

Computer Graphics

FINAL EXAM

The final exam will be performed individually or in team (maximum 3 students):

- A. (Individual) Based on the **chess Project**, perform the following tasks:
1. **(3 points)** Create the shadow for each piece
 2. **(3 points)** Apply at least 3 lights on the scene (It should start turned on when the scene starts)
 3. **(2 points)** Turn on, and turn off all lights at the same time (using keys or mouse)
 4. **(1 point)** Turn on, and turn off one light at the same time (using keys or mouse)
 5. **(1 point)** Apply an image texture to each object or to all objects (using keys or mouse)
- B. (Individual) Based on the lab with **three parametric surfaces (different to torus, sphere, hemisphere)**, perform the following tasks:
1. **(3 points)** Create the shadow for each object
 2. **(3 points)** Apply at least 3 lights on the scene (It should start turned on when the scene starts)
 3. **(1 point)** Turn on, and turn off all lights at the same time (using keys or mouse)
 4. **(2 points)** Turn on, and turn off one light at the same time (using keys or mouse)
 5. **(1 point)** Apply an image texture to each object or to all objects (using keys or mouse)
- C. (Individual) Create the teapot object using Bezier algorithm, and perform the following tasks:
1. **(2 points)** Build the teapot object with a base using Bezier algorithm for the teapot, and a primitive/surface to the base object (Similar to Figure 1)
 2. **(2 points)** Create the shadow for the teapot objects
 3. **(2 points)** Apply at least 3 lights on the scene (It should start turned on when the scene starts)
 4. **(1 point)** Turn on, and turn off all lights at the same time (using keys or mouse)
 5. **(2 points)** Turn on, and turn off one light at time (using keys or mouse)
 6. **(1 point)** Apply an image texture to the teapot (using keys or mouse)

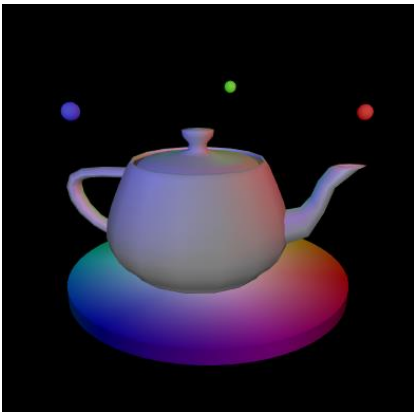


Figure 1: Teapot

- D. (Individual) Based on the triangle mesh and using bunny.obj/tyra.obj/armadillo.obj, perform the following tasks:
1. **(3 points)** Create the shadow for the object on the scene
 2. **(3 points)** Apply at least 3 lights on the scene (It should start turned on when the scene starts)
 3. **(1 point)** Turn on, and turn off all lights at the same time (using keys or mouse)
 4. **(2 points)** Turn on, and turn off one light at time (using keys or mouse)
 5. **(1 point)** Apply an image texture to the object (using keys or mouse)