AN ANDROID APPLICATION FOR KEEPING UP WITH THE LATEST HEADLINES

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DESCRIPTION:

The app's main feature is displaying a list of news articles, each with a title, image, and brief description. Users can scroll through the list of articles and tap on an article to view more details.

REQUIRED INITIAL STEPS:

Step 1: Visit the official Android Studio Website.

go to the **https://developer.android.com/studio**

Step 2: Select the version of your operating system.

> ➢ On the website, you will see download options for windows, macOS, and Linux.
> ➢ Click on the approximate version for your computer.

Step 3: Read and accept all the terms and conditions.

> ➢ Read through the terms and conditions, and then click on **"I have read and agree with the terms and conditions"** checkbox before proceeding.

Step 4: Click download button and start downloading.

> ➢ Click on the **"Download"** button to begin downloading the installer file.

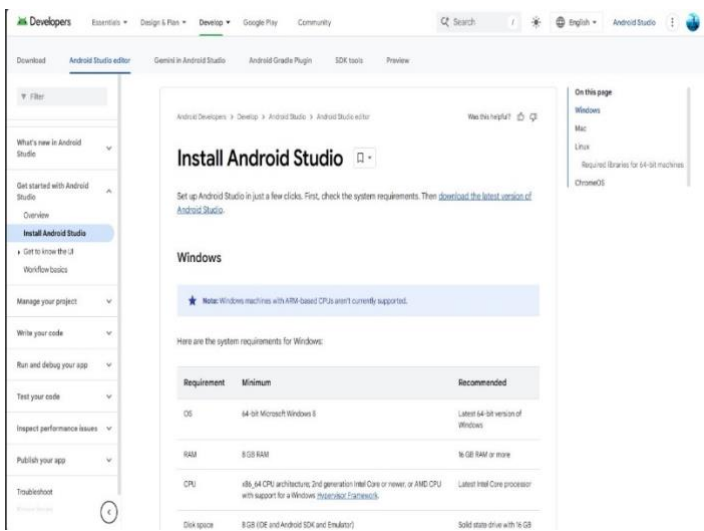**Step 5:** Wait for download to complete and proceed installation.
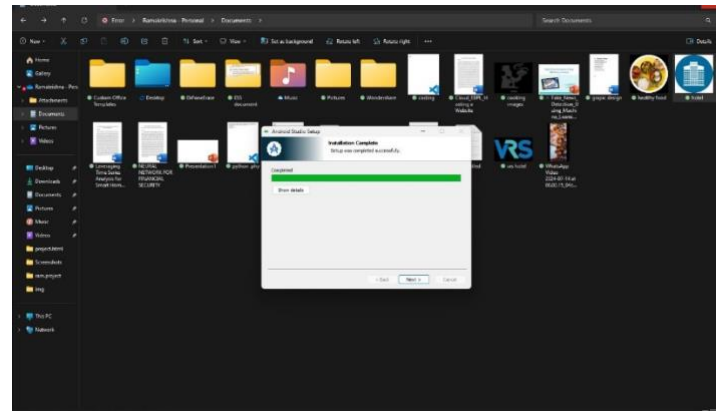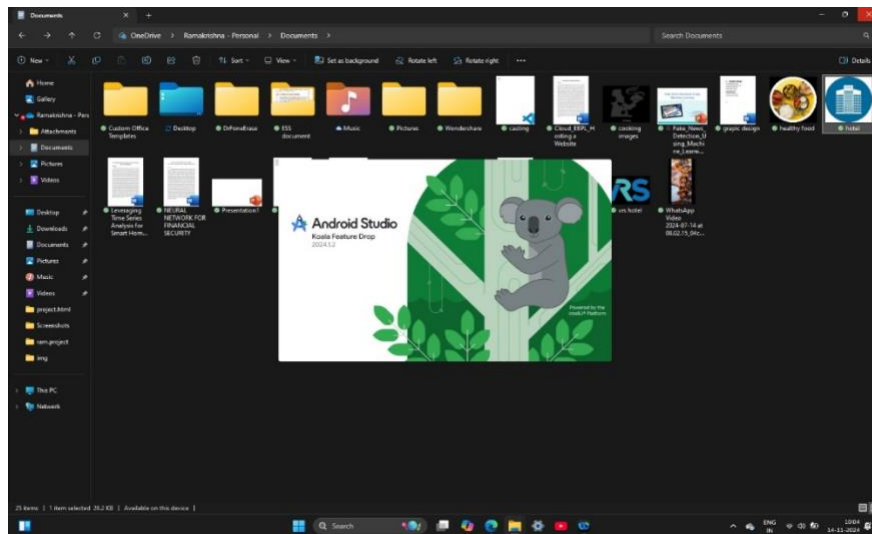
FIG 1: INSTALL ANDROID STUDIO

FIG 2: INSTALLATION

FIG 3: AFTER THE INSTALLATION

CREATE A ACTIVITY

Step 1: Open Android Studio

➢ Launch Android Studio on your computer.

Step 2: Start a New Project

➢ Navigate to the menu and click File > New > New Project.

Step 3: Choose a Project Template

➢ Select Empty Compose Activity as your project template.
➢ A screen with different project options such as "Basic Activity" and "Empty Activity" will appear. Ensure that Empty Compose Activity is highlighted.

Step 4: Click on "Next"

➢ Click on the Next button to proceed to the next configuration page.

Step 5: Configure Your Project

➢ Enter details like the Project Name, Package Name, Save Location, Language (choose Kotlin), and the Minimum SDK.
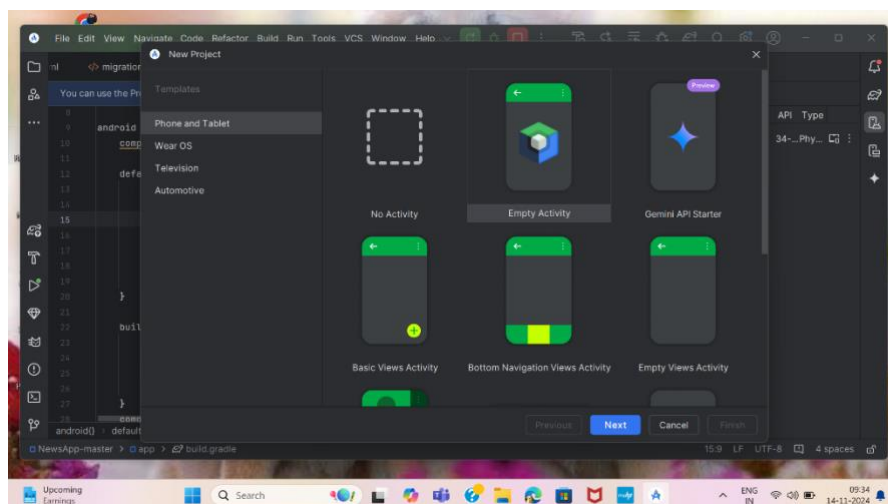
CREATING A ACTIVITY

