## 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 :- 3<sup>rd</sup> Year

Semester :- 3<sup>rd</sup>

Branch :- CSE(DS)

Student No. :- 2115402-D

Date :-



# **Certificate of Training**

## Gaurav Singh

from Ajay Kumar Garg Engineering College has successfully completed a six weeks online training on Android App Development from 11th September, 2022 to 25th October, 2022. The training consisted of Introduction to Android, World of Kotlin, Android Kick-Off, Higher Order Functionalities and The Final Project modules.

We wish Gaurav Singh all the best for the future

Sarvesh Agrawal
Founder & CEO. Internshala

Date of certification: 2022-11-27 Certificate no.: 1BE4879D-597D-0C9E-A2E7-7264454853AE For certificate authentication, please visit https://trainings.internshala.com/verify\_certificate

# AJAY KUMAR GARG ENGINEERING COLLEGE

 $27^{\rm th}$  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, ha	s 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. Rekha Baghel** 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**:

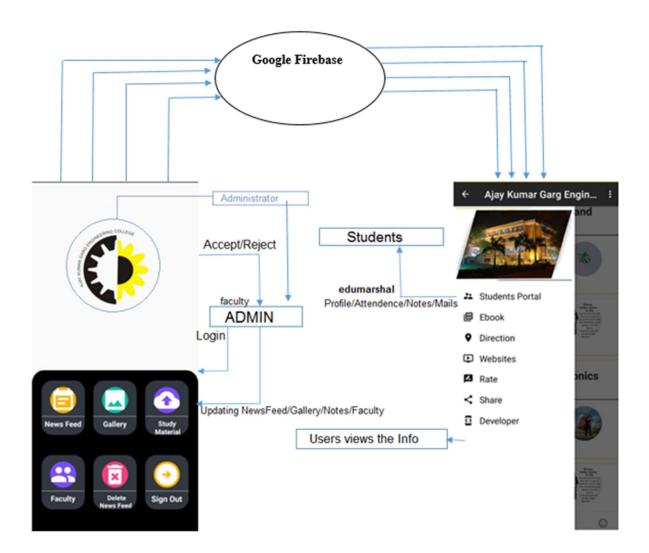
- ❖ The main purpose is to take trainee to their "DREAM JOB". The objective of Training is to develop useful knowledge, techniques, and skills. They prepare the students to carry out the tasks in well-defined job circumstances.
- Training is theactivity that enhances your performance in the present or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

