CS 405 PROJECT 1

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**metin, ekran görüntüsü, yazılım, multimedya yazılımı içeren bir resim

Açıklama otomatik olarak oluşturulduTASK 1**: Here is my chatting history with ChatGPT 🡪 <https://chat.openai.com/share/5743e0ea-d1d2-4221-a47f-16762f78cd1d>

ekran görüntüsü, tasarım içeren bir resim

Açıklama otomatik olarak oluşturulduAs it can be seen from the screenshot, this is what ChatGPT provided me with.

**TASK 2**: It can be seen that all of the crucial functions were provided in the code itself. After applying all of the transformation and some multiplications, the result can be seen below. Here is the implementation that I had done:

metin, ekran görüntüsü, yazılım içeren bir resim

Açıklama otomatik olarak oluşturuldu

tasarım içeren bir resim

Açıklama otomatik olarak orta güvenilirlik düzeyiyle oluşturuldu

Above is the cube that was generated after completing task 2.

Also, my calculations and the calculations provided from the ChatGPT were the same even though the functions that was provided were better.

**TASK 3:**

Here is my ChatGPT chatting history for task 3: <https://chat.openai.com/share/31131546-9e4c-425f-a3dc-946fad5e00ee>

metin, ekran görüntüsü içeren bir resim

Açıklama otomatik olarak oluşturulduHere is the implementation that I had done:

In order to make the transition of the cube smoother, I have added some functions like getPeriodicMovement function which creates the animation, calculates the time which needs to be 5 seconds for rotating and scaling and 5 seconds to turn back to its original position.

let lerpFactor;

if (fraction <= 0.5) {

// Forward animation

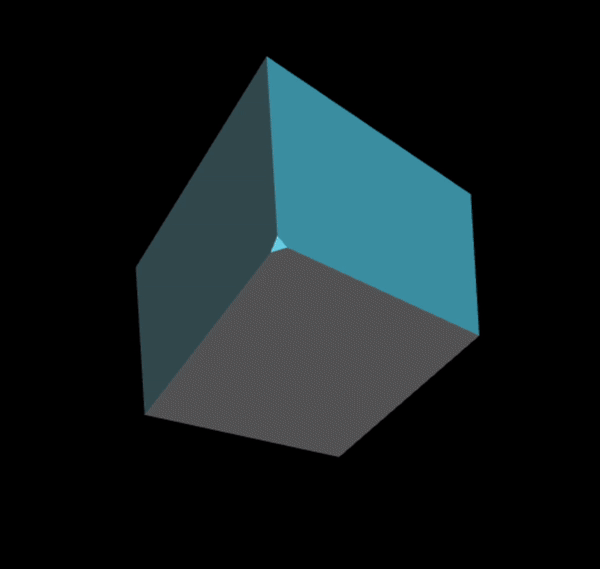
lerpFactor = fraction / 0.5; // Normalize to range 0 to 1

} else {

// Backward animation

lerpFactor = (1 - fraction) / 0.5; // Normalize and reverse

}

Here is the final output: