AJAY KUMAR GARG ENGINEERING COLLEGE

27th KM STONE DELHI-HAPUR BYPASS ROAD, P.O. ADHYATMIK NAGAR
GHAZIABAD-201009

AN
INTERNSHIP TRAINING REPORT
ON
LIVE 'COLLEGE ANDROID APP'

Submitted By :-
Gaurav Singh
Year :- 2nd Year
Semester :- 3rd
Branch :- CSE(DS)
Student No. :- 2115402-D
Date :-

AJAY KUMAR GARG ENGINEERING COLLEGE

27th KM STONE DELHI-HAPUR BYPASS ROAD, P.O. ADHYATMIK NAGARGHAZIABAD-201009

INTERNSHIP CERTIFICATE

This is to certify that_____student of AJAY KUMAR GARG ENGINEERING COLLEGE B. Tech__year_____branch, has undergone Internship Training in (Topic) _____from_____to____.

(Name of faculty)   **Dr. Sunita Yadav**

Faculty Internship Assessment Lab   **HoD, CSE**

ABSTRACT

Android is an operating system based on the Linux kernal, and designed primarily for touch screen mobile devices such as smart phones and tablet computer. Android holds almost 50% of the total mobile application market, which is worth billions and with the latest advances, it is only going to increase.

Android App Builder helps you in creating the most sophisticated Android applications, that you can create yourself without any previous knowledge of coding or mobile app development experience. Our Android Appp Builder provides you with the best, error free and pleasant app building experience. Users can convert any web content into an Android App using AppsBuilder. The main aim of this project is to reach users new dimensions and to provide them with applications that they can change/modify themselves without any problem. Users can use this tool to develop applications for your business, employees, or general public.

PREFACE

"Necessity is Mother of All Inventions"

ACKNOWLEDGEMENT

- ❖ I am thankful to our **director** "R.K. **Agrawal**", for permittingand encouraging me in doing this project.

- ❖ I express my sincere thanks to our Academic Dean "**Mr. SL Kapoor**", for encouragement and suggestions to the successful completion of my project.

- ❖ My sincere thanks to "**Mr. Sunita Yadav**" **Professor, Head of Department in CSE** whose motivation and constant encouragement has led to pursue a project in the field of software development.

- ❖ I am very much obliged and thankful to my Coordinator **Ms. Chhaya Yadav** to providing this opportunity.

- ❖ My Parents have put myself ahead of themselves. Because of their hardwork and dedication. My heartful thanks to them for giving me all I ever needed to be successful student and individual.

    Finally, I express my thanks to all my other professors, classmates, friends and my family members who helped me for the completion of my project and without support and patient this would never have been possible

INTRODUCTION TO ORGANIZATION

❖ Internshala is India's no. 1 internship and training platform with 40000+ paid internship in Engineering, MBA, media, law, arts, and other streams.

❖ The platform, which was founded in 2010, started out as a WordPress blog that aggregated internships across India and articles on education, technology and skill gap. Internshala launched its online trainings in 2014. As of 2018, the platform had 3.5 million students and 80,000 companies.

Purpose:

❖ The main purpose is to take trainee to their "DREAM JOB". The objective of Training is to develop useful knowledge, techniques, and skills. They prepare the students to carry out the tasks in well-defined job circumstances.

❖ Training is the activity that enhances your performance in the present or upcoming job. In our company, you may learn new skills, boost your learning, and get a lot of confidence.

INTERNSHIP TRAINING WORK

Introduction: College Android App

OBJECTIVE: To create an android app by which users/students can get the updated information about college through this live app. The main purpose is to make one platform for all like (OfficialWhatsAppGroup/ GCR/edumarshal)

METHODOLOGY:

Tools and Technology used:-

    i.)   Android Studio for App Development
    ii.)   Firebase as network storage.

Languages for programming:-

    i.)   Java
    ii.)   XML for UI development

Modules in Project:-

        1. Login Manager
        2. News Feed Management
        3. Gallery Management

4. Notes Management

5. Faculties Management

6. Student Portal* (edumarshal)

SNAPSHOTS

AKGEC Administrator   AKGEC Administrator   AKGEC Administrator

Applied Sciences and Humanities

Name
Testing

Post
Freedom Fighter

Email
xyz@gmail.com

Update   Delete

Testing
Freedom Fighter
xyz@gmail.com
UPDATE INFO

xyz
abc
xyz@gmail.com
UPDATE INFO

Civil Engineering

Washu
Civil Lecturer
civil
UPDATE INFO

xyz
xyz
xyz@gmail.com
UPDATE INFO

xyz

xyz

xyz@gmail.com

Select Departments

Applied Sciences & Humanities

Civil Engineering

Computer Science and Engineering

Electrical and Electronics Engineering

Electronics and Communication Engineering

Mechanical Engineering

Information Technology

≡ Ajay Kumar Garg Engin... ⋮   ≡ Ajay Kumar Garg Engin... ⋮   ≡ Ajay Kumar Garg Engin... ⋮

fourth

Ajay Kumar Garg Engineering College

Ajay Kumar Garg Engineering College
(AKGEC) is an engineering college
located in Ghaziabad, Uttar Pradesh,
India. The college was established in
1998. It is affiliated to Dr. A.P.J. Abdul
Kalam Technical University, Lucknow. It
was designated as one of the 9 research
centers in Ghaziabad-Noida area.Students
of the institute have ranked in the

AKGEC - News Feed
Date : 25--01--22   Time : 04:58 pm

testing

Programming Wisdom
@CodeWisdom

"Any fool can write code that a computer
can understand. Good programmers
write code that humans can understand."
— Martin Fowler
6:07 PM · 23 Apr 21 · Buffer

340 Retweets 25 Quote Tweets 1,736 Likes

Programmers
who write
regex:

AKGEC - News Feed
Date : 24--01--22   Time : 03:17 am

Holiday's List

AJAY KUMAR GARG INSTITUTE OF MANAGEMENT
27ᵗʰ Km. Stone, Delhi-Hapur By Pass Road, Adhyatmik Nagar, Post Box No.116, Ghaziabad-201009

LIST OF HOLIDAYS DURING THE YEAR 2022

S. No.	Name of Festival	Date	Day
1	Republic Day	26ᵗʰ January 2022	Wednesday
2	Maha Shivratri	1ˢᵗ March 2022	Tuesday
3	Holika Dahan	17ᵗʰ March 2022	Thursday
4	Holi	18ᵗʰ March 2022	Friday
5	Ram Navmi	10ᵗʰ April 2022	Sunday
6	Dr. Bhimrao Ambedkar's Birthday / Mahaveer Jayanti	14ᵗʰ April 2022	Thursday
7	Id-Ul-Fittar / Prashuram Jayanti	3ʳᵈ May 2022	Tuesday
8	Ed-Ul-Juha (Bakreed)	10ᵗʰ July 2022	Sunday
9	Moharrum	9ᵗʰ August 2022	Tuesday

Applied Sciences and Humanities

Testing
Freedom Fighter
xyz@gmail.com

xyz
abc
xyz@gmail.com

Civil Engineering

Washu
Civil Lecturer
civil

xyz
xyz
xyz@gmail.com

Home   News Feed   Faculty
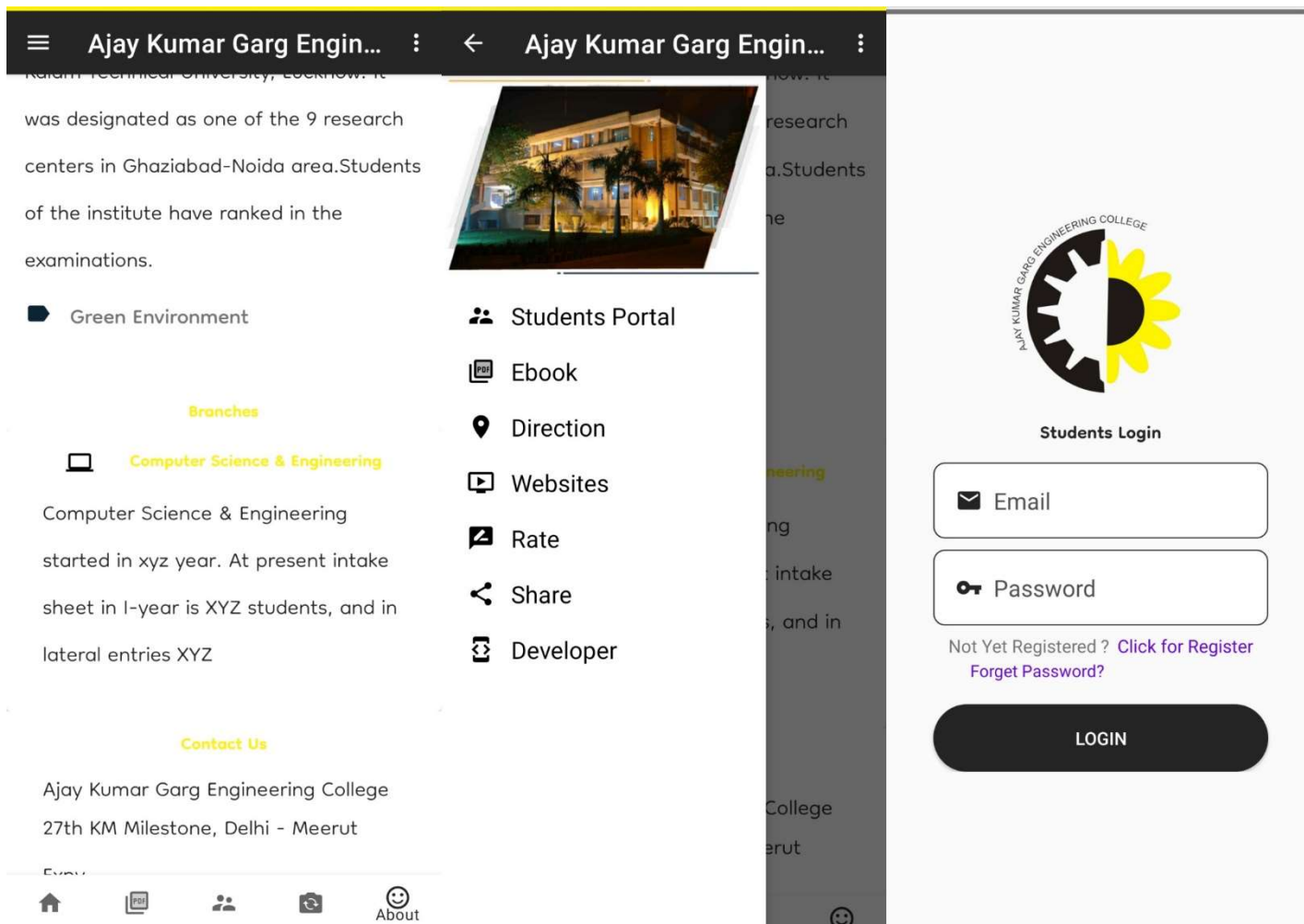
Code: Administrator App

activity_admin_login XML (Design of Login Layout)