Step-by-Step Instructions:

GRADLE SCRIPT>BUILD.GRADLE(Module:App)

1. Open Your Project in Android Studio:

 ➢ Ensure you have your project open in Android Studio.
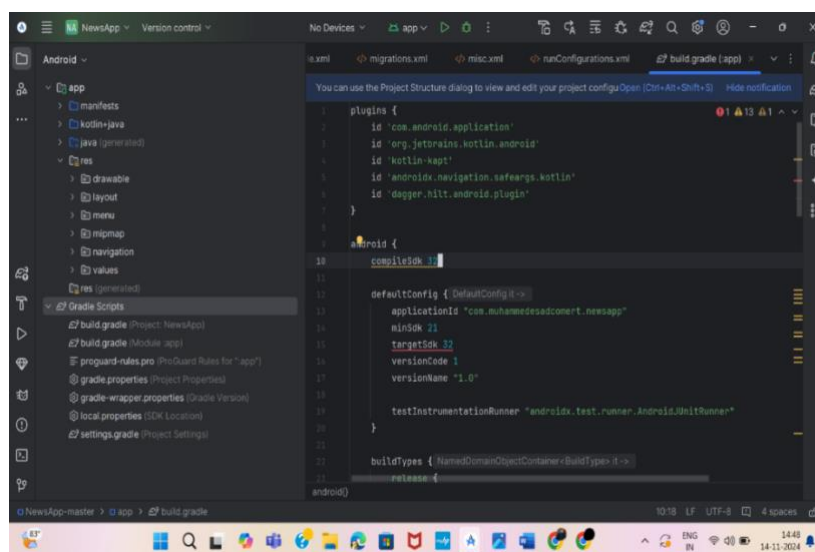
2. Navigate to the build.gradle (Module: app) File:

 ➢ In the Project pane on the left, expand the Gradle Scripts section.
 ➢ Click on build.gradle (Module: app) to open it.

3. Add/Modify Dependencies:

 ➢ Locate the dependencies block within the build.gradle file.
 ➢ Add or modify the necessary implementation statements for your project.

4. Sync the Project:

 ➢ After making changes to build.gradle, click on the "Sync Now" prompt that appears at the top of the editor to ensure your project configuration is up to data.

GRADLE SCRIPT

ADDING ROOM DEPENDENCIES:

1. **Open build.gradle (Module: app):**

   ➢ Locate the build.gradle file of the app module in your project.

2. **Add Room Dependencies:**

   ➢ Inside the dependencies section, add the following code to include Room database support in your project:

```
dependencies {
    implementation 'androidx.core:core-ktx:1.8.0'
    implementation 'androidx.appcompat:appcompat:1.5.0'
    implementation 'com.google.android.material:material:1.6.1'
    implementation 'androidx.constraintlayout:constraintlayout:2.1.4'
    // Arch components
    implementation "androidx.lifecycle:lifecycle-livedata-
ktx:$lifecycle_version"
    implementation "androidx.lifecycle:lifecycle-viewmodel-
ktx:$lifecycle_version"
```

3. **Sync the Project:**

   ➢ After adding these lines, sync your project with Gradle to ensure the dependencies are correctly integrated.

ADDIND RETROFIT DEPENDENCIES:

Inside the dependencies section, add the following code to include Retrofit and OkHttp in your project:

```
implementation 'com.squareup.retrofit2:retrofit:2.9.0'
implementation 'com.squareup.retrofit2:converter-gson:2.9.0'

// OkHttp
// Define a BOM and its version
implementation platform("com.squareup.okhttp3:okhttp-bom:4.9.3")
// Define any required OkHttp artifacts without version
implementation 'com.squareup.okhttp3:okhttp'
implementation 'com.squareup.okhttp3:logging-interceptor'
```

ADDING COIL DEPENDENCIES:

Inside the dependencies section, add the following line to include Coil in your project:
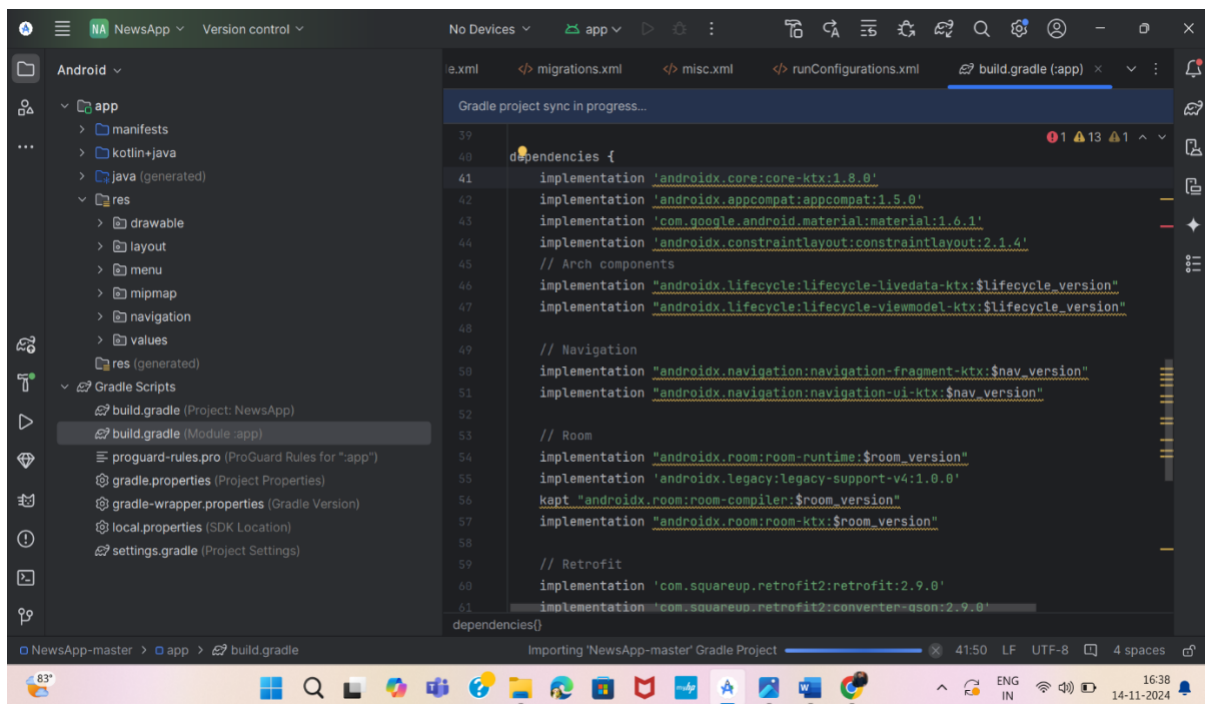
ADDING PERMISSION:

