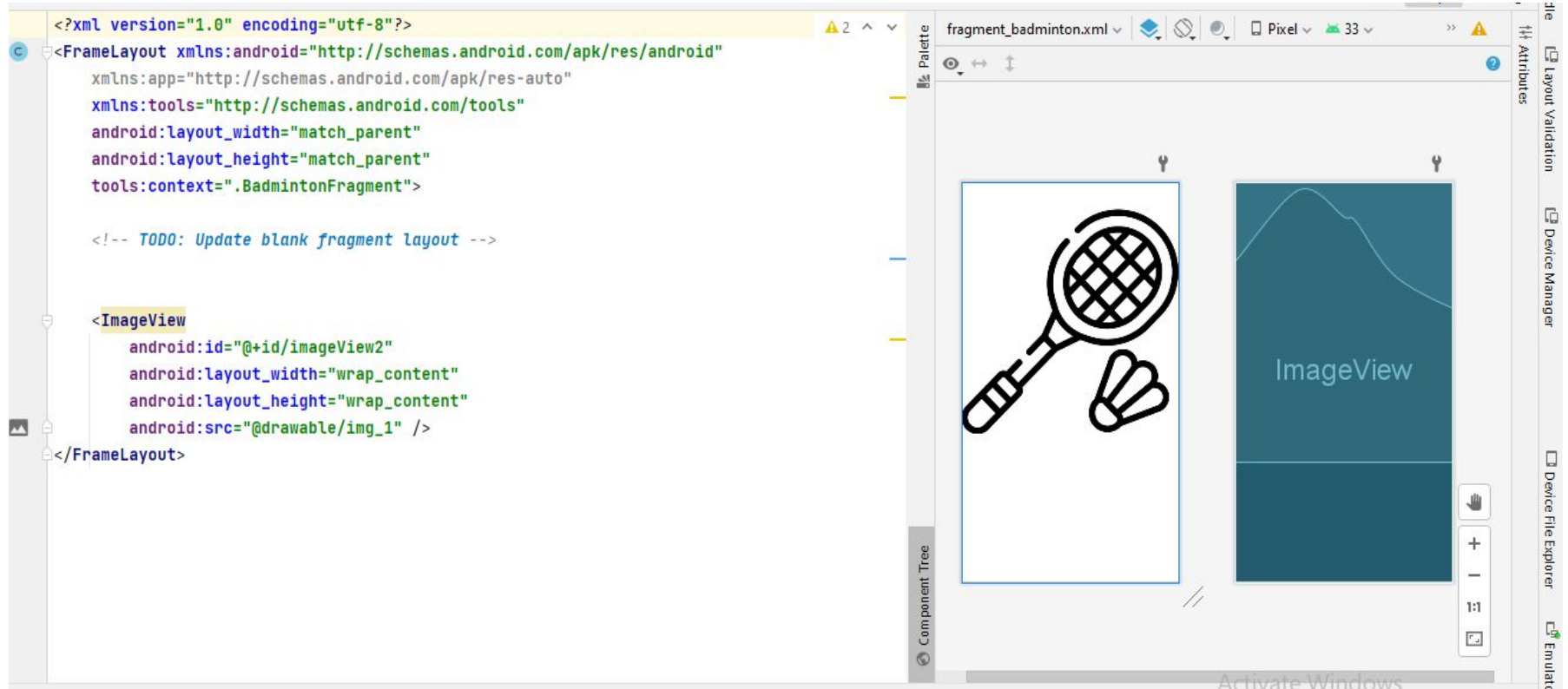
```
public class SportsFragment extends Fragment implements AdapterView.OnItemClickListener
{
    ListView lv;
    public SportsFragment() { }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_sports, container, attachToRoot: false);
    }

    @Override
    public void onViewCreated(@NonNull View view, @Nullable Bundle savedInstanceState)
    {
        lv=(ListView)view.findViewById(R.id.lv_fragment);
        lv.setOnItemClickListener(this);
        super.onViewCreated(view, savedInstanceState);
    }

    @Override
    public void onItemClick(AdapterView<?> adapterView, View view, int i, long l)
    {
        try {
            Toast.makeText(getContext(),lv.getItemAtPosition(i).toString() , Toast.LENGTH_SHORT).show();
            Bundle bun=new Bundle();
            bun.putInt("SelectedItemIndex",i);
            getParentFragmentManager().setFragmentResult
                ( requestKey: "requestKey",bun);
        }
        catch(Exception ex)
        {
            Log.d( tag: "MIC EXCEPTION", msg: "onItemClick: "+ex.getMessage());
            Toast.makeText(getContext(), ex.getMessage(), Toast.LENGTH_SHORT).show();
        }
    }
}
```

Badminton Fragment - Design - XML file



```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".BadmintonFragment">

    <!-- TODO: Update blank fragment layout -->

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/img_1" />
</FrameLayout>
```

The design preview on the right shows a badminton racket icon on the left and a large blue area labeled "ImageView" on the right. The interface includes a Palette, Component Tree, and various toolbars.

```
ty_main.xml × MainActivity.java × SportsFragment.java × BadmintonFragment.java × CricketFragment.java × fra

package com.example.micfragmentapp1;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;

public class BadmintonFragment extends Fragment {

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_badminton, container, attachToRoot: false);
    }
}
```

Just like Badminton Fragment, Prepare remaining fragments

Ex:- cricket, Tennis & Hockey