MOBILE APPLICATION DEVELOPMENT

Lab 7

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BSCS-VII

Contents

Activity 1 – Adding fragments statically

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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">


    <fragment
```

```xml
        android:id="@+id/fragment"
        android:name="com.example.fragement_activity.fragement1"
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_weight="1" />

    <fragment
        android:id="@+id/fragment2"
        android:name="com.example.fragement_activity.fragement2"
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_weight="1" />
</LinearLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".fragement1">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Fragement 1 "
        android:textSize="40sp"
        android:textColor="@color/design_default_color_primary"
        />

</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".fragement2">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Fragement 2 "
```

```xml
        android:textSize="40sp"
        android:textColor="@color/design_default_color_primary"
        />

</FrameLayout>
```

Logic Code

```java
package com.example.fragement_activity;

import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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

        FragmentManager manager=getSupportFragmentManager();
        FragmentTransaction transaction=manager.beginTransaction();

        transaction.add(R.id.fragment,new fragement1());
        transaction.add(R.id.fragment2,new fragement2());


        transaction.commit();



    }
}
```

```java
package com.example.fragement_activity;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
```

```java
import android.view.View;
import android.view.ViewGroup;

public class fragement1 extends Fragment {

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        return inflater.inflate(R.layout.fragment_fragement1, container, false);
    }
}
```

```java
package com.example.fragement_activity;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

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

public class fragement2 extends Fragment {

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_fragement2, container, false);
    }
}
```
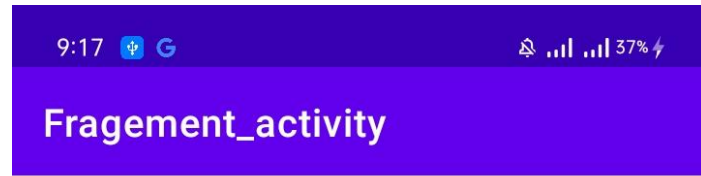
Activity 2: Dynamic Fragements

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="horizontal"
    android:layout_weight="1"
    >

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <Button
            android:id="@+id/button1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Battery"
            android:onClick="show"

            />


        <Button
            android:id="@+id/button2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="location"
            android:onClick="show"

            />

        <Button
            android:id="@+id/button3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Setting"
            android:onClick="show"
            />
```

```xml
        <Button
            android:id="@+id/button4"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Notification"
            android:onClick="show"

            />

        <Button
            android:id="@+id/button5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Alarm"
            android:onClick="show"
            />

    </LinearLayout>

    <FrameLayout
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_weight="1"
        android:id="@+id/frag"
        >
    </FrameLayout>
</LinearLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".alarm">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="Alarm Fragement Loaded"
        android:textSize="20sp"
        android:textColor="@color/teal_700"
        />
</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Battery">


    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="Battery Fragement Loaded"
        android:textSize="20sp"
        android:textColor="@color/teal_700"
        />
</FrameLayout>
<?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=".location">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="Location Fragement Loaded"
        android:textSize="20sp"
        android:textColor="@color/teal_700"
        />
</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".notification">


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

```xml
        android:layout_height="match_parent"
        android:text="Notification Fragement Loaded"
        android:textSize="20sp"
        android:textColor="@color/teal_700"
        />
</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".setting">

    <!-- TODO: Update blank fragment layout -->
    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="Settings Fragement Load"
        android:textSize="20sp"
        android:textColor="@color/teal_700"
        />

</FrameLayout>
```

Logic Code

```java
package com.example.dynamic_fragements;

import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    FragmentTransaction transaction;
    FragmentManager manager;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
```

```java
        manager=getSupportFragmentManager();
    transaction=manager.beginTransaction();




}
public void show(View view){
    Button btn = (Button)view;
    if(btn.getText().toString().equalsIgnoreCase("Setting"))
    {
        transaction=manager.beginTransaction();
        transaction.replace(R.id.frag,new setting());
        transaction.commit();


    }
  else if(btn.getText().toString().equalsIgnoreCase("Notification"))
   {
        transaction=manager.beginTransaction();

        transaction.replace(R.id.frag,new notification());
        transaction.commit();