Open AndroidManifest.xml

In Android Studio, navigate to app > src > main > AndroidManifest.xml to open the AndroidManifest.xml file. This file defines essential information about your application to the Android system, including its components and permissions.
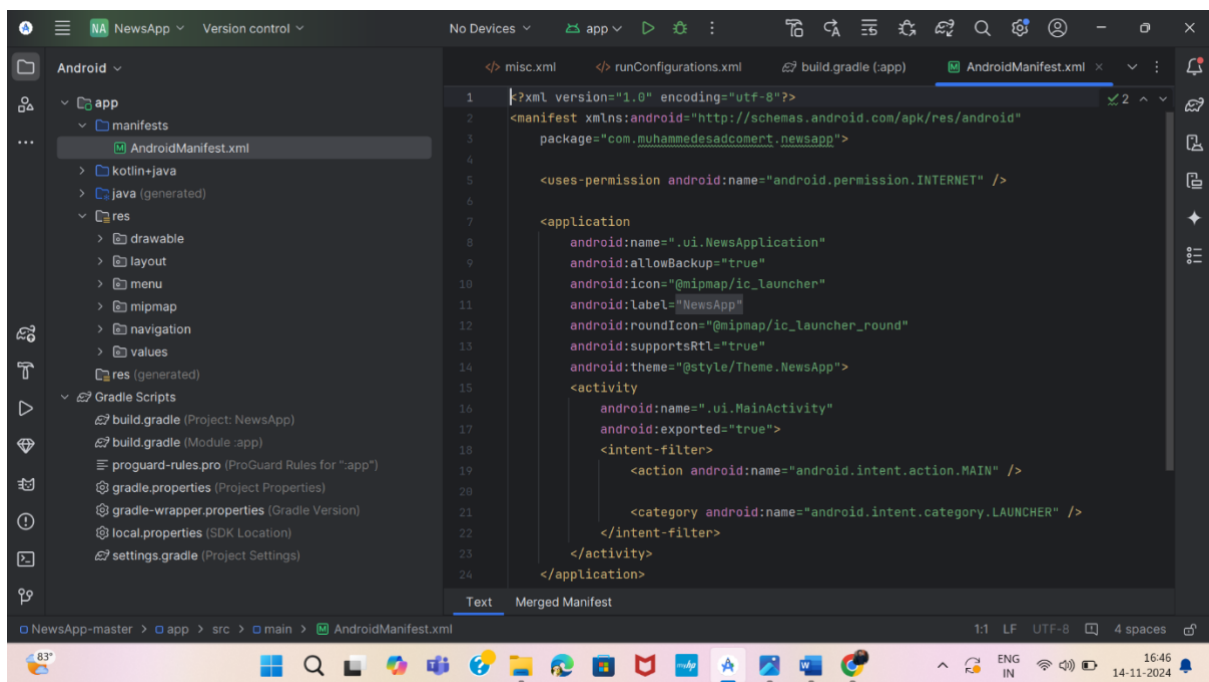
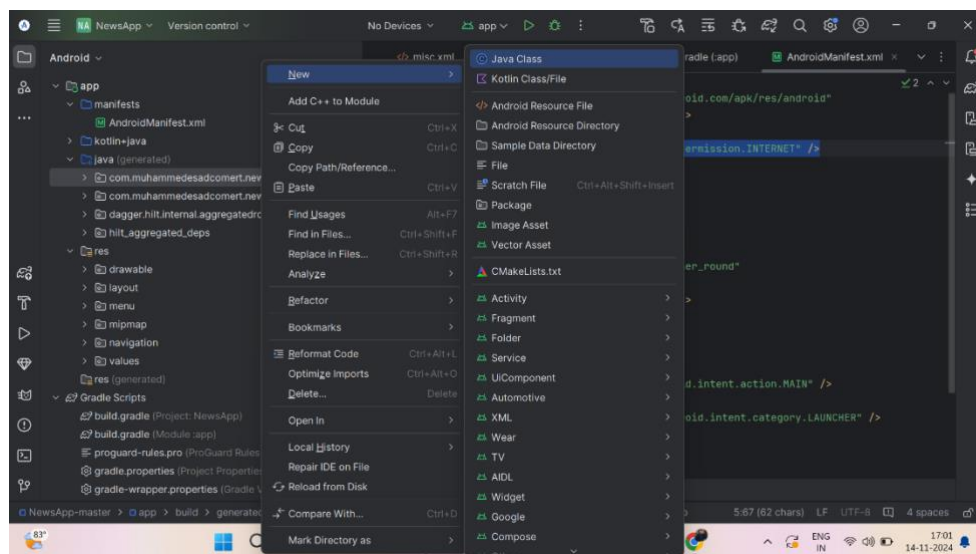# ADD PERMISSION TO ACCESS WIFI AND INTERNET

