Part –A

5. Implement web view concept in application which contains multiple activity and default HTML pages.

Create 2 Activities

a)Q2Main.java

b) Q5WebView.java

Add internet request to manifest file

<uses-permission android:name="android.permission.INTERNET"/>

a)

```
public class Q2Main extends AppCompatActivity
{

    Button defaultPage;
    Button loadPage;
    EditText url;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_q2_main);


        defaultPage = (Button) findViewById(R.id.defaultPage);
        loadPage = (Button) findViewById(R.id.loadURL);
        url = (EditText) findViewById(R.id.url);

        ActivityCompat.requestPermissions(Q2Main.this, new
String[]{Manifest.permission.INTERNET}, 1);

        defaultPage.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View v) {
                Intent i = new Intent(getApplicationContext(), Q5WebView.class);
                i.putExtra("load", "defaultpage");
                startActivity(i);
            }
        });
```

```
        loadPage.setOnClickListener(new View.OnClickListener()
        {           @Override           public void onClick(View v) {
            Intent i = new Intent(getApplicationContext(), Q5WebView.class);
            i.putExtra("load", url.getText().toString());
            startActivity(i);
        }
        });

    } }
```

Q5WebView.java

```
public class Q5WebView extends AppCompatActivity
 {

    WebView page;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {       super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_q5_web_view);

        page = (WebView) findViewById(R.id.WebView);
        page.setWebViewClient(new WebViewClient());

        Intent i = getIntent();
        String url = i.getStringExtra("load");

        if(url.equals("defaultpage"))
        {
            page.loadUrl("http://172.16.2.10");
        }

         else
            {
                page.loadUrl(url);
            }

    }
 }
```

activity_main.xml (this for main activity UI)

```
<?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="com.example.ananthu.finalsee.Q2Main"
android:gravity="center" android:orientation="vertical">

   <TextView        android:layout_width="match_parent"

 android:layout_height="wrap_content"

  android:text="Web View!"

android:textAlignment="center"

 android:textSize="30dp"

 android:paddingBottom="100px"/>

   <Button        android:id="@+id/defaultPage"

  android:layout_width="wrap_content"

 android:layout_height="wrap_content"

android:text="Default Page"

  android:layout_margin="50px"/>

   <EditText        android:id="@+id/url"

  android:layout_width="match_parent"

android:layout_height="wrap_content"

  android:hint="Enter Web URL"

android:textAlignment="center"

 android:layout_margin="50px"/>

   <Button        android:id="@+id/loadURL"
```

```
 android:layout_width="wrap_content"

 android:layout_height="wrap_content"

  android:text="Load Page"/>

</LinearLayout>
```

activity_q5_web_view.xml (this for webview activity UI)

```
<?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="com.example.ananthu.finalsee.Q5WebView">

    <WebView   android:id="@+id/WebView"

   android:layout_width="match_parent"

  android:layout_height="match_parent">

    </WebView>

</LinearLayout>
```

6. Implement an app to store and retrieve data by using shared preference.

```
public class MainActivity extends AppCompatActivity implements View.OnClickListener
 {
    EditText ed1,ed2,ed3;
    Button b1;

    public static final String MyPREFERENCES = "MyPrefs" ;
    public static final String Name = "nameKey";
    public static final String Phone = "phoneKey";
    public static final String Email = "emailKey";

    SharedPreferences sharedpreferences;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ed1=(EditText)findViewById(R.id.editText);
        ed2=(EditText)findViewById(R.id.editText2);
        ed3=(EditText)findViewById(R.id.editText3);

        b1=(Button)findViewById(R.id.button);
        b1.setOnClickListener(this);
        sharedpreferences = getSharedPreferences(MyPREFERENCES,
Context.MODE_PRIVATE);
    }
    public void onClick(View v) {
        String n  = ed1.getText().toString();
        String ph  = ed2.getText().toString();
        String e  = ed3.getText().toString();

        SharedPreferences.Editor editor = sharedpreferences.edit();

        editor.putString(Name, n);
        editor.putString(Phone, ph);
        editor.putString(Email, e);
        editor.commit();
        Toast.makeText(MainActivity.this,"Thanks",Toast.LENGTH_LONG).show();
    }
}
```

Part –B

1. Implement an AsyncTask to count from 1 to 100 in the background and the display the progress using progress bar on the screen.

```
public class MainActivity extends AppCompatActivity
 {
   private ProgressBar pgsBar;
   private int i = 0;
   private TextView txtView;

   Thread t;
   @Override
   protected void onCreate(Bundle savedInstanceState)
{
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      pgsBar = (ProgressBar) findViewById(R.id.pBar);
      txtView = (TextView) findViewById(R.id.tView);
      Button btn = (Button) findViewById(R.id.btnShow);

      btn.setOnClickListener(new View.OnClickListener()
      {           @Override
      public void onClick(View v)
      {

         pgsBar.setProgress(0);
         new AsyncTask<String, Integer, String>()
         {
            @Override
            protected String doInBackground(String[] params)
            {
               int i = 0;

            int max = Integer.parseInt(params[0]);

            while(i < max)
            {
               try
               {

               Thread.sleep(100);
                  i++;
                  publishProgress(i);

            }
            catch (Exception ex){

               Log.e("error", ex.toString());
```

```
            }
            }
            return null;
            }

            @Override
            protected void onProgressUpdate(Integer... values)
            {
                super.onProgressUpdate(values);
                pgsBar.setProgress(values[0]);
                txtView.setText(values[0].toString());
            }

        }.execute("100");

    }
    });
} }
```