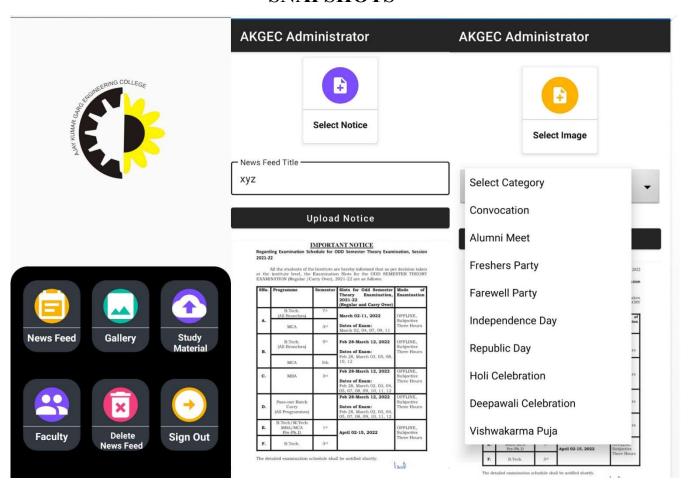
## Languages for programming:-

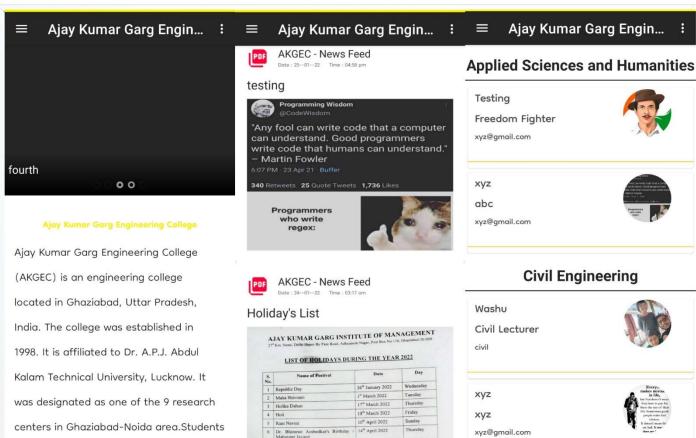
- i.) Java
- ii.) XML for UI development

## **Modules in Project:-**

- 1. Login Manager
- 2. News Feed Management
- 3. Gallery Management
- 4. Notes Management
- 5. Faculties Management
- 6. Student Portal\* (edumarshal)

## **SNAPSHOTS**





News Feed

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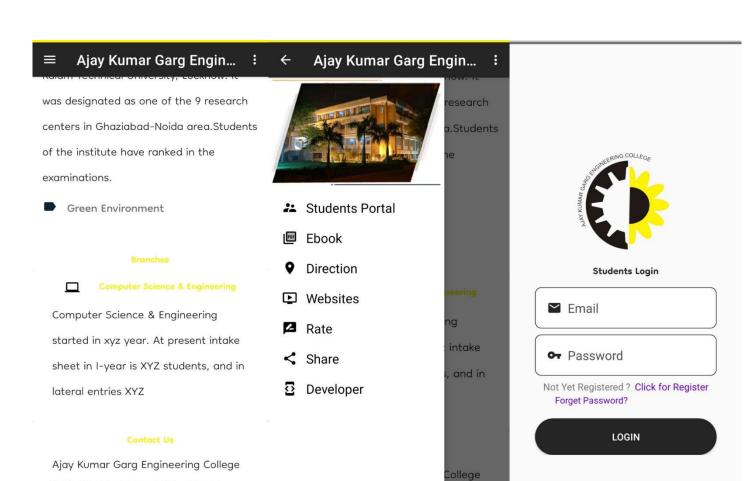
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# **Code: Student App**

# MainActivity.java

```
package akgecians.students;
import androidx.annotation.NonNull;
import androidx.appcompat.app.ActionBarDrawerToggle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.view.GravityCompat;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.navigation.NavController;
import androidx.navigation.Navigation;
import androidx.navigation.ui.NavigationUI;
import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.Toast;
import com.google.android.material.bottomnavigation.BottomNavigationView;
import com.google.android.material.navigation.NavigationView;
import com.google.firebase.auth.FirebaseAuth;
import java.util.Objects;
import akgecians.students.authentication.LoginActivity;
import akgecians.students.authentication.RegisterActivity;
import akgecians.students.ebook.EbookActivity;
public class MainActivity extends AppCompatActivity implements
NavigationView.OnNavigationItemSelectedListener {
  private DrawerLayout drawerLayout;
  private ActionBarDrawerToggle toggle;
  private FirebaseAuth auth;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
  setContentView(R.layout.activity main);
  auth = FirebaseAuth.getInstance();
BottomNavigationView bottomNavigationView =findViewById(R.id.bottomNavigationView);
NavController navController = Navigation.findNavController(this, R.id.frame layout);
  NavigationUI.setupWithNavController(bottomNavigationView, navController);
  drawerLayout = findViewById(R.id.drawerLayout);
  NavigationView navigationView = findViewById(R.id.navigation view);
  toggle = new ActionBarDrawerToggle(this,drawerLayout, R.string.start,R.string.close);
  drawerLayout.addDrawerListener(toggle);
  toggle.syncState();
  Objects.requireNonNull(getSupportActionBar()).setDisplayHomeAsUpEnabled(true);
  navigationView.setNavigationItemSelectedListener(this);
}
@Override
public boolean onCreateOptionsMenu(Menu menu) {
  MenuInflater menuInflater = getMenuInflater();
  menuInflater.inflate(R.menu.option menu, menu);
  return true;
}
@Override
public boolean onOptionsItemSelected(@NonNull MenuItem item) {
  if (toggle.onOptionsItemSelected(item)){
    return true;
  }
  if (item.getItemId() == R.id.logout) {
    auth.signOut();
    Toast.makeText(this, "Logout", Toast.LENGTH SHORT).show();
     openLogin();
```

