Technical University of Moldova

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Web Programming

Laboratory work #4

QUIZ APP

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1 Task

The tasks for this lab are:

1. Pick a frontend framework;
2. Create a web app that has the following functions:

- it shows a landing page with different quizzes;
- the user can pick a quiz and play it;
- after the game has ended, the user can see their score.

3. The app should have attractive UI;
4. Consume [Quiz API](https://late-glitter-4431.fly.dev) to fetch data from backend server.

2 Results

In the Laboratory work nr. 4 have been realised all the tasks: the basic app, an attractive one, that can show a landing page with different quizzes, where the user can pick a quiz and play it and after the game has ended, the user can see their score.

To implement this laboratory work, I have done firstly the HTML elements, the CSS[1] for styling and the last JavaScript[2] file for function.

In the Figure 1 is represented how the ELSE quiz app looks like when it has been run for the first time, which consists of header and the main body. The header is going to be present and not changeable during all the process, because it has one of the major functionalities, the paths to specific pages of this app.

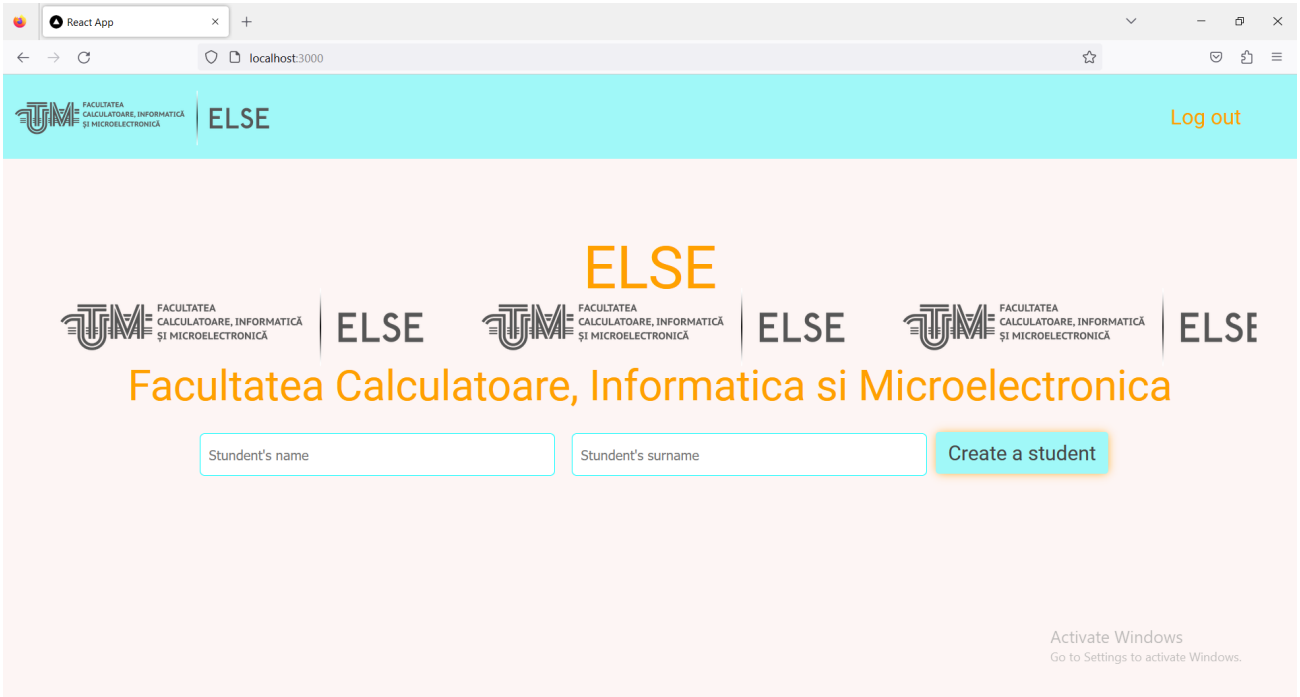

Figure 1: The main page, user registration

Thus, in this page is represented the registration form that has to be completed with the student's name and surname. At the end the button of the create student should be pressed, so as to be able to pass any quiz. At this step the user id is going to be stored into the local storage, as it can be seen in the Figure 2.

Figure 2: After registration, user id storage

Regarding the next page, it is the list of the existing quizzes. In the Figure 3 can be seen the list of them sorted by the most recently created quiz. As we can see there are 2 quizzes, which can be accessed by a click.

