1. firebase image upload download code full--------------

@@ java files:

1. Upload---

package com.example.anabi.anisulfirebaseimageuploadretriveproject;  
  
import com.google.firebase.database.Exclude;  
  
public class Upload {  
  
 private String imageName;  
 private String imageUrl;  
 private String key;  
  
 @Exclude  
 public String getKey() {  
 return key;  
 }  
  
 @Exclude  
 public void setKey(String key) {  
 this.key = key;  
 }  
  
  
 public Upload(){  
  
 }  
  
  
 public Upload(String imageName, String imageUrl) {  
 this.imageName = imageName;  
 this.imageUrl = imageUrl;  
 }  
  
  
  
 public String getImageName() {  
 return imageName;  
 }  
  
 public void setImageName(String imageName) {  
 this.imageName = imageName;  
 }  
  
 public String getImageUrl() {  
 return imageUrl;  
 }  
  
 public void setImageUrl(String imageUrl) {  
 this.imageUrl = imageUrl;  
 }  
}

@@@ MyAdapter---

package com.example.anabi.anisulfirebaseimageuploadretriveproject;  
  
import android.content.Context;  
import android.support.annotation.NonNull;  
import android.support.v7.widget.RecyclerView;  
import android.view.ContextMenu;  
import android.view.LayoutInflater;  
import android.view.Menu;  
import android.view.MenuItem;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.ImageView;  
import android.widget.TextView;  
  
import com.squareup.picasso.Picasso;  
  
import java.util.List;  
  
public class MyAdapter extends RecyclerView.Adapter<MyAdapter.MyViewHolder> {  
  
 private Context context;  
 private List<Upload> uploadList;  
 private OnItemClickListener listener;  
  
 public MyAdapter(Context context, List<Upload> uploadList) {  
 this.context = context;  
 this.uploadList = uploadList;  
 }  
  
 @NonNull  
 @Override  
 public MyViewHolder onCreateViewHolder(@NonNull ViewGroup viewGroup, int i) {  
  
 LayoutInflater layoutInflater = LayoutInflater.*from*(context);  
 View view = layoutInflater.inflate(R.layout.*item\_layout*,viewGroup,false);  
  
 return new MyViewHolder(view);  
 }  
  
 @Override  
 public void onBindViewHolder(@NonNull MyViewHolder myViewHolder, int i) {  
  
 Upload upload = uploadList.get(i);  
  
 myViewHolder.textView.setText(upload.getImageName());  
  
 Picasso.*with*(context)  
 .load(upload.getImageUrl())  
 .placeholder(R.mipmap.*ic\_launcher\_round*)  
 .fit()  
 .centerCrop()  
 .into(myViewHolder.imageView);  
  
 }  
  
 @Override  
 public int getItemCount() {  
 return uploadList.size();  
 }  
  
 public class MyViewHolder extends RecyclerView.ViewHolder implements View.OnClickListener, View.OnCreateContextMenuListener,MenuItem.OnMenuItemClickListener {  
  
 TextView textView;  
 ImageView imageView;  
  
 public MyViewHolder(@NonNull View itemView) {  
 super(itemView);  
  
 textView = itemView.findViewById(R.id.*cardTextViewId*);  
 imageView = itemView.findViewById(R.id.*cardImageViewId*);  
 itemView.setOnClickListener(this);  
 itemView.setOnCreateContextMenuListener(this);  
  
 }  
  
 @Override  
 public void onClick(View v) {  
  
 if(listener!=null){  
  
 int position = getAdapterPosition();  
  
 if(position!=RecyclerView.*NO\_POSITION*){  
  
 listener.onItemClick(position);  
 }  
 }  
  
 }  
  
 @Override  
 public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {  
  
 menu.setHeaderTitle("Choose an action");  
 MenuItem doAnyTask = menu.add(Menu.*NONE*,1,1,"do any task");  
 MenuItem delete = menu.add(Menu.*NONE*,2,2,"delete");  
  
 doAnyTask.setOnMenuItemClickListener(this);  
 delete.setOnMenuItemClickListener(this);  
  