To allow your application to access Wi-Fi and the internet, add the following permissions in your AndroidManifest.xml file:
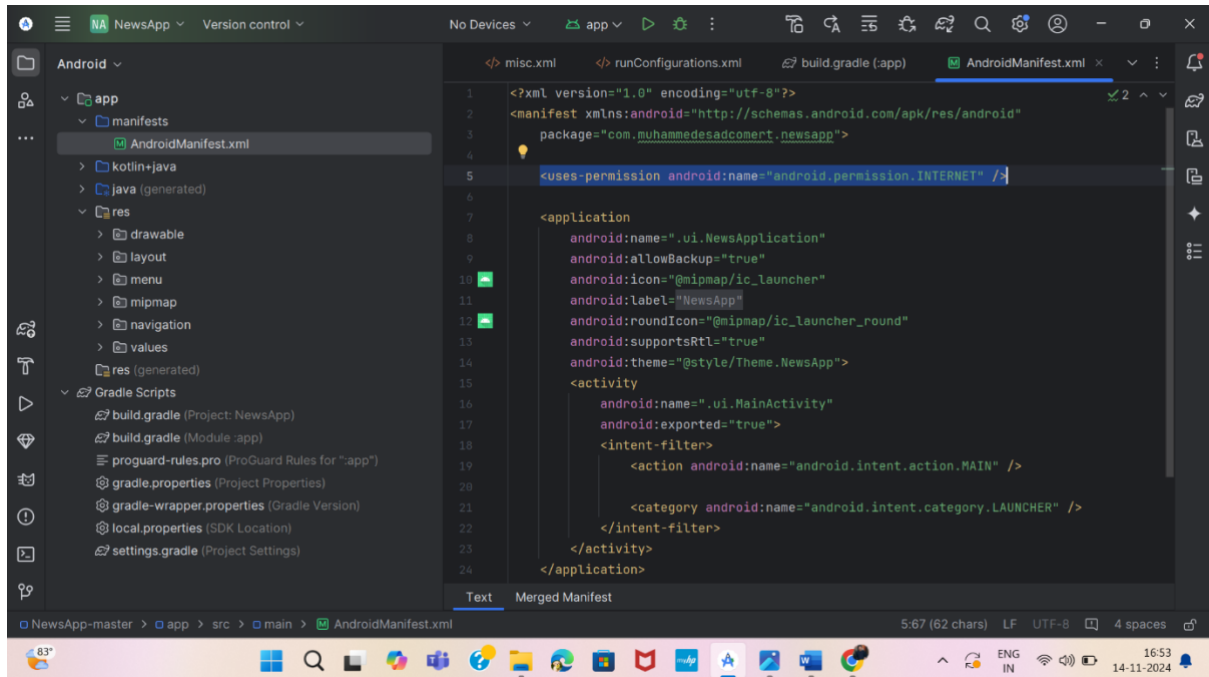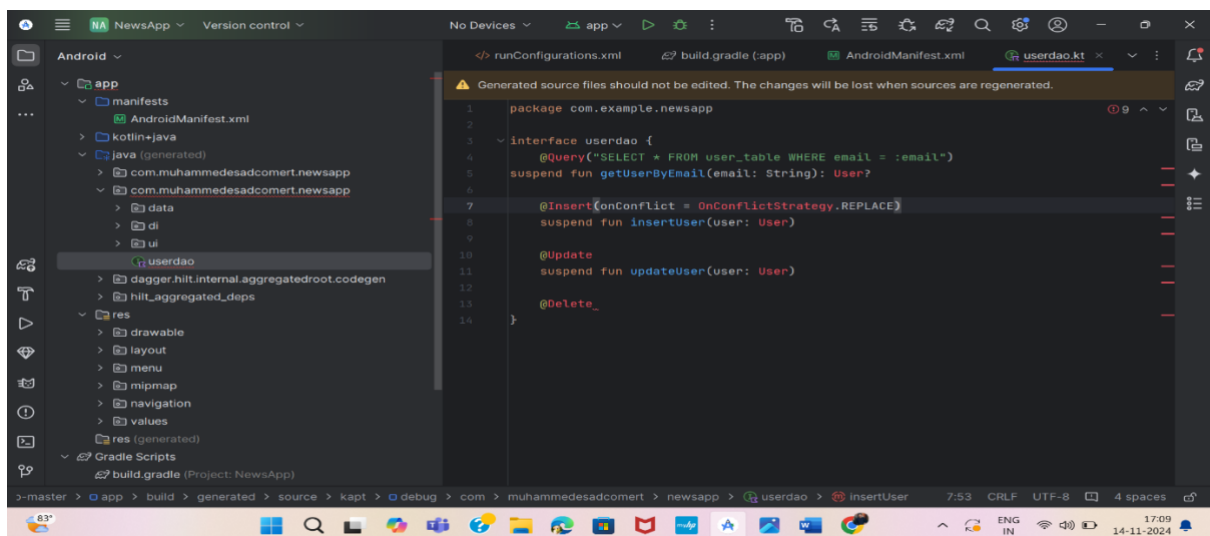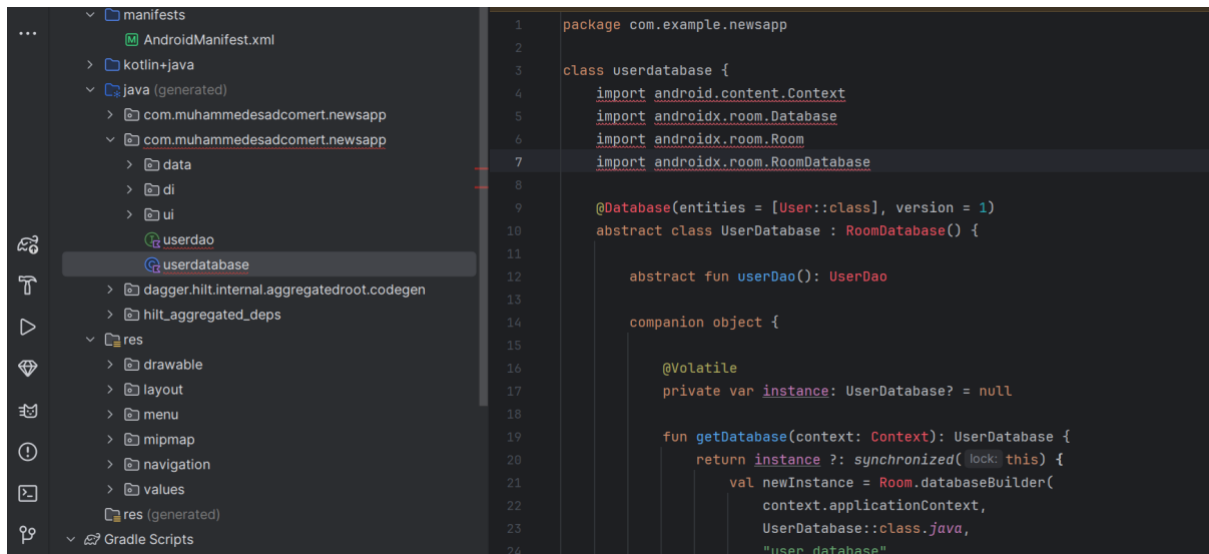
CREATE USER DATA CLASS:

1. Right-click on your project's package directory
(e.g., com.example.newsapplication).

2. Choose New > Kotlin Class/File.

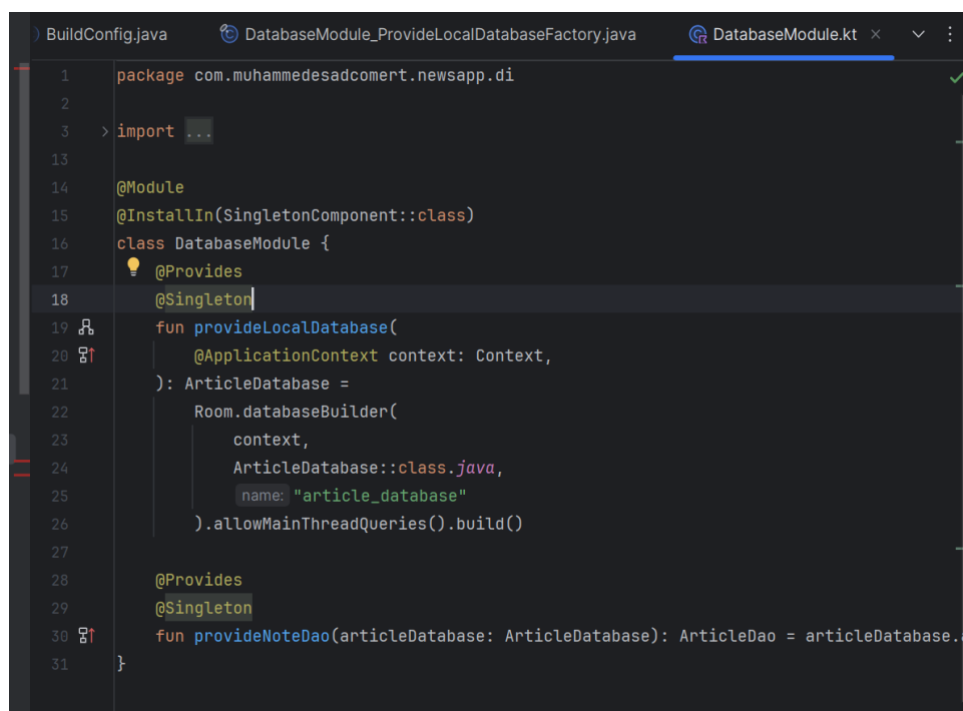3. Enter User as the class name and select Class

