

## (ANDROID)

Anyone familiar with YouTube will know that one creator has dominated the platform for the past 5 years as the most-subscribed-to channel. **PewDiePie**, one of the most talked-about gamers in the world, has held onto his position as King of YouTube since 2013, but his crown is in danger as Indian Media company, **T-Series**, looks on course to surpass PewDiePie's over 75 Million subscribers in the next few days – and that news has caused quite a stir.

## **Necessary Features:**

- The main screen of the app must a MainActivity with a
   BottomNavigationBar / Tab Layout. It should have two options "Stats" and "Posts". By default, the Stats page should be displayed.
- The stats page should show two ImageViews logos of both channels and two TextViews displaying the current Subscriber count.
   Use the Retrofit library for Android and the YouTube Data API.
- Clicking on the Post Button for the first time should display a login page.

If not registered, the user should be able to register using a username and a password.

Hint: You may need to read about **Firebase Authentication** to get an insight into this.

- You also need to think of a way by which on opening the Posts page, the login screen is not shown when a user has already logged in the last time he/she opened the app.
  - Hint: You may need to read about **Shared Preferences** to get an insight into this.
- The Posts screen of the app will be an Activity/Fragment with a list
  of posts from various users. These posts will be plain text and
  displayed on the screen through ListView in Android and fetched
  through Firebase Database as mentioned below.
- There should be an option for the user to post something if he/she wishes, and the data which the user prefers to post will be saved in an online database. This can be done through Firebase Databases.
   Just google and read its documentation to find out.
- There should be a provision of Logout for the users.

## **Optional Features:**

- Elegant User Interface, particularly **Material UI**.
- Displaying a bar graph in stats page, showing the number of subscribers of each channel and also the difference of both these figures in real time.

- Using the newly introduced architecture components (Android Jetpack).
- Using RecyclerViews instead of ListViews will be a great addition to the UI.
- Allowing the user to log in via google/facebook (have a look at apps which provide such feature to get an idea).
- Allowing users to upload an image along with text will be highly appreciated.
- Introducing a feature of being able to react to a specific post will be an addon.
- Receiving a notification for every new activity (post/like) will be counted as a plus point. Read about Notification/NotificationManager to find out.
- Any additional features from your side are most welcome given that you have implemented all the necessary features.

**PS**: Bold words can be used as keywords for google search.