

StackOverflow Users

Develop an Android application that fetches a list of StackOverflow users and displays it in a list on the screen.

Functional Requirements

- When the app is launched, the user should be able to see a list of the top 20 StackOverflow users.
- Each list item should contain the user's profile image, name and reputation.
- Cells should contain an additional option to 'follow' a user. **“Follow” functionality should just be locally simulated**, i.e. no actual API call should be made.
 - Users that are followed should show an indicator in the list item.
 - Include an 'unfollow' option in the view when a user is followed.
 - “Follow” status should persist between sessions.
- If the server is unavailable (e.g. offline, error response etc), the user should see an empty state with an error message.

Technical Specifications

- Emphasise testability and architecture - use whatever pattern you like, but be prepared to justify your decision!
- Your code should be covered by unit tests.
- Your UI is entirely up to you, but please use Compose to build your views.
- Write in Kotlin - no Java.
- No 3rd party frameworks - we want to see what you can do!
- Deliver your work as a Git repository, preferably on Github or Bitbucket so we can see your commit history.
- Include a README explaining how your app works, any installation requirements, and details behind any technical decisions you made while developing it.

Additional Information

This is a take-home exercise and you should take as much time as you need, but try not to spend too long on it. All code must be your own.

Example of requests/responses

StackOverflow users API:

None

GET

<http://api.stackexchange.com/2.2/users?page=1&pagesize=20&order=desc&sort=reputation&site=stackoverflow>

Example Response (truncated for brevity):

None

```
{
  "items": [
    {
      "badge_counts": {
        "bronze": 9255,
        "silver": 9202,
        "gold": 877
      },
      "account_id": 11683,
      "is_employee": false,
      "last_modified_date": 1711287919,
      "last_access_date": 1711355649,
      "reputation_change_year": 13860,
      "reputation_change_quarter": 13860,
      "reputation_change_month": 3856,
      "reputation_change_week": 118,
      "reputation_change_day": 30,
      "reputation": 1454978,
      "creation_date": 1222430705,
      "user_type": "registered",
      "user_id": 22656,
      "accept_rate": 86,
      "location": "Reading, United Kingdom",
      "website_url": "http://csharpindepth.com",
      "link":
        "https://stackoverflow.com/users/22656/jon-skeet",
      "profile_image":
        "https://www.gravatar.com/avatar/6d8ebb117e8d83d74ea95fbdd0f87e13?s=256&d=identicon&r=PG",
      "display_name": "Jon Skeet"
    }
  ]
}
```

Response schema:

None

```
{
  "items": [
    {
      "badge_counts": {
        "bronze": String,
        "silver": String,
        "gold": Int
      },
      "account_id": Int,
      "is_employee": Boolean,
      "last_modified_date": Int,
      "last_access_date": Int,
      "reputation_change_year": Int,
      "reputation_change_quarter": Int,
      "reputation_change_month": Int,
      "reputation_change_week": Int,
      "reputation_change_day": Int,
      "reputation": Int,
      "creation_date": Int,
      "user_type": String,
      "user_id": Int,
      "accept_rate": Int,
      "location": String?,
      "website_url": String?,
      "link": String,
      "profile_image": String?,
      "display_name": String
    }
  ]
}
```