2. **Implement a service concept to play the music in the background for long duration and perform a foreground job.**

```
public class MusicService extends Service
{
   MediaPlayer music;
   @Override
   public void onCreate()
   {       super.onCreate();
      music = MediaPlayer.create(this, R.raw.dre);//music file location
   }
   @Override
   public void onStart(Intent intent, int startId)
   {
      super.onStart(intent, startId);
      music.start();
   }
   @Override
   public void onDestroy()
   {
      super.onDestroy();
      music.stop();
   }
   @Override
   public IBinder onBind(Intent intent)
   {
      return null;
   }
}
```

```
public class MusicPlayer extends AppCompatActivity
{

   Button play, stop, color;
   @Override
   protected void onCreate(Bundle savedInstanceState)
   {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_music_player);

      play = (Button) findViewById(R.id.Play);
      stop = (Button) findViewById(R.id.Stop);
      color = (Button) findViewById(R.id.ChangeColor);

      play.setOnClickListener(new View.OnClickListener()
      {
```

```
        @Override
        public void onClick(View v)
        {
            startService(new Intent(getApplicationContext(), MusicService.class));
        }

    });




    stop.setOnClickListener(new View.OnClickListener()
    {
        @Override
        public void onClick(View v)
        {
            stopService(new Intent(getApplicationContext(), MusicService.class));
        }
    });


     color.setOnClickListener(new View.OnClickListener()
      {
        @Override
        public void onClick(View v)
         {
            LinearLayout ll = (LinearLayout) findViewById(R.id.layout);
            Random gen = new Random();
   ll.setBackgroundColor(Color.rgb(  gen.nextInt(255),  gen.nextInt(255),
gen.nextInt(255)

 ));
 }
 });

   }
}
```

3. Implement broadcast receiver to carry out one of following:

```
public class MainActivity extends AppCompatActivity {
    TextView mBatteryLevelText;
    ProgressBar mBatteryLevelProgress;
    BroadcastReceiver mReceiver;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        mBatteryLevelText = (TextView) findViewById(R.id.textView);
        mBatteryLevelProgress = (ProgressBar) findViewById(R.id.progressBar);
        mReceiver = new BroadcastReceiver() {

            public void onReceive(Context context, Intent intent) {
                int level = intent.getIntExtra(BatteryManager.EXTRA_LEVEL, 0);


                mBatteryLevelText.setText("Battery Level : " + level);
                mBatteryLevelProgress.setProgress(level);

                RelativeLayout rl = (RelativeLayout) findViewById(R.id.r1);
                if (level > 60)
                    rl.setBackgroundColor(Color.GREEN);
                else if (level > 30)
                    rl.setBackgroundColor(Color.BLUE);
                else
                    rl.setBackgroundColor(Color.RED);
            }
        };
    }

    @Override
    protected void onStart()
    {
        super.onStart();
        registerReceiver(mReceiver, new IntentFilter(Intent.ACTION_BATTERY_CHANGED));
    }

    @Override     protected void onStop()
    {
        unregisterReceiver(mReceiver);
        super.onStop();
    }


}
```

8. Make dialogue box to confirm the change of background color or image.

```
public class MainActivity extends AppCompatActivity implements View.OnClickListener
{
    Button closeButton;
    AlertDialog.Builder builder;
    @Override
    protected void onCreate(Bundle savedInstanceState)
   {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        closeButton = (Button) findViewById(R.id.button);
        builder = new AlertDialog.Builder(this);
        closeButton.setOnClickListener(this);

    }
        @Override
        public void onClick(View v)
   {

            builder.setMessage("Do you want to close this application ?")
                    .setCancelable(false)

                .setPositiveButton("Yes", new DialogInterface.OnClickListener()
               {
                        public void onClick(DialogInterface dialog, int id)
                    {
                        finish();
                        Toast.makeText(getApplicationContext(),"you choose yes action for
alertbox",
                                Toast.LENGTH_SHORT).show();
                    }
                })

                .setNegativeButton("No", new DialogInterface.OnClickListener()
                {
                    public void onClick(DialogInterface dialog, int id)
                   {
                        //  Action for 'NO' Button
                        dialog.cancel();

   Toast.makeText(getApplicationContext(),"you choose no action for alertbox",
                                Toast.LENGTH_SHORT).show();

}
                });
            //Creating dialog box
            AlertDialog alert = builder.create();
            //Setting the title manually
```

```
        alert.setTitle("AlertDialogExample");
        alert.show();
    }

}
```