Assignment

GitHub app

Intro

The goal of this assignment is to develop a simple app that allows you to search the repositories and view the users that created them on the GitHub service. The assignment should be solved in Swift and it should have a decent UI, although the focus should be on code quality and reusability, which can be achieved by using one of the popular iOS architectures. Using third-party libraries and frameworks is allowed (and recommended). Basically the idea of this assignment is to show us all your skills as an iOS developer in a real-world app. It can be delivered as a zip of the project folder or on Google Drive but it is recommended to deliver it as a git repository.

Resources

The data to show in the app should be fetched from GitHub public APIs. More info can be found on these links:
- https://developer.github.com/v3/
- https://api.github.com/
- https://developer.github.com/v3/search/#search-repositories

Requirements

Main screen (search)

The main screen should contain:
- Search field
- Possibility to enter a search query
- List of repositories
- Possibility to sort the search results by:
  - Stars
  - Forks
  - Updated

Each element of the list (result) must be presented with the following data (at minimum):
- Repository name
- Name of the author
- Thumbnail image of the author
- Number of watchers
- Number of forks

- Number of issues

Optionally you can add any other data you want from the GitHub API.

From this screen navigation should be made possible to:
- Repository detail screen (e.g. by clicking on the list item)
- User detail screen (e.g. by clicking the thumbnail avatar of the user)

Repository detail screen

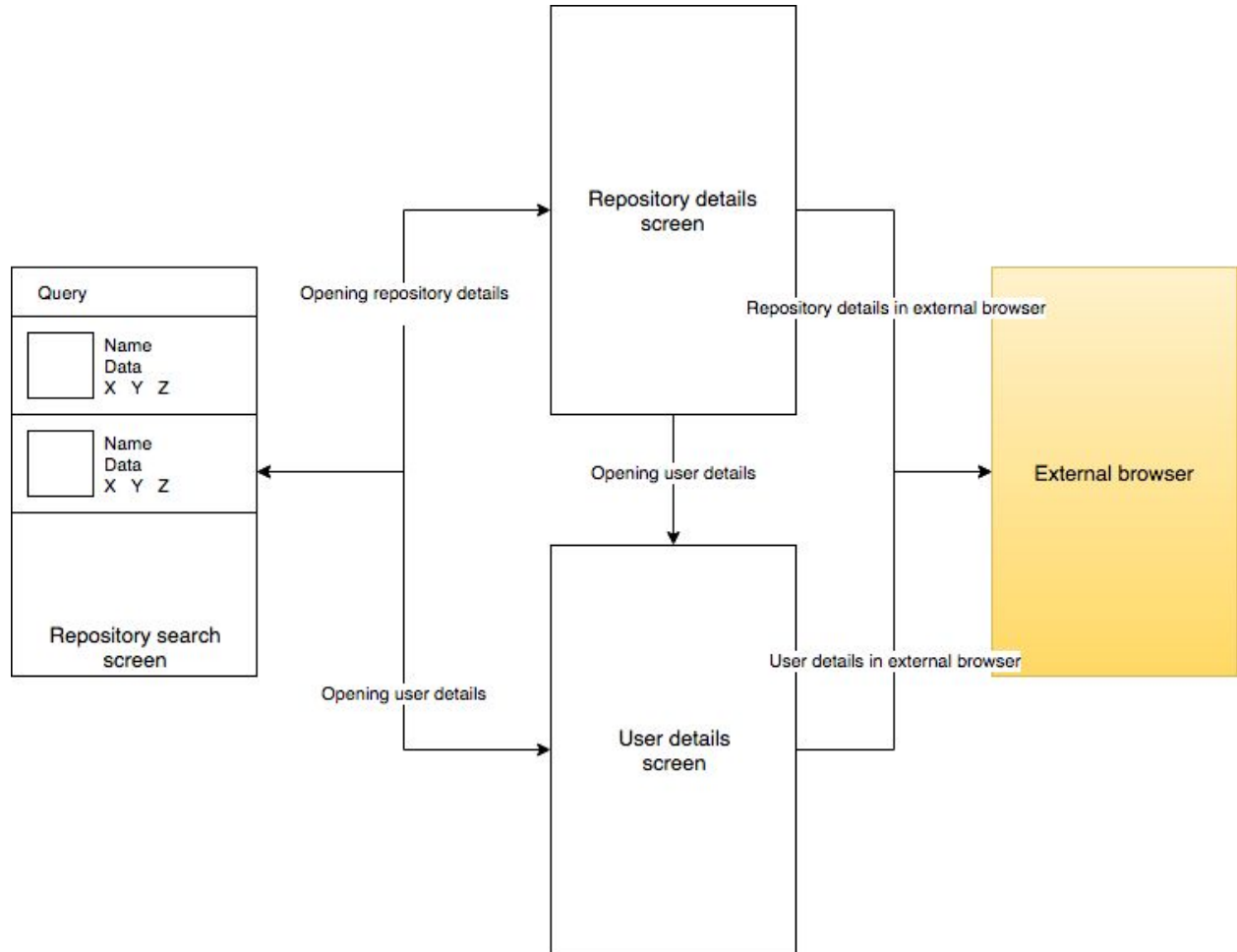The repository detail screen should contain:
- An extended set of information about the repository. This can be anything else you want from the Github API like:
  - Programming language
  - Date of creation
  - Date of last modification
- The ability to open (navigate) the repository details in an external browser (e.g. Chrome, Firefox, Safari)
- Information about the owner of the repository

User detail screen

The user detail screen should contain:
- User's thumbnail picture (bigger than in the repository list screen)
- Any other user information you want
- Ability to open the user details in an external browser

Navigation overview

Bonus

If you have some extra time and really want to amaze us and go above and beyond, try solving these tasks too:

- Implement user authorization and show information about the currently logged in user. You can add additional functionality that requires authorization if needed. Documentation for OAuth is available at the following link: https://developer.github.com/v3/oauth/
- Implement some unit tests.
- Configure different environments for the app (test, staging, production) and make it possible to have 3 different apps on a device for each environment. To distinguish them, configure it in such a way that the test environment only shows the repository list and cannot do anything else, make staging able to show only the repository list and details, and finally production should be able to show everything.
- Implement a nice transition animation for the user avatar when going from list to details.