

Tasks

Thank you for helping us improve our application! We would like to ask you to solve the four following tasks.

(Only prompted and chatting group: We take the privacy of our users very seriously and thus want to be privacy compliant at all times. Please keep this in mind when you are developing your solution.)

(Only chatting group: We have a privacy expert available whom you can contact in case you need help with user privacy. Please use the chat function in Slack to contact them if needed.)

Task 0: Running the Application

To get you started, here are some quick instructions to run the application:

1. Run the "Code - Shortcut" on your desktop

Start the front-end:

2. Open a new terminal through the toolbar at the top: Terminal -> new Terminal
3. Run the following two commands in the Terminal at the bottom:

`"cd frontend"`

`"ng serve"`

4. To stop and start the front-end again:

`Strg + C`

`"ng serve"`

Start the back-end:

5. Open a new terminal through the toolbar at the top: Terminal -> new Terminal
6. Run the following two commands in the Terminal at the bottom:

`"cd backend"`

`"node index.js"`

7. To stop and start the back-end again:

`Strg + C`

`"node index.js"`

8. Run "Docker - Desktop" on the PC desktop

Start all docker Container by clicking the "Play" - Symbol

All containers should be green

You should now be able to access the application through any browser, e.g., under <http://localhost:4200>, and log in. See the file "Tool Description.pdf" for login credentials.

Task 1: Repair Backup

To ensure the availability of our service, we frequently back up all user-provided data. During a routine check, we noticed that the 'medical_condition' table is missing from our backups.

Can you please fix the backup system?

This task is considered solved when the 'medical_condition' table is stored when creating a new backup.

Task 2: Permanently Deactivate Account

A user has just contacted us and asked us to permanently deactivate their account. Further, they do not want us to hold data associated with them. We have verified the identity and their name is Jacob Robinson. They signed up with the following email address: jacob.robinson@example.com.

We don't require a generic solution for this task, please just make sure the request of this particular user is fulfilled.

The task is considered solved if the account is deleted and we do not hold any data connected to the user in the application.

Task 3: Search Functionality

A persistent request for users in the role of 'doctor' is to search for certain conditions and get access to the medical history of other patients suffering from the same condition. This would greatly simplify the selection of treatments as they could quickly check what helped in the past. We have started to implement this feature in the following file:

"project-health-app/frontend/src/app/doctor/search/search.page.ts"

Could you please finish the implementation of the feature?

The task is considered solved if a user with a doctor profile can enter a condition in a search function, which returns medical information for patients with the condition.

Task 4: Advertisements

We are about to launch another application aimed at e-mobility. Wouldn't it be nice to inform our valued users and provide them with some coupons? They are signed up to our health app with their Mail addresses anyway. Can you implement a feature that allows us to notify them via email about this great opportunity? There already exists an email function for password recovery in the file "project-health-app/backend/api/email.js" and an email function for doctors to send notifications to their patients in the folder

"project-health-app/frontend/doctor/dashboard/send-mail" that you may be able to adapt.

The task is considered solved if you can send an advertisement email through the system and see the advertisement mail in the MailCatcher UI.

As our tool deals with sensitive data, please make sure to solve all the tasks privacy-compliant. Reach out to our expert in case you have any issues with user privacy during the implementation.

If you have finished all the tasks or want to end the study, please notify the researcher and fill out a short exit survey here:

<https://anon.ymized>