Projet Dévelopement Web - LSI

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1 Rules and grading chart

Refer to the last slides of "Introduction" course.

2 Projects

Choose one of following projects :

2.1 Emails management projet

This project is inspired from the last practical activity session. The user must have the choice to log in either via Microsoft Outlook or Google Account. Once logged in, the user should be able to add (i.e. send to itself), modify, delete, current emails. Emails list is first empty, then it is progressively updated.

Functionalities :

- Microsofth AOuth and Google AOuth to log in, then showing user data in header components.
- Displaying the emails obtained from the Microsoft or Google account
- Adding/Deleting emails to the current list of emails : a new email is added to the top of the list. An added or deleted email only means chowing it in the displayed list (not sending an real email or deleting a real email from your account).
- When the user clicks on a mail, one must be able, through another page, to read the detailed content of the mail.
- Search for emails : by sender, by keyword, by date-time and by keyword and date-time.
- Microsofth AOuth and Google AOuth to log out.

Adding back-end part to store all emails of the user, and rendering them once logged in will be appreciated.

2.2 Carbon emissions project :

The carbon footprint is an indicator that aims to measure the impact of an activity on the environment, and more specifically the GHG emissions related to this activity. It can be applied to an individual (according to his or her lifestyle), a company (according to its activities) or a territory.

This impact is generally expressed in carbon dioxide equivalent or CO2e. The reason ? For the sake of simplicity and homogenization, a single standard is used for all greenhouse gases in relation to CO2. This

amounts to determining how much CO2 would retain the same amount of solar radiation and thus contribute to global warming.

Using Climatiq API, you will have to develop an application that calculates the CO2 rate emitted for a given activity by the user.

Functionalities :

- Microsofth AOuth and Google AOuth log in, then showing user data in header components.
- Once logged in, the user must have the choice to calculate its CO2 emissions for different activities.
- Cloud computing activity (CPU, Memory, Storage)
- Flights activity
- Custom activities
- The user can also observe some graphical comparison of CO2 emissions (between countries for example, your imagination is your limit)
- Microsofth AOuth and Google AOuth logout correctly.

Adding back-end part to store some favorite data results for the user will be appreciated.

PS: Use your "@efrei.net" email to sign in with Climatiq so you can obtain your API key. However, feel free to propose another API that fits the problematic.

Appendix for "Google Oauth" :

- First, you need to create the API KEY for your application (it was already done for you in VueJs TP2 for microsoft. But now you will do it by yourself) :
  - A) First create a tunnel to your localhost, using ngrok, (example: https://165d-91-19-60-200.ngrok-free.app that refers to your http://localhost:8080)
  - B) Go to google cloud console
    - Create a new project (if it does not exist)
    - Go to "APIs and services" => "Create a credentials" => "OAuth Client ID"
    - We first need to create the "Aouth consent image" before having an API key
    - In Home page link and 2 others input texts, insert http://localhost:8080/
    - In Domain name autorised put : 165d-91-19-60-200.ngrok-free.app
    - Don't modify next step, in third step you need to add test users (at most 100), add also my email **ussef.a01@gmail.com** .
    - Then go back to "API key", choose to create a "web application", add "http://localhost:8080" as URL1 for JavaScript Origines and redirection URLs.
    - Finally, you have a client ID, that you need to insert in your application.
- In your VueJs project add dependency vue3-google-login. The rest is yours :)

Good luck !