

CS460 Fall 2022

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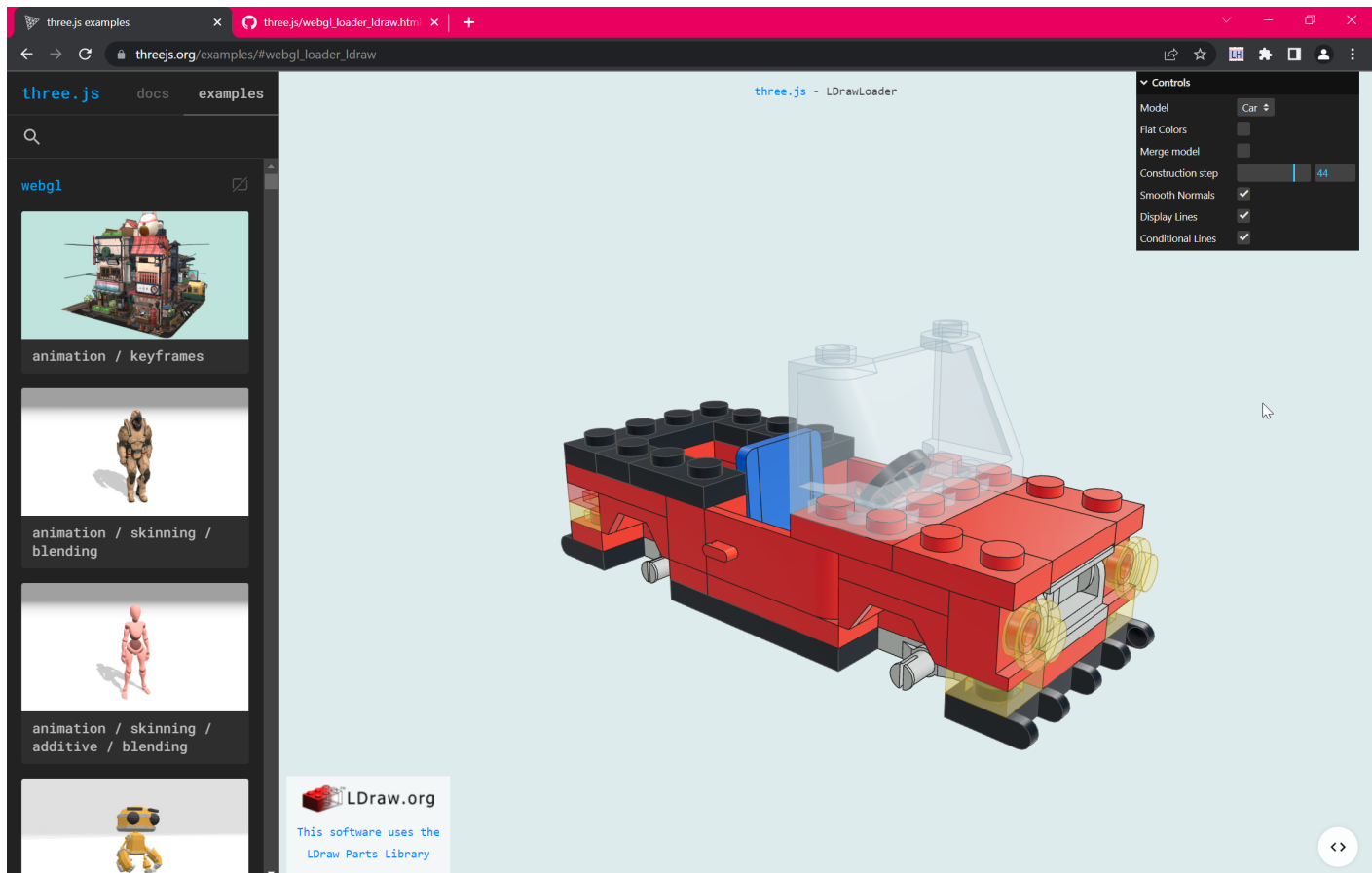
Due Date: 09/12/2022

