

1.Music

Res/raw/song

Manifest

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

Main.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

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

```

@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 implemented");
}
}

```

2.datepicker

Activity

```

<DatePicker
/>
<Spinner/>

```

Main

```

public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemClickListener {
    DatePicker dp;
    Spinner sp;
    ArrayAdapter ad;

    String date,br;
    String s[]={"ise","cse","eee","ece","me"};

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

```

```

        dp=findViewById(R.id.dp);
        sp=findViewById(R.id.spinner);

        ad=new ArrayAdapter(this,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item,s);
        sp.setAdapter(ad);

        sp.setOnItemSelectedListener(this);
    }

    @Override
    public void onItemSelected(AdapterView<?> parent, View view, int position, long id)
    {
        date=dp.getDayOfMonth()+"-"+(dp.getMonth()+1)+"-"+dp.getYear();
        br=ad.getItem(position).toString();
        String t="Joined on"+date+" Branch "+br;
        Toast.makeText(this, t, Toast.LENGTH_SHORT).show();
    }

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

    }
}

```

3.Battery

```

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);
}
}

```

4.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);
        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

```

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);
    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);
            }
        });
    }
}
}

```

5.Database1

```

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);
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());
        }
    }
});
}
}
}

```

6.Database2

```

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

```

```

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

```

Main

```

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();
        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);
        }
    }
});
}
}
}
}

```

7.Animation

Blink

```

<?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 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>
```

Rotate

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

```
<set xmlns:android="http://schemas.android.com/apk/res/android">
```

```
  <rotate xmlns:android="http://schemas.android.com/apk/res/android"  
    android:fromDegrees="0"  
    android:toDegrees="360"  
    android:pivotX="50%"  
    android:pivotY="50%"  
    android:duration="5000" >  
  </rotate>
```

```
  <rotate xmlns:android="http://schemas.android.com/apk/res/android"  
    android:startOffset="5000"  
    android:fromDegrees="360"  
    android:toDegrees="0"  
    android:pivotX="50%"  
    android:pivotY="50%"  
    android:duration="5000" >  
  </rotate>
```

```
</set>
```

Zoom

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

```
<set xmlns:android="http://schemas.android.com/apk/res/android">
```

```
  <scale xmlns:android="http://schemas.android.com/apk/res/android"
```

```

        android:fromXScale="0.5"
        android:toXScale="3.0"
        android:fromYScale="0.5"
        android:toYScale="3.0"
        android:duration="1000"
        android:pivotX="25%"
        android:pivotY="25%" >
</scale>

<scale xmlns:android="http://schemas.android.com/apk/res/android"
    android:startOffset="1000"
    android:fromXScale="3.0"
    android:toXScale="0.5"
    android:fromYScale="3.0"
    android:toYScale="0.5"
    android:duration="1000"
    android:pivotX="25%"
    android:pivotY="25%" >
</scale>

</set>

```

Main

```

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);
            }
        });
    }
}

```

8.WebView

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

Main1

```
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

```
public class MainActivity2 extends AppCompatActivity {
    WebView we;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        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);
}
}
}

```

9.SHARED PREFERENCE

```

public class MainActivity extends AppCompatActivity {
    EditText e1,e2,e3;
    Button b1,b2,b3;
    public static final String MyPrefs="MyPrefs";
    public static final String Name="NameKey";
    public static final String Phone="phoneKey";
    public static final String Email="emailKey";
    SharedPreferences sp;
    SharedPreferences.Editor er;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate( savedInstanceState );
        setContentView( R.layout.activity_main );
        b1=(Button)findViewById( R.id.button );
        b2=(Button)findViewById( R.id.button2 );
        b3=(Button)findViewById( R.id.button3 );
        e1=(EditText)findViewById( R.id.e1 );
        e2=(EditText)findViewById( R.id.e2 );
        e3=(EditText)findViewById( R.id.e3 );
        sp=getSharedPreferences( MyPrefs,MODE_PRIVATE );
        b1.setOnClickListener( new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name=e1.getText().toString();
                String phone=e2.getText().toString();
                String email=e3.getText().toString();
                SharedPreferences.Editor editor=sp.edit();
                editor.putString( Name,name );
                editor.putString( Phone,email);
                editor.putString( Email,phone );
                editor.commit();
                Toast.makeText( MainActivity.this,"thanks",Toast.LENGTH_SHORT ).show();
            }
        } );
        b2.setOnClickListener( new View.OnClickListener() {

```

```

        @Override
        public void onClick(View view) {
            er=sp.edit();
            er.clear();
            er.commit();
        }
    } );
    b3.setOnClickListener( new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String s;
            s="Name-"+sp.getString(Name,null)+" Email-"+sp.getString( Email,null
)+" Phone-"+sp.getString( Phone,null );

            Toast.makeText( MainActivity.this,s,Toast.LENGTH_LONG).show();
        }
    } );
}
}

```

10.ASYNC TIME

```

public class MainActivity extends AppCompatActivity {

    Button btn;
    TextView t;
    ProgressBar p;

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

        btn=findViewById(R.id.button);
        t=findViewById(R.id.t);
        p=findViewById(R.id.progressBar);

        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                T t1=new T();
                t1.execute("100");
            }
        });
    }

    class T extends AsyncTask<String,Integer,String>{

        @Override
        protected String doInBackground(String... strings) {
            int max=Integer.parseInt(strings[0]);
            int i=0;
            while(i<max)
            {
                try{
                    Thread.sleep(1000);
                }catch (InterruptedException e)
                {
                    e.printStackTrace();
                }
                i++;
                publishProgress(i);
            }
        }
    }
}

```

```
    }

    return null;
}

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