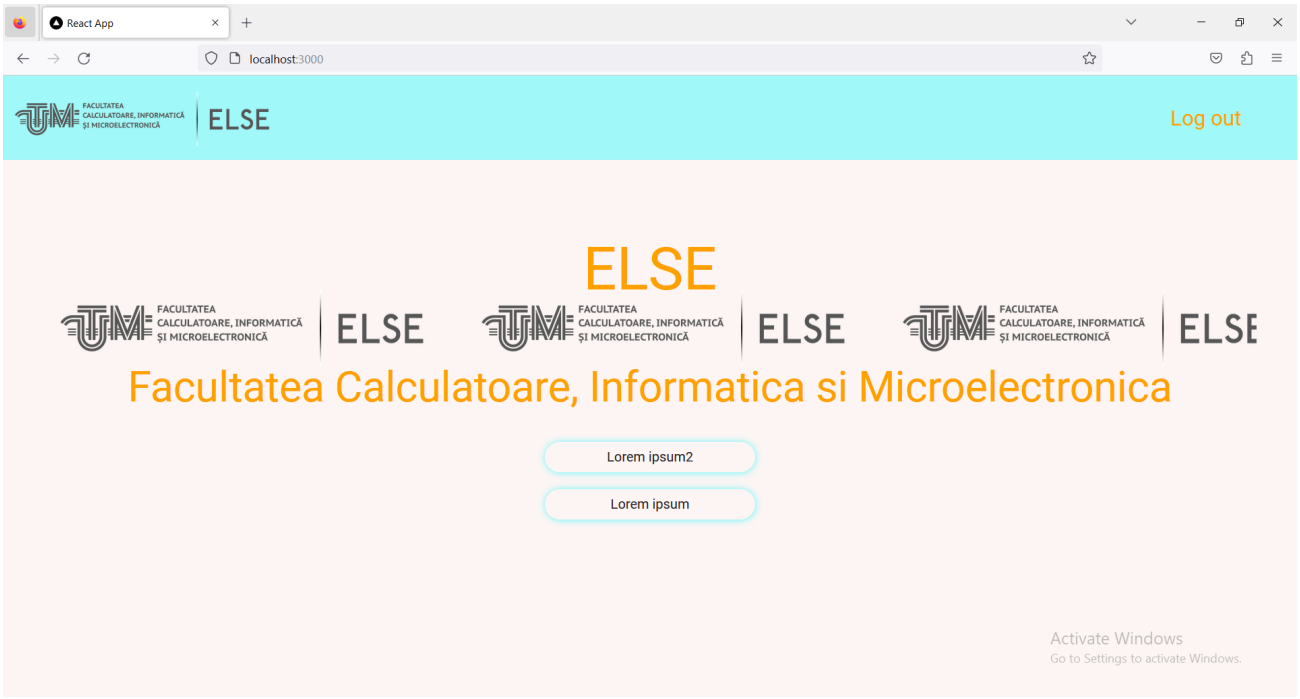

Figure 3: List of quizzes

Each quiz will be presented in this form as shown in the Figure 4. Its structure contains quiz's name, questions and answers. The right answer can be selected by pushing the radio input.

Another useful functionality that is implemented is the logo. If we press the logo, then we come back to the list of quizzes. It is useful in case a user mistakes the right quiz and does not want to pass it.

The end of the quiz will the identified as the press of the submit button.

Figure 4: Quiz

After pressing the submit button on the screen will appear the obtained points, as it can be seen in the Figure 5. There was selected the right answer, that is why we have maximum points.

