CS32310 Assignment - Report

This report accompanies my implementation of a solar system in WebGL for the CS32310 assignment.

# Self evaluation

Looking at the mark breakdown, I’ve achieved:

* 20% - For this high quality written report.
* 15% - For correctly drawing the spheres representing planets, at their correct ratios and scales.
* 15% - For correctly texture mapping the spheres, due to good object-oriented code and config passing a string pointing to the location of the texture file for the planet
* 15% - For correctly lighting the spheres
* 15% - For correctly positioning and animating the spheres. I positioned the spheres at the correct distance to the sun and in the right ratio, and each planet, moon and star spins on its scientifically correct axis.
* 20% - For additional functionality implemented. I’ve added keyboard (including general navigation and planet ‘snapping’) and mouse controls to move around the system, and GUI elements to see the solar system under different lighting conditions. I’ve added a universe background to make the solar system look more realistic. I’ve added the rings of Saturn.

# Mark breakdown

*You are required to deliver the following via Blackboard as a single zip file by Friday 21st November 2014, 23.59 GMT. You may also be asked to give a demonstration of your working solution to the examiners.*

*You should include the following in the zip file:*

*a) 20% of the marks are allocated for a brief report on your implementation, including a description of the program and its functionality and structure, any problems encountered and any extras implemented. This should be in pdf format. Note: it must be possible to mark your submission CS32310 Assignment based on the report only, therefore it must be an accurate and honest description of your submission. Also, no report means no grade.*

*b) 60% of the marks are allocated for functionality as specified in Part 2 above, as assessed from the information given in your report. The examiners will (most probably) also try to run your code in the Chrome browser in the Orchard lab to verify the claimed functionality and may examine your code. A rough break down of the marks is 15% for correctly drawing the spheres, 15% for correctly texture mapping the spheres, 15% for correctly lighting the spheres and 15% for correctly positioning and animating the spheres.*

*c) Up to 20% of the marks are allocated for any additional functionality implemented. Trivial extensions will only gain a small fraction of the possible 20%. This is an opportunity for first class students to “wow” the markers. Any extensions should be detailed in your report and clearly identified in your submitted code.*