

MINI PROJECT

Travel Blog Application

MID-TERM REPORT



Institute of Engineering & Technology

Submitted by-

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Introduction

1.1 General Introduction to topic

Welcome to Travel Blog Application that describes the tourist places. We are creating this app to tell the people who wish to visit a place to enjoy their time efficiently with low investment. We aim to provide an interesting, honest and genuine blog to our user. Since everyone has android phones with them as it is moderate in price and easy to handle so we decided to make an android app to reach out to one and all. This android application is designed in Kotlin, official language of Android.

1.2 Hardware Requirements

- Android Operating System
- Min 2GB RAM (Memory)

1.3 Software requirements

- Desktop or Smartphone
- Android Studio
- Internet Connection

Problem Statement

According to The World Travel and Tourism Council (WTTC), tourism generated \$194 bn or 6.8% of India's GDP in 2019 and supported 39.80 Mn jobs which is 8 % of its total employment. The sector is predicted to grow at an annual rate of 6.9% to \$460 bn by 2028 which is 9.9% of GDP. We want to create a platform where people can share their experience of their tours, the places they visit, what their feelings are, is the place worth visiting or not. It should be easy to access. So, we are creating an android based application where people can share their thoughts and experiences of their tour in the form of a blog. People can also review other people's blogs. They can create their own user id for the activities.

Objective

To solve this problem we create a MADE IN INDIA android application. Our application is able to provide the following features to the users, which are:-

- Login / Logout
- List Screen
- Detail Screen
- Sorting the blogs
- Searching the blogs

Screenshot

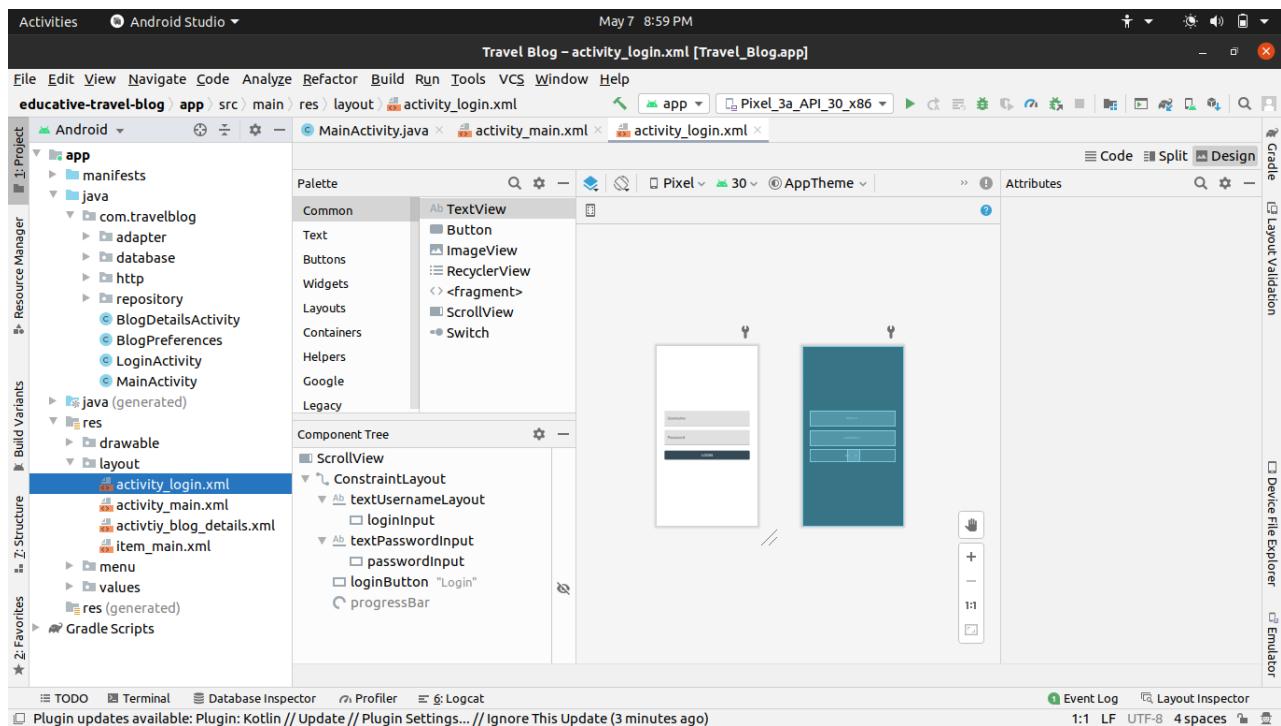
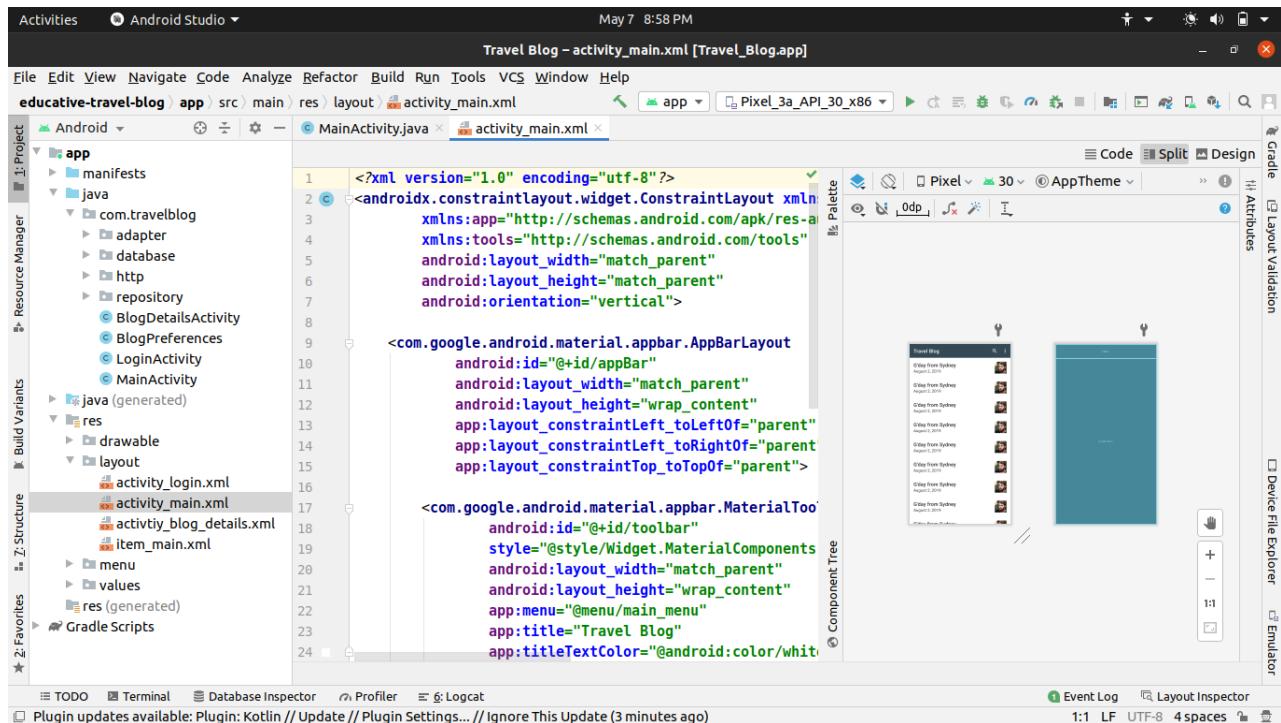
The screenshot shows the Android Studio interface with the following details:

