

PRACTICAL ASSESSMENT SHEET

Experiment number: - 8

Title of experiment: - Use of databases using Android Studio

Name of Student: - Niraj Nitin Surve

Roll number: - 68

Date of performance: -

Date of submission: -

Attendance 03 marks	Submission 03 marks	Performance 03 marks	Oral 03 marks	Result 03 marks	Total 15 marks

Faculty Signature with date

Practical No. 08

TITLE: USE OF DATABASES USING ANDROID STUDIO

AIM: IMPLEMENT USE OF DATABASES USING ANDROID STUDIO

APPARATUS: ANDROID STUDIO

THEORY:

- **activity_main.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"
    android:orientation="vertical"
    android:background="#ffffff"
    tools:context=".MainActivity">
    <ImageView
        android:id="@+id/imageView10"
        android:layout_width="0dp"
        android:layout_height="0dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/background_login" />
    <ImageView
        android:id="@+id/imageView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:layout_constraintEnd_toEndOf="parent"
```

```
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/top_background" />
<ScrollView
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical" >
        <TextView
            android:id="@+id/textView"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Create\nAccount"
            android:textColor="#603a91"
            android:textSize="40sp"
            android:layout_marginBottom="35dp"
            android:textStyle="bold"
            android:layout_marginStart="32dp"
            android:layout_marginTop="80dp"/>
        <EditText
            android:id="@+id/fullname"
            android:layout_width="match_parent"
            android:layout_height="50dp"
            android:ems="10"
            android:inputType="textPersonName"
            android:drawableStart="@drawable/name"
            android:textColorHint="#603a91"
            android:textColor="#603a91"
            android:background="@drawable/edittext_background"
            android:hint="Name"
            android:layout_marginStart="32dp"
            android:layout_marginTop="32dp"
            android:layout_marginEnd="32dp"
            android:padding="8dp"
            android:drawablePadding="16dp"/>
    </LinearLayout>
</ScrollView>
```

```
<EditText
    android:id="@+id/number"
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:layout_marginStart="32dp"
    android:layout_marginTop="32dp"
    android:layout_marginEnd="32dp"
    android:textColor="#603a91"
    android:background="@drawable/edittext_background"

    android:drawableStart="@drawable/baseline_mobile_friendly_24"
    android:drawablePadding="16dp"
    android:ems="10"
    android:hint="Mobile Number"
    android:inputType="numberDecimal"
    android:maxLength="11"
    android:padding="8dp"
    android:textColorHint="#603a91" />

<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:drawableStart="@drawable/email"
    android:textColorHint="#603a91"
    android:textColor="#603a91"
    android:background="@drawable/edittext_background"
    android:hint="Email"
    android:layout_marginStart="32dp"
    android:layout_marginTop="32dp"
    android:layout_marginEnd="32dp"
    android:padding="8dp"
    android:drawablePadding="16dp"/>
```

```
<EditText
    android:id="@+id/password"
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:ems="10"
    android:inputType="textPassword"
    android:drawableStart="@drawable/password"
    android:textColorHint="#603a91"
    android:textColor="#603a91"
    android:background="@drawable/edittext_background"
    android:hint="Password"
    android:layout_marginStart="32dp"
    android:layout_marginTop="32dp"
    android:layout_marginEnd="32dp"
    android:padding="8dp"
    android:drawablePadding="16dp"/>
```

```
<ImageView
    android:id="@+id/signup"
    android:layout_gravity="end"
    android:layout_marginTop="16dp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:srcCompat="@drawable/btn_login" />
```

```
<TextView
    android:id="@+id/gotologinactivity"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Already have an account? Sign in"
    android:textColor="#603a91"
    android:textStyle="bold"
    android:textSize="17sp"
    android:layout_gravity="center"/>
```

```
</LinearLayout>
```

```
</ScrollView>
```

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

- **MainActivity.java**

```
package com.example.useofdatabase;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.app.Activity;
import android.app.AlertDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;

import com.example.useofdatabase.databinding.ActivityLoginBinding;
import com.example.useofdatabase.databinding.ActivityMainBinding;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.firestore.FirebaseFirestore;
import com.google.firebase.firestore.auth.User;

public class MainActivity extends AppCompatActivity {

    ActivityMainBinding binding;
    FirebaseAuth firebaseAuth;
    AlertDialog progressDialog;
    FirebaseFirestore firebaseFirestore;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        binding=ActivityMainBinding.inflate(getLayoutInflater());
        firebaseAuth=FirebaseAuth.getInstance();
        setContentView(binding.getRoot());
        progressDialog=new AlertDialog(this);
        firebaseFirestore=FirebaseFirestore.getInstance();
    }
}
```

```

        binding.signup.setOnClickListener(new
View.OnClickListener() {

            @Override

            public void onClick(View v) {

                String name=
binding.fullname.getText().toString();

                String number=
binding.number.getText().toString();

                String email=
binding.email.getText().toString().trim();

                String password=
binding.password.getText().toString();

                progressDialog.show();
firebaseAuth.createUserWithEmailAndPassword(email,password)

                    .addOnSuccessListener(new
OnSuccessListener<AuthResult>() {

                        @Override

                        public void

onSuccess(AuthResult authResult) {

                            startActivity(new
Intent(MainActivity.this,LoginActivity.class));