CREATING A USERDAO INTERFACE

CREATE A USER DATABASE CLASS:


```
package com.example.newsapp

class userdatabase {
    import android.content.Context
    import androidx.room.Database
    import androidx.room.Room
    import androidx.room.RoomDatabase

    @Database(entities = [User::class], version = 1)
    abstract class UserDatabase : RoomDatabase() {

        abstract fun userDao(): UserDao

        companion object {

            @Volatile
            private var instance: UserDatabase? = null

            fun getDatabase(context: Context): UserDatabase {
                return instance ?: synchronized( lock: this) {
                    val newInstance = Room.databaseBuilder(
                        context.applicationContext,
                        UserDatabase::class.java,
                        "user database"
```

CREATE A DATABASE HELPER CLASS


```
package com.muhammedesadcomert.newsapp.di

import ...

@Module
@InstallIn(SingletonComponent::class)
class DatabaseModule {
    @Provides
    @Singleton
    fun provideLocalDatabase(
        @ApplicationContext context: Context,
    ): ArticleDatabase =
        Room.databaseBuilder(
            context,
            ArticleDatabase::class.java,
            name: "article_database"
        ).allowMainThreadQueries().build()

    @Provides
    @Singleton
    fun provideNoteDao(articleDatabase: ArticleDatabase): ArticleDao = articleDatabase.
}
```
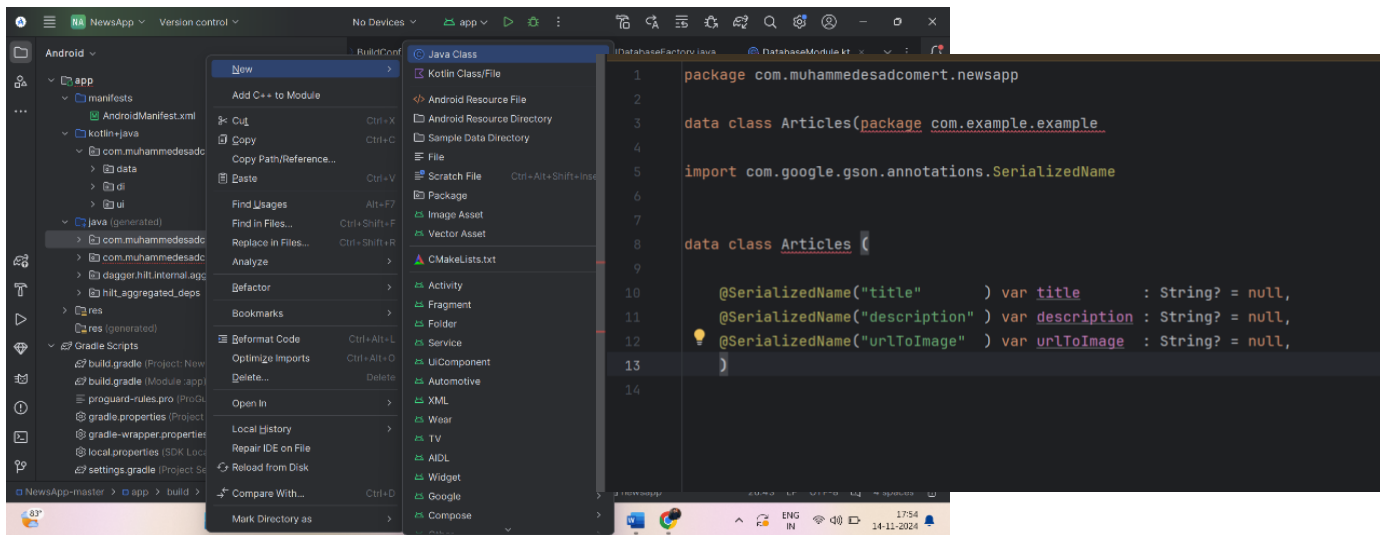
CREATING A API SERVICE AND REQUIRED CLASSES FOR INTEGRATING API
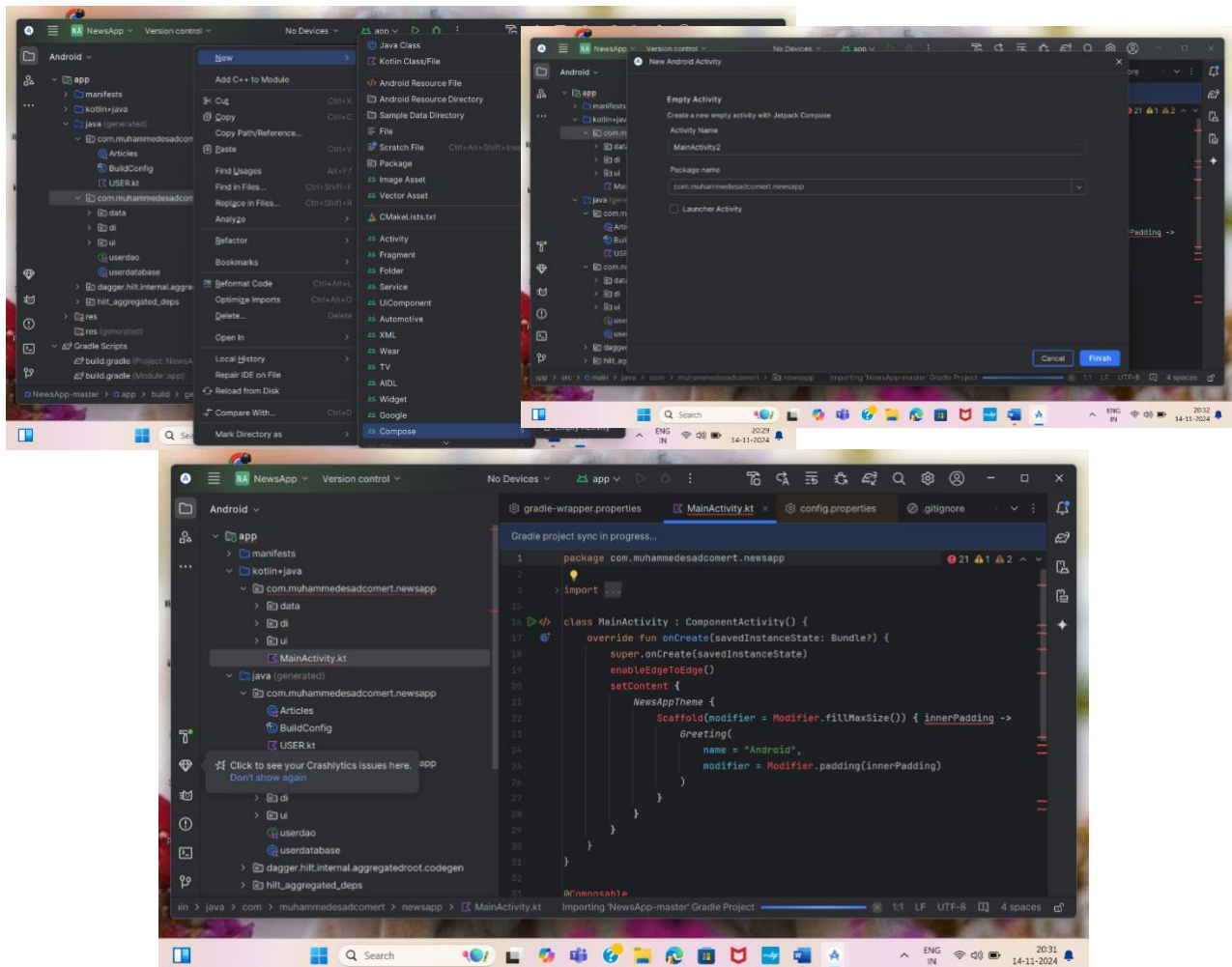
CREATE A API KEY FOR THE REQUIRED API
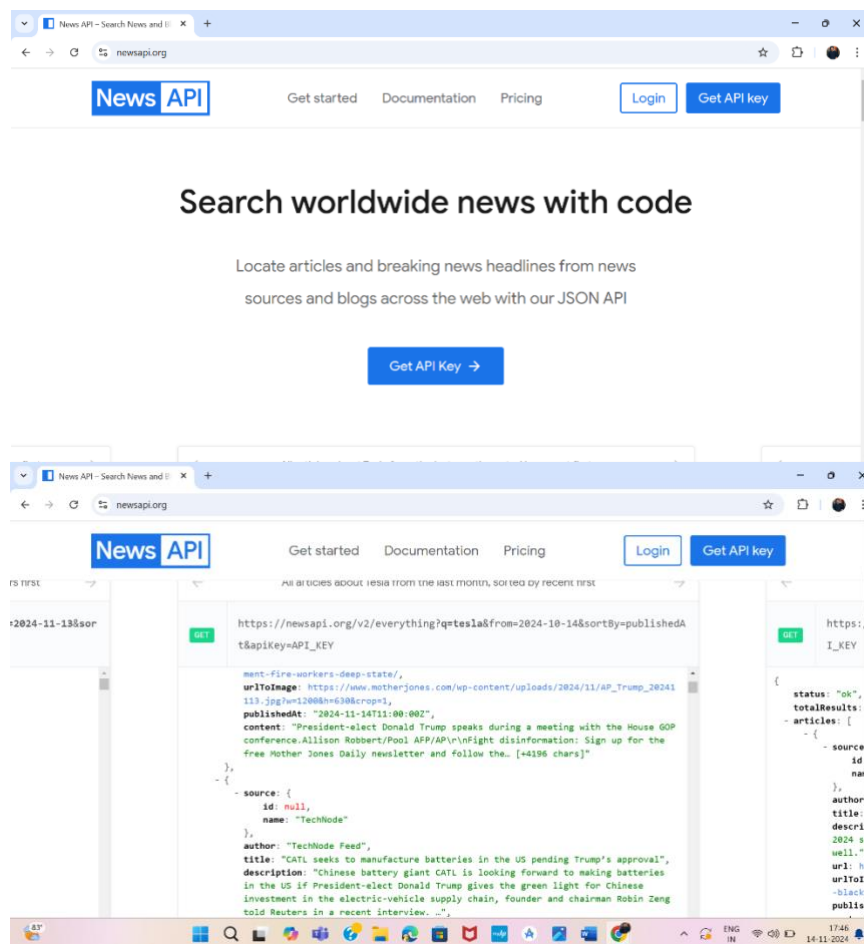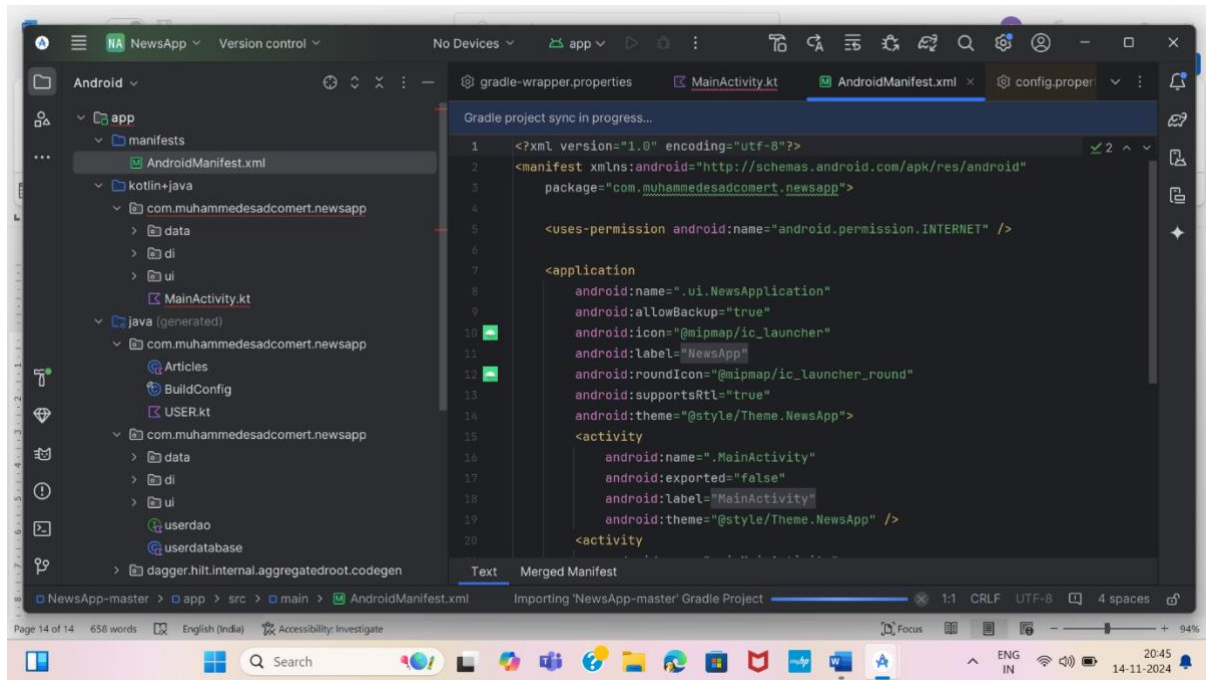
CREATE ARTICLES DATA CLASS

BULDING APPLICATION UI AND CONNECTING TO DATABASE

CREATING LOGINACTIVITY.KT WITH DATABASE

MODIFYING ANDROIDMANIFEST .XML

RUNNING THE APPLICATION

RUN APP ON A HARDWARE DEVICE

1.Set Up the Device for Development:

- ➢ Enable Developer Options on your Androidw device by going to Settings > About phone and tapping on the Build number seven times.
- ➢ In Developer Options, enable USB debugging.