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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=".AdminLogin"
    android:background="@color/textColor">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_margin="20dp"
        android:orientation="vertical"
        android:layout_gravity="center">
        <ImageView
```

```xml
        android:layout_width="160dp"
        android:layout_height="160dp"
        android:layout_marginTop="100dp"
        android:src="@drawable/akgec"
        android:layout_gravity="center"/>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="ADMINISTRATION"
        android:textColor="@color/akgecblack"
        android:layout_gravity="center"
        android:layout_marginTop="20dp"
        android:textSize="25dp"
        android:fontFamily="@font/donglebold"/>
    <EditText
        android:id="@+id/user_email"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:inputType="textEmailAddress"
        android:hint="Email"
        android:textColorHint="@color/lightgrey"
        android:textColor="@color/akgecblack"
        android:layout_gravity="center"
        android:drawableLeft="@drawable/ic_email"
        android:drawablePadding="10dp"
        android:layout_marginTop="35dp"
        android:background="@drawable/edit"
        android:padding="20dp"/>
    <EditText
        android:id="@+id/user_password"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:inputType="textPassword"
        android:hint="Password"
        android:textColorHint="@color/lightgrey"
        android:textColor="@color/akgecblack"
        android:layout_gravity="center"
        android:drawableLeft="@drawable/ic_key"
        android:drawablePadding="10dp"
        android:layout_marginTop="15dp"
        android:background="@drawable/edit"
```

```xml
            android:padding="20dp"/>
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Forget Password?"
            android:textColor="@color/akgecyellow"
            android:fontFamily="sans-serif-medium"
            android:layout_gravity="right"
            android:layout_marginTop="20dp"
            android:textSize="15dp"
            android:layout_marginRight="35dp"/>
        <Button
            android:id="@+id/login_button"
            android:layout_width="300dp"
            android:layout_height="60dp"
            android:layout_gravity="center"
            android:text="Login"
            android:textColor="#fff"
            android:layout_marginTop="20dp"
            android:background="@drawable/button"/>
    </LinearLayout>
</LinearLayout>
```

AdminLogin JAVA (admin login)

```java
package akgecians.administrator;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class AdminLogin extends AppCompatActivity {

    private EditText adminEmail,adminPassword;
//    private TextView pwdShow;
```

```java
    private Button loginBtn;
    private String email, pwd;
    private SharedPreferences sharedPreferences;
    private SharedPreferences.Editor editor;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_admin_login);
    sharedPreferences = this.getSharedPreferences("login",MODE_PRIVATE);
    editor = sharedPreferences.edit();
    if (sharedPreferences.getString("isLogin","false").equals("yes")) {
        openDash();
    }
    adminEmail = findViewById(R.id.user_email);
    adminPassword = findViewById(R.id.user_password);
//    pwdShow = findViewById(R.id.pwd_show);
    loginBtn = findViewById(R.id.login_button);
/*    pwdShow.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            if (adminPassword.getInputType() == 144){
                adminPassword.setInputType(129);
                pwdShow.setText("hide");
            }else {
                adminPassword.setInputType(144);
                pwdShow.setText("show");
            }
            adminPassword.setSelection(adminPassword.getText().length());
        }
    });
*/
    loginBtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            validateData();
        }
    });
}
private void validateData() {
    email = adminEmail.getText().toString();
    pwd = adminPassword.getText().toString();
```

```java
        if (email.isEmpty()){
            adminEmail.setError("Please Enter Your Email");
            adminEmail.requestFocus();
        }else if(pwd.isEmpty()){
            adminPassword.setError("Please Enter the Password");
            adminPassword.requestFocus();
        }else if (email.equals("admin@gmail.com") && pwd.equals("12345")){
            editor.putString("isLogin","yes");
            editor.commit();
            openDash();
        }else {
            Toast.makeText(this, "Please Check Your Email & Password Again",
Toast.LENGTH_LONG).show();
        }
    }
    private void openDash() {
        startActivity(new Intent(AdminLogin.this, MainActivity.class));
        finish();
    }
}
```

activity_main XML (Admin Dashboard)

```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">
    <TextView
        android:id="@+id/textview"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="8dp"
        android:layout_marginTop="28dp"
        android:layout_marginEnd="8dp"
        android:text="AKGEC"
        android:textColor="@color/akgecblack"
        app:layout_constraintEnd_toEndOf="parent"
```

```xml
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"/>
<ImageView
        android:id="@+id/administrator"
        android:layout_width="150dp"
        android:layout_height="150dp"
        android:layout_marginStart="8dp"
        android:layout_marginTop="58dp"
        android:layout_marginEnd="8dp"
        android:src="@drawable/akgec"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.496"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textview"/>
<LinearLayout
        android:layout_width="match_parent"
        android:layout_height="350dp"
        android:layout_marginStart="0dp"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="0dp"
        android:orientation="vertical"
        android:background="@drawable/bg_menu"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent">
    <LinearLayout
        android:paddingTop="24dp"
        android:paddingBottom="24dp"
        android:paddingLeft="12dp"
        android:paddingRight="12dp"
        android:layout_weight="3"
        android:orientation="horizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <LinearLayout
            android:orientation="vertical"
            android:layout_weight="1"
            android:layout_width="0dp"
            android:layout_height="wrap_content">
            <LinearLayout
```

```xml
        android:id="@+id/uploadNotice"
        android:layout_width="match_parent"
        android:layout_height="125dp"
        android:layout_marginLeft="10dp"
        android:layout_marginRight="10dp"
        android:background="@drawable/bgnotice"
        android:orientation="vertical">
        <ImageView
            android:layout_gravity="center_horizontal"
            android:layout_marginTop="12dp"
            android:layout_marginBottom="5dp"
            android:layout_width="55dp"
            android:layout_height="55dp"
            android:background="@drawable/circle_yellow"
            android:src="@drawable/ic_notice"/>
        <View
            android:layout_width="match_parent"
            android:layout_height="1dp"
            android:background="@color/lightgrey"
            android:layout_marginTop="7dp"/>
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="News Feed"
            android:textColor="@color/akgecblack"
            android:textStyle="bold"
            android:textSize="16sp"
            android:layout_marginTop="5dp"
            android:layout_gravity="center_horizontal"/>
    </LinearLayout>
</LinearLayout>
<LinearLayout
    android:orientation="vertical"
    android:layout_weight="1"
    android:layout_width="0dp"
    android:layout_height="wrap_content">
    <LinearLayout
        android:id="@+id/addGalleryImage"
        android:layout_width="match_parent"
        android:layout_height="125dp"
        android:layout_marginLeft="10dp"
```

```xml
            android:layout_marginRight="10dp"
            android:background="@drawable/bgnotice"
            android:orientation="vertical">
            <ImageView
                android:layout_gravity="center_horizontal"
                android:layout_marginTop="12dp"
                android:layout_marginBottom="5dp"
                android:layout_width="55dp"
                android:layout_height="55dp"
                android:background="@drawable/circle_green"
                android:src="@drawable/ic_gallery"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="@color/lightgrey"
                android:layout_marginTop="7dp"/>
            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Gallery"
                android:textColor="@color/akgecblack"
                android:textStyle="bold"
                android:textSize="16sp"
                android:layout_marginTop="5dp"
                android:layout_gravity="center_horizontal"/>
        </LinearLayout>
    </LinearLayout>
    <LinearLayout
        android:orientation="vertical"
        android:layout_weight="1"
        android:layout_width="0dp"
        android:layout_height="wrap_content">
        <LinearLayout
            android:id="@+id/addEbook"
            android:layout_width="match_parent"
            android:layout_height="125dp"
            android:layout_marginLeft="10dp"
            android:layout_marginRight="10dp"
            android:background="@drawable/bgnotice"
            android:orientation="vertical">
            <ImageView
```

```xml
            android:layout_gravity="center_horizontal"
            android:layout_marginTop="12dp"
            android:layout_marginBottom="5dp"
            android:layout_width="55dp"
            android:layout_height="55dp"
            android:background="@drawable/circle_purple"
            android:src="@drawable/ic_upload"/>
        <View
            android:layout_width="match_parent"
            android:layout_height="1dp"
            android:background="@color/lightgrey"
            android:layout_marginTop="7dp"/>
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text=" Study\n Material"
            android:textColor="@color/akgecblack"
            android:textStyle="bold"
            android:textSize="16sp"
            android:layout_marginTop="5dp"
            android:layout_gravity="center_horizontal"/>
        </LinearLayout>
    </LinearLayout>
</LinearLayout>
<LinearLayout
    android:paddingBottom="24dp"
    android:paddingLeft="12dp"
    android:paddingRight="12dp"
    android:layout_weight="3"
    android:orientation="horizontal"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <LinearLayout
        android:orientation="vertical"
        android:layout_weight="1"
        android:layout_width="0dp"
        android:layout_height="wrap_content">
        <LinearLayout
            android:id="@+id/faculty"
            android:layout_width="match_parent"
            android:layout_height="125dp"
```