  
 }  
  
 @Override  
 public boolean onMenuItemClick(MenuItem item) {  
  
 if(listener!=null){  
  
 int position = getAdapterPosition();  
  
 if(position!=RecyclerView.*NO\_POSITION*){  
  
 switch (item.getItemId()){  
  
 case 1:  
 listener.onDoAnyTask(position);  
 return true;  
  
  
 case 2:  
 listener.onDelete(position);  
 return true;  
  
 }  
 }  
 }  
  
 return false;  
 }  
  
 }  
  
  
  
 //listener  
  
 public interface OnItemClickListener{  
  
 void onItemClick(int position);  
  
 void onDoAnyTask(int position);  
  
 void onDelete(int position);  
  
 }  
  
  
 public void setOnItemClickListener(OnItemClickListener listener){  
  
 this.listener = listener;  
  
 }  
  
  
  
}

@@@ MainActivity----

package com.example.anabi.anisulfirebaseimageuploadretriveproject;  
  
import android.content.ContentResolver;  
import android.content.Intent;  
import android.media.Image;  
import android.net.Uri;  
import android.support.annotation.NonNull;  
import android.support.annotation.Nullable;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.webkit.MimeTypeMap;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.ImageView;  
import android.widget.ProgressBar;  
import android.widget.Toast;  
  
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.StorageTask;  
import com.google.firebase.storage.UploadTask;  
import com.squareup.picasso.Picasso;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
  
 private Button chooseButton,saveButton,displayButton;  
 private ImageView imageView;  
 private EditText imageNameEditText;  
 private ProgressBar progressBar;  
 private Uri imageUri;  
 StorageTask uploadTask;  
  
 DatabaseReference databaseReference;  
 StorageReference storageReference;  
  
 private static final int *IMAGE\_REQUEST* = 1;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 databaseReference = FirebaseDatabase.*getInstance*().getReference("Upload");  
 storageReference = FirebaseStorage.*getInstance*().getReference("Upload");  
  
 chooseButton = findViewById(R.id.*chooseImageButtonId*);  
 displayButton = findViewById(R.id.*displayImageButtonId*);  
 saveButton = findViewById(R.id.*saveImageButtonId*);  
 progressBar =findViewById(R.id.*progressBarId*);  
  
 imageView = findViewById(R.id.*imageViewId*);  
 imageNameEditText = findViewById(R.id.*imageNameEditTextId*);  
  
 saveButton.setOnClickListener(this);  
 displayButton.setOnClickListener(this);  
 chooseButton.setOnClickListener(this);  
  
  
  
 }  
  
 @Override  
 public void onClick(View v) {  
  
 switch (v.getId()){  
  
 case R.id.*chooseImageButtonId*:  
  
 openFileChooser();  
  
 break;  
  
  
  
 case R.id.*saveImageButtonId*:  
  
 if(uploadTask!=null && uploadTask.isInProgress()){  
  
 Toast.*makeText*(getApplicationContext(),"Uploading is in Progress",Toast.*LENGTH\_SHORT*).show();  
  
 }  
 else{  
  
 saveData();  
  
 }  
  
 break;  
  
  
  
  
 case R.id.*displayImageButtonId*:  
  
 Intent intent = new Intent(getApplicationContext(),ImageActivity.class);  
 startActivity(intent);  
 break;  
  
  
 }  
  
 }  
  
  
 void openFileChooser(){  
  
 Intent intent = new Intent();  
 intent.setType("image/\*");  
 intent.setAction(Intent.*ACTION\_GET\_CONTENT*);  
 startActivityForResult(intent,*IMAGE\_REQUEST*);  
  
  
 }  
  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
  
  
 if(requestCode == *IMAGE\_REQUEST* && resultCode == *RESULT\_OK* && data!=null && data.getData()!=null){  
  
 imageUri = data.getData();  
 Picasso.*with*(this).load(imageUri).into(imageView);  
  
 }  
 }  
  
  
  
 // getFile Extension  
  
 public String getFileExtension(Uri imageUri){  
  
  
 ContentResolver contentResolver = getContentResolver();  
 MimeTypeMap mimeTypeMap = MimeTypeMap.*getSingleton*();  
 return mimeTypeMap.getExtensionFromMimeType(contentResolver.getType(imageUri));  
  
