1.Music

Res/raw/song

Manifest

```xml
<service android:name=".MyService" android:enabled="true"/>
```

Main.java

```java
public class MainActivity extends AppCompatActivity {
Button change,start,stop;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        change=findViewById(R.id.change);
        start=findViewById(R.id.play);
        stop=findViewById(R.id.stop);

        start.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                startService(new Intent(getApplicationContext(),MyService.class));
            }
        });

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

        change.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Random r=new Random();
                ConstraintLayout c=findViewById(R.id.body);
                c.setBackgroundColor(Color.rgb(r.nextInt(256),r.nextInt(256),r.nextInt(256
)));
            }
        });
    }
}
```

Myservice

```java
public class MyService extends Service {
    MediaPlayer music;
```

```java
    @Override
    public void onCreate() {
        super.onCreate();
        Toast.makeText(this, "service Started", Toast.LENGTH_SHORT).show();
        music=MediaPlayer.create(this,R.raw.song3);
    }

    @Override
    public void onStart(Intent intent, int startId) {
        super.onStart(intent, startId);
        music.start();
    }

    @Override
    public void onDestroy() {
        super.onDestroy();
        Toast.makeText(this, "Service stopped", Toast.LENGTH_SHORT).show();
        music.stop();
    }

    @Nullable
    @Override
    public IBinder onBind(Intent intent) {
        throw new UnsupportedOperationException("Not implememnted");
    }
}
```

2.Dialog

```java
public class MainActivity extends AppCompatActivity {

    Button button;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        button =findViewById(R.id.button);

        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                AlertDialog.Builder builder;
                builder = new AlertDialog.Builder(MainActivity.this);
                builder.setTitle("Wanna Change Background Color?")
                        .setMessage("Pakka?")
                        .setPositiveButton("YES", new DialogInterface.OnClickListener() {
                            @Override
                            public void onClick(DialogInterface dialogInterface, int i) {
                                ConstraintLayout back = findViewById(R.id.cl);
                                Random r = new Random();
```

```java
                            back.setBackgroundColor(Color.rgb(r.nextInt(255),r.nextInt
(255),r.nextInt(255)));
                        }
                }).setNegativeButton("NO", new DialogInterface.OnClickListener() {
                        @Override
                        public void onClick(DialogInterface dialogInterface, int i) {


                        }
                }).setIcon(R.drawable.ic_launcher_background)
                .show();
        }
    });
    }
}
```

3.datepicker

Activity

```xml
<DatePicker
/>
<Spinner/>
```

Main

```java
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemSelectedListener {
DatePicker dp;
ArrayAdapter ad;

String s1,date;
String s2[]={"cse","ise","me","aiml","ri"};



Spinner sp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        EdgeToEdge.enable(this);
        dp=findViewById(R.id.datep);
        sp=findViewById(R.id.spinner);
        sp.setOnItemSelectedListener(this);
        ad=new ArrayAdapter(this,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item,s2);
        sp.setAdapter(ad);
    }

    @Override
```

```java
    public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
s1=ad.getItem(position).toString();
date=dp.getDayOfMonth()+"-"+(dp.getMonth()+1)+"-"+dp.getYear();

    String t="Joined on "+date+" Branch "+s1;

    Toast.makeText(getApplicationContext(), t, Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onNothingSelected(AdapterView<?> parent) {

    }
}
```

4.Battery

```java
public class MainActivity extends AppCompatActivity {
TextView battery;
BroadcastReceiver b;
ConstraintLayout c;
ProgressBar p;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        c=findViewById(R.id.body);
        battery=findViewById(R.id.battery);
        p=findViewById(R.id.progressBar);
        b=new BroadcastReceiver() {
            @Override
            public void onReceive(Context context, Intent intent) {
                int level=intent.getIntExtra(BatteryManager.EXTRA_LEVEL,0);
                battery.setText(String.valueOf(level));
                p.setProgress(level);
                if(level>=80)
                {
                    c.setBackgroundColor(Color.GREEN);
                }else if(level>=40)
                {
                    c.setBackgroundColor(Color.YELLOW);
                }else{
                    c.setBackgroundColor(Color.RED);
                }

            }
        };
    }

    @Override
    protected void onStart() {
```

```
        super.onStart();
        registerReceiver(b,new IntentFilter(Intent.ACTION_BATTERY_CHANGED));
    }

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

5.Resume

Main1

```
public class MainActivity extends AppCompatActivity {

    EditText name, email, phone, quali;
    Button upload, submit;
    RadioGroup r;
    RadioButton male, female;
    ImageView imgv;
    Bitmap ibit;
    static final int REQUEST_IMAGE_CAPTURE = 1;