```xml
            android:layout_marginLeft="10dp"
            android:layout_marginRight="10dp"
            android:background="@drawable/bgnotice"
            android:orientation="vertical">
            <ImageView
                android:layout_gravity="center_horizontal"
                android:layout_marginTop="12dp"
                android:layout_marginBottom="5dp"
                android:layout_width="55dp"
                android:layout_height="55dp"
                android:background="@drawable/circle_purple"
                android:src="@drawable/ic_group"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="@color/lightgrey"
                android:layout_marginTop="7dp"/>
            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Faculty"
                android:textColor="@color/akgecblack"
                android:textStyle="bold"
                android:textSize="16sp"
                android:layout_marginTop="5dp"
                android:layout_gravity="center_horizontal"/>
        </LinearLayout>
    </LinearLayout>
    <LinearLayout
        android:orientation="vertical"
        android:layout_weight="1"
        android:layout_width="0dp"
        android:layout_height="wrap_content">
        <LinearLayout
            android:id="@+id/deleteNotice"
            android:layout_width="match_parent"
            android:layout_height="125dp"
            android:layout_marginLeft="10dp"
            android:layout_marginRight="10dp"
            android:background="@drawable/bgnotice"
            android:orientation="vertical">
```

```xml
        <ImageView
            android:layout_gravity="center_horizontal"
            android:layout_marginTop="12dp"
            android:layout_marginBottom="5dp"
            android:layout_width="50dp"
            android:layout_height="50dp"
            android:background="@drawable/circle_red"
            android:src="@drawable/ic_delete"/>
        <View
            android:layout_width="match_parent"
            android:layout_height="1dp"
            android:background="@color/lightgrey"
            android:layout_marginTop="7dp"/>
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Delete\nNews Feed"
            android:textColor="@color/akgecblack"
            android:textStyle="bold"
            android:textSize="16sp"
            android:layout_marginTop="5dp"
            android:layout_gravity="center_horizontal"/>
    </LinearLayout>
</LinearLayout>
<LinearLayout
    android:orientation="vertical"
    android:layout_weight="1"
    android:layout_width="0dp"
    android:layout_height="wrap_content">
    <LinearLayout
        android:id="@+id/logout"
        android:layout_width="match_parent"
        android:layout_height="125dp"
        android:layout_marginLeft="10dp"
        android:layout_marginRight="10dp"
        android:background="@drawable/bgnotice"
        android:orientation="vertical">
        <ImageView
            android:layout_gravity="center_horizontal"
            android:layout_marginTop="12dp"
            android:layout_marginBottom="5dp"
```

```xml
            android:layout_width="50dp"
            android:layout_height="50dp"
            android:background="@drawable/circle_yellow"
            android:src="@drawable/ic_logout"/>
        <View
            android:layout_width="match_parent"
            android:layout_height="1dp"
            android:background="@color/lightgrey"
            android:layout_marginTop="7dp"/>
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text=" Sign Out"
            android:textColor="@color/akgecblack"
            android:textStyle="bold"
            android:textSize="16sp"
            android:layout_marginTop="5dp"
            android:layout_gravity="center_horizontal"/>
        </LinearLayout>
      </LinearLayout>
    </LinearLayout>
  </LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.JAVA

```java
package akgecians.administrator;
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;
import android.widget.LinearLayout;
import android.widget.Toast;
import akgecians.administrator.faculty.UpdateFaculty;
import akgecians.administrator.notice.DeleteNoticeActivity;
import akgecians.administrator.notice.UploadNoticeActivity;

public class MainActivity extends AppCompatActivity {
```

```java
private LinearLayout uploadNotice, addGalleryImage, addEbook, faculty, deleteNotice, logout;
private ImageView admin;
private SharedPreferences sharedPreferences;
private SharedPreferences.Editor editor;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    sharedPreferences = this.getSharedPreferences("login",MODE_PRIVATE);
    editor = sharedPreferences.edit();
    if (sharedPreferences.getString("isLogin","false").equals("false")) {
        openAdminLogin();
    }
    uploadNotice = findViewById(R.id.uploadNotice);
    addGalleryImage = findViewById(R.id.addGalleryImage);
    addEbook = findViewById(R.id.addEbook);
    faculty = findViewById(R.id.faculty);
    deleteNotice = findViewById(R.id.deleteNotice);
    logout = findViewById(R.id.logout);
    admin = findViewById(R.id.administrator);
    admin.setOnClickListener(this);
    uploadNotice.setOnClickListener(this);
    addGalleryImage.setOnClickListener(this);
    addEbook.setOnClickListener(this);
    faculty.setOnClickListener(this);
    deleteNotice.setOnClickListener(this);
    logout.setOnClickListener(this);
}
private void openAdminLogin() {
    startActivity(new Intent(MainActivity.this,AdminLogin.class));
}
@Override
public void onClick(View view) {
    Intent intent;
    //switch cases for Intent to run smoothly
    switch (view.getId()) {
        case  R.id.administrator:
        Toast.makeText(this, "Administrator", Toast.LENGTH_LONG).show();
        break;
        case R.id.uploadNotice:
```

```java
                intent = new Intent(MainActivity.this, UploadNoticeActivity.class);
                startActivity(intent);
                break;
            case R.id.addGalleryImage:
                intent = new Intent(MainActivity.this, UploadImage.class);
                startActivity(intent);
                break;
            case R.id.addEbook:
                intent = new Intent(MainActivity.this, UploadPdfActivity.class);
                startActivity(intent);
                break;
            case R.id.faculty:
                intent = new Intent(MainActivity.this, UpdateFaculty.class);
                startActivity(intent);
                break;
            case R.id.deleteNotice:
                intent = new Intent(MainActivity.this, DeleteNoticeActivity.class);
                startActivity(intent);
                break;
            case R.id.logout:
                editor.putString("isLogin","false");
                editor.commit();
                openAdminLogin();
                intent = new Intent(MainActivity.this, AdminLogin.class);
                startActivity(intent);
                break;
        }
    }
}
```

activity_upload_notice XML (News Feed Layout)

```xml
<?xml version="1.0" encoding="utf-8"?>
<ScrollView 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=".notice.UploadNoticeActivity">
    <LinearLayout
        android:layout_width="match_parent"
```

```xml
    android:layout_height="match_parent"
    android:orientation="vertical">
    <com.google.android.material.card.MaterialCardView
        android:layout_width="130dp"
        android:layout_height="150dp"
        android:layout_margin="10dp"
        android:id="@+id/addImage"
        app:cardElevation="5dp"
        android:layout_gravity="center">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical"
            android:gravity="center">
            <ImageView
                android:layout_width="64dp"
                android:layout_height="64dp"
                android:background="@drawable/circle_purple"
                android:src="@drawable/ic_note"
                android:padding="15dp"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="@color/lightgrey"
                android:layout_marginTop="10dp"/>
            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Select Notice"
                android:textStyle="bold"
                android:padding="5dp"
                android:layout_marginTop="10dp"
                android:textColor="@color/textcolor">
            </TextView>
        </LinearLayout>
    </com.google.android.material.card.MaterialCardView>
    <com.google.android.material.textfield.TextInputLayout
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_marginTop="16dp">
```

```xml
            <com.google.android.material.textfield.TextInputEditText
                android:id="@+id/noticeTitle"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:hint="News Feed Title" />
        </com.google.android.material.textfield.TextInputLayout>
        <com.google.android.material.button.MaterialButton
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Upload Notice"
            android:layout_marginTop="16dp"
            android:textAllCaps="false"
            android:id="@+id/uploadNoteBtn"/>
        <com.google.android.material.card.MaterialCardView
            android:layout_width="match_parent"
            android:layout_marginTop="16dp"
            android:layout_height="400dp">
            <ImageView
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:scaleType="centerCrop"
                android:id="@+id/noticeImageView"/>
        </com.google.android.material.card.MaterialCardView>
    </LinearLayout>
</ScrollView>
```

newsfeed_item_layout XML

```xml
<?xml version="1.0" encoding="utf-8"?>
<com.google.android.material.card.MaterialCardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:padding="16dp"
        android:orientation="vertical">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
```

```xml
                android:gravity="center_vertical"
                android:orientation="horizontal">
                <de.hdodenhof.circleimageview.CircleImageView
                    android:layout_width="36dp"
                    android:layout_height="36dp"
                    android:src="@drawable/akgec"/>
                <TextView
                    android:layout_width="match_parent"
                    android:layout_height="match_parent"
                    android:text="AKGEC - News Feed"
                    android:layout_marginLeft="16dp"
                    android:textSize="18dp"
                    android:textColor="@color/textcolor"/>
                <com.google.android.material.button.MaterialButton
                    android:id="@+id/deleteNotice"
                    android:layout_width="wrap_content"
                    android:layout_height="wrap_content"
                    android:text="Delete"
                    android:layout_marginLeft="-100dp"
                    style="@style/Widget.MaterialComponents.Button.OutlinedButton"/>
            </LinearLayout>
            <TextView
                android:id="@+id/deleteNoticeTitle"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Welcome in AKGEC - News Feed"
                android:textSize="17sp"
                android:textColor="@color/textcolor"/>
            <ImageView
                android:id="@+id/deleteNoticeImage"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:scaleType="fitXY"/>
        </LinearLayout>
</com.google.android.material.card.MaterialCardView>
```