 }  
  
  
  
  
  
 //Save Data  
  
 private void saveData(){  
  
  
 final String imageName = imageNameEditText.getText().toString().trim();  
  
 if(imageName.isEmpty()){  
  
 imageNameEditText.setError("Enter the image name");  
 imageNameEditText.requestFocus();  
 return;  
 }  
  
  
 StorageReference ref = storageReference.child(System.*currentTimeMillis*()+"."+getFileExtension(imageUri));  
  
  
  
 ref.putFile(imageUri)  
 .addOnSuccessListener(new OnSuccessListener<UploadTask.TaskSnapshot>() {  
 @Override  
 public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {  
 // Get a URL to the uploaded content  
  
 Toast.*makeText*(getApplicationContext(),"Image is stored successfully",Toast.*LENGTH\_SHORT*).show();  
  
 Task<Uri> uriTask = taskSnapshot.getStorage().getDownloadUrl();  
  
 while(!uriTask.isSuccessful());  
  
 Uri downloadUrl = uriTask.getResult();  
  
 Upload upload = new Upload(imageName, downloadUrl.toString());  
  
 String uploadId = databaseReference.push().getKey();  
 databaseReference.child(uploadId).setValue(upload);  
  
 }  
 })  
 .addOnFailureListener(new OnFailureListener() {  
 @Override  
 public void onFailure(@NonNull Exception exception) {  
 // Handle unsuccessful uploads  
  
 Toast.*makeText*(getApplicationContext(),"Image is not stored! failed",Toast.*LENGTH\_SHORT*).show();  
  
 // ...  
 }  
 });  
  
  
 }  
  
}

@@@ ImageActivity--------

package com.example.anabi.anisulfirebaseimageuploadretriveproject;  
  
import android.support.annotation.NonNull;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.support.v7.widget.LinearLayoutManager;  
import android.support.v7.widget.RecyclerView;  
import android.view.View;  
import android.widget.ProgressBar;  
import android.widget.Toast;  
  
import com.google.android.gms.tasks.OnSuccessListener;  
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 com.google.firebase.storage.StorageReference;  
  
import java.util.ArrayList;  
import java.util.List;  
  
public class ImageActivity extends AppCompatActivity {  
  
 private RecyclerView recyclerView;  
 private MyAdapter myAdapter;  
 private List<Upload> uploadList;  
 DatabaseReference databaseReference;  
 private ProgressBar newProgressbar;  
 private FirebaseStorage firebaseStorage;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_image*);  
  
 recyclerView = findViewById(R.id.*recyclerView*);  
 recyclerView.setHasFixedSize(true);  
 recyclerView.setLayoutManager(new LinearLayoutManager(this));  
  
 uploadList = new ArrayList<>();  
  
 firebaseStorage = FirebaseStorage.*getInstance*();  
  
 newProgressbar = findViewById(R.id.*progressbarNew*);  
  
 databaseReference = FirebaseDatabase.*getInstance*().getReference("Upload");  
  
 databaseReference.addValueEventListener(new ValueEventListener() {  
 @Override  
 public void onDataChange(@NonNull DataSnapshot dataSnapshot) {  
  
 uploadList.clear();  
  
 for(DataSnapshot dataSnapshot1: dataSnapshot.getChildren()){  
  
 Upload upload = dataSnapshot1.getValue(Upload.class);  
 upload.setKey(dataSnapshot1.getKey());  
  
 uploadList.add(upload);  
 }  
  
 myAdapter = new MyAdapter(ImageActivity.this,uploadList);  
 recyclerView.setAdapter(myAdapter);  
  
 myAdapter.setOnItemClickListener(new MyAdapter.OnItemClickListener() {  
 @Override  
 public void onItemClick(int position) {  
  
  
 String text = uploadList.get(position).getImageName();  
 Toast.*makeText*(getApplicationContext(),text+" is selected "+position,Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onDoAnyTask(int position) {  
  
 Toast.*makeText*(getApplicationContext()," On Do Any Task Selected ",Toast.*LENGTH\_SHORT*).show();  
  
 }  
  
 @Override  
 public void onDelete(int position) {  
  
 Upload selectedItem = uploadList.get(position);  
 final String key = selectedItem.getKey();  
  