2. Connect to Your Device Using USB:

- ➢ Use a USB cable to connect your Android device to your computer.
- ➢ Ensure your computer recognizes the device, and allow USB debugging on your phone if prompted.

3. Connect to Your Device Using Wi-Fi (Optional):

- ➢ If USB connection isn't possible, you can connect to the device over Wi-Fi.

4. Device Mirroring and Redirecting Audio:

- ➢ Some tools allow device mirroring on the computer screen, which helps with testing.
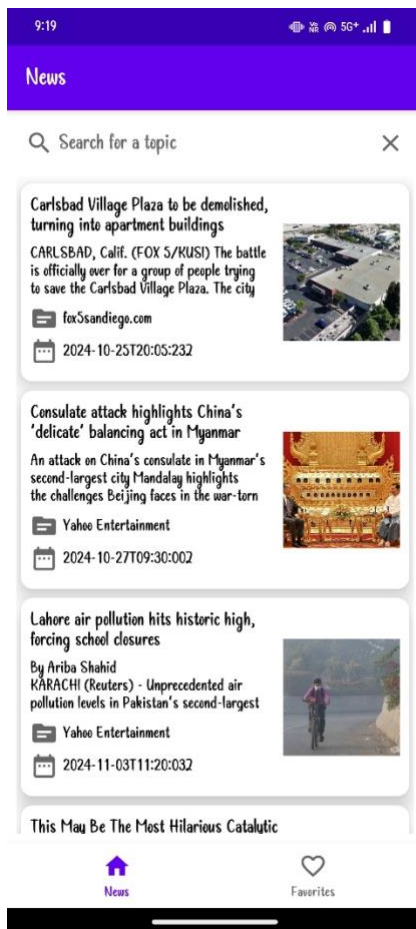
5. Troubleshooting Device Connection:

- ➢ If there are connection issues, you may need to reinstall USB drivers or restart Android Studio.

> ➢ Check for any other known issues on the Android Developer site for solutions.

6. Testing and Debugging:

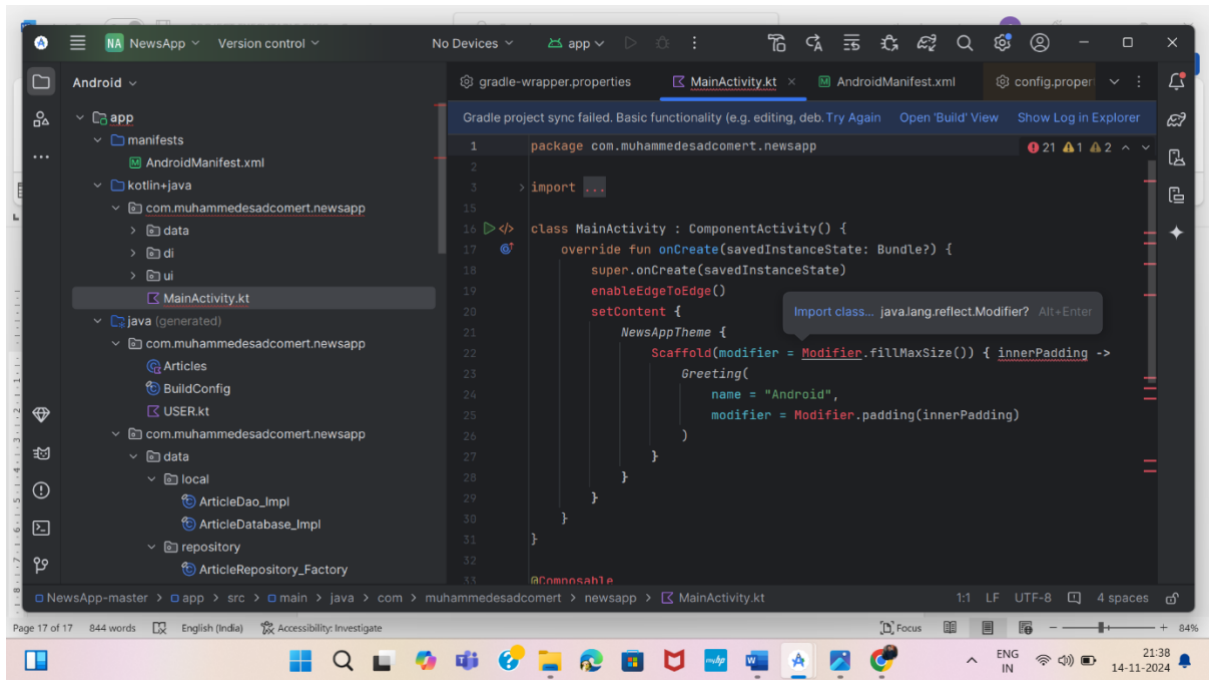> ➢ Once connected, you can run and debug your app directly on the device from Android Studio.
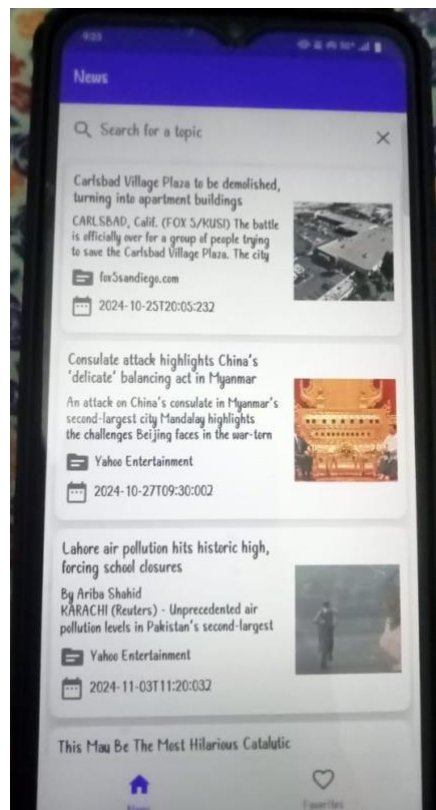