UploadNoticeActivity JAVA

```java
package akgecians.administrator.notice;
import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
```

```java
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.app.ProgressDialog;
import android.content.Intent;
import android.graphics.Bitmap;
import android.net.Uri;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.Toast;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.storage.FirebaseStorage;
import com.google.firebase.storage.StorageReference;
import com.google.firebase.storage.UploadTask;
import java.io.ByteArrayOutputStream;
import java.io.IOException;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import akgecians.administrator.R;

public class UploadNoticeActivity extends AppCompatActivity {
    private CardView addImage;
    private final int REQ = 1;
    private Bitmap bitmap;
    private ImageView noticeImageView;
    private EditText noticeTitle;
    private Button uploadNoteBtn;
    private DatabaseReference reference,dbRef;
    private StorageReference storageReference;
    String downloadUrl= "";
    private ProgressDialog pd;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_upload_notice);
addImage = findViewById(R.id.addImage);
noticeImageView = findViewById(R.id.noticeImageView);
noticeTitle = findViewById(R.id.noticeTitle);
uploadNoteBtn = findViewById(R.id.uploadNoteBtn);
reference = FirebaseDatabase.getInstance().getReference();
storageReference = FirebaseStorage.getInstance().getReference().child("News Feed");
pd = new ProgressDialog(this);

    //this will open the gallary to selecting img
    addImage.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        openGallery();  //declared this mathod to open gallery


    }
});

    //we check the titel and photo != empty and then
    uploadNoteBtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            if (noticeTitle.getText().toString().isEmpty()){
                noticeTitle.setError("Empty");
                noticeTitle.requestFocus();
            }else if(bitmap == null){
                    uploadData();
            }else{
//when get the both title and image than we upload the data creating this method which declared
                uploadImage();
            }
        }
    });
}

//uploading data
private void uploadImage() {
                pd.setMessage("Uploading...");
                pd.show();
    ByteArrayOutputStream baos = new ByteArrayOutputStream();
```

```java
        bitmap.compress(Bitmap.CompressFormat.JPEG, 100, baos);  //compressing before upload
        byte[] finalimg = baos.toByteArray();
        //creating filepath to store data
        final StorageReference filePath;
        filePath = storageReference.child(finalimg+"jpg");
        //uploading
        final UploadTask uploadTask = filePath.putBytes(finalimg);
        uploadTask.addOnCompleteListener(UploadNoticeActivity.this, new
            OnCompleteListener<UploadTask.TaskSnapshot>() {
          @Override
          public void onComplete(@NonNull Task<UploadTask.TaskSnapshot> task) {
             if (task.isSuccessful()){
                 uploadTask.addOnSuccessListener(new
OnSuccessListener<UploadTask.TaskSnapshot>() {
                    @Override
                    public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {

                        filePath.getDownloadUrl().addOnSuccessListener(new OnSuccessListener<Uri>()
{
                           @Override
                           public void onSuccess(Uri uri)
                              downloadUrl = String.valueOf(uri);
                              uploadData();
                           }
                       });
                    }
                });
             }else{
                pd.dismiss();
                Toast.makeText(UploadNoticeActivity.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
             }
          }
       });

    //storing the data in firebase storage
    private void uploadData() {
       dbRef = reference.child("News Feed");
       final String uniqueKey = dbRef.push().getKey();
       String title = noticeTitle.getText().toString();    //through this get the title
       //getting the currentDate
```

```java
        Calendar calForDate = Calendar.getInstance();
        SimpleDateFormat currentDate = new SimpleDateFormat("dd--MM--yy");
        String date = currentDate.format(calForDate.getTime());
        //getting the currentTime
        Calendar calForTime = Calendar.getInstance();
        SimpleDateFormat currentTime = new SimpleDateFormat("hh:mm a");
        String time = currentTime.format(calForTime.getTime())
        //here NoticeData comes from NoticeData Java class file where created constructor
        NoticeData noticeData = new NoticeData(title, downloadUrl,date,time,uniqueKey);
        /*storing in firebase but we will not know so +1 method
        reference.child(uniqueKey).setValue(noticeData);*/
        dbRef.child(uniqueKey).setValue(noticeData).addOnSuccessListener(new
OnSuccessListener<Void>() {
            @Override
            public void onSuccess(Void aVoid) {
                            pd.dismiss();
                Toast.makeText(UploadNoticeActivity.this, "Successfully Uploaded",
Toast.LENGTH_SHORT).show();
            }
        }).addOnFailureListener(new OnFailureListener() {
            @Override
            public void onFailure(@NonNull Exception e) {
                            pd.dismiss();
                Toast.makeText(UploadNoticeActivity.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
            }
        });
    }
    //created that method to open gallery
    private void openGallery() {
        Intent pickImage = new Intent(Intent.ACTION_PICK,
            MediaStore.Images.Media.EXTERNAL_CONTENT_URI);
        startActivityForResult(pickImage,REQ);
    }
    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if (requestCode == REQ && resultCode == RESULT_OK) {
            Uri uri = data.getData();  //will get the img in uri and initialize to bitmap
            try {
                bitmap = MediaStore.Images.Media.getBitmap(getContentResolver(), uri);
```

```java
        } catch (IOException e) {
            e.printStackTrace();
        }
        //set on img(bitmap) noticeImageView to show preview in down
        noticeImageView.setImageBitmap(bitmap);
    }
}
}
```

NoticeAdapter JAVA

```java
package akgecians.administrator.notice;
import android.content.Context;
import android.content.DialogInterface;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AlertDialog;
import androidx.recyclerview.widget.RecyclerView;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.squareup.picasso.Picasso
import java.util.ArrayList;
import akgecians.administrator.R;
public class NoticeAdapter extends RecyclerView.Adapter<NoticeAdapter.NoticeViewAdapter> {
    private Context context;
    private ArrayList<NoticeData> list;
    public NoticeAdapter(Context context, ArrayList<NoticeData> list) {
        this.context = context;
        this.list = list;
    }
    @NonNull
    @Override
```

```java
    public NoticeViewAdapter onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
        View view = LayoutInflater.from(context).inflate(R.layout.newsfeed_item_layout, parent,
false);
        return new NoticeViewAdapter(view);
    }
    @Override
    public void onBindViewHolder(@NonNull NoticeViewAdapter holder, int position) {
        NoticeData currentItem = list.get(position);
        holder.deleteNoticeTitle.setText(currentItem.getTitle());
        try {
            if (currentItem.getImage() != null)
                Picasso.get().load(currentItem.getImage()).into(holder.deleteNoticeImage);
        } catch (Exception e) {
            e.printStackTrace();
        }
        holder.deleteNotice.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                AlertDialog.Builder builder = new AlertDialog.Builder(context);
                builder.setMessage("Are You Sure Want to Delete This Notice?");
                builder.setCancelable(true);
                builder.setPositiveButton("YES", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int i) {
                        DatabaseReference reference =
FirebaseDatabase.getInstance().getReference().child("News Feed");
                        reference.child(currentItem.getKey()).removeValue()
                            .addOnCompleteListener(new OnCompleteListener<Void>() {
                                @Override
                                public void onComplete(@NonNull Task<Void> task) {
                                    Toast.makeText(context, "Notice Deleted",
Toast.LENGTH_SHORT).show();
                                }
                            }).addOnFailureListener(new OnFailureListener() {
                            @Override
                            public void onFailure(@NonNull Exception e) {
                                Toast.makeText(context, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
                            }
                        });
                        notifyItemRemoved(position);
```

```java
                    }
                });
                builder.setNegativeButton("NO", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int i) {
                        dialogInterface.cancel();
                    }
                });
                AlertDialog dialog = null;
                try {
                    dialog = builder.create();
                } catch (Exception e) {
                    e.printStackTrace();
                }
                if (dialog != null)
                dialog.show();
            }
        });
    }
    @Override
    public int getItemCount() {
        return list.size();
    }
    public class NoticeViewAdapter extends RecyclerView.ViewHolder {
        private Button deleteNotice;
        private TextView deleteNoticeTitle;
        private ImageView deleteNoticeImage;
        public NoticeViewAdapter(@NonNull View itemView) {
        super(itemView);
        deleteNotice = itemView.findViewById(R.id.deleteNotice);
        deleteNoticeTitle = itemView.findViewById(R.id.deleteNoticeTitle);
        deleteNoticeImage = itemView.findViewById(R.id.deleteNoticeImage);
    }
  }
}
```

activity_delete_notice XML

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

```xml
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".notice.DeleteNoticeActivity">
    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/deleteNoticeRecycler"
        android:layout_width="match_parent"
        android:layout_height="match_parent"/>
    <ProgressBar
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:id="@+id/progressBar"/>
</RelativeLayout>
```

DeleteNoticeActivity JAVA

```java
package akgecians.administrator.notice;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import android.os.Bundle;
import android.view.View;
import android.widget.ProgressBar;
import android.widget.Toast;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import java.util.ArrayList;
import java.util.List;
import akgecians.administrator.R;
public class DeleteNoticeActivity extends AppCompatActivity {
        private RecyclerView deleteNoticeRecycler;
        private ProgressBar progressBar;
        private ArrayList<NoticeData> list;
        private NoticeAdapter adapter;
        private DatabaseReference reference;
    @Override
```

```java
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_delete_notice);
        progressBar = findViewById(R.id.progressBar);
        reference = FirebaseDatabase.getInstance().getReference().child("News Feed");
        deleteNoticeRecycler.setLayoutManager(new LinearLayoutManager(this));
        deleteNoticeRecycler.setHasFixedSize(true);
        getNotice();
    }

    private void getNotice() {
        reference.addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot snapshot) {
                list = new ArrayList<>();
                for (DataSnapshot dataSnapshot : snapshot.getChildren()){
                    NoticeData data = dataSnapshot.getValue(NoticeData.class);
                    list.add(0, data);
                }
                adapter = new NoticeAdapter(DeleteNoticeActivity.this, list);
                adapter.notifyDataSetChanged();
                progressBar.setVisibility(View.GONE);
                deleteNoticeRecycler.setAdapter(adapter);
                Toast.makeText(DeleteNoticeActivity.this, "News Feed Found Successfully",
                Toast.LENGTH_SHORT).show();
            }
            @Override
            public void onCancelled(@NonNull DatabaseError error) {
                progressBar.setVisibility(View.GONE);
                Toast.makeText(DeleteNoticeActivity.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

activity_upload_image XML (Gallery)

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

```xml
android:layout_width="match_parent"
android:layout_height="match_parent"
android:padding="16dp"
tools:context=".UploadImage">
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <com.google.android.material.card.MaterialCardView
        android:layout_width="130dp"
        android:layout_height="150dp"
        android:layout_margin="10dp"
        android:id="@+id/addGalleryImage"
        app:cardElevation="5dp"
        android:layout_gravity="center">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical"
            android:gravity="center">
            <ImageView
                android:layout_width="64dp"
                android:layout_height="64dp"
                android:background="@drawable/circle_yellow"
                android:src="@drawable/ic_note"
                android:padding="15dp"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="@color/lightgrey"
                android:layout_marginTop="10dp"/>
            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Select Image"
                android:textStyle="bold"
                android:padding="5dp"
                android:layout_marginTop="10dp"
                android:textColor="@color/textcolor">
            </TextView>
        </LinearLayout>
    </LinearLayout>
```