//

```
}
  return true;
}
private void openLogin() {
  startActivity(new Intent(MainActivity.this, LoginActivity.class));
  finish();
}
@Override
protected void onStart() {
  super.onStart();
  if (auth.getCurrentUser() == null){
    openLogin();
  }
}
@SuppressLint("NonConstantResourceId")
@Override
public boolean onNavigationItemSelected(@NonNull MenuItem item) {
  switch (item.getItemId()){
       case R.id.studentPortal:
       startActivity(new Intent(this, RegisterActivity.class));
       break;
       case R.id.navigation_ebook:
       startActivity(new Intent(this, EbookActivity.class));
       break;
       case R.id.navigation map:
       Toast.makeText(this,"Map", Toast.LENGTH_SHORT).show();
       break;
       case R.id.navigation website:
       Toast.makeText(this,"Website", Toast.LENGTH SHORT).show();
       break;
       case R.id.navigation rate:
```

```
Toast.makeText(this,"Rating", Toast.LENGTH SHORT).show();
      break;
      case R.id.navigation share:
      Toast.makeText(this, "Share", Toast.LENGTH SHORT).show();
      break;
      case R.id.navigation developer:
      Toast.makeText(this,"Developer", Toast.LENGTH SHORT).show();
      break;
  }
  return true;
}
@SuppressLint("SuspiciousIndentation")
@Override
public void onBackPressed() {
  if (drawerLayout.isDrawerOpen(GravityCompat.START)){
    drawerLayout.closeDrawer(GravityCompat.START);
  }else
  super.onBackPressed();
}
```