    }
    if(btn.getText().toString().equalsIgnoreCase("Alarm"))
    {
        transaction=manager.beginTransaction();
        transaction.replace(R.id.frag,new alarm());
        transaction.commit();
    }
    if(btn.getText().toString().equalsIgnoreCase("Location"))
    {
        transaction=manager.beginTransaction();
        transaction.replace(R.id.frag,new location());
        transaction.commit();


    }
    if(btn.getText().toString().equalsIgnoreCase("Battery"))
    {
        transaction=manager.beginTransaction();

        transaction.replace(R.id.frag,new Battery());
        transaction.commit();
```

```
        }


    }

}
```

```java
package com.example.dynamic_fragements;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

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

/**
 * A simple {@link Fragment} subclass.
 * Use the {@link notification#newInstance} factory method to
 * create an instance of this fragment.
 */
public class notification extends Fragment {

    // TODO: Rename parameter arguments, choose names that match
    // the fragment initialization parameters, e.g. ARG_ITEM_NUMBER
    private static final String ARG_PARAM1 = "param1";
    private static final String ARG_PARAM2 = "param2";

    // TODO: Rename and change types of parameters
    private String mParam1;
    private String mParam2;

    public notification() {
        // Required empty public constructor
    }

    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     *
     * @param param1 Parameter 1.
     * @param param2 Parameter 2.
```

```java
     * @return A new instance of fragment notification.
     */
    // TODO: Rename and change types and number of parameters
    public static notification newInstance(String param1, String param2) {
        notification fragment = new notification();
        Bundle args = new Bundle();
        args.putString(ARG_PARAM1, param1);
        args.putString(ARG_PARAM2, param2);
        fragment.setArguments(args);
        return fragment;
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        if (getArguments() != null) {
            mParam1 = getArguments().getString(ARG_PARAM1);
            mParam2 = getArguments().getString(ARG_PARAM2);
        }
    }

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

```java
package com.example.dynamic_fragements;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
public class setting extends Fragment {

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
    }

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

```
package com.example.dynamic_fragements;

import android.os.Bundle;

import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;

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

public class location extends Fragment {
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

    }

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

    @Override
    public void onActivityCreated(@Nullable Bundle savedInstanceState) {
        super.onActivityCreated(savedInstanceState);
    }