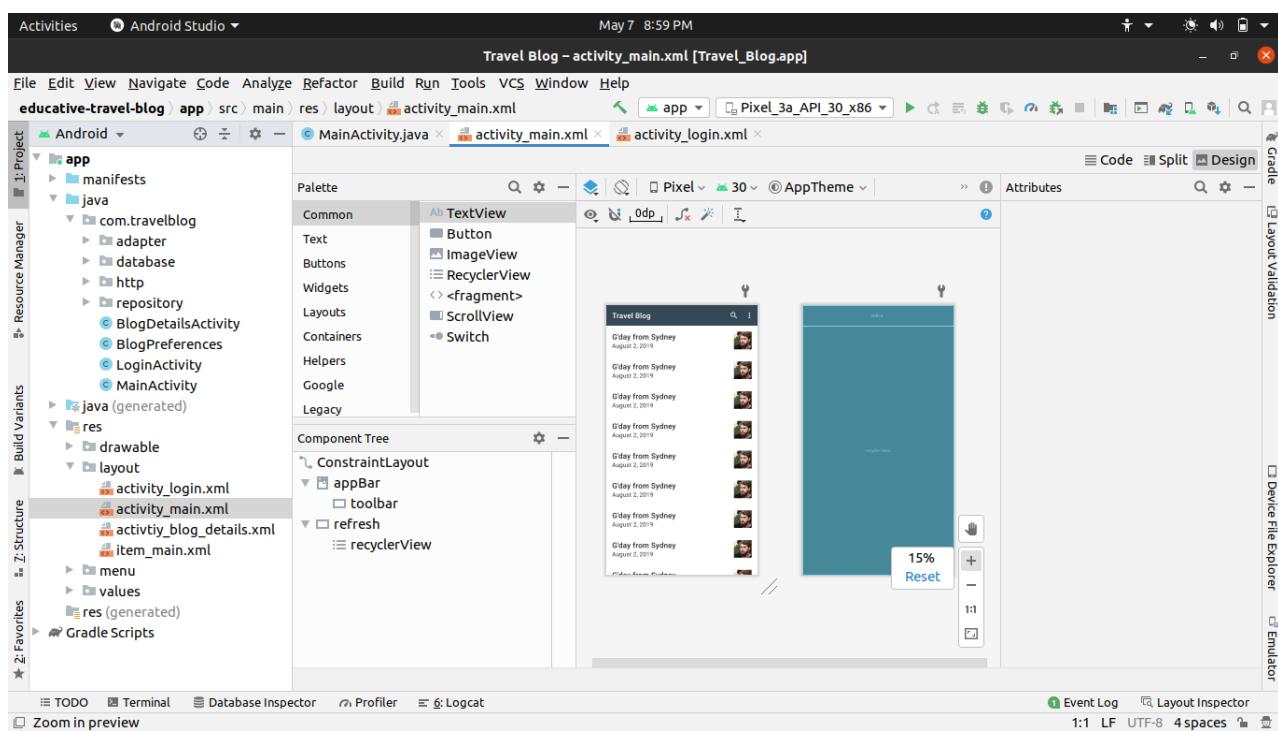
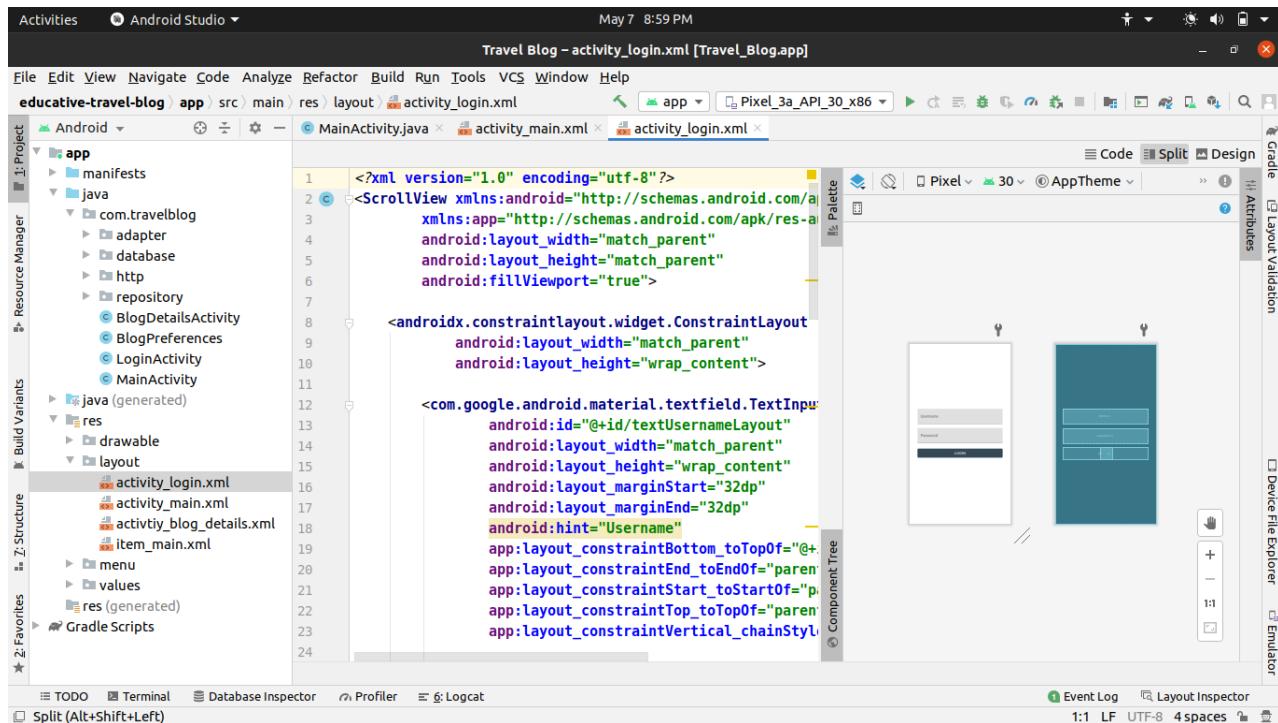
- Title Bar:** Activities, Android Studio, May 7 8:58 PM, Travel Blog - MainActivity.java [Travel_Blog.app]
- Toolbar:** File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, Help.
- Project Navigators:** 1: Project (app), 2: Favorites (Build Variants, Z: Structure).
- Code Editor:** File path: educative-travel-blog > app > src > main > java > com > travelblog > MainActivity.java. The code is as follows:

```
1 package com.travelblog;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private static final int SORT_TITLE = 0;
8     private static final int SORT_DATE = 1;
9
10    private int currentSort = SORT_DATE;
11
12    private MainAdapter adapter;
13    private SwipeRefreshLayout refreshLayout;
14    private BlogRepository repository;
15
16    @Override
17    protected void onCreate(Bundle savedInstanceState) {
18        super.onCreate(savedInstanceState);
19        setContentView(R.layout.activity_main);
20
21        repository = new BlogRepository(getApplicationContext());
22
23        MaterialToolbar toolbar = findViewById(R.id.toolbar);
24        toolbar.setOnMenuItemClickListener(
25            item -> if (item.getItemId() == R.id.sort)
26                onSortClicked());
27
28    }
29
30    private void onSortClicked() {
31        if (currentSort == SORT_DATE)
32            currentSort = SORT_TITLE;
33        else
34            currentSort = SORT_DATE;
35
36        adapter.notifyDataSetChanged();
37    }
38
39    private void onRefresh() {
40        repository.refresh();
41    }
42}
```

A tooltip "Plugin updates available" is shown over the "onSortClicked" method, with options to "Update", "Plugin Settings...", and "Ignore This Update".

Bottom Status Bar: TODO, Terminal, Database Inspector, Profiler, Logcat, Event Log, Layout Inspector, 20:14, LF, UTF-8, 4 spaces.





Activities Android Studio ▾ May 7 8:59 PM Travel Blog - LoginActivity.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog > app > src > main > java > com > travelblog > LoginActivity
  MainActivity.java activity_main.xml LoginActivity.java activity_login.xml
  package com.travelblog;
  import ...
  public class LoginActivity extends AppCompatActivity {
    private TextInputLayout textUsernameLayout;
    private TextInputLayout textPasswordInput;
    private ProgressBar progressBar;
    private Button loginButton;
    private BlogPreferences preferences;
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        preferences = new BlogPreferences(context: this);
        if (preferences.isLoggedIn()) {
            startMainActivity();
            finish();
            return;
        }
        setContentView(R.layout.activity_login);
    }
}

```

Android 1:Project 2:Favorites Resource Manager Build Variants Z-Structure Favorites Gradle Scripts

File Editor Database Inspector Profiler Logcat Event Log Layout Inspector

Plugin updates available: Plugin: Kotlin // Update // Plugin Settings... // Ignore This Update (4 minutes ago)

Activities Android Studio ▾ May 7 8:59 PM Travel Blog - LoginActivity.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog > app > src > main > java > com > travelblog > LoginActivity
  MainActivity.java activity_main.xml LoginActivity.java activity_login.xml
  textPasswordInput = findViewById(R.id.textPasswordInput);
  progressBar = findViewById(R.id.progressBar);
  loginButton = findViewById(R.id.loginButton);

  textUsernameLayout.getEditText().addTextChangedListener(createTextWatcher(textUsernameLayout));
  textPasswordInput.getEditText().addTextChangedListener(createTextWatcher(textPasswordInput));
  loginButton.setOnClickListener(v -> onLoginClicked());
}

private void onLoginClicked() {
    String username = textUsernameLayout.getEditText().getText().toString();
    String password = textPasswordInput.getEditText().getText().toString();
    if (username.isEmpty()) {
        textUsernameLayout.setError("Username must not be empty");
    } else if (password.isEmpty()) {
        textPasswordInput.setError("Password must not be empty");
    } else if (!username.equals("admin") && !password.equals("admin")) {
        showErrorDialog();
    } else {
        performLogin();
    }
}

private void performLogin() {
    preferences.setLoggedIn(true);
    textUsernameLayout.setEnabled(false);
}

```

Android 1:Project 2:Favorites Resource Manager Build Variants Z-Structure Favorites Gradle Scripts

File Editor Database Inspector Profiler Logcat Event Log Layout Inspector

Plugin updates available: Plugin: Kotlin // Update // Plugin Settings... // Ignore This Update (4 minutes ago)

Activities Android Studio May 7 8:59 PM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com.travelblog LoginActivity

MainActivity.java activity_main.xml LoginActivity.java activity_login.xml

```

private void startMainActivity() {
    Intent intent = new Intent( packageContext: this, MainActivity.class );
    startActivity(intent);
}

private void showErrorDialog() {
    new AlertDialog.Builder( context: this )
        .setTitle("Login Failed")
        .setMessage("Username or password is not correct. Please try again.")
        .setPositiveButton( text: "OK", (dialog, which) -> dialog.dismiss()).show();
}

private TextWatcher createTextWatcher(EditText textPasswordInput) {
    return new TextWatcher() {
        @Override
        public void beforeTextChanged(CharSequence s, int start, int count, int after) {

        }

        @Override
        public void onTextChanged(CharSequence s, int start, int before, int count) {
            textPasswordInput.setError(null);
        }

        @Override
        public void afterTextChanged(Editable s) {
        };
    };
}