# HomeFragment.java

```
package akgecians.students.ui.home;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import com.smarteist.autoimageslider.DefaultSliderView;
import com.smarteist.autoimageslider.IndicatorAnimations;
import com.smarteist.autoimageslider.SliderAnimations;
```

```
import com.smarteist.autoimageslider.SliderLayout;
import akgecians.students.R;
public class HomeFragment extends Fragment {
  private SliderLayout sliderLayout;
  private ImageView map;
  @Override
  public View on Create View (Layout Inflater inflater, View Group container,
                 Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view = inflater.inflate(R.layout.fragment home, container, false);
    sliderLayout = view.findViewById(R.id.slider);
    sliderLayout.setIndicatorAnimation(IndicatorAnimations.FILL);
sliderLayout.setSliderTransformAnimation(SliderAnimations.SIMPLETRANSFORMATION);
    sliderLayout.setScrollTimeInSec(1);
    setSliderViews();
    map = view.findViewById(R.id.map);
    map.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         openMap();
       }
    });
    return view;
  }
  private void openMap() {
    Uri uri = Uri.parse("geo:0, 0?q=Ajay Kumar Garg Engineering College Ghaziabad");
    Intent intent = new Intent(Intent.ACTION VIEW, uri);
    intent.setPackage("com.google.android.apps.map");
    startActivity(intent);
  }
```

```
private void setSliderViews() {
      for (int i=0; i<5; i++){
        DefaultSliderView sliderView = new DefaultSliderView(getContext());
        switch (i) {
          case 0:
             sliderView.setImageUrl("");
             sliderView.setDescription("Top College");
             break;
          case 1:
             sliderView.setImageUrl("");
             sliderView.setDescription("Second");
             break;
          case 2:
             sliderView.setImageUrl("");
             sliderView.setDescription("third");
             break;
          case 3:
             sliderView.setImageUrl("");
             sliderView.setDescription("fourth");
             break;
          case 4:
             sliderView.setImageUrl("");
             sliderView.setDescription("fifth");
             break;
        }
        sliderView.setImageScaleType(ImageView.ScaleType.CENTER_CROP);
        sliderLayout.addSliderView(sliderView);
      }
    }
NoticeFragment.java
 package akgecians.students.ui.notice;
 import android.os.Bundle;
 import androidx.annotation.NonNull;
 import androidx.fragment.app.Fragment;
 import androidx.recyclerview.widget.LinearLayoutManager;
 import androidx.recyclerview.widget.RecyclerView;
 import android.view.LayoutInflater;
```

```
import android.view.View;
import android.view.ViewGroup;
import android.widget.LinearLayout;
import android.widget.Toast;
import com.facebook.shimmer.ShimmerFrameLayout;
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 akgecians.students.R;
public class NoticeFragment extends Fragment {
  private RecyclerView deleteNoticeRecycler;
  private ArrayList<NoticeData> list;
  private NoticeAdapter adapter;
  private DatabaseReference reference;
  ShimmerFrameLayout shimmerFrameLayout;
  LinearLayout shimmerNotice;
  @Override
  public View on Create View (Layout Inflater inflater, View Group container,
                 Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view = inflater.inflate(R.layout.fragment notice, container, false);
    deleteNoticeRecycler = view.findViewById(R.id.deleteNoticeRecycler);
    reference = FirebaseDatabase.getInstance("https://akgec-ghaziabad-2115402d-default-
rtdb.asia-southeast1.firebasedatabase.app/").getReference().child("News Feed");
    deleteNoticeRecycler.setLayoutManager(new LinearLayoutManager(getContext()));
    deleteNoticeRecycler.setHasFixedSize(true);
    shimmerFrameLayout = view.findViewById(R.id.shimmer view container);
    shimmerNotice = view.findViewById(R.id.shimmerNotice);
    getNotice();
    return view;
```

```
}
  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(getContext(), list);
         adapter.notifyDataSetChanged();
         deleteNoticeRecycler.setAdapter(adapter);
Toast.makeText(getContext(), "News Feed Found Successfully",
Toast.LENGTH_SHORT).show();
         shimmerFrameLayout.stopShimmer();
         shimmerNotice.setVisibility(View.GONE);
       }
      @Override
      public void onCancelled(@NonNull DatabaseError error) {
         Toast.makeText(getContext(), error.getMessage(), Toast.LENGTH_SHORT).show();
      }
    });
  }
  @Override
  public void onPause() {
    shimmerFrameLayout.stopShimmer();
    super.onPause();
  }
  @Override
  public void onResume() {
    shimmerFrameLayout.stopShimmer();
    super.onResume();
```

```
}
NoticeAdapter.java
package akgecians.students.ui.notice;
import android.content.Context;
import android.content.Intent;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import com.bumptech.glide.Glide;
import com.squareup.picasso.Picasso;
import java.util.ArrayList;
import akgecians.students.FullImageView;
import akgecians.students.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
  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());
  holder.date.setText(currentItem.getDate());
  holder.time.setText(currentItem.getTime());
  try {
    if (currentItem.getImage() != null)
       Picasso.get().load(currentItem.getImage()).into(holder.deleteNoticeImage);
  } catch (Exception e) {
    e.printStackTrace();
  }
  holder.deleteNoticeImage.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
       Intent intent = new Intent(context, FullImageView.class);
       intent.putExtra("image", currentItem.getImage());
       context.startActivity(intent);
     }
  });
@Override
public int getItemCount() {
  return list.size();
}
public class NoticeViewAdapter extends RecyclerView.ViewHolder {
  private TextView deleteNoticeTitle, date, time;
  private ImageView deleteNoticeImage;
  public NoticeViewAdapter(@NonNull View itemView) {
    super(itemView);
    deleteNoticeTitle = itemView.findViewById(R.id.deleteNoticeTitle);
    deleteNoticeImage = itemView.findViewById(R.id.deleteNoticeImage);
    date = itemView.findViewById(R.id.date);
    time = itemView.findViewById(R.id.time);
```

