

ANKARA UNIVERSITY
Computer Engineering
2020-2021 Fall Semester
COM3(0)37 Computer Graphics
Practical Assignment 2

Important Note: The students are expected to complete the tasks using shader-based graphics programming approach and WebGL. Solutions using fixed-function style or other graphics libraries (including Javascript graphics libraries) will be graded zero. This includes solutions that have code segments such as glBegin-gLEnd sections, those that are not using a vertex or a fragment shader, or “webgl” context from canvas element.

Tasks: A teapot displaying program was discussed in tutorial/lab 8 and code and slides are shared on the ekampus course page. Before starting this coursework, you should understand and be able to run that program on your computer.

The tasks for this coursework are:

- Finding or designing a simple 3D geometric model (vertices, faces/triangles/polygons, normals, etc.)
- Modifying the teapot program so that you can show your model as a wireframe (with lines)
- Implementing lighting calculations to show your shaded model like in the second program in tutorial/lab 8 BUT using **Phong polygon rendering (normal interpolation)**
- Covering your model with a texture

See the lab/tutorial 8 recording and accompanying slides for further information.

WARNING

You are free to discuss with your friends (e.g., over the forum on the course ekampus page) and research on the web but your code should be your own work. If there is high level of similarity with other students' solutions, it will be treated as plagiarism. In such a case, Higher Education Council (YÖK) regulations will be strictly applied.

Deadline and Submission

You should complete your work until **23:59 on January 4, Monday**. You will submit your code via the homework submission mechanism on ekampus course page. Also you will need to demonstrate your program and answer questions about it. If you only submit your code but do not give a demonstration, your solution **will not be graded**.

COM3037 students will do their demos during the lab hours on January 5 and **COM337 students** on January 6 at 13.30 as in the previous assignment. If you are unable to attend that demo hour, contact the course instructor before that time.