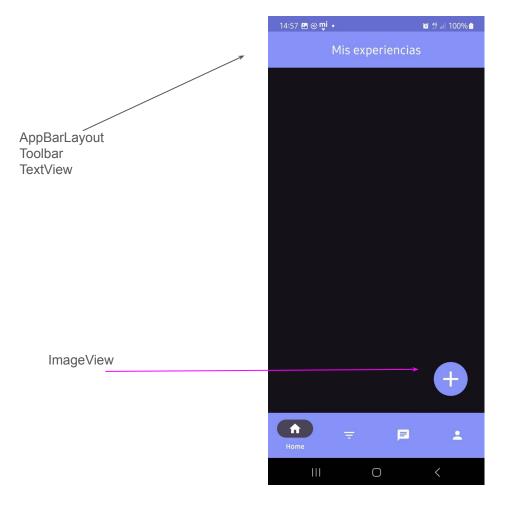
Post en Proyecto integrador

ScrollView, cardView, retrofit, Cloudinary

HomeFragment.xml

```
android:layout_marginBottom="80dp"
   <com.google.android.material.appbar.AppBarLayout</pre>
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:background="@color/red">
      <androidx.appcompat.widget.Toolbar
          android:layout_width="match_parent"
          android:layout_height="wrap_content"
          android:background="@color/primary"
          android:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar">
          <TextView
               android:layout_width="wrap_content"
              android:layout_height="wrap_content"
              android:text="@string/mis_experiencias"
               android:textAlignment="center"
               android:textSize="18sp"
               android:layout_gravity="center" />
      </androidx.appcompat.widget.Toolbar>
   </com.google.android.material.appbar.AppBarLayout>
   <ImageView
      android:id="@+id/fab"
      android:layout_width="60dp"
      android:layout_height="60dp"
      android:src="@drawable/ic_add"
      android:background="@drawable/circular_backg_lavanada"
      android:scaleType="centerCrop"
      android:layout_margin="30dp"
      android:layout_gravity="end|bottom"
      android:padding="7dp"/>
/FrameLayout>
```



Fondo para el botón circular

Es el archivo circular_backg_lavanda.xml en la carpeta drawable usado para el botón circular. Lo usamos en la imageView que actúa como botón circular.

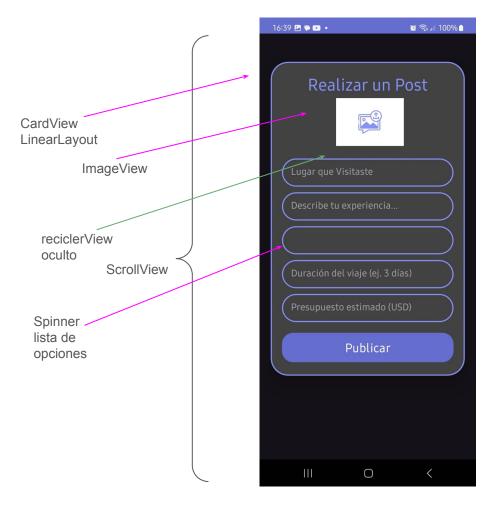
android:background="@drawable/circular_backg_lavanada"

Asignamos comportamiento al botón circular

```
HomeFragment.java ×
       package com.example.appchat.view.fragments;
     > import ....
       public class HomeFragment extends Fragment { ∴ mariel*
          private FragmentHomeBinding binding; 4 usages
          public HomeFragment() { ** mariel
                                                                                            @Override * mariel *
                                                                                            public void onViewCreated(View view, Bundle savedInstanceState) {
          public static HomeFragment newInstance(String param1, String param2) { 2 usages ♣ marie
  @
                                                                                                super.onViewCreated(view, savedInstanceState);
              return new HomeFragment();
                                                                                                @Override * mariel *
          @Override * mariel
          public View onCreateView(LayoutInflater inflater, ViewGroup container,
                                                                                                   public void onClick(View v) {
                                                                                                       Intent intent=new Intent(getContext(), UploadActivity.class);
                                Bundle savedInstanceState) {
                                                                                                       startActivity(intent);
              binding=FragmentHomeBinding.inflate(inflater, container, attachToParent: false)
              return binding.getRoot();
                                                                                            @Override ∴ mariel
 Prestar atención a cómo se crea el binding,
                                                                                            public void onDestroyView() {
                                                                                                super.onDestroyView();
 cómo se infla en la vista y lo necesario del
                                                                                                // Limpiamos la referencia del binding para evitar fugas de memoria
 método onDestroyView.
```