# FacultyFragment.java

```
package akgecians.students.ui.faculty;
import android.content.Intent;
import android.os.Bundle;
import androidx.annotation.NonNull;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.LinearLayout;
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.students.R;
public class FacultyFragment extends Fragment {
private RecyclerView appliedDepartment, civilDepartment, csDepartment, eeeDepartment,
eceDepartment, meDepartment, itDepartment;
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
  public View on Create View (Layout Inflater inflater, View Group container,
                 Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view = inflater.inflate(R.layout.fragment faculty, container, false);
    appliedDepartment = view.findViewById(R.id.appliedDepartment);
    civilDepartment = view.findViewById(R.id.civilDepartment);
    csDepartment = view.findViewById(R.id.csDepartment);
```

```
eeeDepartment = view.findViewById(R.id.eeeDepartment);
    eceDepartment = view.findViewById(R.id.eceDepartment);
    meDepartment = view.findViewById(R.id.meDepartment);
    itDepartment = view.findViewById(R.id.itDepartment);
    appliedNoData = view.findViewById(R.id.appliedNoData);
    civilNoData = view.findViewById(R.id.civilNoData);
    csNoData = view.findViewById(R.id.csNoData);
    eeeNoData = view.findViewById(R.id.eeeNoData);
    eceNoData = view.findViewById(R.id.eceNoData);
    meNoData = view.findViewById(R.id.meNoData);
    itNoData = view.findViewById(R.id.itNoData);
    reference = FirebaseDatabase.getInstance("https://akgec-ghaziabad-2115402d-default-
rtdb.asia-southeast1.firebasedatabase.app/").getReference().child("Faculties");
    appliedDepartment();
    civilDepartment();
    csDepartment();
    eeeDepartment();
    eceDepartment();
    meDepartment();
    itDepartment();
    return view;
}
  private void appliedDepartment() {
    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(getContext()));
         adapter = new TeacherAdapter(list1, getContext());
         appliedDepartment.setAdapter(adapter);
       }
     }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
       Toast.makeText(getContext(), 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);
         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(getContext()));
         adapter = new TeacherAdapter(list2, getContext());
         civilDepartment.setAdapter(adapter);
       }
     }
```

```
@Override
    public void onCancelled(@NonNull DatabaseError error) {
       Toast.makeText(getContext(), 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(getContext()));
         adapter = new TeacherAdapter(list3, getContext());
         csDepartment.setAdapter(adapter);
       }
    }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
      Toast.makeText(getContext(), 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(getContext()));
         adapter = new TeacherAdapter(list4, getContext());
         eeeDepartment.setAdapter(adapter);
       }
     }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
       Toast.makeText(getContext(), error.getMessage(), Toast.LENGTH_SHORT).show();
    }
  });
}
private void eceDepartment() {
  dbRef = reference.child("Electronics and Communication Engineering");
  dbRef.addValueEventListener(new ValueEventListener() {
    @Override
    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(getContext()));
         adapter = new TeacherAdapter(list5, getContext());
         eceDepartment.setAdapter(adapter);
       }
    }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
      Toast.makeText(getContext(), 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);
         }
         meDepartment.setHasFixedSize(true);
         meDepartment.setLayoutManager(new LinearLayoutManager(getContext()));
         adapter = new TeacherAdapter(list6, getContext());
         meDepartment.setAdapter(adapter);
       }
    }
    @Override
    public void onCancelled(@NonNull DatabaseError error) {
       Toast.makeText(getContext(), 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(getContext()));
            adapter = new TeacherAdapter(list7, getContext());
            itDepartment.setAdapter(adapter);
       @Override
       public void onCancelled(@NonNull DatabaseError error) {
          Toast.makeText(getContext(), error.getMessage(), Toast.LENGTH SHORT).show();
     });
}
```