```

1:Project 2:Resource Manager 3:Build Variants 4:Favorites 5:Z-Structure 6:Gradle 7:Device File Explorer 8:Emulator

Event Log Layout Inspector

Plugin updates available: Plugin: Kotlin // Update // Plugin Settings... // Ignore This Update (4 minutes ago)

27:14 LF UTF-8 4 spaces

Activities Android Studio May 7 8:59 PM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com.travelblog LoginActivity

MainActivity.java activity_main.xml LoginActivity.java activity_login.xml

```

private TextWatcher createTextWatcher(EditText textPasswordInput) {
    return new TextWatcher() {
        @Override
        public void beforeTextChanged(CharSequence s, int start, int count, int after) {

        }

        @Override
        public void onTextChanged(CharSequence s, int start, int before, int count) {
            textPasswordInput.setError(null);
        }

        @Override
        public void afterTextChanged(Editable s) {
        };
    };
}

```

1:Project 2:Resource Manager 3:Build Variants 4:Favorites 5:Z-Structure 6:Gradle 7:Device File Explorer 8:Emulator

Event Log Layout Inspector

Plugin updates available: Plugin: Kotlin // Update // Plugin Settings... // Ignore This Update (4 minutes ago)

27:14 LF UTF-8 4 spaces

The screenshot shows the Android Studio interface with the following details:

- Top Bar:** Activities, Android Studio, May 7 9:00 PM, Travel Blog - MainActivity.java [Travel_Blog.app]
- Menu Bar:** File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, Help
- Toolbar:** educative-travel-blog app src main java com travelblog MainActivity
- Project Structure:** Shows the project tree with modules: app, manifests, java, com.travelblog, adapter, database, http, repository, BlogDetailsActivity, BlogPreferences, LoginActivity, and MainActivity.
- Code Editor:** Displays the MainActivity.java code. The code handles the creation of a toolbar, setting up a search view, and managing an adapter for displaying blog posts.
- Bottom Bar:** TODO, Terminal, Database Inspector, Profiler, Logcat, Event Log, Layout Inspector.

```
setContentView(R.layout.activity_main);

repository = new BlogRepository(getApplicationContext());

MaterialToolbar toolbar = findViewById(R.id.toolbar);
toolbar.setOnMenuItemClickListener(item -> {
    if (item.getItemId() == R.id.sort) {
        onSortClicked();
    }
    return false;
});

MenuItem searchItem = toolbar.getMenu().findItem(R.id.search);
SearchView searchView = (SearchView) searchItem.getActionView();
searchView.setOnQueryTextListener(new SearchView.OnQueryTextListener() {
    @Override
    public boolean onQueryTextSubmit(String query) { return false; }

    @Override
    public boolean onQueryTextChange(String newText) {
        adapter.filter(newText);
        return true;
    }
});

adapter = new MainAdapter(blog ->
```

```
refreshLayout = findViewById(R.id.refresh);
refreshLayout.setOnRefreshListener(this::loadDataFromNetwork);

loadDataFromDatabase();
loadDataFromNetwork();

private void onSortClicked() {
    String[] items = {"Title", "Date"};
    new MaterialAlertDialogBuilder(context: this)
        .setTitle("Sort order")
        .setSingleChoiceItems(items, currentSort, (dialog, which) -> {
            dialog.dismiss();
            currentSort = which;
            sortData();
        }).show();
}

private void sortData() {
    if (currentSort == SORT_TITLE) {
        adapter.sortByTitle();
    } else if (currentSort == SORT_DATE) {
        adapter.sortByDate();
    }
}
```

The screenshot shows the Android Studio interface with the following details:

- Top Bar:** Activities, Android Studio, May 7 9:00 PM, Travel Blog - MainActivity.java [Travel_Blog.app].
- Menu Bar:** File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, Help.
- Project Structure:** Shows the project tree under app, including manifests, java (com.travelblog), res (drawable, layout, menu, values), and generated files.
- Code Editor:** The main editor shows MainActivity.java with the following code:

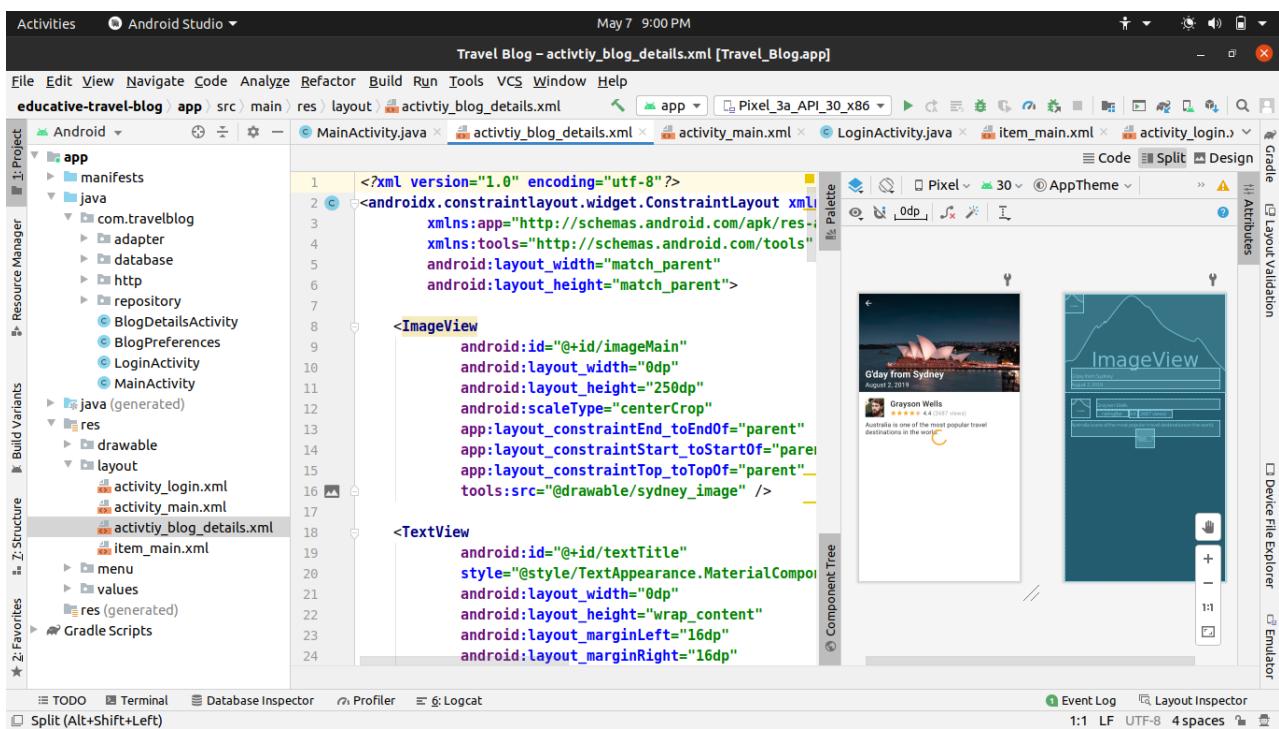
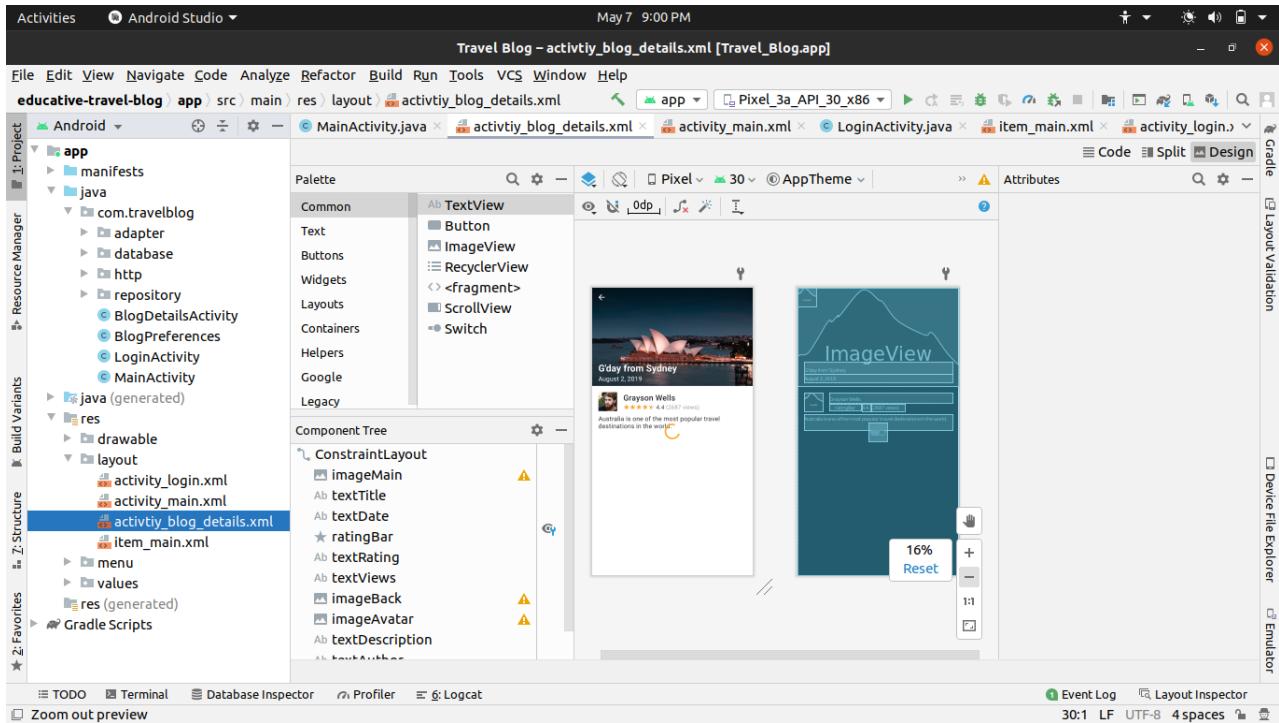
```
105
106     @Override
107     public void onSuccess(List<Blog> blogList) {
108         runOnUiThread(() -> {
109             adapter.setData(blogList);
110             sortData();
111             refreshLayout.setRefreshing(false);
112         });
113     }
114
115     @Override
116     public void onError() {
117         runOnUiThread(() -> {
118             refreshLayout.setRefreshing(false);
119             showErrorSnackbar();
120         });
121     }
122 }
123
124 private void showErrorSnackbar() {
125     View rootView = findViewById(android.R.id.content);
126     Snackbar snackackbar = Snackbar.make(rootView, text: "Error during loading blog articles", Snackbar.LENGTH_LONG)
127     snackackbar.setActionTextColor(getResources().getColor(R.color.orange500));
128     snackackbar.setAction( text: "Retry", v -> {
129         loadDataFromNetwork();
130         snackackbar.dismiss();
131     });
132 }
```