```xml
        </com.google.android.material.card.MaterialCardView>
        <Spinner
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/image_category"
            android:background="@android:drawable/btn_dropdown"
            android:gravity="center"
            android:layout_marginVertical="16dp"/>
        <com.google.android.material.button.MaterialButton
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Upload Image"
            android:layout_marginTop="16dp"
            android:textAllCaps="false"
            android:id="@+id/uploadImageBtn"/>
        <com.google.android.material.card.MaterialCardView
            android:layout_width="match_parent"
            android:layout_marginTop="16dp"
            android:layout_height="400dp">
            <ImageView
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:scaleType="centerCrop"
                android:id="@+id/galleryImageView"/>
        </com.google.android.material.card.MaterialCardView>
    </LinearLayout>
</ScrollView>
```

UploadImage JAVA

```java
package akgecians.administrator;
import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.app.ProgressDialog;
import android.content.Intent;
import android.graphics.Bitmap;
import android.net.Uri;
import android.os.Bundle;
import android.provider.MediaStore;
```

```java
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.Spinner;
import android.widget.Toast;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.storage.FirebaseStorage;
import com.google.firebase.storage.StorageReference;
import com.google.firebase.storage.UploadTask;
import java.io.ByteArrayOutputStream;
import java.io.IOException;

public class UploadImage extends AppCompatActivity {

    private Spinner imageCategory;
    private CardView selectImage;
    private Button uploadImage;
    private ImageView galleryImageView;
    private String category;
    private final int REQ = 1;
    private Bitmap bitmap;  // firstly  we'll store img in bitmap
    ProgressDialog pd;

    private DatabaseReference reference,dbRef;    //for database
    private StorageReference storageReference;  //for storage
    String downloadUrl = "";

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

        selectImage = findViewById(R.id.addGalleryImage);
        imageCategory = findViewById(R.id.image_category);
```

```java
uploadImage = findViewById(R.id.uploadImageBtn);
galleryImageView = findViewById(R.id.galleryImageView);
pd = new ProgressDialog(this);

reference = FirebaseDatabase.getInstance().getReference().child("Gallery");
storageReference = FirebaseStorage.getInstance().getReference().child("Gallery");
String[] items = new String[]{"Select Category", "Convocation", "Alumni Meet", "Freshers
Party","Farewell           Party","Independence Day","Republic Day","Holi
Celebration","Deepawali Celebration","Vishwakarma Puja"};
imageCategory.setAdapter(new ArrayAdapter<String>(this,
android.R.layout.simple_spinner_dropdown_item,   items));
imageCategory.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
    @Override
    public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
        category = imageCategory.getSelectedItem().toString();
    }
    @Override
    public void onNothingSelected(AdapterView<?> adapterView) {
    }
});
//setting the ClickListener on selectImage
selectImage.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        openGallery();  //declared this method to open gallery
    }
});
//here we set the onClickListener on uploadImageBtn(uploadImage)
uploadImage.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        //first we check the user selected the images or not through 'bitmap'
        if (bitmap == null){
            Toast.makeText(UploadImage.this, "Please Select Image",
Toast.LENGTH_SHORT).show();
        }//than we check user selected the cat through 'category'
        else if (category.equals("Select Category")){
            Toast.makeText(UploadImage.this, "Please Select Image Category",
Toast.LENGTH_SHORT).show();
        }//when we got the both
        else{
            pd.setMessage("Uploading..");
```

```java
                pd.show();
                //here called a method
                uploadImage();
            }
        }
    });
}
    // here that method created to upload images
    private void uploadImage() {
        ByteArrayOutputStream baos = new ByteArrayOutputStream();
        bitmap.compress(Bitmap.CompressFormat.JPEG, 100, baos);
        byte[] finalimg = baos.toByteArray();
        //creating filepath to store data
        final StorageReference filePath;
        filePath = storageReference.child(finalimg+"jpg");
        //uploading
        final UploadTask uploadTask = filePath.putBytes(finalimg);
        uploadTask.addOnCompleteListener(UploadImage.this, new
OnCompleteListener<UploadTask.TaskSnapshot>() {
            @Override
            public void onComplete(@NonNull Task<UploadTask.TaskSnapshot> task) {
                if (task.isSuccessful()){
                    uploadTask.addOnSuccessListener(new
OnSuccessListener<UploadTask.TaskSnapshot>() {
                        @Override
                        public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {
                            filePath.getDownloadUrl().addOnSuccessListener(new OnSuccessListener<Uri>()
{
                                @Override
                                public void onSuccess(Uri uri) {
                                    //we get the url of img in downloadUrl
                                    downloadUrl = String.valueOf(uri);
                                    //now we are going to upload data
                                    uploadData();
                                }
                            });
                        }
                    });
                }else{
                    pd.dismiss();
```

```java
                Toast.makeText(UploadImage.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
            }
          }
        });
    }
    //this is the code to store your data in firebase database
    private void uploadData() {
        //here by passing 'category' we store the data in that cat which selected by user
        dbRef = reference.child(category);
        final String uniquekey = dbRef.push().getKey();
        //now we set the data
        dbRef.child(uniquekey).setValue(downloadUrl).addOnSuccessListener(new
OnSuccessListener<Void>() {
            @Override
            public void onSuccess(Void aVoid) {
                pd.dismiss();
                Toast.makeText(UploadImage.this, "Image Uploaded Successfully",
Toast.LENGTH_SHORT).show();
            }
        }).addOnFailureListener(new OnFailureListener() {
            @Override
            public void onFailure(@NonNull Exception e) {
                pd.dismiss();
                Toast.makeText(UploadImage.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
            }
        });
    }
    //here created that method to open Gallary
    private void openGallery() {
        Intent pickImage = new Intent(Intent.ACTION_PICK,
MediaStore.Images.Media.EXTERNAL_CONTENT_URI);
        startActivityForResult();
    }
    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if(requestCode == REQ && resultCode == RESULT_OK){
            Uri uri = data.getData();
            try {
                bitmap = MediaStore.Images.Media.getBitmap(getContentResolver());
```

```java
        } catch (IOException e) {
            e.printStackTrace();
        }
        galleryImageView.setImageBitmap(bitmap);
    }
  }
}
```

activity_upload_pdf XML (Notes / Study Material)

```xml
<?xml version="1.0" encoding="utf-8"?>
<ScrollView 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=".UploadPdfActivity">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">
        <com.google.android.material.card.MaterialCardView
            android:layout_width="130dp"
            android:layout_height="150dp"
            android:layout_margin="10dp"
            android:id="@+id/addPdf"
            app:cardElevation="5dp"
            android:layout_gravity="center">
            <LinearLayout
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:orientation="vertical"
                android:gravity="center">
                <ImageView
                    android:layout_width="64dp"
                    android:layout_height="64dp"
                    android:background="@drawable/circle_red"
                    android:src="@drawable/ic_pdf"
                    android:padding="15dp"/>
                <View
```

```xml
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="@color/lightgrey"
                android:layout_marginTop="10dp"/>
            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Select Notes"
                android:textStyle="bold"
                android:padding="5dp"
                android:layout_marginTop="10dp"
                android:textColor="@color/textcolor">
            </TextView>
        </LinearLayout>
    </com.google.android.material.card.MaterialCardView>
    <TextView
        android:id="@+id/pdfTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="No file selected "
        android:textSize="16sp" />
    <com.google.android.material.textfield.TextInputLayout
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_marginTop="16dp">
        <com.google.android.material.textfield.TextInputEditText
            android:id="@+id/pdfTitle"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:hint="Notes Title" />
    </com.google.android.material.textfield.TextInputLayout>
    <com.google.android.material.button.MaterialButton
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Upload Notes"
        android:layout_marginTop="16dp"
        android:textAllCaps="false"
        android:id="@+id/uploadPdfBtn"/>
</LinearLayout>
```

</ScrollView>

UploadPdfActivity JAVA

package akgecians.administrator;

import androidx.annotation.NonNull;

import androidx.annotation.Nullable;

import androidx.appcompat.app.AppCompatActivity;

import androidx.cardview.widget.CardView;

import android.app.ProgressDialog;

import android.content.Intent;

import android.database.Cursor;

import android.graphics.Bitmap;

import android.net.Uri;

import android.os.Bundle;

import android.provider.MediaStore;

import android.provider.OpenableColumns;

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 com.google.android.gms.tasks.OnCompleteListener;

import com.google.android.gms.tasks.OnFailureListener;

import com.google.android.gms.tasks.OnSuccessListener;

import com.google.android.gms.tasks.Task;

import com.google.firebase.database.DatabaseReference;

import com.google.firebase.database.FirebaseDatabase;

import com.google.firebase.storage.FirebaseStorage;

import com.google.firebase.storage.StorageReference;

import com.google.firebase.storage.UploadTask;

import java.io.File;

import java.io.IOException;

import java.util.HashMap;

public class UploadPdfActivity extends AppCompatActivity {

   private CardView addPdf;
   private EditText pdfTitle;
   private Button uploadPdfBtn;

```java
private TextView pdfTextView;
private final int REQ = 1;

private String pdfName, title;
private Uri pdfData;
private DatabaseReference databaseReference;
private StorageReference storageReference;
String downloadUrl= "";
private ProgressDialog pd;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_upload_pdf);
    addPdf = findViewById(R.id.addPdf);
    pdfTitle = findViewById(R.id.pdfTitle);
    uploadPdfBtn = findViewById(R.id.uploadPdfBtn);
    pdfTextView = findViewById(R.id.pdfTextView);
    pd = new ProgressDialog(this);
    databaseReference = FirebaseDatabase.getInstance().getReference();
    storageReference = FirebaseStorage.getInstance().getReference();
    addPdf.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            openGallery();  //declared this mathod to open gallery
        }
    });
    uploadPdfBtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            title = pdfTitle.getText().toString();
            if (title.isEmpty()){
                pdfTitle.setError("Please Enter the Title");
                pdfTitle.requestFocus();
            }else if (pdfData == null){
                Toast.makeText(UploadPdfActivity.this, "Please Select Notes",
Toast.LENGTH_SHORT).show();
            }else {
                uploadPdf();
            }
        }
```

