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WEB PROGRAMMING
LABORATORY WORK #4

Quiz App

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1 Task

Pick a frontend framework. 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. The app should have attractive UI. Consume [Quiz API](https://pure-caverns-82881.herokuapp.com) to fetch data from backend server.

2 Results

Laboratory work nr.4 was an exiting opportunity to gain some skills in the domain of frontend frameworks. I decided to use Next.js. Also I used the TailwindCSS library for easier work with css styles. I faced some problems during the writing code in Next.js. It was my first time of using frontend frameworks and it was extremely hard to understand the logic of building pages, functions, connecting the css styles, etc. However, I liked to build requests to the Quiz API. I used Postman to get access to its collection. Thus, there were generated access token, users and quizzes.

To begin with, unauthorized users can access <http://localhost:3000/> and log in or go to the registration form:



Figure 1: Log In Form



Figure 2: Registration Form

Let's try to register a user Ana Petranis.



Figure 3: Registration Form with Entered Name and Surname

After the successful registration, user is redirected to the login page, and after a successful authentication, the home page becomes available.

Also we can observe that in Postman appeared a new note in the users list. It means that the POST request Create user has been successfully done.

```
{
  "name": "Ana",
  "surname": "Petranis",
  "id": 1061
}
```

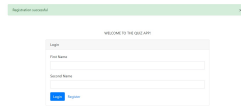


Figure 4: Successful Registration

At the home page there is presented a list with currently available quizzes, that could be played only once. Also one can see a Logout button, that deletes the session and redirects the user to the login page.

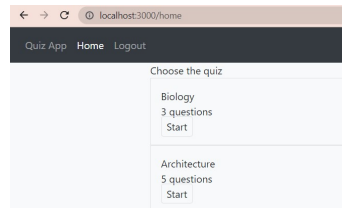


Figure 5: Home Page

Let's play a quiz. Each quiz has options to answer, and the navigation buttons Next and Previous. After the quiz was played, the score appears. Finally, the user is redirected to the home page.



Figure 6: Quiz Page - Question 1

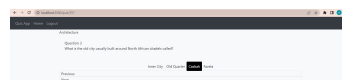


Figure 7: Quiz Page - Question 3



Figure 8: Final Score

3 Conclusion

After implementing the task, I've learned how to make a frontend application using Next.js. I had a good practice in writing functions of different purpose, composing requests and interaction with HTML elements and CSS selectors.

4 Bibliography

<https://nextjs.org/docs/getting-started>

https://github.com/23-anna/PW_lab4