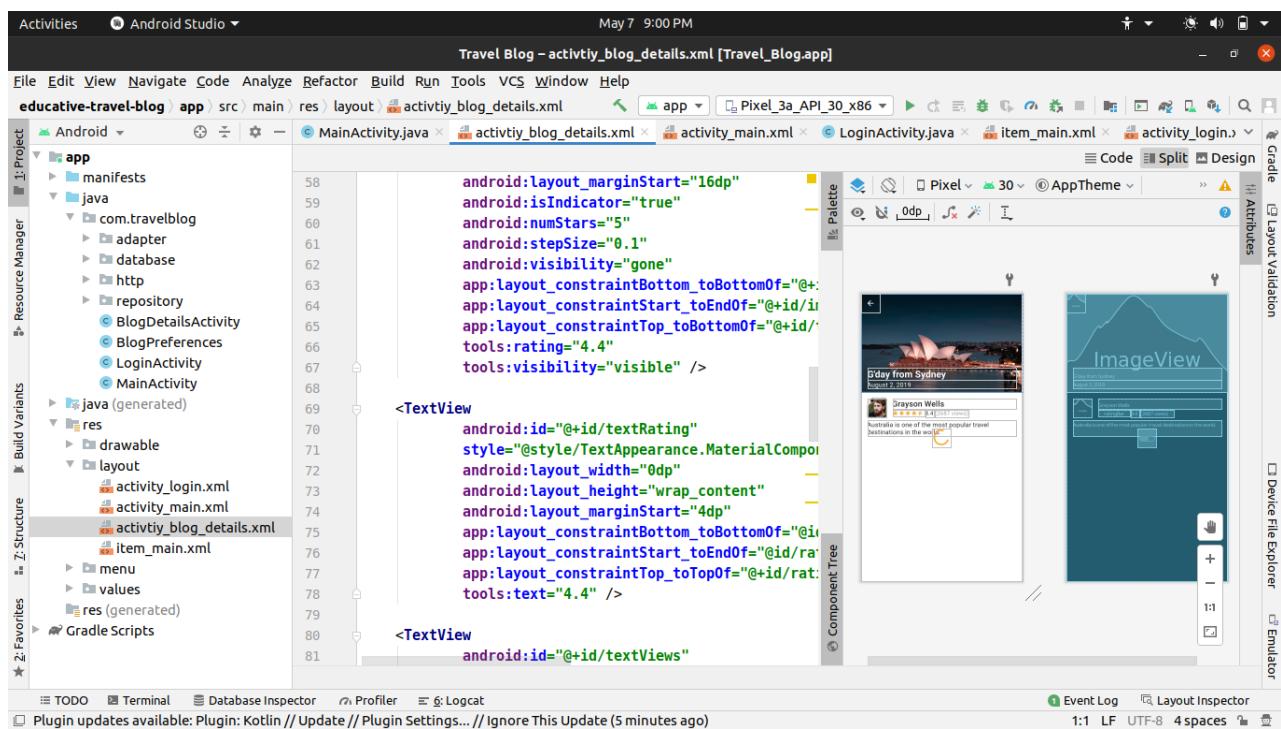
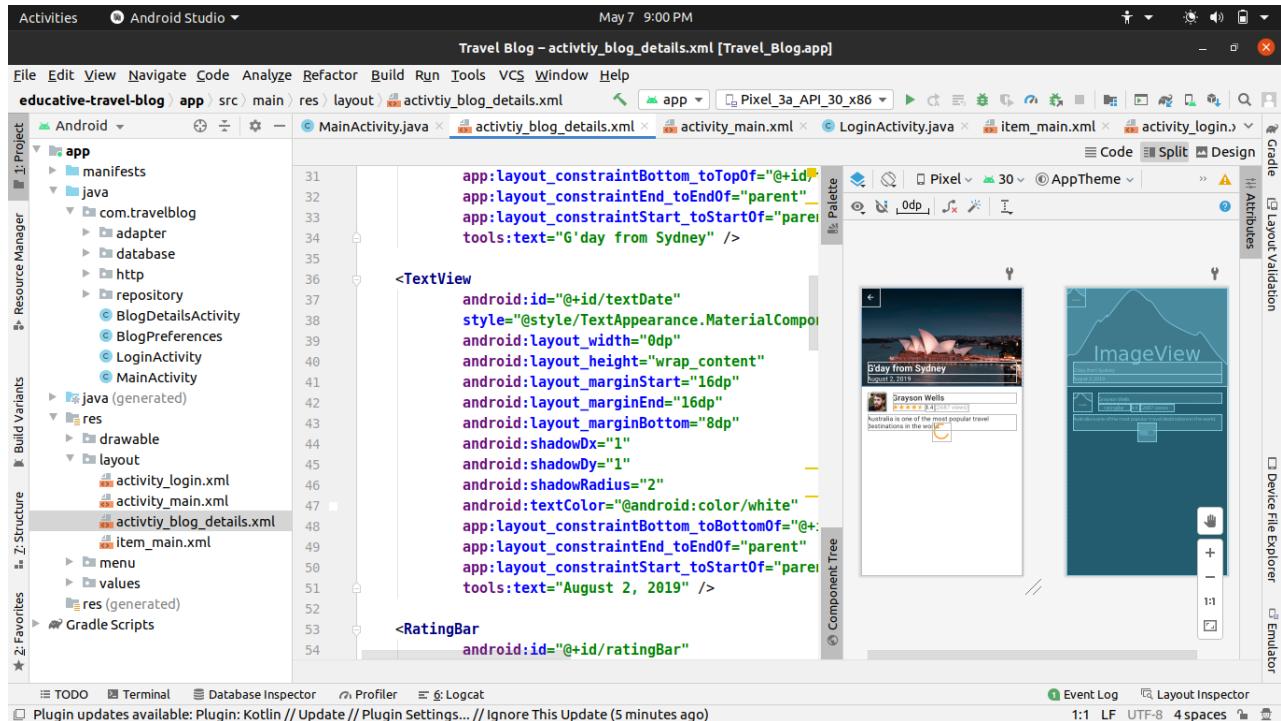
The code handles network requests for blog articles. It uses the RxJava library for asynchronous operations and a RecyclerView adapter to update the UI. It also includes error handling with a Snackbar.