actyity_upload.xml

```
android:layout_width="match_parent"
android:orientation="vertical"
   <androidx.cardview.widget.CardView
      android:layout_width="match_parent"
      android:layout_marginTop="50dp"
      android:layout_marginEnd="20dp"
      android:layout_marginStart="20dp"
      app:cardCornerRadius="30dp"
      app:cardElevation="20dp">
          android:layout_width="match_parent"
          android:layout_gravity="center_horizontal"
          android:padding="20dp"
          android:background="@drawable/lavender_border">
          <TextView...>
          <androidx.recyclerview.widget.RecyclerView...>
          <EditText...>
          <EditText...>
          <Spinner...>
          <EditText...>
          <EditText...>
          <Button...>
      </LinearLayout>
```



Así lucen los componentes de actyity_upload.xml

```
<TextView
                                             <EditText
   android:layout_width="match_parent"
   android:layout_height="wrap_content"
   android:text="Realizar un Post"
   android:textSize="30sp"
   android:textAlignment="center"
   android:textColor="@color/lavender"/>
   android:id="@+id/uploadImage"
   android:layout_width="329dp"
   android:layout_height="170dp"
   android:layout_marginTop="10dp"
                                              <Button
   android:scaleType="centerCrop"
   android:src="@drawable/uploadimg"
```

dentro del LinearLayout...

```
android:id="@+id/etPresupuesto"
android:layout_width="match_parent"
android:layout_height="50dp"
android:hint="Presupuesto estimado (USD)"
android:inputType="numberDecimal"
android:background="@drawable/lavender_border"
android:layout_marginTop="20dp"
android:padding="16dp"
android:gravity="start|center_vertical"
android:textColor="@color/lavender"
android:textSize="14sp"/>
android:id="@+id/btnPublicar"
android:layout_width="match_parent"
android:layout_height="60dp"
android:text="Publicar"
android:textSize="18sp"
android:layout_marginTop="20dp"
app:cornerRadius = "20dp"/>
```

```
<EditText
    android:id="@+id/itTitulo"
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:background="@drawable/lavender_border"
    android:layout_marginTop="20dp"
    android:padding="16dp"
    android:hint="Título"
    android:gravity="start|center_vertical"
    android:textColor="@color/lavender"
    android:textSize="14sp"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="80dp"
    android:id="@+id/etDescripcion"
    android:background="@drawable/lavender_border"
    android:layout_marginTop="20dp"
    android:padding="16dp"
    android:hint="Describe to experiencia..."
    android:gravity="start|center_vertical"
    android:textColor="@color/lavender"
    android:textSize="14sp"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:id="@+id/etDuracion"
    android:background="@drawable/lavender_border"
    android:layout_marginTop="20dp"
    android:padding="16dp"
    android:hint="Duración del viaje (ej. 3 días)"
    android:gravity="start|center_vertical"
    android:textColor="@color/lavender"
```

lavander_border.xml

Es el archivo *lavander_border.xml* en la carpeta drawable. Lo usamos en el linearLayout

android:background="@drawable/lavender border"