# TeacherAdapter.java

```
package akgecians.students.ui.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 java.util.List;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import com.squareup.picasso.Picasso;
import akgecians.students.R;
public class TeacherAdapter extends
RecyclerView.Adapter<TeacherAdapter.TeacherViewAdapter> {
  private List<TeacherData> list;
  private Context context;
  //here we create constructor below of variables declared just above
  public TeacherAdapter(List<TeacherData> list, Context context) {
    this.list = list;
    this.context = context;
  }
  @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) {
    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()).placeholder(R.drawable.akgec).into(holder.imageView);
    } catch (Exception e) {
       e.printStackTrace();
     }
```

```
@Override
public int getItemCount() {
    return list.size();
}

public class TeacherViewAdapter extends RecyclerView.ViewHolder {
    private TextView name, post, email;
    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);
}

}
```

# GalleryFragment.java

```
package akgecians.students.ui.gallery;
import android.os.Bundle;
import androidx.annotation.NonNull;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.GridLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
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.students.R;
public class GalleryFragment extends Fragment {
  private RecyclerView convocationRecycler, alumniRecycler, freshersRecycler,
farewellRecycler, independenceRecycler, republicRecycler, holiRecycler, vishwakarmaRecycler;
  private GalleryAdapter adapter;
  private DatabaseReference reference;
  @Override
  public View on Create View (Layout Inflater inflater, View Group container,
                 Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view = inflater.inflate(R.layout.fragment gallery, container, false);
    convocationRecycler = view.findViewById(R.id.convocationRecycler);
    alumniRecycler = view.findViewById(R.id.alumniRecycler);
    freshersRecycler = view.findViewById(R.id.freshersRecycler);
    farewellRecycler = view.findViewById(R.id.farewellRecycler);
    independenceRecycler = view.findViewById(R.id.independenceRecycler);
    republicRecycler = view.findViewById(R.id.republicRecycler);
    holiRecycler = view.findViewById(R.id.holiRecycler);
    vishwakarmaRecycler = view.findViewById(R.id.vishwakarmaRecycler);
    reference = FirebaseDatabase.getInstance("https://akgec-ghaziabad-2115402d-default-
rtdb.asia-southeast1.firebasedatabase.app/").getReference().child("Gallery");
    getconvocationRecycler();
    getalumniRecycler();
```

```
getfreshersRecycler();
    getfarewellRecycler();
    getindependenceRecycler();
    getrepublicRecycler();
    getholiRecycler();
    getvishwakarmaRecycler();
    return view;
}
  private void getconvocationRecycler() {
/*
    reference.child("Convocation").addValueEventListener(new ValueEventListener() {
       List<String> imageList = new ArrayList<>();
       @Override
       public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
           String data = (String) snapshot.getValue();
           imageList.add(data);
         }
         adapter = new GalleryAdapter(getContext(), imageList);
         convocationRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         convocationRecycler.setAdapter(adapter);
       }
       @Override
       public void onCancelled(@NonNull DatabaseError error) {
       }
    });
*/
  private void getalumniRecycler() {
```

```
/*
     reference.child("Alumni Meet").addValueEventListener(new ValueEventListener() {
      List<String> imageList = new ArrayList<>();
      @Override
      public void onDataChange(@NonNull DataSnapshot snapshot) {
        for (DataSnapshot dataSnapshot: snapshot.getChildren()){
           String data = (String) snapshot.getValue();
           imageList.add(data);
         }
        adapter = new GalleryAdapter(getContext(), imageList);
        alumniRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
        alumniRecycler.setAdapter(adapter);
      }
      @Override
      public void onCancelled(@NonNull DatabaseError error) {
      }
    });
 private void getfreshersRecycler() {
      reference.child("Freshers Party").addValueEventListener(new ValueEventListener() {
      List<String> imageList = new ArrayList<>();
      @Override
