Interactive Graphics

Homework

Deadline: May 31st, 2016

Download the file Homework.zip from the course homepage in Piazza
https://piazza.com/uniroma1.it/spring2016/1044398/home

There are 4 files:

1. basic-objects.js: contains the definition of the primitives used in the example
2. gl-matrix.js   contains the utility functions on matrices and vectors
3. HW.html   Main File
4. simple-rotator.js   contains the code for the rotator

You only need to modify the HW.html file. You need to complete/modify the file with the code needed to:

1. Create a fully assembled bicycle
2. Create a tree
3. Create a scene with two bicycles and 4 trees
4. Modify the vertex and fragment shaders to implement Phong shading with 1 directional light (moving so to simulate the sun) and 2 positional lights positioned on the front of the bicycles
5. (optional) Add textures on the objects (trees, disc, etc…)