Actividades de hoy

- Modificar el home_fragment.xml y el HomeFragment.java (agregar botón y comportamiento)
- 2. Crear ActivityUpload.java y upload_activity.xml (Construir la vista similar a la propuesta)
- 3. Crear en el paquete modelo la clase Post.java con los siguientes atributos

```
private int id_post; 2 usages

private String titulo; 4 usages

private String descripcion; 4 usages

private int duracion; 4 usages

private String categoria; 4 usages

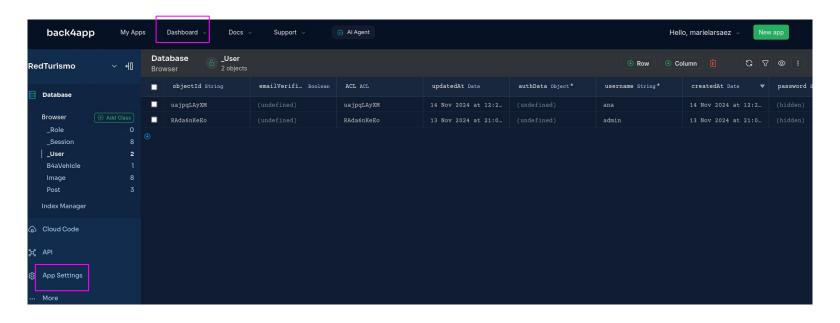
private double presupuesto; 4 usages

private List<String> imagenes; 4 usages

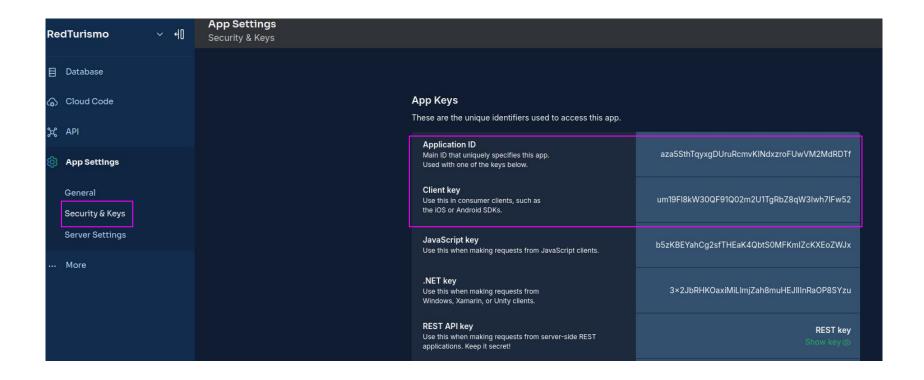
private String id_user; 3 usages
```

- 4. Modificar el archivo Android Manifest.xml asignando permisos y agregando los metadatos
- 5. Agregar dependencias a build.gradle.kts

Creando nuestro proyecto en parse (Configuración de Parse)



Configuración de Parse



Permisos y Metas en Manifest

```
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.READ_MEDIA_IMAGES" />
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
```

```
<meta-data
    android:name="com.parse.SERVER URL"
    android:value="@string/back4app_server_url" />
<meta-data
    android:name="com.parse.APPLICATION_ID"
    android:value="@string/back4app_app_id" />
<meta-data
    android:name="com.parse.CLIENT_KEY"
    android:value="um19F18kW30QF91Q02m2U1TgRbZ8gW3Iwh7IFw52" />
```

Configurar en Manifest la aplicación de inicio

```
AndroidManifest.xml ×
     <?xml version="1.0" encoding="utf-8"?>
     <manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
         xmlns:tools="http://schemas.android.com/tools">
         <uses-permission android:name="android.permission.INTERNET" />
         <uses-permission android:name="android.permission.READ_MEDIA_IMAGES" />
         <uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
         <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"/>
         <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
         <application
             android:name=".view.MyApplication"
             android:allowBackup="true"
             android:dataExtractionRules="@xml/data_extraction_rules"
```

Crear un archivo que extienda de Aplication

```
package com.example.appchat.view;
import com.example.appchat.R;
import android.app.Application;
import com.parse.Parse;
import com.parse.ParseACL;
public class MyApplication extends Application { ♣ mariel*
    @Override # mariel *
    public void onCreate() {
        super.onCreate();
        Parse.enableLocalDatastore(context: this);
        Parse.initialize(new Parse.Configuration.Builder(context: this)
                .applicationId(getString(R.string.back4app_app_id))
                .clientKey(getString(R.string.back4app_client_key))
                .server(getString(R.string.back4app_server_url))
                .build()
       ParseACL defaultACL = new ParseACL();
       defaultACL.setPublicReadAccess(true);
        defaultACL.setPublicWriteAccess(true):
       ParseACL.setDefaultACL(defaultACL, withAccessForCurrentUser: true);
```

inicializar parse con los strigns del archivo strings.xml con security keys de parse

Agregar keys a strings.xml

```
<string name="app_name">AppChat</string>
  <string name="mis_experiencias">Mis experiencias/string>
   <string name="Chats">Chats</string>
  <string name="Perfil">Perfil</string>
  <string name="Filtros">Filtros</string>
  <string name="image_description">Describe tu imagen</string>
  <string name="titulo_ppal">Realizar un Post</string>
   <string name="titulo_post">Lugar que Visitaste</string>
  <string name="descripcion">Describe tu experiencia...
  <string name="presupuesto"> Presupuesto estimado (USD)</string>
  <string name="duracion">Duración del viaje (ej. 3 días) </string>
  <string name="publicar">Publicar</string>
   <string-array name="categorias_array">
      <item>Naturaleza</item>
      <item>Montaña</item>
      <item>Playa</item>
   </string-array>
  <string name="back4app_server_url">https://parseapi.back4app.com/</string>
  <string name="back4app_app_id">aza5$thTqyxqDUruRemvKINdxzroFUwVM2MdRDTf
<string name="back4app_client_key">um19Fl8kW30QF91Q02m2U1TqRbZ8qW3Iwh7IFw52</string>
```

pegan sus configuraciones...