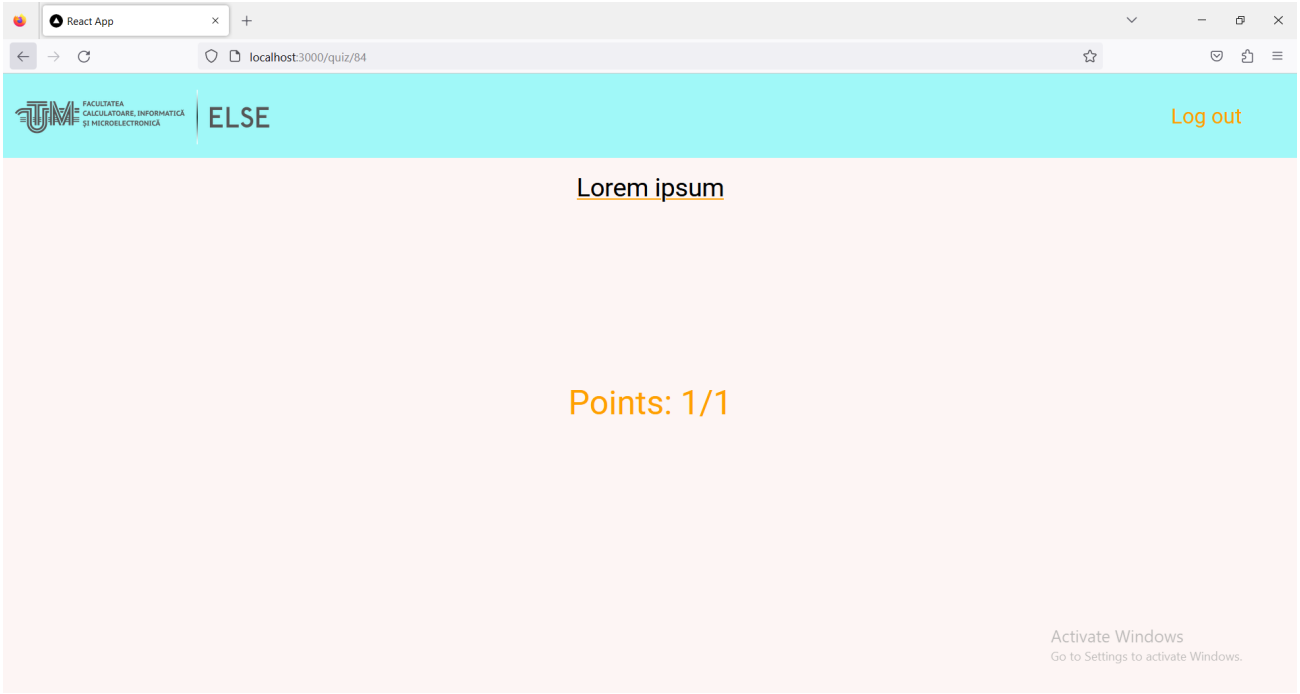

Figure 5: Obtained score

If the user wants to pass another quiz or the same one, he can do that by pressing the logo, because it includes that functionality, and the user will be back at the page with the list of quizzes.

In case if the user no longer wants to pass any quizzes, then he can Log out by pressing the log out button from the header. Thus this user id will be erased from the local storage, and we will come back to the registration page.

In the not last figure, Figure 6, is represented a part of the code.