 StorageReference storageReference = firebaseStorage.getReferenceFromUrl(selectedItem.getImageUrl());  
 storageReference.delete().addOnSuccessListener(new OnSuccessListener<Void>() {  
 @Override  
 public void onSuccess(Void aVoid) {  
  
 databaseReference.child(key).removeValue();  
 Toast.*makeText*(getApplicationContext(),"Item is deleted",Toast.*LENGTH\_SHORT*).show();  
  
  
 }  
 });  
  
  
 }  
 });  
  
  
 newProgressbar.setVisibility(View.*INVISIBLE*);  
  
 }  
  
 @Override  
 public void onCancelled(@NonNull DatabaseError databaseError) {  
  
 Toast.*makeText*(getApplicationContext(),"Error: "+databaseError.getMessage(),Toast.*LENGTH\_LONG*).show();  
  
 newProgressbar.setVisibility(View.*VISIBLE*);  
  
 }  
 });  
  
 }  
}

### activity\_main.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="10dp"  
 android:weightSum="3"  
 tools:context=".MainActivity">  
  
 <Button  
 android:backgroundTint="@color/colorAccent"  
 android:id="@+id/chooseImageButtonId"  
 style="@style/Base.TextAppearance.AppCompat.Widget.Button.Colored"  
 android:layout\_marginTop="10dp"  
 android:layout\_weight="0.25"  
 android:text="Choose Image"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 <EditText  
 android:id="@+id/imageNameEditTextId"  
 android:textAppearance="@style/Base.TextAppearance.AppCompat.Large"  
 android:layout\_weight="0.25"  
 android:layout\_marginTop="10dp"  
 android:hint="Enter a name for Image"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 <ImageView  
 android:id="@+id/imageViewId"  
 android:layout\_marginTop="10dp"  
 android:layout\_weight="2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="300dp" />  
  
 <ProgressBar  
 android:id="@+id/progressBarId"  
 android:layout\_weight="0.16"  
 android:layout\_gravity="center"  
 android:visibility="gone"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content" />  
  
 <Button  
 android:backgroundTint="@color/colorAccent"  
 android:id="@+id/saveImageButtonId"  
 android:text="Save Image"  
 style="@style/Base.TextAppearance.AppCompat.Widget.Button.Colored"  
 android:layout\_weight="0.17"  
 android:layout\_marginTop="5dp"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
 <Button  
 android:backgroundTint="@color/colorAccent"  
 android:id="@+id/displayImageButtonId"  
 android:text="Display Image"  
 style="@style/Base.TextAppearance.AppCompat.Widget.Button.Colored"  
 android:layout\_weight="0.17"  
 android:layout\_marginTop="5dp"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content" />  
  
</LinearLayout>

#### item\_layout.xml-------

<?xml version="1.0" encoding="utf-8"?>  
<android.support.v7.widget.CardView xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:foreground="?android:attr/selectableItemBackground"  
 android:layout\_height="wrap\_content"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 app:cardElevation="6dp"  
 app:cardCornerRadius="5dp"  
 android:elevation="10dp"  
 android:padding="10dp"  
  
 android:layout\_margin="5dp">  
  
 <LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <ImageView  
 android:id="@+id/cardImageViewId"  
 android:scaleType="fitXY"  
 android:layout\_marginTop="10dp"  
 android:layout\_width="match\_parent"  
 android:layout\_height="250dp" />  
  
 <TextView  
 android:id="@+id/cardTextViewId"  
 android:textColor="#464646"  
 android:textAlignment="center"  
 android:text="Image name"  
 android:layout\_marginTop="5dp"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textAppearance="@style/Base.TextAppearance.AppCompat.Large"/>  
  
 </LinearLayout>  
  
</android.support.v7.widget.CardView>

### activity\_image.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:background="#efefef"  
 tools:context=".ImageActivity">  
  
  
  
 <android.support.v7.widget.RecyclerView  
 android:id="@+id/recyclerView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 </android.support.v7.widget.RecyclerView>  
  
 <ProgressBar  
 android:id="@+id/progressbarNew"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content" />  
  
</LinearLayout>