                            progressDialog.cancel();

firebaseFirestore.collection("User")

                            .document(FirebaseAuth.getInstance().getUid()).set(new
UserModel(name,number,email));

                        }

                    })

                .addOnFailureListener(new OnFailureListener() {

                    @Override

                    public void onFailure(@NonNull Exception e) {

                        Toast.makeText(MainActivity.this,
e.getMessage(), Toast.LENGTH_SHORT).show();

                        progressDialog.cancel();

                    }

                });

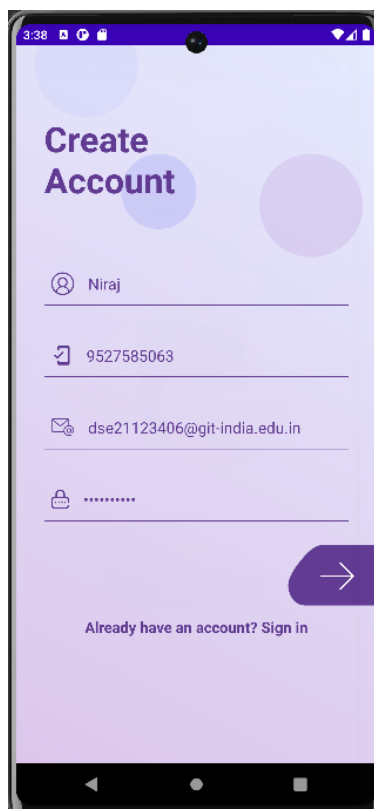
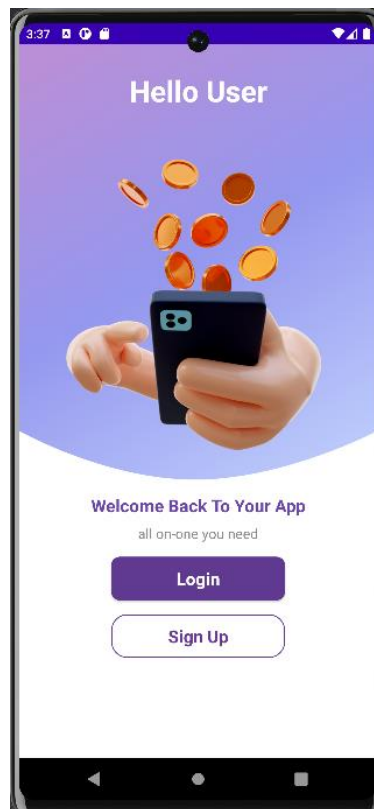
            }

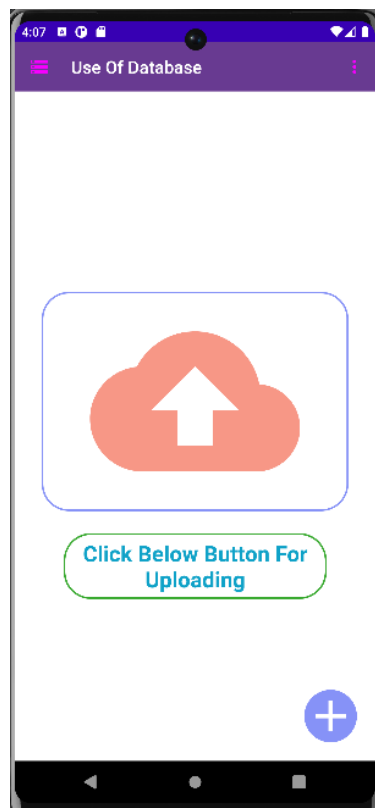
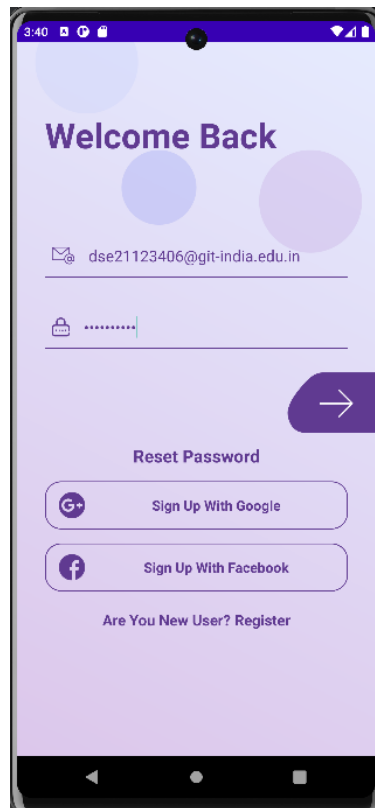
        }

```

```
    });  
    binding.gotologinactivity.setOnClickListener(new  
View.OnClickListener() {  
        @Override  
        public void onClick(View v) {  
            startActivity(new Intent(MainActivity.this,  
LoginActivity.class));  
        }  
    });  
}  
  
@Override  
public void onBackPressed() {  
    Intent a = new Intent(Intent.ACTION_MAIN);  
    a.addCategory(Intent.CATEGORY_HOME);  
    a.setFlags(Intent.FLAG_ACTIVITY_NO_HISTORY);  
    startActivity(a);  
}  
}
```


- **Output on Emulator –**







Conclusion: Thus we studied the implementation of use of databases in Android Studio.