

LAB 2: 2D TRANSFORMATION

Overview

Create a 2D scene with hierarchical transformation.

Tasks

Your program will show a 2D scene similar to the example at <https://harviu.github.io/WebGL-Example/html/soldier.html>.

- Your scene should contain at least 3 layers of hierarchy. (3 points)
- Each hierarchy should contain at least one transformation. (3 points)
- Each of Translation, Scaling, and Rotation should be correctly implemented and used at least once. (1 point)
- Transformations are bound to user input and interaction. (1 point)
- Creativity and aesthetics. (1 point)

Submission

What to submit?

- Your program source files
 - lab1.html
- Any images, data files, or setup scripts needed for your program to run (including any supplied by the assignment)
 - setupShader.js
- A readme file which:
 - Describes the Tasks you finished for this lab and anything that is not achieved for the lab
 - Describes the interaction you designed for this lab
 - Lists which browser/OS you developed your code on (just in case)

Combine these into a single ZIP archive file and submit that ZIP file to BB. (I should be able to unzip this file and immediately run your program, so ensure you include everything needed.)

Late Penalty

You should submit your lab on time. Being late for one lab could affect your time to complete subsequent labs. All labs are due at 11:59 pm (Eastern) of the specified due date, and there is a **10% penalty each day for up to 50%**. After that, you get zero.

AI Policy

Using AI help for the labs are ALLOWED. But you must quote the code from AI help.

Quote it like this:

```
// --- start AI code ---
```

```
// --- end AI code ---
```

Using AI generated code without quoting is considered academic misconduct and will result in 0 for the lab. Mistakes in the code from AI help will result in doubled point deduction according to the rubrics.

e.g. rubrics states -1 point for incorrect object rotation. The point deduction will be doubled to -2 if AI help is used for object rotation.

Reuse of any code of previous examples are ALLOWED and encouraged.

Grading Criteria

Grading of the labs will base on the following:

- 90%: Correctness and adherence to assignment specification.
- 10%: Readability, the structure of code, use of comments, adherence to lab procedures (submitting, naming conventions, etc.)