      public void onDataChange(@NonNull DataSnapshot snapshot) {
        for (DataSnapshot dataSnapshot: snapshot.getChildren()){
           String data = (String) snapshot.getValue();
           imageList.add(data);
         }
        adapter = new GalleryAdapter(getContext(), imageList);
        freshersRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
        freshersRecycler.setAdapter(adapter);
      }
```

```
@Override
      public void onCancelled(@NonNull DatabaseError error) {
      }
    });
  private void getfarewellRecycler() {
      reference.child("Farewell Party").addValueEventListener(new ValueEventListener() {
      List<String> imageList = new ArrayList<>();
      @Override
      public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
           String data = (String) snapshot.getValue();
           imageList.add(data);
         }
         adapter = new GalleryAdapter(getContext(), imageList);
         farewellRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         farewellRecycler.setAdapter(adapter);
       }
      @Override
      public void onCancelled(@NonNull DatabaseError error) {
      }
    });
*/
  private void getindependenceRecycler() {
      reference.child("Independence Day").addValueEventListener(new ValueEventListener() {
      List<String> imageList = new ArrayList<>();
      @Override
      public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
```

```
String data = (String) snapshot.getValue();
           imageList.add(data);
         adapter = new GalleryAdapter(getContext(), imageList);
         independenceRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         independenceRecycler.setAdapter(adapter);
       }
      @Override
      public void onCancelled(@NonNull DatabaseError error) {
      }
    });
  private void getrepublicRecycler() {
      reference.child("Republic Day").addValueEventListener(new ValueEventListener() {
      List<String> imageList = new ArrayList<>();
      @Override
      public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
           String data = (String) snapshot.getValue();
           imageList.add(data);
         }
         adapter = new GalleryAdapter(getContext(), imageList);
         republicRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         republicRecycler.setAdapter(adapter);
       }
      @Override
      public void onCancelled(@NonNull DatabaseError error) {
      }
    });
*/
```

```
private void getholiRecycler() {
      reference.child("Holi Celebration").addValueEventListener(new ValueEventListener() {
       List<String> imageList = new ArrayList<>();
       @Override
       public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
            String data = (String) snapshot.getValue();
           imageList.add(data);
         }
         adapter = new GalleryAdapter(getContext(), imageList);
         holiRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         holiRecycler.setAdapter(adapter);
       }
       @Override
       public void onCancelled(@NonNull DatabaseError error) {
       }
    });
*/
  private void getvishwakarmaRecycler() {
/*
    reference.child("Vishwakarma Puja").addValueEventListener(new ValueEventListener() {
       List<String> imageList = new ArrayList<>();
       @Override
       public void onDataChange(@NonNull DataSnapshot snapshot) {
         for (DataSnapshot dataSnapshot: snapshot.getChildren()){
            String data = (String) snapshot.getValue();
           imageList.add(data);
         }
         adapter = new GalleryAdapter(getContext(), imageList);
         vishwakarmaRecycler.setLayoutManager(new GridLayoutManager(getContext(), 3));
         vishwakarmaRecycler.setAdapter(adapter);
       }
```

```
@Override
        public void onCancelled(@NonNull DatabaseError error) {
     });
AboutFragment.java
package akgecians.students.ui.about;
import android.os.Bundle;
import androidx.fragment.app.Fragment;
import androidx.viewpager.widget.ViewPager;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.LinearLayout;
import com.bumptech.glide.Glide;
import java.util.ArrayList;
import java.util.List;
import akgecians.students.R;
public class AboutFragment extends Fragment {
  private ViewPager viewPager;
  private BranchAdapter adapter;
  private List<BranchModel> list;
  @Override
  public View onCreateView(LayoutInflater inflater, ViewGroup container,
               Bundle savedInstanceState) {
```

