A11 – Smooth objects

The goal of the application contained in `index.html`, is to create 6 objects: a pyramid, a cube, a cylinder, a cone, a sphere and torus. Models are created in file `models.js`. In particular, the procedure `addMesh()` receives as parameters the vertex buffer (an array of three elements with the coordinates of the vertices), the normal vector buffer (an array of three elements with the direction of the normal vectors to the surface for the vertexes), the index buffer (an array of indices in the vertex buffer), and an RGB color (a three-elements array, with the value of the red, green and blue components of the color, each one in the 0-1 range). Primitives are encoded as indexed triangle lists.

Only the pyramid, the cone and the sphere are implemented: complete the missing elements.

In the application, the mouse turns the view, and the slider at the bottom of the page can be used to change the objects being displayed. To help you in the creation of objects, it is possible to toggle a wireframe view pressing the space bar key.