

An Android Application For Keeping Up With The Latest Headlines

By-

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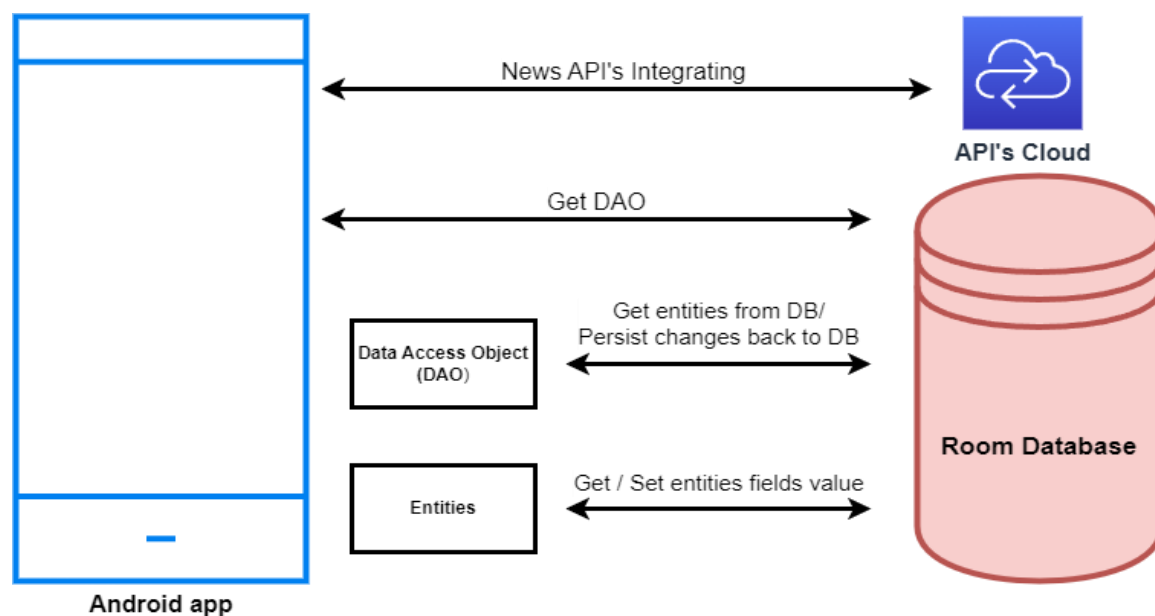
Campus- VIT Bhopal

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Project 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. The app uses the Jetpack Compose UI toolkit to build the UI and it uses the coil library to load images. The app fetches data from a remote server using Retrofit library and demonstrates how to use the Jetpack Compose UI toolkit for Android development.

Technical Architecture:



Pre requisites:

1. Android Studio
2. Jetpack Compose
3. Kotlin
4. Adding Room Dependencies
5. Adding Retrofit dependencies
6. Adding Coil Dependencies
7. API Key

Project Objectives:

By end of this project:

- You'll be able to work on Android studio and build an app.
- You'll be able to integrate the database accordingly.
- You'll be able to integrate the API's accordingly.

Project Workflow:

- Users register into the application.
- After registration , user logins into the application.
- User enters into the main page

Project Structure:

- AndroidManifest.xml file
- User Data Class file
- User Database Class file
- Model Data Class
- Database for news integration

- Application UI Connected to Database

Milestone 1:

Creating a new project on Android Studio and creating an empty activity in Kotlin.

Milestone 2: Adding required dependencies and permissions.

1. Gradle scripts > build.gradle(Module :app)
2. Adding Room Dependencies
3. Adding Retrofit Dependencies
4. Adding Coil Dependencies

Milestone 3: Adding Permissions

- Open AndroidManifest.xml.
- Add permission to access wifi and internet

```
<!-- permissions-->  
<uses-permission android:name="android.permission.INTERNET"/>  
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
```

Milestone 4: Creating The Database Classes

Milestone 5: Creating API Service And Required Classes For Integrating API

1. Create a API key for the required API
2. Copy and paste the complete json file to json2kt.com
3. Create ApiService interface
4. Create Model data class
5. Create News data class
6. Create Source data class
7. Create Articles data class

Milestone 6: Create MainViewModel Class

Milestone 7: Building Application UI And Connecting To Database

1. Creating LoginActivity.Kt With Database
2. Creating RegistrationActivity.Kt With Database
3. Creating Mainpage.Kt File
4. Creating DisplayNews.Kt File

Milestone 8: Creating DisplayNews.Kt File

Milestone 9: Running The Application

1. Run Apps On A Hardware Device
2. Run The Application In Mobile

Result & Conclusion:

This guided project successfully made use of Jetpack compose and various news APIs displaying a list of news articles. The application has been successfully developed on Android Studio and has been connected to database. It has been configured on android mobile phone.

Acknowledgement:

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