```java
        });
    }
    private void uploadPdf() {
        pd.setTitle("Please Wait...");
        pd.setMessage("Uploading Notes");
        pd.show();
    StorageReference reference = storageReference.child("pdf/"+ pdfName + "-"
+System.currentTimeMillis()+ ".pdf");
        reference.putFile(pdfData).addOnSuccessListener(new
OnSuccessListener<UploadTask.TaskSnapshot>() {
            @Override
            public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {
                Task<Uri> uriTask = taskSnapshot.getStorage().getDownloadUrl();
                while (!uriTask.isComplete());
                Uri uri = uriTask.getResult();
                uploadData(String.valueOf(uri));
            }
        }).addOnFailureListener(new OnFailureListener() {
            @Override
            public void onFailure(@NonNull Exception e) {
                pd.dismiss();
                Toast.makeText(UploadPdfActivity.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
            }
        });
    }
    private void uploadData(String downloadUrl) {
                String uniqueKey = databaseReference.child("Study Materials").push().getKey();
                HashMap hp = new HashMap();
                hp.put("pdfTitle", title);
                hp.put("pdfUrl",downloadUrl);
                databaseReference.child("Study
Materials").child(uniqueKey).setValue(hp).addOnCompleteListener(new
        OnCompleteListener<Void>() {
                    @Override
                    public void onComplete(@NonNull Task<Void> task) {
                        pd.dismiss();
        Toast.makeText(UploadPdfActivity.this, "Notes Uploaded Successfully",
Toast.LENGTH_SHORT).show();
                        pdfTitle.setText("");
                    }
                }).addOnFailureListener(new OnFailureListener() {
```

```java
            @Override
            public void onFailure(@NonNull Exception e) {
                pd.dismiss();
                Toast.makeText(UploadPdfActivity.this, "Uploading Failed",
Toast.LENGTH_SHORT).show();
            }
        });
    }
    private void openGallery() {
        Intent intent = new Intent();
        intent.setType("pdf/docs/ppt");
        intent.setAction(Intent.ACTION_GET_CONTENT);
        startActivityForResult(Intent.createChooser(intent,"Select PDF File"),REQ);
    }
    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if(requestCode == REQ && resultCode == RESULT_OK){
            pdfData = data.getData();
            Toast.makeText(this, ""+pdfData, Toast.LENGTH_SHORT).show();
            if (pdfData.toString().startsWith("content://")){
                Cursor cursor = null;
                try {
                    cursor =
UploadPdfActivity.this.getContentResolver().query(pdfData,null,null,null,null);
                    if (cursor != null && cursor.moveToFirst()){
                        //incomplete code to set  selected pdf name on layout
                    }
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }else if(pdfData.toString().startsWith("file://")){
                pdfName = new File(pdfData.toString()).getName();
            }
        }
    }
}
```

activity_update_faculty XML (Faculty Layout)

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

```xml
<androidx.coordinatorlayout.widget.CoordinatorLayout
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=".faculty.UpdateFaculty">
    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/fab"
        style="@style/Widget.Design.FloatingActionButton"
        android:layout_gravity="bottom|right"
        android:layout_margin="16dp"
        android:src="@drawable/ic_add"
        android:elevation="3dp"
        app:fabSize="normal"/>
    <androidx.core.widget.NestedScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical">
            <TextView
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="Applied Sciences and Humanities"
                android:gravity="center"
                android:textSize="22sp"
                android:textColor="@color/textcolor"
                android:textStyle="bold"
                android:layout_marginTop="16dp"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1.5dp"
                android:background="#070407"
                android:layout_marginVertical="8dp"/>
            <androidx.recyclerview.widget.RecyclerView
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
```

```xml
            android:id="@+id/appliedDepartment"
            android:nestedScrollingEnabled="false"
            android:visibility="gone"/>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/appliedNoData"
            android:orientation="vertical">
            <include layout="@layout/no_data_found"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="#ffcc00"
                android:layout_marginVertical="8dp"/>
        </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Civil Engineering"
        android:gravity="center"
        android:textSize="22sp"
        android:textColor="@color/textcolor"
        android:textStyle="bold"
        android:layout_marginTop="16dp"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1.5dp"
        android:background="#070407"
        android:layout_marginVertical="8dp"/>
    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/civilDepartment"
        android:nestedScrollingEnabled="false"
        android:visibility="gone"/>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/civilNoData"
            android:orientation="vertical">
            <include layout="@layout/no_data_found"/>
```

```xml
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="#ffcc00"
                android:layout_marginVertical="8dp"/>
        </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Computer Science and Engineering"
        android:gravity="center"
        android:textSize="22sp"
        android:textColor="@color/textcolor"
        android:textStyle="bold"
        android:layout_marginTop="16dp"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1.5dp"
        android:background="#070407"
        android:layout_marginVertical="8dp"/>
    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/csDepartment"
        android:nestedScrollingEnabled="false"
        android:visibility="gone"/>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/csNoData"
            android:orientation="vertical">
            <include layout="@layout/no_data_found"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="#ffcc00"
                android:layout_marginVertical="8dp"/>
        </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```xml
        android:text="Electrical and Electronics Engineering"
        android:gravity="center"
        android:textSize="22sp"
        android:textColor="@color/textcolor"
        android:textStyle="bold"
        android:layout_marginTop="16dp"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1.5dp"
        android:background="#070407"
        android:layout_marginVertical="8dp"/>
    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/eeeDepartment"
        android:nestedScrollingEnabled="false"
        android:visibility="gone"/>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/eeeNoData"
            android:orientation="vertical">
            <include layout="@layout/no_data_found"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="#ffcc00"
                android:layout_marginVertical="8dp"/>
        </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Electronics and Communication Engineering"
        android:gravity="center"
        android:textSize="22sp"
        android:textColor="@color/textcolor"
        android:textStyle="bold"
        android:layout_marginTop="16dp"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1.5dp"
```

```xml
        android:background="#070407"
        android:layout_marginVertical="8dp"/>
    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/eceDepartment"
        android:nestedScrollingEnabled="false"
        android:visibility="gone"/>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/eceNoData"
            android:orientation="vertical">
            <include layout="@layout/no_data_found"/>
            <View
                android:layout_width="match_parent"
                android:layout_height="1dp"
                android:background="#ffcc00"
                android:layout_marginVertical="8dp"/>
    </LinearLayout>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Mechanical Engineering"
        android:gravity="center"
        android:textSize="22sp"
        android:textColor="@color/textcolor"
        android:textStyle="bold"
        android:layout_marginTop="16dp"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1.5dp"
        android:background="#070407"
        android:layout_marginVertical="8dp"/>
    <androidx.recyclerview.widget.RecyclerView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/meDepartment"
        android:nestedScrollingEnabled="false"
        android:visibility="gone"/>
    <LinearLayout
```

```xml
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/meNoData"
    android:orientation="vertical">
    <include layout="@layout/no_data_found"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1dp"
        android:background="#ffcc00"
        android:layout_marginVertical="8dp"/>
</LinearLayout>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Information Technology"
    android:gravity="center"
    android:textSize="22sp"
    android:textColor="@color/textcolor"
    android:textStyle="bold"
    android:layout_marginTop="16dp"/>
<View
    android:layout_width="match_parent"
    android:layout_height="1.5dp"
    android:background="#070407"
    android:layout_marginVertical="8dp"/>
<androidx.recyclerview.widget.RecyclerView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/itDepartment"
    android:nestedScrollingEnabled="false"
    android:visibility="gone"/>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/itNoData"
    android:orientation="vertical">
    <include layout="@layout/no_data_found"/>
    <View
        android:layout_width="match_parent"
        android:layout_height="1dp"
        android:background="#ffcc00"
```

```
                android:layout_marginVertical="8dp"/>
        </LinearLayout>
    </LinearLayout>
    </androidx.core.widget.NestedScrollView>
</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

no_data_found XML (for No Data)

```
<?xml version="1.0" encoding="utf-8"?>
<com.google.android.material.card.MaterialCardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/noDataFound">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="No Data Found"
        android:textColor="@color/textcolor"
        android:textSize="20sp"
        android:gravity="center"
        android:layout_margin="8dp"/>
</com.google.android.material.card.MaterialCardView>
```

faculty_item_layout XML (Faculty Data List)

```
<?xml version="1.0" encoding="utf-8"?>
<com.google.android.material.card.MaterialCardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="4dp">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:weightSum="2">
```

```xml
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:paddingLeft="12dp"
    android:layout_weight="1.5"
    android:orientation="vertical"
    android:gravity="center_vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/teacherName"
        android:text="Garv Singh"
        android:textColor="@color/textcolor"
        android:textSize="18sp"/>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/teacherPost"
        android:text="Student"
        android:textColor="@color/textcolor"
        android:textSize="18sp"/>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/teacherEmail"
        android:text="gtiians@gmail.com"
        android:textColor="@color/textcolor"
        android:textSize="18sp"/>
    <com.google.android.material.button.MaterialButton
        android:id="@+id/teacherUpdate"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Update Info"
        android:layout_marginVertical="4dp"
        style="@style/Widget.MaterialComponents.Button.OutlinedButton"/>
</LinearLayout>
<de.hdodenhof.circleimageview.CircleImageView
    android:id="@+id/teacherImage"
    android:layout_width="80dp"
    android:layout_height="120dp"
    android:src="@drawable/fac"
```

```xml
        android:layout_gravity="center_horizontal"
        android:layout_weight="0.5"/>
    </LinearLayout>
    <View
        android:layout_width="match_parent"
        android:layout_height="1dp"
        android:background="#ffcc00"
        android:layout_marginVertical="8dp"/>
  </LinearLayout>
</com.google.android.material.card.MaterialCardView>
```

