

Assignments

BACKEND

Following is an API which gives GitHub data

Request Type: GET

<https://api.github.com/users/:username>

Eg: <https://api.github.com/users/mralexgray>

Build the backend app that supports below APIs:

1. Accept any GitHub username and save details from the GitHub API into the database. If a user's data is already available in the database, do not call the GitHub API again.
2. For a given user, find all the users where users mutually follow each other and save them as friends. Eg: UserA -> Follows UserB, UserC, UserD; UserA follows back by UserB, UserC. So, UserB and UserC would be friends of UserA
3. Search the saved data from the database based on username, location etc.
4. Soft delete a record based on a given username from the database.
5. Update fields like "location", "blog", "bio" etc for a given user in the database.
6. Return list of all users from the database sorted by given fields like "public_repos", "public_gists", "followers", "following", "created_at" etc.

Bonus points:

- Implement validation for API endpoint
- Use TypeScript

Important Notes:

- Submit the code by pushing repository to GitHub or any hosting platform of your choice. Maintaining a reasonable commit history is recommended.
- Use only NodeJs, ExpressJS and any Database (preferably Relational Database).

FRONTEND

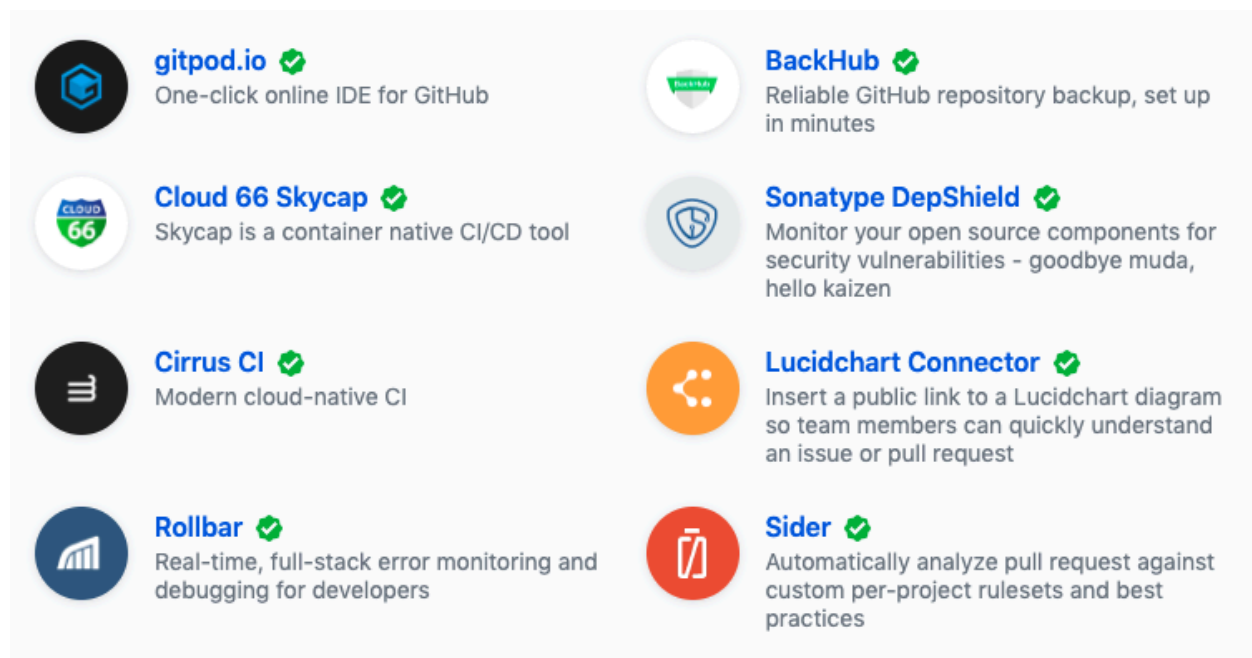
Requirements:

1. An initial page with a input box that accepts a GitHub username and a submit/search button
2. On submit, show the list of repositories returned from above API (See image 1) for the username entered in the input box. Display some useful user info above the repository list. (Design not given in image1)

3. Clicking on any of the repositories should take us to a page which shows description about that repository (See image 2)
4. Also on the repository list page near the user info, add a button / link that should lead to a page with followers of the current user. (Design not given, you are free to choose any simple design or you may follow a design similar to the repository list)
5. Clicking on any follower should display the repository list page of that user
6. Also there has to be a way to go back to the repository list page with the input box

Important Notes:

1. Use only React hooks to build the app.
2. You may use Redux or store everything in React, structure your code appropriately
3. For any images use owner.avatar_url
4. Don't call the GitHub API again for any information you already have. Eg. Do not make
5. API call again in the repository details page. Do not make API call again to get
6. repositories or followers info for a user if that info has already been fetched earlier for
7. that user.
8. For the pages with design images given, try to style it as close as possible to the given
9. images in terms of layout and presentation but beautification is not important
10. Do not use any CSS/UI frameworks
11. You do not need to manage browser history i.e all the pages can be on the same url
12. Submit the code by pushing repository to GitHub or any hosting platform of your choice.
13. Maintaining a reasonable commit history is recommended.



Ref Image 1



✓ Verified by GitHub
GitHub confirms that this app meets
the [requirements for verification](#).

Categories

Code review

IDEs

Free

Paid

Application

gitpod.io

Set up a plan

Gitpod is the online IDE for GitHub.

It launches a complete dev environment for any GitHub project, by simply prefixing the GitHub URL with **gitpod.io/#**.

Install this app and get your project prebuilt, so you don't have to wait for your build downloading the internet when starting a Gitpod workspace. 🚀

Gitpod is the first IDE that builds your project before you even open it.

Ref Image 2