CS405 Project3 Report- Osman Berk An 28849

In that homework, we are simulating a solar system including Earth, Moon, Sun and Mars object on the space.

TASK1: I implemented the “draw” function inside the sceneNode.js class. Applied the transformations to the children nodes. Variables names are already given so get the transformation matrix and make the matrix multiplications to that variables first. Then drawing the mesh drawer is already implemented and last job is drawing children noops inside the loop recursively. Task1 is finished with that implementation. I have that screenshot below after the implementation of “draw” function with that way: ekran görüntüsü, yazılım, bilgisayar, metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

TASK2: In task2, we are updating the fragment shader inside the meshDrawer.js class. Calculating diffuse and specular lightning values in the fragment shader. After I calculated diff in 1 line code and spec in 3 lines of code, thats the screenshot of the solar system after the implementation of task 2:

ekran görüntüsü, bilgisayar, yazılım, metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

TASK3: In task 3, we are adding Mars into the solar system. I worked on project3.html file, First creating mesh and set the values, add the texture link given to us in the file. Then creating the helper transformation class and making translation with the given values and scaling with the given values. Lastly, adding Mars node into the solar system as a child of Sun. After that, I also implemented the rotation of Mars on z-axis. Thats the screenshot of the solar system after implemented the task 3:

ekran görüntüsü, yazılım, bilgisayar, multimedya yazılımı içeren bir resim

Açıklama otomatik olarak oluşturuldu

That’s all about the Project 3 implementations.