}
```

Output

Dynamic_fragements

BATTERY   Notification Fragement
                 Loaded

LOCATION

SETTING
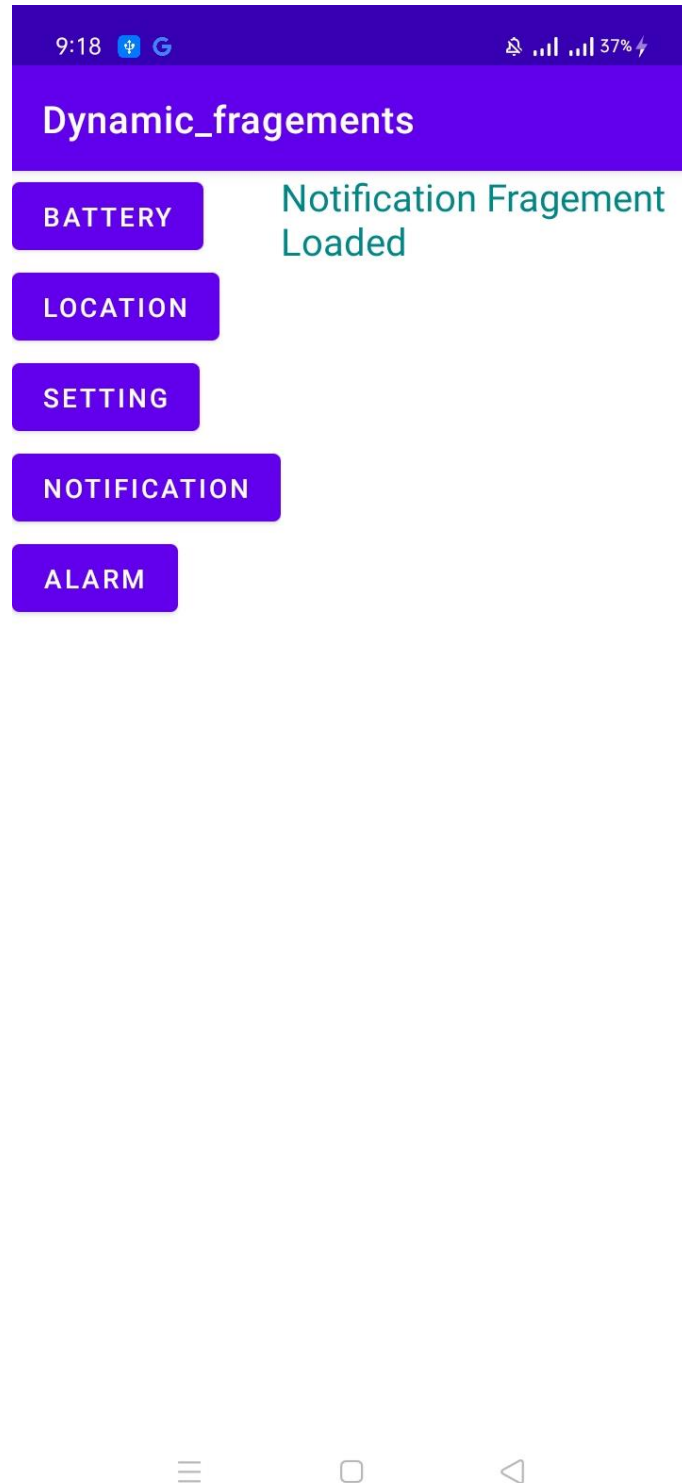
NOTIFICATION

ALARM

Dynamic_fragements

BATTERY

LOCATION

SETTING

NOTIFICATION

ALARM

Location Fragement
Loaded

Activity 3: Friends App (Fragments)

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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">
<FrameLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/fragement"
    ></FrameLayout>

</LinearLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".details">
    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:scrollbarSize="25sp"
        >


        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical"
            tools:context=".Details"
            android:padding="10dp"
            >

            <RatingBar
                android:id="@+id/rating"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
```

```xml
                android:numStars="5" />

            <ImageView
                android:id="@+id/imageView"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                tools:srcCompat="@tools:sample/avatars" />

            <TextView
                android:id="@+id/txt"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center"
                android:text="TextView"
                android:textSize="24sp" />


        </LinearLayout>
    </ScrollView>



</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    tools:context=".main">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">


        <TextView
            android:id="@+id/textView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:layout_weight="0"
            android:text="Friends"
```

```xml
            android:textSize="26sp"
            android:textStyle="bold" />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:text="Click on an eligible single user to learn more and see
if you are compatible  for a date!"
            android:textSize="18sp" />

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:orientation="horizontal">

            <LinearLayout
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:layout_marginStart="20dp"
                android:layout_marginLeft="20dp"
                android:layout_weight="1"
                android:gravity="center"
                android:orientation="vertical">

                <ImageButton
                    android:id="@+id/ImageButton"
                    android:layout_width="wrap_content"
                    android:layout_height="wrap_content"
                    app:srcCompat="@drawable/chandlersmall"
                    android:tag="1"

                    />

                <TextView
                    android:id="@+id/textView3"
                    android:layout_width="wrap_content"
                    android:layout_height="wrap_content"
                    android:text="Chandler" />

                <ImageButton
                    android:id="@+id/ImageButton3"
                    android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"
        app:srcCompat="@drawable/monicasmall"
        android:tag="2"


        />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Monica" />

    <ImageButton
        android:id="@+id/ImageButton4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:srcCompat="@drawable/rachelsmall"
        android:tag="3"


        />

    <TextView
        android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Rachel" />

</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_marginEnd="20dp"
    android:layout_marginRight="20dp"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <ImageButton
        android:id="@+id/ImageButton2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:tag="4"
        app:srcCompat="@drawable/joeysmall"
```

```xml
                    />

            <TextView
                android:id="@+id/textView6"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Joey" />

            <ImageButton
                android:id="@+id/ImageButton5"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:tag="5"
                app:srcCompat="@drawable/phoebesmall"

                />

            <TextView
                android:id="@+id/textView7"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Phoebe" />

            <ImageButton
                android:id="@+id/ImageButton6"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:tag="6"
                app:srcCompat="@drawable/rosssmall"
                android:onClick="click"
                />

            <TextView
                android:id="@+id/textView8"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Ross" />
        </LinearLayout>
    </LinearLayout>
</LinearLayout>

</FrameLayout>
```

Logic Code

```java
package com.example.friends_app_fragements;

import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {
    FragmentTransaction transaction;
    FragmentManager manager;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        manager=getSupportFragmentManager();
        transaction=manager.beginTransaction();
        transaction.add(R.id.fragement,new main());

        transaction.commit();

    }

}
```

```java
package com.example.friends_app_fragements;

import android.os.Bundle;

import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.util.Log;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.ImageButton;
import android.widget.Toast;

public class main extends Fragment implements  View.OnClickListener{
```

```java
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                            Bundle savedInstanceState) {
    Bundle bundle=getArguments();
    if(bundle!=null) {

        Toast.makeText(getActivity(), "You have rated" + bundle.getFloat("rating"
), Toast.LENGTH_LONG).show();

    }
    //Log.i("ra",bundle.getFloat("rating")+"");
        return inflater.inflate(R.layout.fragment_main, container, false);
    }
    @Override
    public void onActivityCreated(@Nullable Bundle savedInstanceState) {
        super.onActivityCreated(savedInstanceState);
        ImageButton btn=getActivity().findViewById(R.id.ImageButton);
        btn.setOnClickListener(this);
        btn=getActivity().findViewById(R.id.ImageButton2);
        btn.setOnClickListener(this);
        btn=getActivity().findViewById(R.id.ImageButton3);
        btn.setOnClickListener(this);
        btn=getActivity().findViewById(R.id.ImageButton4);
        btn.setOnClickListener(this);
        btn=getActivity().findViewById(R.id.ImageButton5);
        btn.setOnClickListener(this);
        btn=getActivity().findViewById(R.id.ImageButton6);
        btn.setOnClickListener(this);

    }

    @Override
    public void onClick(View v) {
        ImageButton btn=(ImageButton)v;
        details details_frag=new details();
        Bundle bundle=new Bundle();
        bundle.putString("tag",btn.getTag().toString());
        details_frag.setArguments(bundle);
```

```java
        getFragmentManager().beginTransaction().replace(R.id.fragement, details_f
rag).commit();


    }



}
```

```java
package com.example.friends_app_fragements;

import android.content.Context;
import android.content.SharedPreferences;
import android.os.Bundle;

import androidx.activity.OnBackPressedCallback;
import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.util.Log;
import android.view.KeyEvent;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.RatingBar;
import android.widget.TextView;

public class details extends Fragment {
    String name;
    float Rating;
    TextView txt;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);



    }

    @Override
```

```java
    public void onActivityCreated(@Nullable Bundle savedInstanceState) {
        super.onActivityCreated(savedInstanceState);



    }


    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        ViewGroup root=(ViewGroup)inflater.inflate(R.layout.fragment_details,cont
ainer,false);
        String tag=getArguments().getString("tag");
        ImageView img= root.findViewById(R.id.imageView);

        txt=root.findViewById(R.id.txt);
        RatingBar ratingBar=root.findViewById(R.id.rating);
        String[] str=root.getResources().getStringArray(R.array.friend_details);
        SharedPreferences prefs=getActivity().getSharedPreferences("user", getAct
ivity().MODE_PRIVATE);
        Rating=0;

        if(tag.equals("1"))
        {

            img.setImageResource(R.drawable.chandler);
            txt.setText(str[0]);
            name="chandler";

        }

        else if(tag.equals("2"))
        {
            img.setImageResource(R.drawable.monica);
            txt.setText(str[2]);
            name="monica";
        }

        else if(tag.equals("3"))
        {
            img.setImageResource(R.drawable.rachel);
            txt.setText(str[4]);
            name="rachel";
        }
```

```java
        else if(tag.equals("4"))
        {
            img.setImageResource(R.drawable.joey);
            txt.setText(str[1]);
            name="joey";
        }

        else if(tag.equals("5"))
        {
            img.setImageResource(R.drawable.phoebe);
            txt.setText(str[3]);
            name="phoebe";
        }

        else if(tag.equals("6"))
        {
            img.setImageResource(R.drawable.ross);
            txt.setText(str[5]);
            name="ross";
        }
        String d=prefs.getString(name,"none");
        if(!d.equals("none")) {
            ratingBar.setRating(Float.parseFloat(d));
            Rating=Float.parseFloat(d);
        }

        ratingBar.setOnRatingBarChangeListener(new RatingBar.OnRatingBarChangeLis
tener() {

            @Override
            public void onRatingChanged(RatingBar ratingBar, float rating, boolea
n fromUser) {

                SharedPreferences prefs=getActivity().getSharedPreferences("user"
,getActivity().MODE_PRIVATE);
                SharedPreferences.Editor editor=prefs.edit();
                editor.putString(name,""+rating);
                Rating=rating;
                editor.commit();


            }
        });
```

```java
        root.setFocusableInTouchMode(true);
        root.requestFocus();
        root.setOnKeyListener(new View.OnKeyListener() {

            @Override
            public boolean onKey(View v, int keyCode, KeyEvent event) {
                if (keyCode == KeyEvent.KEYCODE_BACK && event.getAction() == KeyEvent.ACTION_UP) {

                    main main_frag=new main();
                    Bundle bundle=new Bundle();
                    bundle.putFloat("rating",Rating);
                    main_frag.setArguments(bundle);
                    getFragmentManager().beginTransaction().replace(R.id.fragement, main_frag).commit();
                    return true;
                }
                return  false;
                }
        });

        return root;
    }

}
```
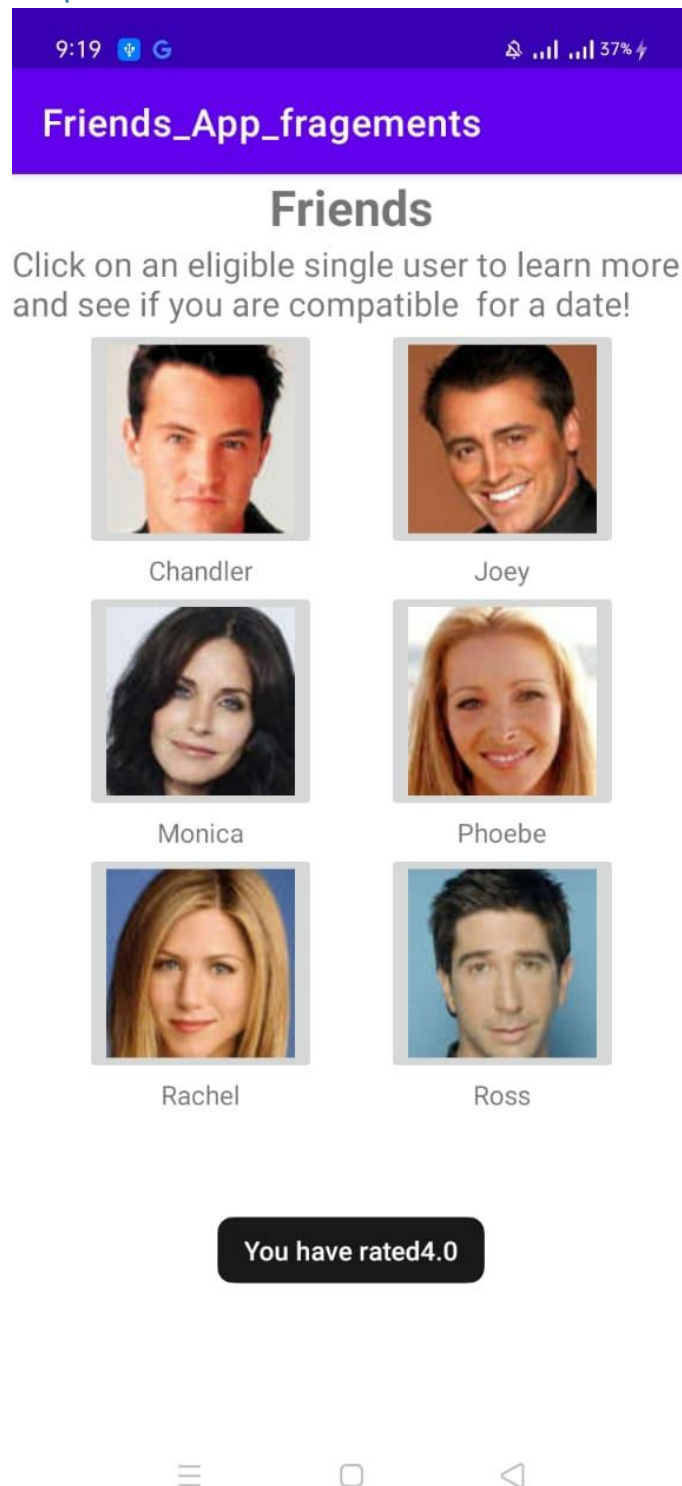
Activity 4: Fake Twitter

