Project 1 Rubric, CS 351-1 Fall 2024

The purpose of this document is to provide condensed rubric for Project 1, separate from the description of the project requirements. This project is scored out of **100 points** and is worth **20%** of your final grade. Every requirement on this rubric must be met to receive full credit.

Points	Requirement	Scoring
10	Demo	You must attend the in-class demo day and submit written reviews on **at least** two other projects. You may receive a deduction if your reviews are especially low effort. If you are unable to attend in-class demo day due to illness, external event, or personal emergency, contact me so we can discuss an alternative to earn these 10 points
10	Writeup submission	The scoring for the writeup consists of 2 pieces: **5 points:** You must include your name, netid, project title, a list of the code files submitted with the project, and a written description of your project and what the user should expect to observe, including **at least** two images of the project -- a deduction may be applied if this overview is especially confusing or misleading. **5 points:** you must describe how the user can interact with this animation, including **at least** two images showing changes from interacting with the animation -- points may be deducted if your description is especially confusing or misleading.
5	On-screen instructions	Graded on clarity and ease-of-use. You may receive a deduction if a feature is not explained on the project main page, or if the instructions are especially difficult to understand.
15	Distinct *rigid* 3D models	You must have at least **three** unique models with at least 6 (visually) distinct vertices each. Note that a particular *assembly* may consist of multiple models, so it is possible to meet this requirement with a single assembly. Note that this requirement means we have to be able to find the models in your scene; if they are always off-camera or too small to see, you may receive a deduction.
10	Per-vertex colors	Your project must support per-vertex colors, which should be demonstrated on at least one of your models. You should clearly see how different parts of the mesh have different colors, and/or how between vertices, the color interpolates.
10	Independent Animation	At least one model must be moving independently of user control (that is, moving when the project is loaded)
10	Interactive Animation	At least one model must be able to move in response to a button being pressed or a slider being moved
5	Assembly Animation	At least one visual "part" of an assembly must be animated independent of the rest of the assembly. This requirement may be fulfilled as part of your "independent animation" or "interactive animation" requirements

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5	Visible Grid	You must have a grid of repeating shapes visible in your scene. This grid can be a different color than the one given in the starter code or drawn as a mesh, so long as there is some kind of repeating pattern in your scene.
20	Movable Camera	The scoring for your camera consists of 2 pieces: **10 points:** you must be able to move your camera along at least one axis (X, Y, or Z) **10 points:** You must be able to switch between an orthographic and perspective camera in some way (for example, with a button press or checkbox)

Extra Credit

We reserve the right to award up to 10 points in extra credit for especially interesting or cool animations. Additionally, obviously high-effort submissions may be "rounded up", so small deductions that would otherwise have been applied may be "given back".