



Android Engineer Assignment

Description

The goal of this assignment is the development of an **Android application** that displays a **user leaderboard** as a list, that each item consists of user score, points, name and avatar.

In order to do so, you should execute following GET REST API request:

<http://localhost:5002/api/leaderboard/<page>>

where <page> is the leaderboard page (0: first page, 1: second page, etc.). API call needs basic authentication with username: **test_me** and password: **G00dw1LL**. Server response is JSON formatted.

Technical

In order to start the API you need to :

1. Install the docker Desktop.
 - a. Windows : <https://docs.docker.com/desktop/windows/install/>
 - b. Mac: <https://docs.docker.com/desktop/mac/install/>
 - c. Linux: <https://docs.docker.com/engine/install/>
2. Unzip the zip file we have sent you.
3. [Open a command or terminal to the unzipped folder](#) and run `docker-compose up wp-leaderboard-api` to start the server

Useful links :

1. [Mongo Express](#)
 - o Username : **testAdmin**
 - o Password: **w4pp13R**
2. [Redis Commander](#)
 - o Username : **testAdmin**
 - o Password: **w4pp13R**

Functional Requirements

The app should have one (1) screen that contains a **Toolbar** and a **RecyclerView** that contains a list of leaderboard items.

Toolbar

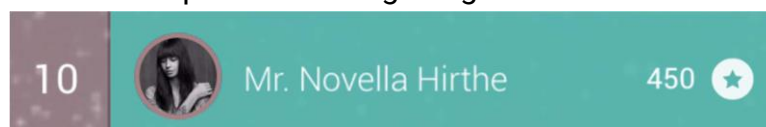
Toolbar should have "Leaderboard" as its title and a **button** placed at its right. The button should reload the list.

RecyclerView

The info that should be displayed for each leaderboard item is the following.

1. Rank
2. Avatar
3. Name
4. Points
5. Star icon

You can see a list item sample at following image:



Your application should make the mentioned REST API call, parse JSON response and create an adapter for the **RecyclerView**. RecyclerView layout manager should be a **LinearLayoutManager**.

Feel free to improvise for the design of leaderboard item. Just try to be consistent with the list item sample.

Deliverables

You have to reply with your suggested solution **within 72 hours (3 days)** after receipt of this assignment to the same email you receive it.

- Share your solution source code with us using a **private** github or bitbucket repository or as a single file (zip or tar.gz) on any other cloud drive you use.
- All libraries you use should be provided along with your **source code** and the project should be ready to compile and run.
- Keep your solution **private**.
- If you didn't manage to finish in time, you are encouraged to send your unfinished project with TODO comments indicating your next steps, it is better than nothing.

Tips

You can use 3rd party libraries if it suits you. The following maybe helpful.

- Networking
<https://developer.android.com/training/volley/index.html>
<https://square.github.io/retrofit/>
- Image loading
<https://github.com/bumptech/glide>
<http://square.github.io/picasso/>
- JSON
<https://github.com/google/gson>

Please consider yourself part of the team while building this app. This means that for any questions, comments, or suggestion we are at your disposal, so please do not hesitate to contact us using tech_team@wappier.com.

Good luck!