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<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">


<FrameLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/fragement"
    ></FrameLayout>


</androidx.constraintlayout.widget.ConstraintLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Details">


    <ListView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/details_list"

        ></ListView>
</FrameLayout>
```

```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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".List">


<ListView
```

```xml
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/list"
        ></ListView>
</FrameLayout>
```

Logic Code

```java
package com.example.fake_twitter;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        getSupportFragmentManager().beginTransaction().add(R.id.fragement,new Lis
t()).commit();
    }
}
```

```java
package com.example.fake_twitter;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListAdapter;
import android.widget.ListView;

public class List extends Fragment {

    @Override
    public void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        ViewGroup view=(ViewGroup)inflater.inflate(R.layout.fragment_list,contain
er,false);

        String names[]={"Bill Gates","Mark Zuckerburg", "Elon Musk"};
        ListView list=view.findViewById(R.id.list);
        ListAdapter Adapter=
      new ArrayAdapter<String>(getActivity(), android.R.layout.simple_list_item_1
,names);
        list.setAdapter(Adapter);

      list.setOnItemClickListener(new AdapterView.OnItemClickListener() {
          @Override
          public void onItemClick(AdapterView<?> parent, View view, int position,
 long id) {
              Details details_frag=new Details();
              Bundle bundle=new Bundle();
              bundle.putString("name",names[position]);
              details_frag.setArguments(bundle);
              getFragmentManager().beginTransaction().replace(R.id.fragement,deta
ils_frag).commit();


          }
      });


        return view;
    }
}
```

```java
package com.example.fake_twitter;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.KeyEvent;
```

```java
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ListAdapter;
import android.widget.ListView;

public class Details extends Fragment {

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {

        ViewGroup view=(ViewGroup)inflater.inflate(R.layout.fragment_details,container,false);
        String name=getArguments().getString("name");
        String[] tweets;
        if(name.equals("Bill Gates"))
          tweets=view.getResources().getStringArray(R.array.billgates);

        else if(name.equals("Mark Zuckerburg"))
            tweets=view.getResources().getStringArray(R.array.Mark);



        else
            tweets=view.getResources().getStringArray(R.array.elon);



        ListView list=view.findViewById(R.id.details_list);
        ListAdapter Adapter=
                new ArrayAdapter<String>(getActivity(), android.R.layout.simple_list_item_1,tweets);
        list.setAdapter(Adapter);


        view.setFocusableInTouchMode(true);
        view.requestFocus();
        view.setOnKeyListener(new View.OnKeyListener() {
```

```java
        @Override
        public boolean onKey(View v, int keyCode, KeyEvent event) {
            if (keyCode == KeyEvent.KEYCODE_BACK && event.getAction() == KeyEvent.ACTION_UP) {
                getFragmentManager().beginTransaction().replace(R.id.fragement,new List()).commit();

                return true;
            }
            return  false;
        }

    });



    return  view;
    }
}
```
Output

Fake_twitter

Bill Gates

Mark Zuckerburg

Elon Musk

Fake_twitter

SpaceX launching satellite Doge-1 to the
moon next year – Mission paid for in Doge –
1st crypto in space – 1st meme in space

Cybertruck prototype in New York this
weekend

Starship landing nominal!

Falcon 9 's first stage has landed on the Of
Course I Still Love You droneship – the 9th
landing of this booster

It's encouraging to see @POTUS Biden and
@ClimateEnvoy Kerry re-establish America's
leading role on climate change. I look forward
to joining leaders from around the world
to talk about some of the most important
challenges we need to overcome to avoid a
climate disaster.

SpaceX launching satellite Doge-1 to the
moon next year – Mission paid for in Doge –
1st crypto in space – 1st meme in space

SpaceX launching satellite Doge-1 to the
moon next year – Mission paid for in Doge –
1st crypto in space – 1st meme in space

Activity 5: Hangman (Speak to text and text to speech feature)

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Hangman"
        android:textSize="36sp"
        />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <ImageView
            android:id="@+id/img"
            android:layout_width="0dp"
            android:layout_height="150dp"
            android:layout_weight="1"
            app:srcCompat="@drawable/hangman0" />

        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="match_parent"
            android:layout_weight="2"
            android:orientation="vertical">

            <TextView
                android:id="@+id/textView5"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="The word:"
                android:textSize="24sp" />
```

```xml
        <TextView
            android:id="@+id/wordview"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:text="TextView"
            android:textSize="30sp" />
    </LinearLayout>

</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    >

    <EditText
        android:id="@+id/txt"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:maxLength="1"
        android:lines="1"
        android:maxLines="1"
        android:inputType="textPersonName"
        android:layout_marginLeft="10dp"
        />

    <Button
        android:id="@+id/guess"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:onClick="Guessword"
        android:text="Guess"
        android:layout_marginLeft="5dp"

        />


    <Button
        android:id="@+id/speak"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_weight="1"
```

```
                android:onClick="recognizer"
                android:text="speak"
                android:layout_marginLeft="5dp"


                />


        <Button
            android:id="@+id/New"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:onClick="newWord"
            android:text="NEW"
            android:layout_marginLeft="5dp"


            />

    </LinearLayout>

    <TextView
        android:id="@+id/guessview"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="You have guessed "
        android:textSize="15sp" />

</LinearLayout>
```