Creamos el archivo AuthProvider.java en providers

```
package com.example.appchat.providers;
import com.example.appchat.R;
import com.parse.Parse;
import com.parse.ParseUser;
import com.parse.ParseException;
import android.content.Context;
                                                                                           public LiveData<String> signIn(String email, String password) { 1usage ** mariel*
import android.util.Log;
                                                                                               MutableLiveData<String> authResult = new MutableLiveData<>();
import androidx.lifecycle.LiveData;
                                                                                               ParseUser.logInInBackground(email, password, new LogInCallback() { # mariel
import androidx.lifecycle.MutableLiveData;
                                                                                                   @Override ≛ mariel
import com.parse.LogInCallback;
                                                                                                   public void done(ParseUser user, ParseException e) {
public class AuthProvider { 6 usages # mariel *
                                                                                                       if (e == null) {
   public AuthProvider(Context context) { 2 usages # mariel*
        Parse.initialize(new Parse.Configuration.Builder(context)
                .applicationId(context.getString(R.string.back4app_app_id))
                                                                                                           authResult.setValue(user.getObjectId());
                .clientKey(context.getString(R.string.back4app_client_key))
                                                                                                           Loq.d( tag: "AuthProvider", msg: "Usuario autenticado exitosamente: " + user.qetObjectId());
                .server(context.getString(R.string.back4app_server_url))
                                                                                                       } else {
                .build()
                                                                                                           authResult.setValue(null);
                                                                                               return authResult;
```

Modificamos los archivos AuthProvider

```
public LiveData<String> signUp(String email, String password) { 1 usage # mariel*
   MutableLiveData<String> authResult = new MutableLiveData<>();
   ParseUser user = new ParseUser();
   user.setUsername(email);
   user.setPassword(password);
   user.signUpInBackground(e -> {
       if (e == null) {
           authResult.setValue(user.getObjectId());
           Log.d( tag: "AuthProvider", msg: "Usuario registrado exitosamente: " + user.getObjectId());
       } else {
           Log.e( tag: "AuthProvider", msg: "Error en registro: ", e);
   return authResult;
```

AuthProvider.java getCurrentUserID()

```
Obtener el ID del usuario actual en Parse
public LiveData<String> getCurrentUserID() { no usages # mariel*
    MutableLiveData<String> currentUserId = new MutableLiveData<>();
    ParseUser currentUser = ParseUser.getCurrentUser();
    if (currentUser != null) {
        currentUserId.setValue(currentUser.getObjectId());
        Log.d( tag: "AuthProvider", msg: "ID de usuario actual: " + currentUser.getObjectId());
    } else {
        Log.d( tag: "AuthProvider", msg: "No hay usuario autenticado.");
    return currentUserId;
```

UploadViewModel.java

```
public class UploadViewModel extends ViewModel { 3 usages * mariel
   private final MutableLiveData<Boolean> postSuccess = new MutableLiveData<>(); 3
   private final PostProvider postProvider; 2 usages
    public LiveData<Boolean> getPostSuccess() { 1usage ** mariel
        return postSuccess;
    public UploadViewModel() { no usages ** marie!
        postProvider = new PostProvider();
    public void publicar(Post post) { 1 usage ** marie!
        postProvider.addPost(post)
                .observeForever(result -> {
                    if ("Post publicado".equals(result)) {
                        postSuccess.setValue(true);
                    } else {
                        postSuccess.setValue(false);
```