UpdateTeacherActivity JAVA

```java
package akgecians.administrator.faculty;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Adapter;
import android.widget.LinearLayout;
import android.widget.Toast;
import com.google.android.material.floatingactionbutton.FloatingActionButton;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
import com.google.firebase.storage.FirebaseStorage;
import java.util.ArrayList;
import java.util.List;
import akgecians.administrator.R;

public class UpdateFaculty extends AppCompatActivity {
    FloatingActionButton fab;
    private RecyclerView appliedDepartment, civilDepartment, csDepartment, eeeDepartment,
eceDepartment,    meDepartment, itDepartment;
```

```java
    private LinearLayout appliedNoData, civilNoData, csNoData, eeeNoData, eceNoData,
meNoData, itNoData;
    private List<TeacherData> list1, list2, list3, list4, list5, list6, list7;
    private TeacherAdapter adapter;
    private DatabaseReference reference, dbRef;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_update_faculty);
    appliedDepartment = findViewById(R.id.appliedDepartment);
    civilDepartment = findViewById(R.id.civilDepartment);
    csDepartment = findViewById(R.id.csDepartment);
    eeeDepartment = findViewById(R.id.eeeDepartment);
    eceDepartment = findViewById(R.id.eceDepartment);
    meDepartment = findViewById(R.id.meDepartment);
    itDepartment = findViewById(R.id.itDepartment);
    appliedNoData = findViewById(R.id.appliedNoData);
    civilNoData = findViewById(R.id.civilNoData);
    csNoData = findViewById(R.id.csNoData);
    eeeNoData = findViewById(R.id.eeeNoData);
    eceNoData = findViewById(R.id.eceNoData);
    meNoData = findViewById(R.id.meNoData);
    itNoData = findViewById(R.id.itNoData);
    reference = FirebaseDatabase.getInstance().getReference().child("Faculties");
    appliedDepartment();
    civilDepartment();
    csDepartment();
    eeeDepartment();
    eceDepartment();
    meDepartment();
    itDepartment();

    fab = findViewById(R.id.fab);
    fab.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View view) {
        startActivity(new Intent(UpdateFaculty.this,AddTeacher.class));
      }
    });
}
    private void appliedDepartment() {
```

```java
        dbRef = reference.child("Applied Sciences & Humanities");
        dbRef.addValueEventListener(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot snapshot) {
                list1 = new ArrayList<>();
                if (!snapshot.exists()){
                    appliedNoData.setVisibility(View.VISIBLE);
                    appliedDepartment.setVisibility(View.GONE);
                }else {
                    appliedNoData.setVisibility(View.GONE);
                    appliedDepartment.setVisibility(View.VISIBLE);
                    for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                        TeacherData data = dataSnapshot.getValue(TeacherData.class);
                        list1.add(data);
                    }
                    appliedDepartment.setHasFixedSize(true);
                    appliedDepartment.setLayoutManager(new
LinearLayoutManager(UpdateFaculty.this));
                    adapter = new TeacherAdapter(list1, UpdateFaculty.this, "Applied Sciences &
Humanities");
                    appliedDepartment.setAdapter(adapter);
                }
            }
            @Override
            public void onCancelled(@NonNull DatabaseError error) {
                Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
            }
        });
    }
    private void civilDepartment() {
    dbRef = reference.child("Civil Engineering");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot snapshot) {
            list2 = new ArrayList<>();
            if (!snapshot.exists()){
                civilNoData.setVisibility(View.VISIBLE);
                civilDepartment.setVisibility(View.GONE);
            }else {
                civilNoData.setVisibility(View.GONE);
```

```java
                civilDepartment.setVisibility(View.VISIBLE);
                for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                    TeacherData data = dataSnapshot.getValue(TeacherData.class);
                    list2.add(data);
                }
                civilDepartment.setHasFixedSize(true);
                civilDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
                adapter = new TeacherAdapter(list2, UpdateFaculty.this, "Civil Engineering");
                civilDepartment.setAdapter(adapter);
            }
        }
        @Override
        public void onCancelled(@NonNull DatabaseError error) {
            Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
        }
    });
}
    private void csDepartment() {
    dbRef = reference.child("Computer Science and Engineering");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot snapshot) {
            list3 = new ArrayList<>();
            if (!snapshot.exists()){
                csNoData.setVisibility(View.VISIBLE);
                csDepartment.setVisibility(View.GONE);
            }else {
                csNoData.setVisibility(View.GONE);
                csDepartment.setVisibility(View.VISIBLE);
                for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                    TeacherData data = dataSnapshot.getValue(TeacherData.class);
                    list3.add(data);
                }
                csDepartment.setHasFixedSize(true);
                csDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
                adapter = new TeacherAdapter(list3, UpdateFaculty.this,"Computer Science and
Engineering");
                csDepartment.setAdapter(adapter);
            }
        }
```

```java
        @Override
        public void onCancelled(@NonNull DatabaseError error) {
            Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
        }
    });
}
    private void eeeDepartment() {
    dbRef = reference.child("Electrical and Electronics Engineering");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot snapshot) {
            list4 = new ArrayList<>();
            if (!snapshot.exists()){
                eeeNoData.setVisibility(View.VISIBLE);
                eeeDepartment.setVisibility(View.GONE);
            }else {
                eeeNoData.setVisibility(View.GONE);
                eeeDepartment.setVisibility(View.VISIBLE);
                for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                    TeacherData data = dataSnapshot.getValue(TeacherData.class);
                    list4.add(data);
                }
                eeeDepartment.setHasFixedSize(true);
                eeeDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
                adapter = new TeacherAdapter(list4, UpdateFaculty.this,"Electrical and Electronics
Engineering");
                eeeDepartment.setAdapter(adapter);
            }
        }
        @Override
        public void onCancelled(@NonNull DatabaseError error) {
            Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
        }
    });
}
    private void eceDepartment() {
    dbRef = reference.child("Electronics and Communication Engineering");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
```

```java
public void onDataChange(@NonNull DataSnapshot snapshot) {
    list5 = new ArrayList<>();
    if (!snapshot.exists()){
        eceNoData.setVisibility(View.VISIBLE);
        eceDepartment.setVisibility(View.GONE);
    }else {
        eceNoData.setVisibility(View.GONE);
        eceDepartment.setVisibility(View.VISIBLE);
        for (DataSnapshot dataSnapshot: snapshot.getChildren()){
            TeacherData data = dataSnapshot.getValue(TeacherData.class);
            list5.add(data);
        }
        eceDepartment.setHasFixedSize(true);
        eceDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
        adapter = new TeacherAdapter(list5, UpdateFaculty.this, "Electronics and Communication Engineering");
        eceDepartment.setAdapter(adapter);
    }
}
@Override
public void onCancelled(@NonNull DatabaseError error) {
    Toast.makeText(UpdateFaculty.this, error.getMessage(), Toast.LENGTH_SHORT).show();
}
});
}
private void meDepartment() {
    dbRef = reference.child("Mechanical Engineering");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot snapshot) {
            list6 = new ArrayList<>();
            if (!snapshot.exists()){
                meNoData.setVisibility(View.VISIBLE);
                meDepartment.setVisibility(View.GONE);
            }else {
                meNoData.setVisibility(View.GONE);
                meDepartment.setVisibility(View.VISIBLE);
                for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                    TeacherData data = dataSnapshot.getValue(TeacherData.class);
                    list6.add(data);
```

```java
            }
            meDepartment.setHasFixedSize(true);
            meDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
            adapter = new TeacherAdapter(list6, UpdateFaculty.this, "Mechanical Engineering");
            meDepartment.setAdapter(adapter);
        }
    }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
        Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
    }
});
}
    private void itDepartment() {
    dbRef = reference.child("Information Technology");
    dbRef.addValueEventListener(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot snapshot) {
            list7 = new ArrayList<>();
            if (!snapshot.exists()){
                itNoData.setVisibility(View.VISIBLE);
                itDepartment.setVisibility(View.GONE);
            }else {
                itNoData.setVisibility(View.GONE);
                itDepartment.setVisibility(View.VISIBLE);
                for (DataSnapshot dataSnapshot: snapshot.getChildren()){
                    TeacherData data = dataSnapshot.getValue(TeacherData.class);
                    list7.add(data);
                }
                itDepartment.setHasFixedSize(true);
                itDepartment.setLayoutManager(new LinearLayoutManager(UpdateFaculty.this));
                adapter = new TeacherAdapter(list7, UpdateFaculty.this,"Information Technology");
                itDepartment.setAdapter(adapter);
            }
        }
        @Override
        public void onCancelled(@NonNull DatabaseError error) {
            Toast.makeText(UpdateFaculty.this, error.getMessage(),
Toast.LENGTH_SHORT).show();
        }
```

```
        });
    }
}
```