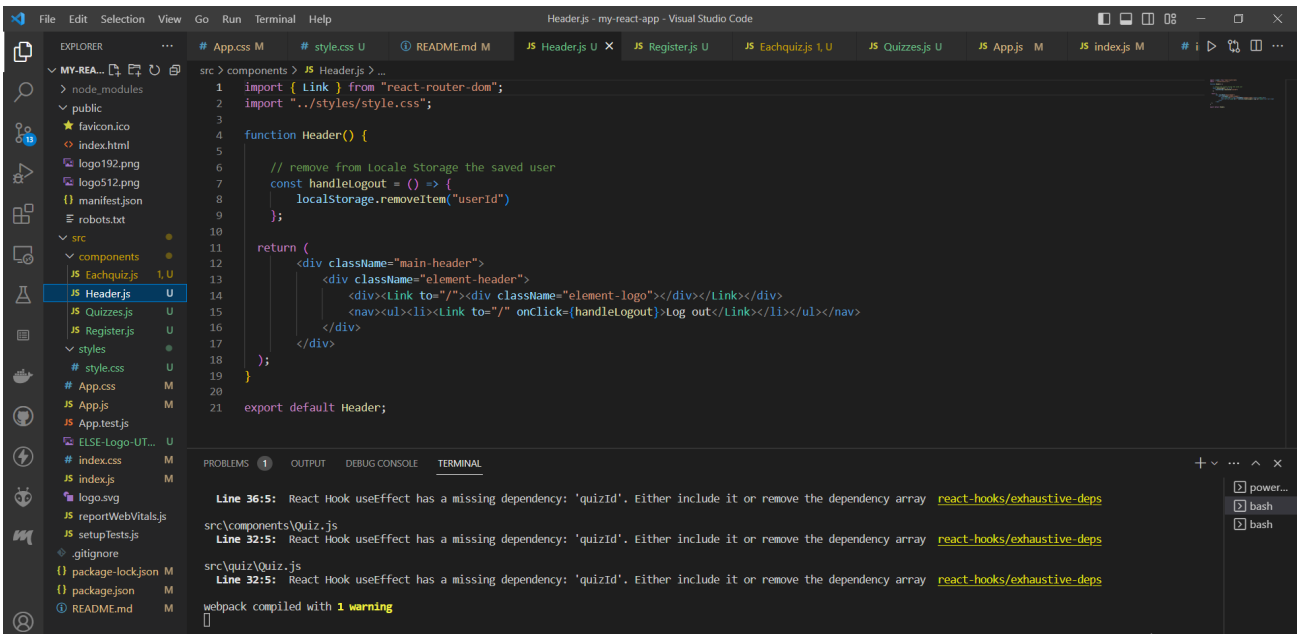

Figure 6: Part of the code

In the last figure, Figure 7, is represented how the postman was used for the realisation of this laboratory work.

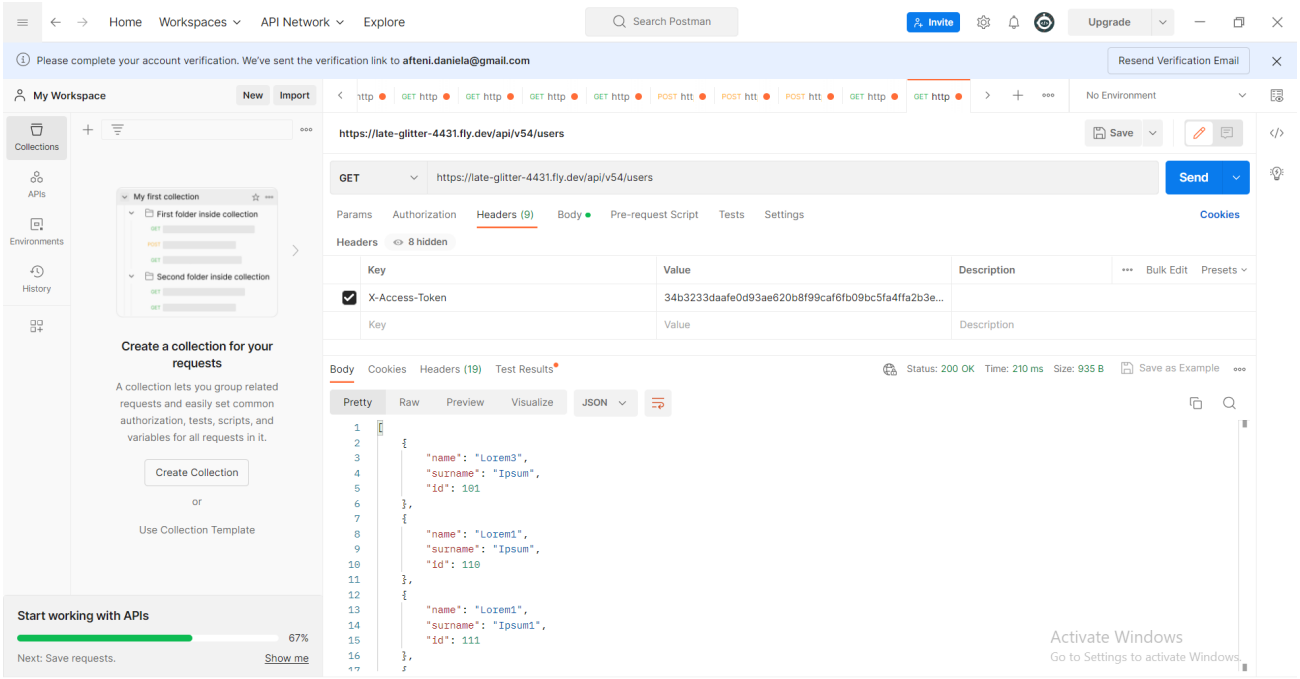

Figure 7: Postman

3 Conclusion

Due to this laboratory work, I practiced working with HTML and CSS, that I learned as well in the laboratory work nr. 1, and learned JavaScript which was the functionality of the app, which as well I learned in the laboratory work nr. 3. Depending on the initial structure of the app, the skeleton that was build in the HTML, designed in the CSS file, and given functionality due to JavaScript code. Also were added corresponding pages, main functionality, and some additional ones (as functional logo). I was also able to implement all the requirements regarding the quiz app implementation. Thus, I learned about how to correctly structure the application, and its available functions.

References

[1] CSS Gradients, *https://www.w3schools.com/css/css3_gradients.asp*
Accessed on April 15, 2023.

[2] JavaScript, *https://developer.mozilla.org/en-US/docs/Web/JavaScript*
Accessed on April 15, 2023.