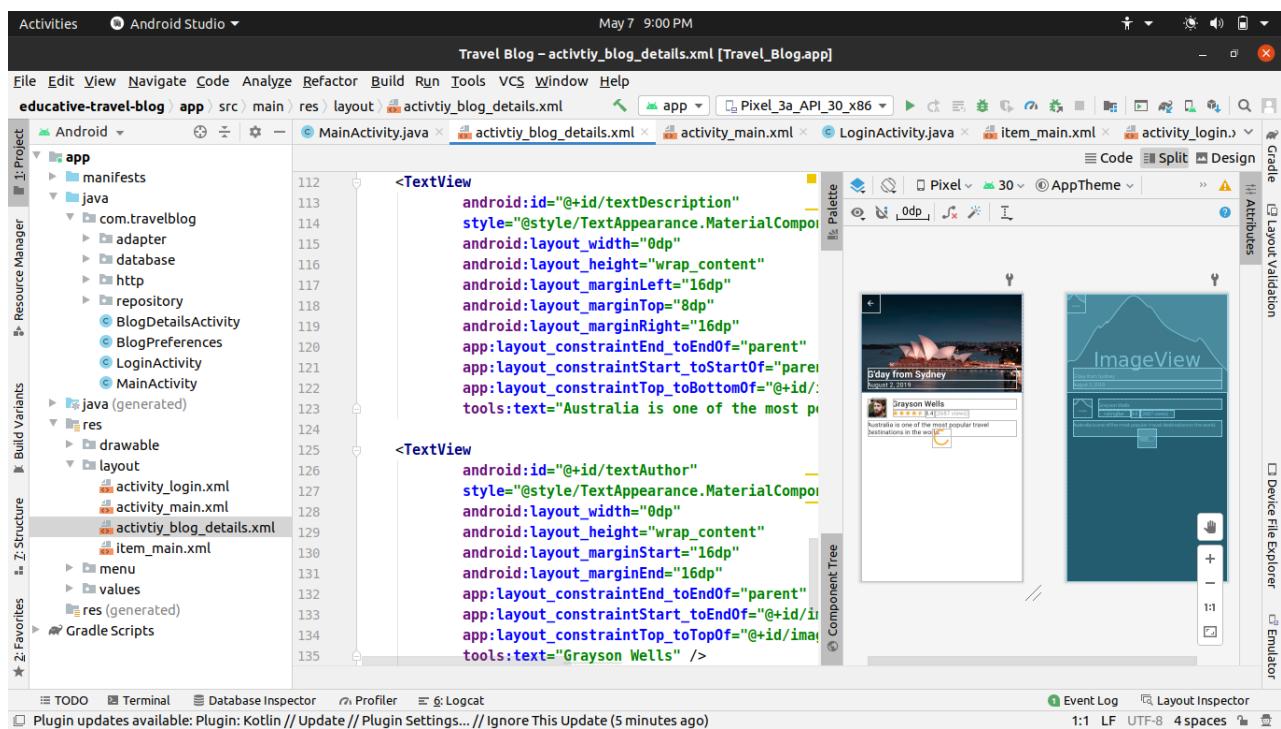
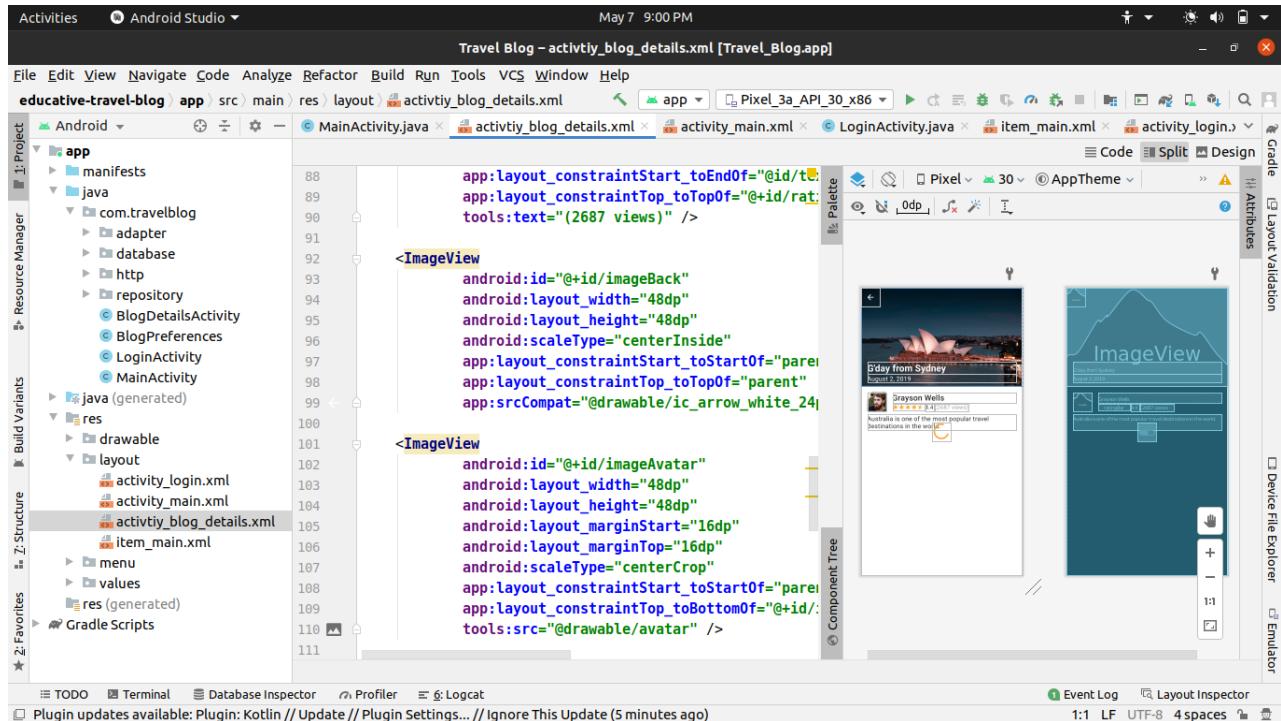
The screenshot shows the Android Studio interface with the following details:

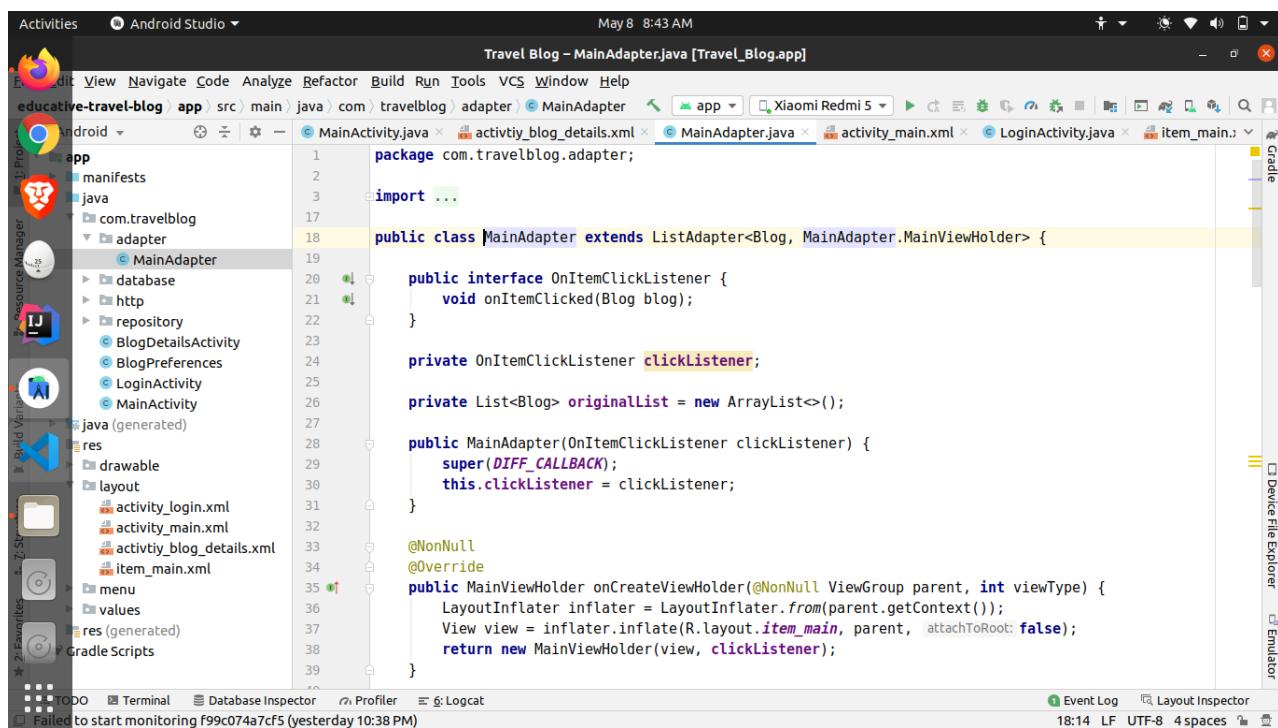
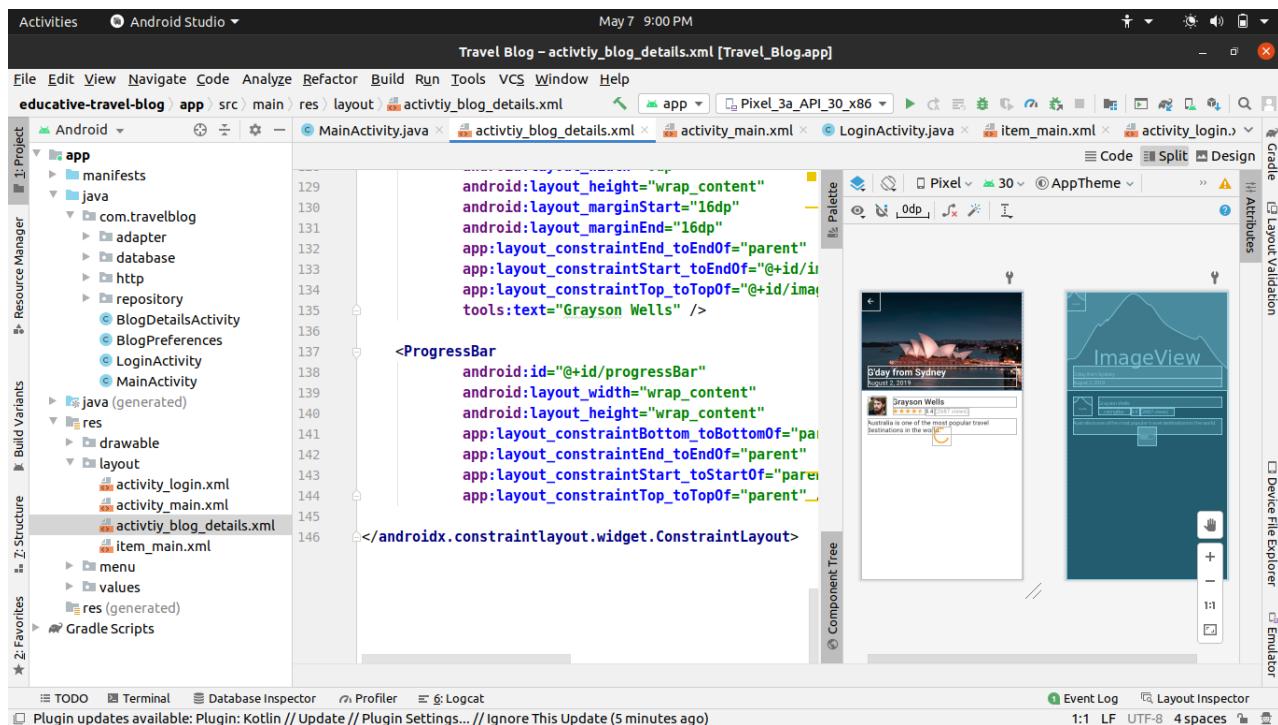
- Top Bar:** Activities, Android Studio, May 7 9:00 PM, Travel Blog – MainActivity.java [Travel_Blog.app]
- Menu Bar:** File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, Help
- Project Structure:** Shows the project tree under app:
 - app
 - manifests
 - java
 - com.travelblog
 - adapter
 - database
 - http
 - repository
 - BlogDetailsActivity
 - BlogPreferences
 - LoginActivity
 - MainActivity
 - java (generated)
 - res
 - drawable
 - layout
 - activity_login.xml
 - activity_main.xml
 - activity_blog_details.xml
 - item_main.xml
 - menu
 - values
 - res (generated)
- Code Editor:** Displays MainActivity.java with the following code:

```
116     runOnUiThread(() -> {
117         refreshLayout.setRefreshing(false);
118         showErrorSnackbar();
119     });
120 });
121 });
122 }
123
124 private void showErrorSnackbar() {
125     View rootView = findViewById(android.R.id.content);
126     Snackbar snackbars = Snackbar.make(rootView, text: "Error during loading blog articles", Snackbar.LENGTH_LONG);
127     snackbars.setActionTextColor(getResources().getColor(R.color.orange500));
128     snackbars.setAction(text: "Retry", v -> {
129         loadDataFromNetwork();
130         snackbars.dismiss();
131     });
132     snackbars.show();
133 }
134
135 }
136 }
```
- Bottom Navigation:** TODO, Terminal, Database Inspector, Profiler, Logcat
- Bottom Status Bar:** Plugin updates available: Plugin: Kotlin // Update // Plugin Settings... // Ignore This Update (4 minutes ago), Event Log, Layout Inspector, 30:1 LF, UTF-8, 4 spaces, etc.