TeacherAdapter JAVA

```java
package akgecians.administrator.faculty;
import android.content.Context;
import android.content.Intent;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import com.squareup.picasso.Picasso;
import java.util.List;
import akgecians.administrator.R;

public class TeacherAdapter extends
RecyclerView.Adapter<TeacherAdapter.TeacherViewAdapter> {
    private List<TeacherData> list;
    private Context context;
    private String category;
    //here we create constructor below of variables declared just above
    public TeacherAdapter(List<TeacherData> list, Context context, String category) {
        this.list = list;
        this.context = context;
        this.category = category;
    }
    @NonNull
    @Override
    public TeacherViewAdapter onCreateViewHolder(@NonNull ViewGroup parent, int viewType)
{
        View view = LayoutInflater.from(context).inflate(R.layout.faculty_item_layout, parent, false);
        return new TeacherViewAdapter(view);
    }
    @Override
    public void onBindViewHolder(@NonNull TeacherViewAdapter holder, int position) {
```

```java
        TeacherData item = list.get(position);
        holder.name.setText(item.getName());
        holder.post.setText(item.getPost());
        holder.email.setText(item.getEmail());
    try {
        Picasso.get().load(item.getImage()).into(holder.imageView);
    } catch (Exception e) {
        e.printStackTrace();
    }
    holder.update.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new Intent(context,UpdateTeacherActivity.class);
            intent.putExtra("name",item.getName());
            intent.putExtra("post",item.getPost());
            intent.putExtra("email",item.getEmail());
            intent.putExtra("image",item.getImage());
            intent.putExtra("key",item.getKey());
            intent.putExtra("category",category);
            context.startActivity(intent);
        }
    });
}
@Override
public int getItemCount() {
    return list.size();
}
public class TeacherViewAdapter extends RecyclerView.ViewHolder {
    private TextView name, post, email;
    private Button update;
    private ImageView imageView;
    public TeacherViewAdapter(@NonNull View itemView) {
        super(itemView);
    name = itemView.findViewById(R.id.teacherName);
    post = itemView.findViewById(R.id.teacherPost);
    email = itemView.findViewById(R.id.teacherEmail);
    imageView = itemView.findViewById(R.id.teacherImage);
    update = itemView.findViewById(R.id.teacherUpdate);
    }
}
}
```

activity_update_teacher XML (Upadte /Delete Faculty)

```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"
    android:padding="15dp"
    tools:context=".faculty.UpdateTeacherActivity">
    <de.hdodenhof.circleimageview.CircleImageView
        android:layout_width="150dp"
        android:layout_height="150dp"
        android:id="@+id/updateTeacherImage"
        android:layout_gravity="center_horizontal"
        android:src="@drawable/fac"
        android:layout_marginTop="36dp"/>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox">
        <com.google.android.material.textfield.TextInputEditText
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:hint="Name"
            android:inputType="text"
            android:id="@+id/updateTeacherName"/>
    </com.google.android.material.textfield.TextInputLayout>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox">
        <com.google.android.material.textfield.TextInputEditText
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:hint="Post"
            android:inputType="text"
```

```xml
            android:id="@+id/updateTeacherPost"/>
    </com.google.android.material.textfield.TextInputLayout>
        <com.google.android.material.textfield.TextInputLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginTop="24dp"
            style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox">
            <com.google.android.material.textfield.TextInputEditText
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:hint="Email"
                android:inputType="text"
                android:id="@+id/updateTeacherEmail"/>
    </com.google.android.material.textfield.TextInputLayout>
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:weightSum="2"
            android:orientation="horizontal"
            android:layout_marginTop="24dp">
            <com.google.android.material.button.MaterialButton
                android:layout_width="0dp"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="Update"
                android:textAllCaps="false"
                android:layout_marginRight="8dp"
                android:id="@+id/updateTeacherBtn"/>
            <com.google.android.material.button.MaterialButton
                android:layout_width="0dp"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="Delete"
                android:textAllCaps="false"
                android:layout_marginLeft="8dp"
                android:id="@+id/deleteTeacherBtn"/>
        </LinearLayout>
</LinearLayout>
```

UpdateTeacherActivity JAVA

```java
package akgecians.administrator.faculty;
import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import android.app.ProgressDialog;
import android.content.Intent;
import android.graphics.Bitmap;
import android.net.Uri;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.Toast;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.android.gms.tasks.Task;
import com.google.android.material.button.MaterialButton;
import com.google.android.material.textfield.TextInputEditText;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.storage.FirebaseStorage;
import com.google.firebase.storage.StorageReference;
import com.google.firebase.storage.UploadTask;
import com.squareup.picasso.Picasso;
import java.io.ByteArrayOutputStream;
import java.io.IOException;
import java.util.HashMap;
import akgecians.administrator.R;
import de.hdodenhof.circleimageview.CircleImageView;


public class UpdateTeacherActivity extends AppCompatActivity {

    private ImageView updateTeacherImage;
    private EditText updateTeacherName, updateTeacherPost, updateTeacherEmail;
    private Button updateTeacherBtn, deleteTeacherBtn;
    private String name,email,image,post;
    private final int REQ = 1;
    private Bitmap bitmap = null;
```

```java
private DatabaseReference reference, dbRef;
private StorageReference storageReference;
private String downloadUrl;
private ProgressDialog pd;
private String category, uniqueKey;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_update_teacher);
        uniqueKey = getIntent().getStringExtra("key");
        category = getIntent().getStringExtra("category");
        name = getIntent().getStringExtra("name");
        post = getIntent().getStringExtra("post");
        email = getIntent().getStringExtra("email");
        image = getIntent().getStringExtra("image");
        updateTeacherImage = findViewById(R.id.updateTeacherImage);
        updateTeacherName = findViewById(R.id.updateTeacherName);
        updateTeacherPost = findViewById(R.id.updateTeacherPost);
        updateTeacherEmail = findViewById(R.id.updateTeacherEmail);
        updateTeacherBtn = findViewById(R.id.updateTeacherBtn);
        deleteTeacherBtn = findViewById(R.id.deleteTeacherBtn);
        reference = FirebaseDatabase.getInstance().getReference().child("Faculties");
        storageReference = FirebaseStorage.getInstance().getReference().child("Faculties");
        pd = new ProgressDialog(this);
    try {
        Picasso.get().load(image).into(updateTeacherImage);
    } catch (Exception e) {
        e.printStackTrace();
    }
        updateTeacherName.setText(name);
        updateTeacherPost.setText(post);
        updateTeacherEmail.setText(email);
        updateTeacherImage.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                openGallery();
            }
        });
        updateTeacherBtn.setOnClickListener(new View.OnClickListener() {
            @Override
```

```java
        public void onClick(View view) {
            name = updateTeacherName.getText().toString();
            post = updateTeacherPost.getText().toString();
            email = updateTeacherEmail.getText().toString();
            checkValidation();
        }
    });
    deleteTeacherBtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            deleteData();
        }
    });
}
private void checkValidation() {
        if (name.isEmpty()){
            updateTeacherName.setError("Please Enter Name");
            updateTeacherName.requestFocus();
        }else if (post.isEmpty()){
            updateTeacherPost.setError("Please Enter Post");
            updateTeacherPost.requestFocus();
        }else if (email.isEmpty()){
            updateTeacherEmail.setError("Please Enter Email");
            updateTeacherEmail.requestFocus();
        }else if (bitmap == null){
            updateData(image);
        }else {
            uploadImage();
        }
    }
private void updateData(String s) {
    HashMap hp = new HashMap();
    hp.put("name", name);
    hp.put("post", post);
    hp.put("email", email);
    hp.put("image", s);
    reference.child(category).child(uniqueKey).updateChildren(hp).addOnSuccessListener(new
OnSuccessListener() {
        @Override
        public void onSuccess(Object o) {
```

```java
            Toast.makeText(UpdateTeacherActivity.this, "Faculty Updated Successfully",
        Toast.LENGTH_SHORT).show();
            Intent intent = new Intent(UpdateTeacherActivity.this, UpdateFaculty.class);
            intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK |
Intent.FLAG_ACTIVITY_CLEAR_TOP);
            startActivity(intent);
        }
    }).addOnFailureListener(new OnFailureListener() {
        @Override
        public void onFailure(@NonNull Exception e) {
            Toast.makeText(UpdateTeacherActivity.this, "Something Went Wrong",
    Toast.LENGTH_SHORT).show();
        }
    });
}
private void uploadImage() {
    pd.setMessage("Updating...");
    pd.show();
    ByteArrayOutputStream baos = new ByteArrayOutputStream();
    bitmap.compress(Bitmap.CompressFormat.JPEG, 100, baos);  //compressing before upload
    byte[] finalimg = baos.toByteArray();

    //creating filepath to store data
    final StorageReference filePath;
    filePath = storageReference.child("Faculties").child(finalimg+"jpg");

    //uploading
    final UploadTask uploadTask = filePath.putBytes(finalimg);

    uploadTask.addOnCompleteListener(UpdateTeacherActivity.this, new
        OnCompleteListener<UploadTask.TaskSnapshot>() {
        @Override
        public void onComplete(@NonNull Task<UploadTask.TaskSnapshot> task) {
            if (task.isSuccessful()){
                uploadTask.addOnSuccessListener(new
OnSuccessListener<UploadTask.TaskSnapshot>() {
                    @Override
                    public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {
                        filePath.getDownloadUrl().addOnSuccessListener(new OnSuccessListener<Uri>()
{
                            @Override
                            public void onSuccess(Uri uri) {
```

```java
                        downloadUrl = String.valueOf(uri);
                        updateData(downloadUrl);
                    }
                });
            }
        });
    }else{
        pd.dismiss();
        Toast.makeText(UpdateTeacherActivity.this, "Something Went Wrong",
    Toast.LENGTH_SHORT).show();
    }
    }
});
}
private void deleteData() {
        pd.setMessage("Deleting...");
        pd.show();
    reference.child(category).child(uniqueKey).removeValue().addOnCompleteListener(new
    OnCompleteListener<Void>() {
        @Override
        public void onComplete(@NonNull Task<Void> task) {

            Toast.makeText(UpdateTeacherActivity.this, "Faculty Deleted Successfully",
    Toast.LENGTH_SHORT).show();
            Intent intent = new Intent(UpdateTeacherActivity.this,UpdateFaculty.class);

            intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK |
Intent.FLAG_ACTIVITY_CLEAR_TOP);
            startActivity(intent);
        }
    }).addOnFailureListener(new OnFailureListener() {
        @Override
        public void onFailure(@NonNull Exception e) {
            Toast.makeText(UpdateTeacherActivity.this, "Something Went Wrong",
Toast.LENGTH_SHORT).show();
            pd.dismiss();
        }
    });
}
private void openGallery() {
    Intent pickImage = new Intent(Intent.ACTION_PICK,
        MediaStore.Images.Media.EXTERNAL_CONTENT_URI);
```

```java
        startActivityForResult(pickImage,REQ);
    }
    @Override
    protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if(requestCode == REQ && resultCode == RESULT_OK){
            Uri uri = data.getData();
            try {
                bitmap = MediaStore.Images.Media.getBitmap(getContentResolver(),uri);
            } catch (IOException e) {
                e.printStackTrace();
            }
            updateTeacherImage.setImageBitmap(bitmap);
        }
    }
}
```

.