SOLAR SYSTEM

Introduction

This is an individual assignment that consists of writing a program that renders the solar system with modern OpenGL using shaders, vertex buffer object, attributes, uniforms and textures.

Specifications

The following specifications needs to be met for a pass:

- Sun in the center
- Planets orbit the sun, from Mercury to Neptune
    - The distance from the sun does not need to be proportional
    - Planets need to be the right size
    - The sun can be smaller
- Earth has an orbiting moon
- The sun, planets and the moon rotate around their own axis
    - Planets can be tilted
- All planets need to be uniquely textured
- All planets have the same angular velocity

A camera can be used, but is not required as long as the viewer can see *all* planets, moon and sun. To simplify the generation of geometry, the celestial bodies don't have to be perfect spheres.

Requirements

Original code written by the student with C/C++, example code provided by course responsible can and should be used as a base for the assignment.

The only external libraries that are allowed are: OpenGL Mathematics (GLM) and stb_image.

Grades

This assignment only has Pass and Fail.

Hand-in

Hand-in naming convention: `5sd805-assignment-1-surname-firstname.zip`.

Upload the project (the whole solution directory) to the course page on Studentportalen in a zip-file. The upload should contain a `readme.txt` with student name, course name and a short assignment description. Please remember to remove all redundant files (specially the build files) from the project!

Failing to comply with *any* of the assignment requirements or hand-in steps will result in a Fail on the assignment.