Activities Android Studio ▾ May 8 8:43 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog > app > src > main > java > com > travelblog > adapter > MainAdapter

```

44     }
45
46     public void setData(@Nullable List<Blog> list) {
47         originalList = list;
48         super.submitList(list);
49     }
50
51     public void filter(String query) {
52         List<Blog> filteredList = new ArrayList<>();
53         for (Blog blog : originalList) {
54             if (blog.getTitle().toLowerCase().contains(query.toLowerCase())) {
55                 filteredList.add(blog);
56             }
57         }
58         submitList(filteredList);
59     }
60
61     public void sortByTitle() {
62         List<Blog> currentList = new ArrayList<>(originalList);
63         Collections.sort(currentList, (o1, o2) -> o1.getTitle().compareTo(o2.getTitle()));
64         submitList(currentList);
65     }
66
67     public void sortByDate() {
68         List<Blog> currentList = new ArrayList<>(originalList);
69         Collections.sort(currentList, (o1, o2) -> o2.getDateMillis().compareTo(o1.getDateMillis()));
70         submitList(currentList);
71     }

```

Project Resource Manager Build Variants Z-Structure Favorites Gradle Scripts

Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

18:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:43 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog > app > src > main > java > com > travelblog > adapter > MainAdapter

```

71     }
72
73     static class MainViewHolder extends RecyclerView.ViewHolder {
74
75         private TextView textTitle;
76         private TextView textDate;
77         private ImageView imageAvatar;
78         private Blog blog;
79
80         MainViewHolder(@NonNull View itemView, OnItemClickListener listener) {
81             super(itemView);
82             itemView.setOnClickListener(v -> listener.onItemClicked(blog));
83             textTitle = itemView.findViewById(R.id.textTitle);
84             textDate = itemView.findViewById(R.id.textDate);
85             imageAvatar = itemView.findViewById(R.id.imageAvatar);
86         }
87
88         void bindTo(Blog blog) {
89             this.blog = blog;
90             textTitle.setText(blog.getTitle());
91             textDate.setText(blog.getDate());
92
93             Glide.with(itemView).RequestManager
94                 .load(blog.getAuthor().getAvatarURL()).RequestBuilder<Drawable>
95                 .transform(new CircleCrop())
96                 .transition(DrawableTransitionOptions.withCrossFade());
97         }

```

Project Resource Manager Build Variants Z-Structure Favorites Gradle Scripts

Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

18:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:43 AM Travel Blog - MainAdapter.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com.travelblog.adapter MainAdapter
Android Project 1: Project 2: Favorites 3: Z-Structure 4: Resource Manager 5: Build Variants 6: Favorites 7: Gradle 8: Device File Explorer 9: Emulator
app manifests java com.travelblog adapter MainAdapter
MainAdapter.java
97 } .into(imageAvatar);
98 }
99 }
100 }
101 }
102 }
103 }
104 }
105 @Override
106 public boolean areItemsTheSame(@NonNull Blog oldData,
107 @NonNull Blog newData) {
108     return oldData.getId() == newData.getId();
109 }
110 }
111 @Override
112 public boolean areContentsTheSame(@NonNull Blog oldData,
113 @NonNull Blog newData) {
114     return oldData.equals(newData);
115 }
116 }
117 }

18:14 LF UTF-8 4 spaces
Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)
Event Log Layout Inspector
10:2 LF UTF-8 4 spaces

```

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - AppDatabase.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com.travelblog.database AppDatabase
Android Project 1: Project 2: Favorites 3: Z-Structure 4: Resource Manager 5: Build Variants 6: Favorites 7: Gradle 8: Device File Explorer 9: Emulator
app manifests java com.travelblog adapter MainAdapter database AppDatabase
AppDatabase.java
1 package com.travelblog.database;
2
3 import ...
4
5 @Database(entities = {Blog.class}, version = 1)
6 public abstract class AppDatabase extends RoomDatabase {
7     public abstract BlogDAO blogDao();
8 }
9
10 }

10:2 LF UTF-8 4 spaces
Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)
Event Log Layout Inspector

```

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - BlogDAO.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog database

BlogDAO

```

1 package com.travelblog.database;
2
3 import ...
4
5 @Dao
6 public interface BlogDAO {
7
8     @Query("SELECT * FROM blog")
9     List<Blog> getAll();
10
11     @Insert
12     void insertAll(List<Blog> blogList);
13
14     @Query("DELETE FROM blog")
15     void deleteAll();
16 }

```

Resource Manager Build Variants Favorites

app manifests java com.travelblog adapter database AppDatabase BlogDAO DatabaseProvider http repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity java (generated) res drawable layout activity_login.xml activity_main.xml activity_blog_details.xml item_main.xml menu values

Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

10:18 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - DatabaseProvider.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog database

DatabaseProvider

```

1 package com.travelblog.database;
2
3 import ...
4
5 public class DatabaseProvider {
6
7     private static volatile AppDatabase instance;
8
9     public static AppDatabase getInstance(Context context) {
10         if (instance == null) {
11             synchronized (DatabaseProvider.class) {
12                 if (instance == null) {
13                     instance = Room
14                         .databaseBuilder(context, AppDatabase.class,
15                                         name: "blog-database")
16                         .build();
17                 }
18             }
19         }
20         return instance;
21     }
22 }

```

Resource Manager Build Variants Favorites

app manifests java com.travelblog adapter database AppDatabase BlogDAO DatabaseProvider http repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity java (generated) res drawable layout activity_login.xml activity_main.xml activity_blog_details.xml item_main.xml menu values

Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

7:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Author.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com travelblog http Author
  app manifests java
    com.travelblog
      adapter MainAdapter
      database AppDatabase BlogDAO DatabaseProvider
      http
        Author
          Blog
          BlogData
          BlogHttpClient
        repository
        BlogDetailsActivity
        BlogPreferences
        LoginActivity
        MainActivity
      java (generated)
      res
      drawable
      layout
        activity_login.xml
        activity_main.xml
  Z-Structure
  Favorites
  2: Favorites
  Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

```

```

package com.travelblog.http;

import ...

public class Author implements Parcelable {

    private String name;
    private String avatar;

    public Author(String name, String avatar) {
        this.name = name;
        this.avatar = avatar;
    }

    protected Author(Parcel in) {
        name = in.readString();
        avatar = in.readString();
    }

    @Override
    public void writeToParcel(Parcel dest, int flags) {
        dest.writeString(name);
        dest.writeString(avatar);
    }

    @Override
    public int describeContents() {
        return 0;
    }
}
```

Event Log Layout Inspector
7:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Author.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com travelblog http Author
  app manifests java
    com.travelblog
      adapter MainAdapter
      database AppDatabase BlogDAO DatabaseProvider
      http
        Author
          Blog
          BlogData
          BlogHttpClient
        repository
        BlogDetailsActivity
        BlogPreferences
        LoginActivity
        MainActivity
      java (generated)
      res
      drawable
      layout
        activity_login.xml
        activity_main.xml
  Z-Structure
  Favorites
  2: Favorites
  Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

```

```

public static final Creator<Author> CREATOR = new Creator<Author>() {
    @Override
    public Author createFromParcel(Parcel in) { return new Author(in); }

    @Override
    public Author[] newArray(int size) { return new Author[size]; }

    public String getName() { return name; }

    public String getAvatar() { return avatar; }

    public String getAvatarURL() {
        return BlogHttpClient.BASE_URL + BlogHttpClient.PATH + getAvatar();
    }

    @Override
    public boolean equals(Object o) {
        if (this == o) return true;
        if (o == null || getClass() != o.getClass()) return false;
        Author author = (Author) o;
        return Objects.equals(name, author.name) &&
               Objects.equals(avatar, author.avatar);
    }
}
```

Event Log Layout Inspector
7:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Author.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com travelblog http Author
  app manifests Java com.travelblog
    adapter MainAdapter
    database AppDatabase BlogDAO DatabaseProvider
    http Author Blog BlogData BlogHttpClient
      repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity
      java (generated)
    res drawable layout activity_login.xml activity_main.xml
  Java (generated)
  res drawable layout activity_login.xml activity_main.xml
  Layout Inspector
  Event Log
  Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM) 7:14 LF UTF-8 4 spaces

```

```

public String getName() { return name; }

public String getAvatar() { return avatar; }

public String getAvatarURL() {
    return BlogHttpClient.BASE_URL + BlogHttpClient.PATH + getAvatar();
}

@Override
public boolean equals(Object o) {
    if (this == o) return true;
    if (o == null || getClass() != o.getClass()) return false;
    Author author = (Author) o;
    return Objects.equals(name, author.name) &&
        Objects.equals(avatar, author.avatar);
}

@Override
public int hashCode() { return Objects.hash(name, avatar); }

```

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Blog.java [Travel_Blog.app]

```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
educative-travel-blog app src main java com travelblog http Blog
  app manifests Java com.travelblog
    adapter MainAdapter
    database AppDatabase BlogDAO DatabaseProvider
    http Author Blog BlogData BlogHttpClient
      repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity
      java (generated)
    res drawable layout activity_login.xml activity_main.xml
  Java (generated)
  res drawable layout activity_login.xml activity_main.xml
  Layout Inspector
  Event Log
  Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM) 11:14 LF UTF-8 4 spaces

```

```

package com.travelblog.http;

import ...

@Entity
public class Blog implements Parcelable {

    private static final SimpleDateFormat dateFormat = new SimpleDateFormat( pattern: "MMMM dd, yyyy" );

    @PrimaryKey
    private int id;
    @Embedded
    private Author author;
    private String title;
    private String date;
    private String image;
    private String description;
    private int views;
    private float rating;

    public Blog(int id, Author author, String title, String date, String image,
               String description, int views, float rating) {
        this.id = id;
        this.author = author;
        this.title = title;
        this.date = date;
    }
}

```

Activities Android Studio May 8 8:44 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http Blog

```

    String description, int views, float rating) {
        this.id = id;
        this.author = author;
        this.title = title;
        this.date = date;
        this.image = image;
        this.description = description;
        this.views = views;
        this.rating = rating;
    }

    protected Blog(Parcel in) {
        id = in.readInt();
        title = in.readString();
        date = in.readString();
        image = in.readString();
        description = in.readString();
        views = in.readInt();
        rating = in.readFloat();
        author = in.readParcelable(Author.class.getClassLoader());
    }

    @Override
    public void writeToParcel(Parcel dest, int flags) {
        dest.writeInt(id);
        dest.writeString(title);
        dest.writeString(date);
        dest.writeString(image);
        dest.writeString(description);
        dest.writeInt(views);
        dest.writeFloat(rating);
        dest.writeParcelable(author, parcelableFlags);
    }

    @Override
    public int describeContents() { return 0; }

    public static final Creator<Blog> CREATOR = new Creator<Blog>() {
        @Override
        public Blog createFromParcel(Parcel in) { return new Blog(in); }

        @Override
        public Blog[] newArray(int size) { return new Blog[size]; }
    };

    public String getTitle() { return title; }

    public String getDate() { return date; }

    public Long getDateMillis() {
        try {
            Date date = dateFormat.parse(getDate());
            return date != null ? date.getTime() : null;
        } catch (ParseException e) {
            e.printStackTrace();
        }
    }
}

```

Project 1:Project 2:Structure Favorites

Resource Manager Build Variants Z-Structure

Event Log Layout Inspector

11:14 LF UTF-8 4 spaces

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio May 8 8:44 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http Blog

```

    String description, int views, float rating) {
        this.id = id;
        this.author = author;
        this.title = title;
        this.date = date;
        this.image = image;
        this.description = description;
        this.views = views;
        this.rating = rating;
    }

    protected Blog(Parcel in) {
        id = in.readInt();
        title = in.readString();
        date = in.readString();
        image = in.readString();
        description = in.readString();
        views = in.readInt();
        rating = in.readFloat();
        author = in.readParcelable(Author.class.getClassLoader());
    }

    @Override
    public void writeToParcel(Parcel dest, int flags) {
        dest.writeInt(id);
        dest.writeString(title);
        dest.writeString(date);
        dest.writeString(image);
        dest.writeString(description);
        dest.writeInt(views);
        dest.writeFloat(rating);
        dest.writeParcelable(author, parcelableFlags);
    }

    @Override
    public int describeContents() { return 0; }

    public static final Creator<Blog> CREATOR = new Creator<Blog>() {
        @Override
        public Blog createFromParcel(Parcel in) { return new Blog(in); }

        @Override
        public Blog[] newArray(int size) { return new Blog[size]; }
    };

    public String getTitle() { return title; }

    public String getDate() { return date; }

    public Long getDateMillis() {
        try {
            Date date = dateFormat.parse(getDate());
            return date != null ? date.getTime() : null;
        } catch (ParseException e) {
            e.printStackTrace();
        }
    }
}

```

Project 1:Project 2:Structure Favorites

Resource Manager Build Variants Z-Structure

Event Log Layout Inspector

11:14 LF UTF-8 4 spaces

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Blog.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http Blog

```

public float getRating() { return rating; }

public Author getAuthor() { return author; }

public void setAuthor(Author author) { this.author = author; }

public int getId() { return id; }

@Override
public boolean equals(Object o) {
    if (this == o) return true;
    if (o == null || getClass() != o.getClass()) return false;
    Blog blog = (Blog) o;
    return views == blog.views &&
        Float.compare(blog.rating, rating) == 0 &&
        Objects.equals(id, blog.id) &&
        Objects.equals(author, blog.author) &&
        Objects.equals(title, blog.title) &&
        Objects.equals(date, blog.date) &&
        Objects.equals(image, blog.image) &&
        Objects.equals(description, blog.description);
}

@Override
public int hashCode() {
}

```

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Resource Manager Build Variants Z-Structure Favorites

Event Log Layout Inspector

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

11:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - Blog.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http Blog

```

@Override
public boolean equals(Object o) {
    if (this == o) return true;
    if (o == null || getClass() != o.getClass()) return false;
    Blog blog = (Blog) o;
    return views == blog.views &&
        Float.compare(blog.rating, rating) == 0 &&
        Objects.equals(id, blog.id) &&
        Objects.equals(author, blog.author) &&
        Objects.equals(title, blog.title) &&
        Objects.equals(date, blog.date) &&
        Objects.equals(image, blog.image) &&
        Objects.equals(description, blog.description);
}

@Override
public int hashCode() {
    return Objects.hash(id, author, title, date, image, description, views, rating);
}

```

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Resource Manager Build Variants Z-Structure Favorites

Event Log Layout Inspector

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

11:14 LF UTF-8 4 spaces

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - BlogData.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http

app manifests java com.travelblog adapter MainAdapter database AppDatabase BlogDAO DatabaseProvider http Author Blog BlogData repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity java (generated) res drawable layout activity_login.xml activity_main.xml