Logic Code

```
package com.example.hangman;

import androidx.annotation.Nullable;
import androidx.annotation.RequiresApi;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.graphics.drawable.Drawable;
import android.os.Build;
import android.os.Bundle;
import android.speech.RecognizerIntent;
import android.speech.tts.TextToSpeech;
import android.util.Log;
```

```java
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import java.util.ArrayList;
import java.util.Locale;
import java.util.Random;

public class MainActivity extends AppCompatActivity {

    String word;
    TextView guessedword;
    EditText txt;
    ImageView img1;
    String[] imgaddr;
    int imgnum;
    Random rand;
    String guessedwords;
    TextView guessview;
    Button guessBtn;
    Button NewBtn;
    TextToSpeech tts;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        rand=new Random();
        word=getResources().getStringArray(R.array.words)[rand.nextInt(5441)];
        Log.i("word",word);
        guessedword=(TextView)findViewById(R.id.wordview);
        guessedword.setText(word.replaceAll(".","?"));
        guessview=(TextView)findViewById(R.id.guessview);
        guessBtn=(Button)findViewById(R.id.guess);
        NewBtn=(Button)findViewById(R.id.New);

        imgaddr= new String[]{
                "@drawable/hangman6",
                "@drawable/hangman5",
                "@drawable/hangman4",
                "@drawable/hangman3",
                "@drawable/hangman2",
                "@drawable/hangman1",
```

```java
                    "@drawable/hangman0"};

        imgnum=0;
        guessedwords="";


    }
    public void Guessword(View view){
        txt=(EditText)findViewById(R.id.txt);
        char[] temp=guessedword.getText().toString().toCharArray();
        if(guessedwords.contains(txt.getText().toString())) {
            Toast.makeText(this,"Already entered",Toast.LENGTH_LONG).show();
            txt.setText("");
            return;
        }

        boolean check=true;
        for(int i=0;i<word.length();i++) {
            if (word.charAt(i) == txt.getText().charAt(0)) {
                temp[i] = word.charAt(i);
                check = false;
            }
        }


        String str=new String(temp);
        guessedword.setText(str);
        if(str.equals(word)) {
            Toast.makeText(this, "You win", Toast.LENGTH_LONG).show();
            guessBtn.setEnabled(false);
            return;
        }

        if(check){
            if(++imgnum>=7) {
                tts = new TextToSpeech(this, new TextToSpeech.OnInitListener() {
                    @RequiresApi(api = Build.VERSION_CODES.LOLLIPOP)
                    @Override
                    public void onInit(int status) {
                        tts.speak("Game over", TextToSpeech.QUEUE_FLUSH, null, "1
234");

                    }
                });
                guessBtn.setEnabled(false);
                guessview.setText("Game over word was "+word);
```

```java
                return;
            }
        }
        guessedwords+=txt.getText().toString();
        String message=(7-(imgnum))+" guesses left";
        tts = new TextToSpeech(this, new TextToSpeech.OnInitListener() {
            @RequiresApi(api = Build.VERSION_CODES.LOLLIPOP)
            @Override
            public void onInit(int status) {
                tts.speak(message, TextToSpeech.QUEUE_FLUSH, null, "1234");


            }
        });


        guessview.setText("You have guessed :"+guessedwords+"("+message+")");

        txt.setText("");


        int imageResource = getResources().getIdentifier(imgaddr[imgnum], null, g
etPackageName());
        img1= (ImageView)findViewById(R.id.img);
        Drawable res = getResources().getDrawable(imageResource);
        img1.setImageDrawable(res);

    }

    public void newWord(View view){
        guessBtn.setEnabled(true);
        guessview.setText("You have guessed : ");
        word=getResources().getStringArray(R.array.words)[rand.nextInt(5441)];
        guessedword.setText(word.replaceAll(".","?"));
        img1.setImageResource(R.drawable.hangman6);
        imgnum=0;
        guessedwords="";


    }


    public void recognizer(View view) {
        Intent intent = new Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH);
        intent.putExtra(RecognizerIntent.EXTRA_LANGUAGE, Locale.getDefault());
        intent.putExtra(RecognizerIntent.EXTRA_LANGUAGE_MODEL, RecognizerIntent.L
ANGUAGE_MODEL_FREE_FORM);
```

```java
        intent.putExtra(RecognizerIntent.EXTRA_PROMPT, "Speak the single letter");
        startActivityForResult(intent, 1234);


    }

    @Override

    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        ArrayList<String> list=data.getStringArrayListExtra(RecognizerIntent.EXTRA_RESULTS);

        txt=(EditText)findViewById(R.id.txt);
        txt.setText(list.get(0));

    }



}
```
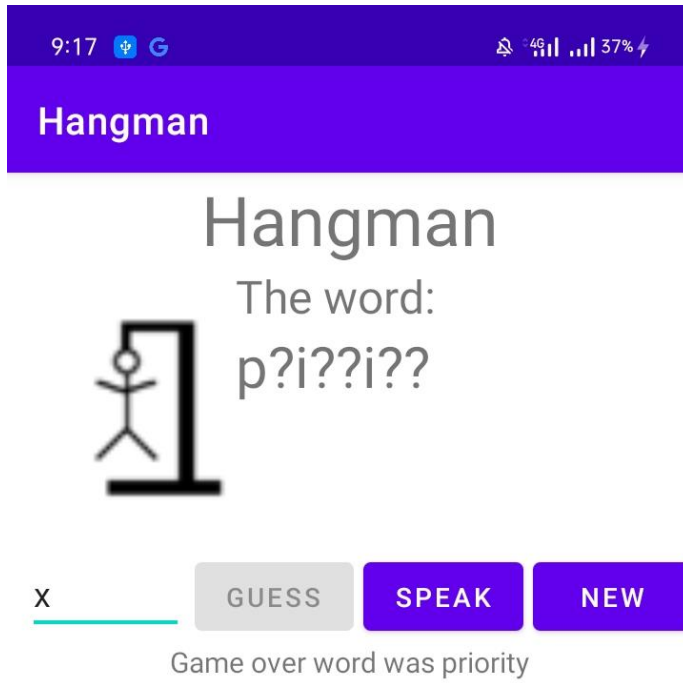
Output

Hangman

9:17

Hangman

Hangman
The word:

p?i??i??

X | GUESS | SPEAK | NEW
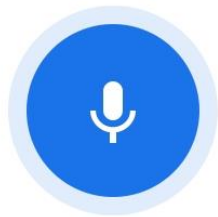
Game over word was priority

Hangman

Hangman
The word:
???????

Google

ke

English (United States)