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

        name = findViewById(R.id.name);
        email = findViewById(R.id.email);
        phone = findViewById(R.id.phone);
        quali = findViewById(R.id.quali);
        imgv = findViewById(R.id.imageView);
        male = findViewById(R.id.male);
        female = findViewById(R.id.female);
        r = findViewById(R.id.gender);
        upload = findViewById(R.id.upload);
        submit = findViewById(R.id.button);

        upload.setOnClickListener(v -> dispatchTakePictureIntent());

        submit.setOnClickListener(v -> {
            String n = name.getText().toString();
            String e = email.getText().toString();
            String p = phone.getText().toString();
            String q = quali.getText().toString();
            String g = male.isChecked() ? "Male" : "Female";

            Intent i = new Intent(MainActivity.this, MainActivity2.class);
            i.putExtra("name", n);
```

```java
            i.putExtra("email", e);
            i.putExtra("gender", g);
            i.putExtra("phone", p);
            i.putExtra("quali", q);
            i.putExtra("image", ibit);

            startActivity(i);
        });
    }

    private void dispatchTakePictureIntent() {
        Intent pickPhoto = new Intent(Intent.ACTION_PICK,
MediaStore.Images.Media.EXTERNAL_CONTENT_URI);
        pickPhoto.setType("image/*");
        startActivityForResult(pickPhoto, REQUEST_IMAGE_CAPTURE);
    }

    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent
data) {
        super.onActivityResult(requestCode, resultCode, data);
        if (requestCode == REQUEST_IMAGE_CAPTURE && resultCode == RESULT_OK) {
            try {
                Uri selectedImage = data.getData();
                Bitmap originalBitmap =
MediaStore.Images.Media.getBitmap(this.getContentResolver(), selectedImage);
                Bitmap resizedBitmap = Bitmap.createScaledBitmap(originalBitmap, 200, 200,
false);
                ibit = resizedBitmap;
                imgv.setImageBitmap(ibit);
            } catch (IOException e) {
                e.printStackTrace();
            }
        }
    }

}
```

Main2

```java
public class MainActivity2 extends AppCompatActivity {
    TextView name, email, phone, gender, quali;
    ImageView img;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);

        name = findViewById(R.id.namev);
        email = findViewById(R.id.emailv);
```

```java
        phone = findViewById(R.id.phonev);
        gender = findViewById(R.id.genderv);
        quali = findViewById(R.id.qulificationv);
        img = findViewById(R.id.imageView2);

        Intent i = getIntent();
        if (i != null) {
            String na = i.getStringExtra("name");
            String ema = i.getStringExtra("email");
            String gen = i.getStringExtra("gender");
            String qua = i.getStringExtra("quali");
            String pho = i.getStringExtra("phone");
            Bitmap im = i.getParcelableExtra("image");


            name.setText("Name :" + na);
            email.setText("Email :" + ema);
            phone.setText("Phone " + pho);
            gender.setText("Gender :" + gen);
            quali.setText("Quali " + qua);

            runOnUiThread(() -> {
                if (im != null) {
                    img.setImageBitmap(im);
                } else {
                    img.setVisibility(View.GONE);
                }
            });
        }
    }
}
```

6.Database1

```java
public class MainActivity extends AppCompatActivity {
EditText name,age,address;
TextView res;
Button submit,display;
SQLiteDatabase db;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        name=findViewById(R.id.name);
        age=findViewById(R.id.age);
        address=findViewById(R.id.address);
        res=findViewById(R.id.res);

        submit=findViewById(R.id.submit);
        display=findViewById(R.id.diplay);

        db=openOrCreateDatabase("mydb",MODE_PRIVATE,null);
```

```java
        db.execSQL("CREATE TABLE IF NOT EXISTS users (name TEXT, age TEXT, address
TEXT)");

        submit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String n,ad,ag;
                n=name.getText().toString();
                ad=address.getText().toString();
                ag=age.getText().toString();
                try{
                    ContentValues values=new ContentValues();
                    values.put("name",n);
                    values.put("age",ag);
                    values.put("address",ad);
                    db.insert("users",null,values);
                    Toast.makeText(MainActivity.this, "DataAdded Sucessfully",
Toast.LENGTH_SHORT).show();
                    name.setText("");
                    address.setText("");
                    age.setText("");
                }catch (SQLException e)
                {
                    Toast.makeText(MainActivity.this, "Error", Toast.LENGTH_SHORT).show();
                }
            }
        });


        display.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                try{
                    Cursor cursor=db.rawQuery("SELECT * FROM users",null);
                    StringBuilder sb=new StringBuilder();
                    if(cursor.moveToFirst()){
                        do{
                            String name = cursor.getString(0);
                            String age = cursor.getString(1);
                            String address = cursor.getString(2);
                            sb.append("Name: ").append(name).append(", Age:
").append(age).append(", Address: ").append(address).append("\n");
                        }while(cursor.moveToNext());
                        res.setText(sb.toString());
                        cursor.close();
                    }