```

1 package com.travelblog.http;
2
3 import ...
4
5 public class BlogData {
6
7     private List<Blog> data;
8
9     public List<Blog> getData() { return data != null ? data : new ArrayList<>(); }
10
11 }

```

Resource Manager Build Variants Z-Structure Favorites Event Log Layout Inspector

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - BlogHttpClient.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog http

app manifests java com.travelblog adapter MainAdapter database AppDatabase BlogDAO DatabaseProvider http Author Blog BlogData BlogHttpClient repository BlogDetailsActivity BlogPreferences LoginActivity MainActivity java (generated) res drawable layout activity_login.xml activity_main.xml

```

1 package com.travelblog.http;
2
3 import ...
4
5 public final class BlogHttpClient {
6
7     public static final BlogHttpClient INSTANCE = new BlogHttpClient();
8
9     public static final String BASE_URL = "https://bitbucket.org/dmytrodanylyk/travel-blog-resources";
10    public static final String PATH = "/raw/3eede691af3e8ff795bf6d31efffb873d484877be";
11    private static final String BLOG_ARTICLES_URL = BASE_URL + PATH + "/blog_articles.json";
12
13    private OkHttpClient client;
14    private Gson gson;
15
16    private BlogHttpClient() {
17        client = new OkHttpClient();
18        gson = new Gson();
19    }
20
21    public List<Blog> loadBlogArticles() {
22        Request request = new Request.Builder()
23            .get()
24            .url(BLOG_ARTICLES_URL)
25            .build();
26    }

```

Resource Manager Build Variants Z-Structure Favorites Event Log Layout Inspector

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

The screenshot shows the Android Studio interface with the project 'educative-travel-blog' open. The code editor displays `BlogHttpClient.java` under the package `com.travelblog.http`. The code implements a method to fetch blog articles from a URL using an OkHttpClient.

```
    .get()
    .url(BLOG_ARTICLES_URL)
    .build();
```

```
try {
    Response response = client.newCall(request).execute();
    ResponseBody responseBody = response.body();
    if (responseBody != null) {
        String json = responseBody.string();
        BlogData blogData = gson.fromJson(json, BlogData.class);
        if (blogData != null) {
            return blogData.getData();
        }
    }
} catch (IOException e) {
    Log.e(tag: "BlogHttpClient", msg: "Error loading blog articles", e);
}
return null;
```

The screenshot shows the Android Studio interface with the following details:

- Top Bar:** Activities, Android Studio, May 8 8:44 AM.
- Middle Bar:** File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help.
- Title Bar:** Travel Blog - BlogRepository.java [Travel_Blog.app].
- Project Structure:** Shows the project tree under "app":
 - java/com/travelblog:
 - MainAdapter
 - BlogDAO
 - DatabaseProvider
 - BlogRepository (selected)
 - BlogHttpClient
 - http/Author
 - Blog
 - BlogData
 - BlogDetailsActivity
 - BlogPreferences
 - LoginActivity
 - MainActivity
- Code Editor:** Displays the博客仓库类(BlogRepository)的实现。该类依赖于BlogHttpClient、AppDatabase和Executor。它有两个主要方法： loadDataFromDatabase 和 loadDataFromNetwork，分别从数据库和网络加载博客文章。
- Side Panels:** Resource Manager, Build Variants, Z-Structure, Favorites, Device File Explorer.
- Bottom Navigation:** TODO, Terminal, Database Inspector, Profiler, Logcat.
- Bottom Status Bar:** Event Log, Layout Inspector, Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM), 11:14 LF, UTF-8, 4 spaces.

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - BlogRepository.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

icative-travel-blog app src main java com travelblog repository博 BlogRepository

```

public void loadDataFromDatabase(DataFromDatabaseCallback callback) {
    executor.execute(() -> callback.onSuccess(database.blogDao().getAll()));
}

public void loadDataFromNetwork(DataFromNetworkCallback callback) {
    executor.execute(() -> {
        List<Blog> blogList = httpClient.loadBlogArticles();
        if (blogList == null) {
            callback.onError();
        } else {
            BlogDAO blogDAO = database.blogDao();
            blogDAO.deleteAll();
            blogDAO.insertAll(blogList);
            callback.onSuccess(blogList);
        }
    });
}

```

Android Project Resource Manager Build Variants Favorites Z-Structure Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio ▾ May 8 8:44 AM Travel Blog - DataFromDatabaseCallback.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

el-blog app src main java com travelblog repository博 DataFromDatabaseCallback

```

package com.travelblog.repository;

import ...

public interface DataFromDatabaseCallback {
    void onSuccess(List<Blog> blogList);
}

```

Android Project Resource Manager Build Variants Favorites Z-Structure Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio May 8 8:44 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Travel Blog - DataFromNetworkCallback.java [Travel_Blog.app]

Android Studio app 1 Project 1-1:Project

```

package com.travelblog.repository;

import ...

public interface DataFromNetworkCallback {
    void onSuccess(List<Blog> blogList);

    void onError();
}

```

Resource Manager Favorites Z-Structure Build Variants Device File Explorer Emulator

Event Log Layout Inspector
7:18 LF UTF-8 4 spaces

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio May 8 8:45 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Travel Blog - BlogDetailsActivity.java [Travel_Blog.app]

Android Studio app 1 Project 1-1:Project

```

package com.travelblog;

import ...

public class BlogDetailsActivity extends AppCompatActivity {

    private static final String EXTRAS_BLOG = "EXTRAS_BLOG";

    private TextView textStatus;
    private TextView textDate;
    private TextView textAuthor;
    private TextView textRating;
    private TextView textDescription;
    private TextView textViews;
    private RatingBar ratingBar;
    private ImageView imageAvatar;
    private ImageView imageMain;
    private ProgressBar progressBar;

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

        imageMain = findViewById(R.id.imageMain);
        imageAvatar = findViewById(R.id.imageAvatar);
    }
}

```

Resource Manager Favorites Z-Structure Build Variants Device File Explorer Emulator

Event Log Layout Inspector
18:14 LF UTF-8 4 spaces

Failed to start monitoring f99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio May 8 8:45 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog BlogDetailsActivity.java [Travel_Blog.app]

```

private void showData(Blog blog) {
    progressBar.setVisibility(View.GONE);
    textTitle.setText(blog.getTitle());
    textDate.setText(blog.getDate());
    textAuthor.setText(blog.getAuthor().getName());
    textRating.setText(String.valueOf(blog.getRating()));
    textViews.setText(String.format("%d views", blog.getViews()));
    textDescription.setText(Html.fromHtml(blog.getDescription()));
    ratingBar.setRating(blog.getRating());
    ratingBar.setVisibility(View.VISIBLE);

    Glide.with( activity: this ) RequestManager
        .load(blog.getImageURL()) RequestBuilder<Drawable>
        .transition(DrawableTransitionOptions.withCrossFade())
        .into(imageMain);

    Glide.with( activity: this ) RequestManager
        .load(blog.getAuthor().getAvatarURL()) RequestBuilder<Drawable>
        .transform(new CircleCrop())
        .transition(DrawableTransitionOptions.withCrossFade())
        .into(imageAvatar);
}

```

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio May 8 8:45 AM

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog BlogDetailsActivity.java [Travel_Blog.app]

```

private void showData(Blog blog) {
    Glide.with( activity: this ) RequestManager
        .load(blog.getImageURL()) RequestBuilder<Drawable>
        .transition(DrawableTransitionOptions.withCrossFade())
        .into(imageMain);

    Glide.with( activity: this ) RequestManager
        .load(blog.getAuthor().getAvatarURL()) RequestBuilder<Drawable>
        .transform(new CircleCrop())
        .transition(DrawableTransitionOptions.withCrossFade())
        .into(imageAvatar);
}

public static void startBlogDetailsActivity(Activity activity, Blog blog) {
    Intent intent = new Intent(activity, BlogDetailsActivity.class);
    intent.putExtra(EXTRAS_BLOG, blog);
    activity.startActivity(intent);
}

```

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

Activities Android Studio ▾ May 8 8:45 AM Travel Blog - BlogPreferences.java [Travel_Blog.app]

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

educative-travel-blog app src main java com travelblog BlogPreferences

```

package com.travelblog;

import ...

public class BlogPreferences {

    private static final String KEY_LOGIN_STATE = "key_login_state";

    private SharedPreferences preferences;

    BlogPreferences(Context context) {
        preferences =
            context.getSharedPreferences("travel-blog", Context.MODE_PRIVATE);
    }

    public boolean isLoggedIn() { return preferences.getBoolean(KEY_LOGIN_STATE, false); }

    public void setLoggedIn(boolean loggedIn) {
        preferences.edit().putBoolean(KEY_LOGIN_STATE, loggedIn).apply();
    }
}

```

Android Project Resource Manager Build Variants Favorites

1: Project 2: Structure 3: Java (generated) 4: res 5: drawable 6: layout 7: menu

activity_login.xml activity_main.xml activitiy_blog_details.xml item_main.xml

Java XML Generated Resources Device File Explorer Emulator

Event Log Layout Inspector

Failed to start monitoring F99c074a7cf5 (yesterday 10:38 PM)

6:14 LF UTF-8 4 spaces

