Frontend Assignment

Create a responsive website using a modern frontend framework of your choice. The website will consume the endpoints described in 'Assignment endpoints' and will consist of the following features:

- Users can be selected and assigned multiple permissions

- Users can be selected and assigned multiple roles

- When a user is selected there should be a display of all roles that this user has

- When a user is selected there should be a display of all permissions that this user has, including permissions assigned directly and permissions inherited from the roles

- The assignments between objects are to be stored in the browser's local storage

Please create a private GitHub repository with all your files and add gbucko@sohosquared.com as a collaborator, you can follow instructions in this link in the link below.

https://docs.github.com/en/enterprise-server@3.0/account-and-profile/setting-up-and-managing-your-github-user-account/managing-access-to-your-personal-repositories/inviting-collaborators-to-a-personal-repository

Assignment endpoints

https://61fc4baf3f1e34001792c875.mockapi.io/api/v1/users - GET endpoint used to retrieve a list of all available users

https://61fc4baf3f1e34001792c875.mockapi.io/api/v1/roles - GET endpoint used to retrieve a list of all available roles and their permissions

https://61fc4baf3f1e34001792c875.mockapi.io/api/v1/permissions - GET endpoint used to retrieve a list of all possible permissions

Further considerations

In the time available we do not expect you to be able to address all of the following in your implementation. However, you will need to be able to discuss your code and design choices, and consider improvements if you are invited to proceed to the next stage of the recruitment process.

- How would you modify your website design in order to provide the best user experience if the number of elements returned from an endpoint increased to 100,000.

- If you would like to make your website available only to registered users, what authentication method would you use and why?

- How could you ensure that a given user can see only elements that they are allowed based on their permissions?

- In a scenario where website traffic increases, you might need to scale your website service. Would stateless design for your website be beneficial in scaling it?