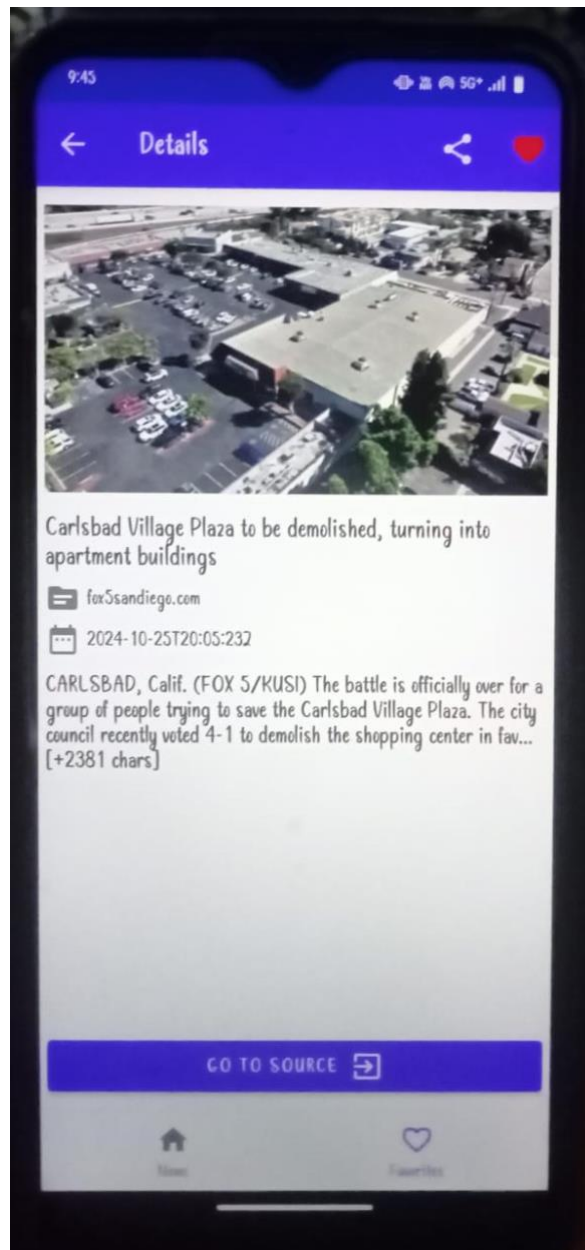
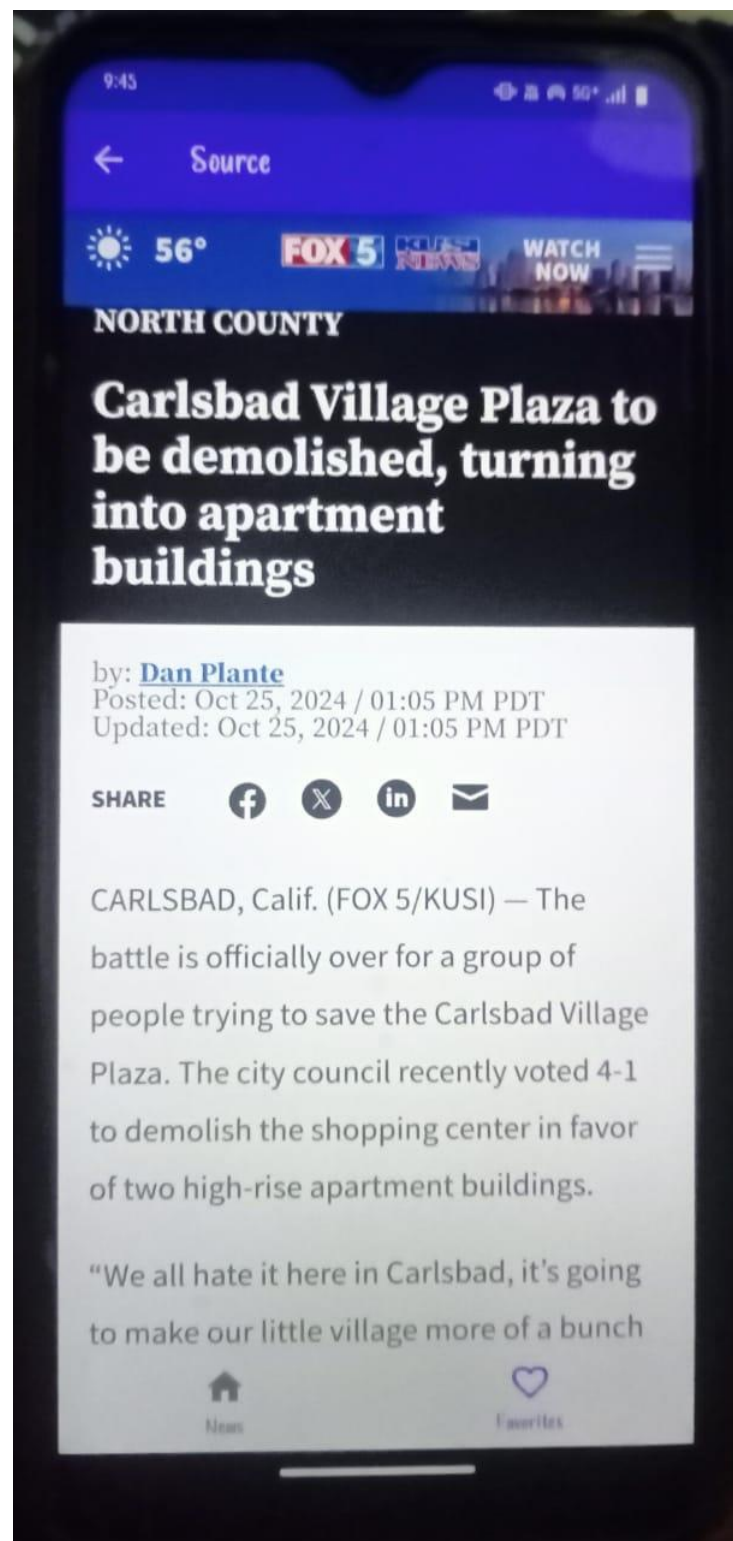HOMEPAGE   LIKEPAGE

RUN THE APPLICATION IN MOBILE

HOMEPAGE:

LIKEPAGE:

SOURCE PAGE:

9:45

← Source

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NORTH COUNTY

Carlsbad Village Plaza to be demolished, turning into apartment buildings

by: **Dan Plante**
Posted: Oct 25, 2024 / 01:05 PM PDT
Updated: Oct 25, 2024 / 01:05 PM PDT

SHARE f X in ✉

CARLSBAD, Calif. (FOX 5/KUSI) — The battle is officially over for a group of people trying to save the Carlsbad Village Plaza. The city council recently voted 4-1 to demolish the shopping center in favor of two high-rise apartment buildings.

"We all hate it here in Carlsbad, it's going to make our little village more of a bunch

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CONCLUSION:

The latest advancements in Android applications highlight their growing role in shaping technology and daily life. These developments underscore their importance in staying connected, informed, and efficient in a rapidly evolving digital world.