PostProvider

```
PostProvider.java ×
       import com.parse.ParseRelation;
        import com.parse.ParseUser;
        public class PostProvider { 3 usages # mariel *
           public LiveData<String> addPost(Post post) { 1usage * mariel*
               MutableLiveData<String> result = new MutableLiveData<>();
               ParseObject postObject = new ParseObject( theClassName: "Post");
                postObject.put("titulo", post.getTitulo());
                postObject.put("descripcion", post.getDescripcion());
               postObject.put("duracion", post.getDuracion());
               postObject.put("categoria", post.getCategoria());
                postObject.put("presupuesto", post.getPresupuesto());
                postObject.put("user", ParseUser.getCurrentUser()); // Relación con el usuario
                postObject.saveInBackground(e -> {
                   if (e == null) {
                       ParseRelation<ParseObject> relation = postObject.getRelation( key: "images");
                        for (String url : post.getImagenes()) {
                           ParseObject imageObject = new ParseObject( theClassName: "Image");
                           imageObject.put("url", url);
                            imageObject.saveInBackground(imgSaveError -> {
                               if (imgSaveError == null) {
                                   postObject.saveInBackground(saveError -> {
                                        if (saveError == null) {
                                       } else {
                                           result.setValue("Error al guardar la relación con las imágenes: " + saveError.getMessage());
                                } else {
                                   result.setValue("Error al guardar la imagen: " + imgSaveError.getMessage());
                   } else {
                        result.setValue("Error al guardar el post: " + e.getMessage());
                return result;
```

```
public class UploadActivity extends AppCompatActivity { ∴ mariel*
   private ActivityUploadBinding binding; 25 usages
   private UploadViewModel uploadViewModel; 3 usages
   private static final int REQUEST_IMAGE = 1; 1 usage
   private List<String> imagenesUrls = new ArrayList<>(); 7 usages
   private Uri uri; 4 usages
   private String id_user: 1usage
   private String categoria; 3 usages
   private int cant = 0; 2 usages
   private ImageAdapter adapter; 4 usages
   private ImageViewModel imageViewModel; 3 usages
   @Override # mariel *
   protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       binding = ActivityUploadBinding.inflate(getLayoutInflater());
       setContentView(binding.getRoot());
       imageViewModel = new ViewModelProvider( owner: this).get(ImageViewModel.class);
       // Observe image URLs list to update the RecyclerView when it changes
       imageViewModel.getImagenesUrls().observe( owner: this, urls -> {
           adapter.updateImages(urls);
       binding.recyclerView.setLayoutManager(new GridLayoutManager( context: this, spanCount: 3));
       binding.recyclerView.setAdapter(new ImageAdapter(imagenesUrls, context: this));
       binding.recyclerView.setVisibility(View.GONE);
       setupCategorySpinner();
       setupViewModel();
       binding.uploadImage.setOnClickListener(v -> pedirPermisos());
       binding.btnPublicar.setOnClickListener(v -> publicarPost());
       adapter = new ImageAdapter(imagenesUrls, context: this);
       binding.recyclerView.setAdapter(adapter);
```

```
private void setupCategorySpinner() { 1usage # mariel*
    ArrayAdapter<String> adapter = new ArrayAdapter<>( context: this, R.layout.spinner_item, getResources().getStringArray(R.array.categorias_array));
    adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
   binding.spinnerCategoria.setAdapter(adapter);
   binding.spinnerCategoria.setSelection(0);
   binding.spinnerCategoria.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() { * marie! *
        @Override 1 usage # mariel
       public void onItemSelected(AdapterView<?> parentView, View selectedItemView, int position, long id) {
            categoria = (String) parentView.getItemAtPosition(position);
        @Override 1 usage # mariel
       public void onNothingSelected(AdapterView<?> parentView) {}
private void setupViewModel() { 1 usage ** mariel *
    uploadViewModel = new ViewModelProvider( owner: this).get(UploadViewModel.class);
    uploadViewModel.getPostSuccess().observe( owner: this, success -> {
        Toast.makeText( context: this, success ? "Publicación exitosa" : "Error al publicar", Toast.LENGTH_SHORT).show();
       Log.d( tag: "TAG#", msg: "Post upload success: " + success);
        if (success) {
            Toast.makeText( context: this, text: "Post published successfully", Toast.LENGTH_SHORT).show();
            finish();
        } else {
            Toast.makeText( context: this, text: "Error while publishing", Toast.LENGTH_SHORT).show();
```

```
private void subirImagenaParse() { 1 usage ** mariel*
   if (uri != null) {
       try (InputStream inputStream = getContentResolver().openInputStream(uri)) {
           byte[] imageBytes = getBytesFromInputStream(inputStream);
           ParseFile parseFile = new ParseFile( name: "image.jpg", imageBytes);
           @Override # mariel *
               public void done(ParseException e) {
                  if (e == null) {
                      String imageUrl = parseFile.getUrl();
                      imageViewModel.agregarImagenUrl(imageUrl);
                      imagenesUrls.add(imageUrl);
                   } else {
                      Toast.makeText( context: UploadActivity.this, text: "Error uploading the image", Toast.LENGTH_SHORT).show();
       } catch (IOException e) {
           e.printStackTrace();
           Toast.makeText( context: this, text: "Error al procesar la imagen", Toast.LENGTH_SHORT).show();
   } else {
       Toast.makeText( context: this, text: "Seleccione una imagen primero", Toast.LENGTH_SHORT).show();
```

```
private byte[] getBytesFromInputStream(InputStream inputStream) throws IOException { 1 usage # mariel
    ByteArrayOutputStream byteArrayOutputStream = new ByteArrayOutputStream();
    byte[] buffer = new byte[1024];
    int bytesRead;
    while ((bytesRead = inputStream.read(buffer)) != -1) {
        byteArrayOutputStream.write(buffer, off: 0, bytesRead);
    return byteArrayOutputStream.toByteArray();
private void pedirPermisos() { 1 usage ** mariel*
    String permission = Build.VERSION.SDK_INT >= Build.VERSION_CODES.TIRAMISU ?
            Manifest.permission.READ_MEDIA_IMAGES: Manifest.permission.READ_EXTERNAL_STORAGE;
    if (ContextCompat.checkSelfPermission( context: this, permission) == PackageManager.PERMISSION_GRANTED) {
        openGallery();
    } else {
        ActivityCompat.requestPermissions( activity: this, new String[]{permission}, REQUEST_IMAGE);
    subirImagenaParse();
private void openGallery() { 1 usage ** mariel
    Intent intent = new Intent(Intent.ACTION_PICK);
    intent.setType("image/*");
    someActivityResultLauncher.launch(intent);
```

