

CS 405 Project 1 Report

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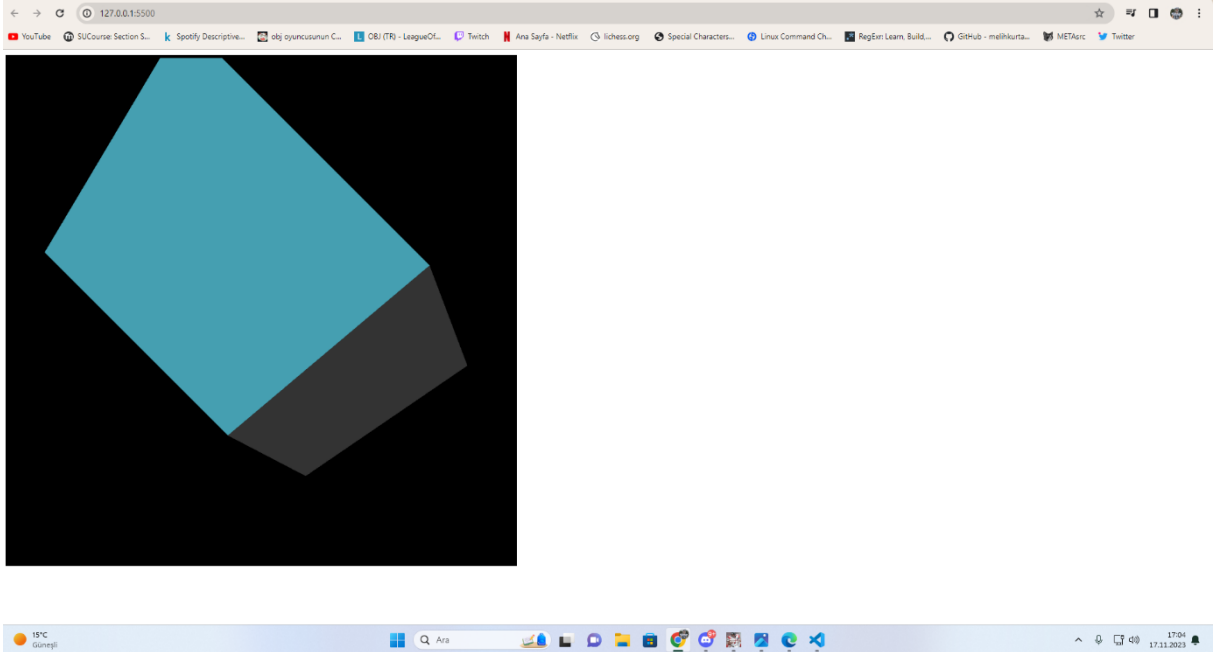
ChatGPT Link: <https://chat.openai.com/share/eef28b29-4b17-44fc-8baa-08f87e07ff8f>

Introduction

In this homework, I used ChatGPT 3.5 to understand the usage of Model View matrixes by creating and animating cubes.

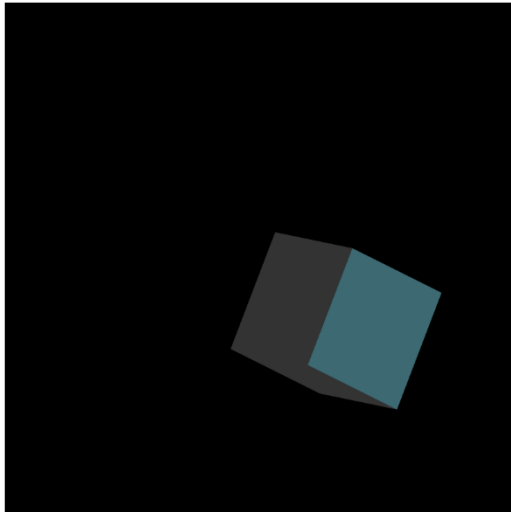
Task 1

In task 1, i pasted the provided transformation-prompt.txt file into chat gpt to generate my transformationMatrix, but i need to say “Please calculate this matrix by yourself” to get the necessary output from GPT.



Task 2

In task 2, i used the provided functions to generate the translation, scaling and rotation matrixes to create the 3D cube according to the transformation rules in transformation-prompt.txt.



When we compare both ViewMatrixes, my modelViewMatrix is more understandable as a cube. This might happen because there are some differences in our transformation order and interpolation matrixes. I used provided functions to create my cube, ChatGPT calculated with just an array and it caused some errors. Also, ChatGPT might understand the matrix representation in wrong way because i didn't send the cube.js file to ChatGPT.

Task 3

In this part, I implemented the `getPeriodicMovement()` function to create an animation for the cube that i created in task 2. The span was for 10 seconds. Cube starts from its initial position and moves to a direction in 3D for 5 seconds and then it returns to the initial position on the last 5 seconds. ChatGPT created different outputs for me. Most of the time, i need to add or remove some of the codes

manually to see the animation of the cube. Finally, it helped me to create the animation for my cube in the given translation order.

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