                }catch (SQLException e)
                {
                    res.setText("Error displaying data: " + e.getMessage());
                }

            }
        });
```

```
        }
}
```

7.Database2

```xml
    <uses-feature
        android:name="android.hardware.telephony"
        android:required="false" />
```

```xml
    <uses-permission android:name="android.permission.CALL_PHONE"/>
```

Main

```java
public class MainActivity extends AppCompatActivity {

    Button add,b2;
    EditText name, usn,phone,callusn;
    SQLiteDatabase db = null;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        add=findViewById(R.id.add);
        b2=findViewById(R.id.b2);

        name=findViewById(R.id.name);
        usn=findViewById(R.id.usn);
        phone=findViewById(R.id.phone);

        callusn=findViewById(R.id.call);

        db=openOrCreateDatabase("mydb",MODE_PRIVATE,null);
        db.execSQL("CREATE TABLE IF NOT EXISTS users (name TEXT,usn TEXT,phone TEXT)");

        add.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String n,u,p;
                n=name.getText().toString();
                u=usn.getText().toString();
                p=phone.getText().toString();
                try{
                    ContentValues values=new ContentValues();
                    values.put("name",n);
                    values.put("usn",u);
                    values.put("phone",p);
                    db.insert("users",null,values);
                    Toast.makeText(MainActivity.this, "Added Sucessfully",
Toast.LENGTH_SHORT).show();
```

```java
                    name.setText("");
                    usn.setText("");
                    phone.setText("");
                }catch(SQLException e)
                {
                    Toast.makeText(MainActivity.this, "ERror", Toast.LENGTH_SHORT).show();
                }
            }
        });


        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String usn = callusn.getText().toString();
                Cursor cursor = db.rawQuery("SELECT * FROM users WHERE usn=?", new
String[]{usn});
                if (cursor.getCount() != 1) {
                    Toast.makeText(MainActivity.this, "Invalid",
Toast.LENGTH_SHORT).show();
                } else {
                    cursor.moveToNext();
                    String ph = cursor.getString(2);

                    Intent i = new Intent(Intent.ACTION_DIAL);
                    i.setData(Uri.parse("tel:" + ph));
                    startActivity(i);
                }
            }
        });

    }

}
```

8.Animation

Blink

```xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">

    <alpha android:fromAlpha="0.0"
        android:toAlpha="1.0"
        android:interpolator="@android:anim/accelerate_interpolator"
        android:duration="600"
        android:repeatMode="reverse"
        android:repeatCount="infinite"/>


</set>
```

Move

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

<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true"
    android:interpolator="@android:anim/linear_interpolator"
    >


    <translate
        android:fromXDelta="0%p"
        android:toXDelta="50%p"
        android:duration="800"/>
    <translate
        android:startOffset="1000"
        android:fromXDelta="50%p"
        android:toXDelta="-50%p"
        android:duration="800"
        />


</set>
```

Main

```java
public class MainActivity extends AppCompatActivity {
    Button move,blink;
    ImageView img;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        move=findViewById(R.id.move);
        blink=findViewById(R.id.blink);
        img=findViewById(R.id.image);

        blink.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Animation animation=
AnimationUtils.loadAnimation(getApplicationContext(),R.anim.blink);
                img.startAnimation(animation);
            }
        });


        move.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Animation animation=
AnimationUtils.loadAnimation(getApplicationContext(),R.anim.move);
                img.startAnimation(animation);
            }
        });
```

```
        }
}
```

9.WebView

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

Main1

```java
public class MainActivity extends AppCompatActivity {

    Button lms,searchs;
    EditText t1;

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

        lms=findViewById(R.id.def);
        searchs=findViewById(R.id.search);
        t1=findViewById(R.id.link);

        lms.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i=new Intent(getApplicationContext(), MainActivity2.class);
                i.putExtra("load","default12");
                startActivity(i);
            }
        });

        searchs.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i=new Intent(getApplicationContext(), MainActivity2.class);
                i.putExtra("load",t1.getText().toString());
                startActivity(i);
            }
        });
    }
}
```

Main2

```java
public class MainActivity2 extends AppCompatActivity {
WebView we;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        we=findViewById(R.id.w);

        we.setWebViewClient(new WebViewClient());
        Intent i=getIntent();
        String extra=i.getStringExtra("load");

        if(extra.equals("default12"))
        {
            we.loadUrl("https://lms.nmamit.in/login/index.php");
        }
        else{

            we.loadUrl(extra);
        }
    }
}
```