// Inflate the layout for this fragment

```
View view = inflater.inflate(R.layout.fragment about, container, false);
```

```
list = new ArrayList<>();
```

list.add(new BranchModel(R.drawable.ic\_civil,"Civil Engineering", "Civil Engineering started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

list.add(new BranchModel(R.drawable.ic\_computer,"Computer Science & Engineering", "Computer Science & Engineering started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

list.add(new BranchModel(R.drawable.ic\_electrical,"Electrical and Electronics Engineering", "Electrical & Electronics Engineering started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

list.add(new BranchModel(R.drawable.ic\_machanical,"Machanical Engineering", "Machanical Engineering started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

list.add(new BranchModel(R.drawable.ic\_electrical,"Electronics and Communication Engineering", "Electronics and Communication Engineering started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

list.add(new BranchModel(R.drawable.ic\_computer,"Information Technology", "Information Technology started in xyz year. At present intake sheet in I-year is XYZ students, and in lateral entries XYZ"));

```
adapter = new BranchAdapter(getContext(),list);
viewPager = view.findViewById(R.id.viewPager);
viewPager.setAdapter(adapter);
// ImageView imageView = view.findViewById(R.id. URL );
// Glide.with(getContext()).load("Fire Base URL").into(imageView);
return view;
}
```

## BranchModel.java

```
package akgecians.students.ui.about;
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
```

import androidx.annotation.NonNull;

```
import androidx.viewpager.widget.PagerAdapter;
import java.util.List;
import akgecians.students.R;
public class BranchAdapter extends PagerAdapter {
  private Context context;
  private List<BranchModel> list;
  public BranchAdapter(Context context, List<BranchModel> list) {
    this.context = context;
    this.list = list;
  }
  @Override
  public int getCount() {
    return list.size();
  }
  @Override
  public boolean isViewFromObject(@NonNull View view, @NonNull Object object) {
    return view.equals(object);
  }
  @NonNull
  @Override
  public Object instantiateItem(@NonNull ViewGroup container, int position) {
    View view = LayoutInflater.from(context).inflate(R.layout.branch_item_layout, container,
false);
    ImageView branchIcon;
    TextView branchTitle, branchDes;
    branchlcon = view.findViewById(R.id.branchlcon);
    branchTitle = view.findViewById(R.id.branchTitle);
```

```
branchDes = view.findViewById(R.id.branchDes);
    branchlcon.setImageResource(list.get(position).getImg());
    branchTitle.setText(list.get(position).getTitle());
    branchDes.setText(list.get(position).getDescription());
    container.addView(view, 0);
    return view;
}
  @Override
  public void destroyItem(@NonNull ViewGroup container, int position, @NonNull Object object)
{
    container.removeView((View) object);
  }
}
BranchAdapter.java
package akgecians.students.ui.about;
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.viewpager.widget.PagerAdapter;
import java.util.List;
import akgecians.students.R;
public class BranchAdapter extends PagerAdapter {
  private Context context;
  private List<BranchModel> list;
```

```
public BranchAdapter(Context context, List<BranchModel> list) {
    this.context = context;
    this.list = list;
  }
  @Override
  public int getCount() {
    return list.size();
  }
  @Override
  public boolean isViewFromObject(@NonNull View view, @NonNull Object object) {
    return view.equals(object);
  }
  @NonNull
  @Override
  public Object instantiateItem(@NonNull ViewGroup container, int position) {
    View view = LayoutInflater.from(context).inflate(R.layout.branch_item_layout, container,
false);
    ImageView branchIcon;
    TextView branchTitle, branchDes;
    branchlcon = view.findViewById(R.id.branchlcon);
    branchTitle = view.findViewById(R.id.branchTitle);
    branchDes = view.findViewById(R.id.branchDes);
    branchlcon.setImageResource(list.get(position).getImg());
    branchTitle.setText(list.get(position).getTitle());
    branchDes.setText(list.get(position).getDescription());
    container.addView(view, 0);
    return view;
```

```
@Override
public void destroyItem(@NonNull ViewGroup container, int position, @NonNull Object object)
{
    container.removeView((View) object);
}
```