<u>UploadActivity.java</u>

```
private void openGallery() { 1 usage ** mariel
    Intent intent = new Intent(Intent.ACTION_PICK);
    intent.setType("image/*");
    someActivityResultLauncher.launch(intent);
ActivityResultLauncher<Intent> someActivityResultLauncher = registerForActivityResult( 1 usage
        new ActivityResultContracts.StartActivityForResult(),
        result -> {
            if (result.getResultCode() == Activity.RESULT_OK && result.getData() != null) {
                uri = result.getData().getData();
                cant++;
                if (cant == 3) {
                    mostrarRecyclerViewEnLugarDeImagen();
                onImageSelected(uri.toString());
            } else {
                Toast.makeText( context: this, text: "Imagen no seleccionada", Toast.LENGTH_SHORT).show();
```

```
private void publicarPost() { 1 usage ** mariel*
    String titulo = binding.itTitulo.getText().toString().trim();
    String descripcion = binding.etDescripcion.getText().toString().trim();
    String duracion = binding.etDuracion.getText().toString().trim();
    String presupuestoStr = binding.etPresupuesto.getText().toString().trim();
    Log.d( tag: "TAG# 1", msg: "En POST - contenido "+titulo+duracion+categoria+presupuestoStr+imagenesUrls);
    if (!Validaciones.validarTexto(titulo)) {
        binding.itTitulo.setError("Error en el título");
    if (descripcion.isEmpty()) {
        binding.etDescripcion.setError("La descripción no puede estar vacía");
    if (Validaciones.validarNumero(duracion) == -1) {
        binding.etDuracion.setError("Error en duración");
    if (Validaciones.validarNumero(presupuestoStr) == -1) {
    double presupuesto;
    try {
        presupuesto = Double.parseDouble(presupuestoStr);
    } catch (NumberFormatException e) {
        binding.etPresupuesto.setError("Presupuesto inválido");
    Log.d( tag: "TAG#", imagenesUrls.toString());
    Post post = new Post(titulo, descripcion, Integer.parseInt(duracion), categoria, presupuesto, imagenesUrls, id_user);
    uploadViewModel.publicar(post);
```

```
private void mostrarRecyclerViewEnLugarDeImagen() { 1 usage ** mariel *
    binding.uploadImage.setVisibility(View.GONE);
    ViewGroup.LayoutParams layoutParams = binding.recyclerView.getLayoutParams();
    layoutParams.height = ViewGroup.LayoutParams.WRAP_CONTENT;
    binding.recyclerView.setLayoutParams(layoutParams);
    binding.recyclerView.setVisibility(View.VISIBLE);
public void onImageSelected(String imagePath) { 1 usage * mariel*
    updateRecyclerViewVisibility();
    adapter.notifyDataSetChanged();
private void updateRecyclerViewVisibility() { 1 usage ** mariel
    binding.recyclerView.setVisibility(imagenesUrls.isEmpty() ? View.GONE : View.VISIBLE);
```