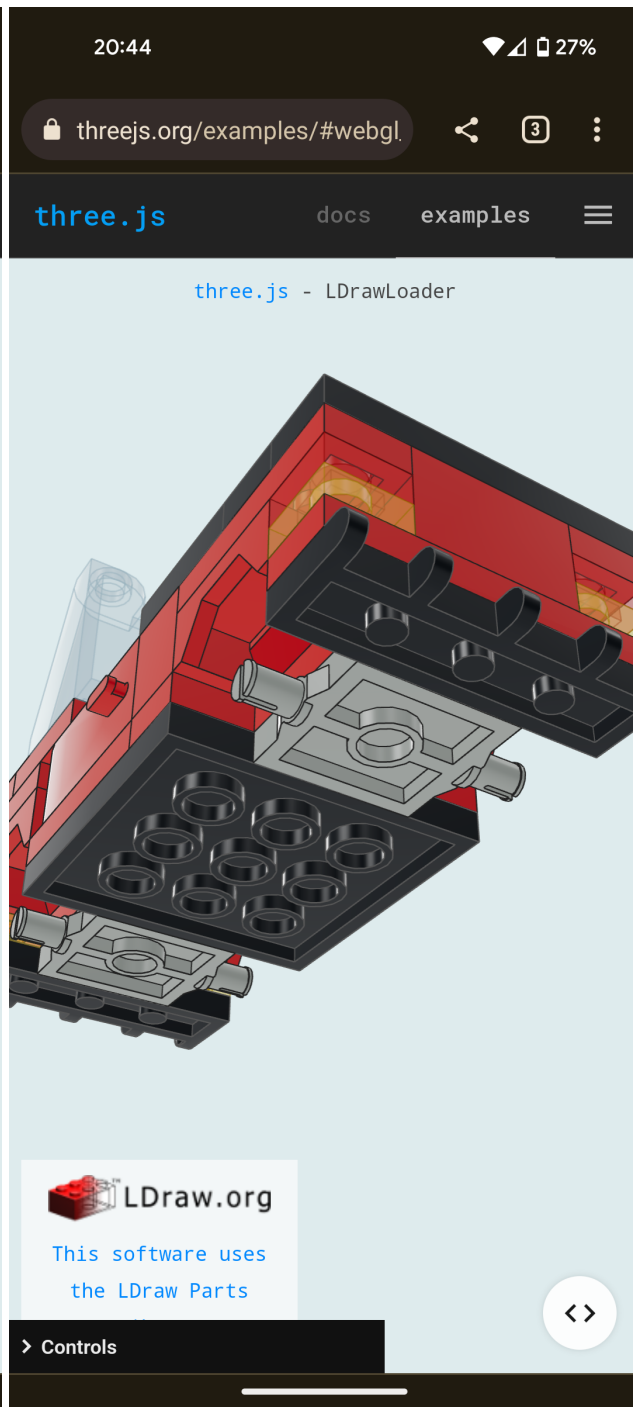
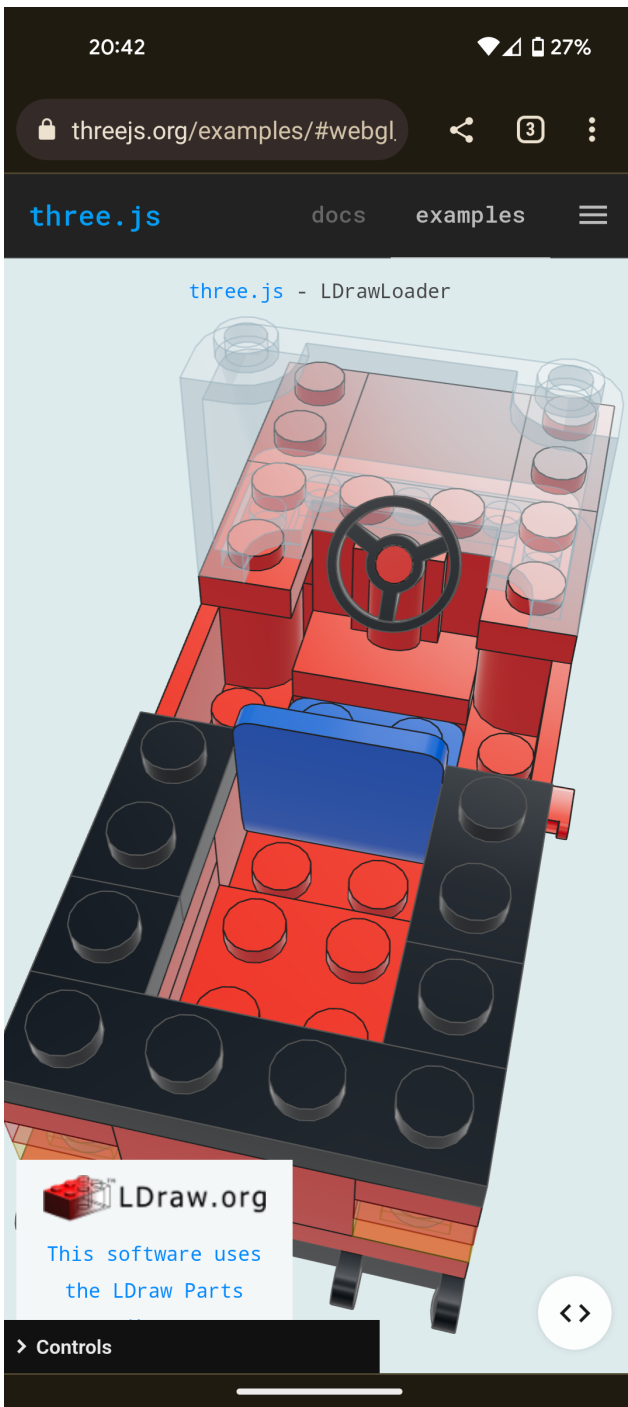
## Assignment 1: Intro

**Part 1 (100 points):** Describe your favorite WebGL demo.

My favorite demo is three.js's Loader LDraw demo ([https://threejs.org/examples/#webgl\\_loader\\_ldraw](https://threejs.org/examples/#webgl_loader_ldraw)). The authors show a simple display that could become a powerful tool for individuals. In this demo, the default option - Car - is a faithful representation of how to build a classic car from LEGO blocks. Each piece is accurately represented. At first glance, it looks like a simple but high-quality recreation of the official instruction booklets, but the real power comes from user interaction. Using the device's default scroll functionality, the user can zoom in or out on the displayed model, allowing for closer inspection of a confusing section by zooming in or zooming out to get a better idea of the overall state of the project. The user can also click and drag (or tap and drag on touch screens) to change the orientation of the diagram, and allows the user to see the project from other angles as desired.

While the projects shown for the sake of this demo are not terribly useful, displaying instructions in this manner for more complex projects, such as LEGO kits that include thousands of pieces and furniture assembly instructions. Presenting such instructions in this manner would allow a user to view the instructions from whatever angle they need as they move around their project, zoom in on a section that is confusing, or zoom out and check if the overall result is looking good.





### Technologies used:

- HTML/CSS/JavaScript
- Three.js
- LDraw: <https://www.ldraw.org/>

**Bonus (33 points):** If possible, try to host the project as your own Github repository and make it accessible via Github pages. Please make sure to credit the original authors. Then, link the repository here: [https://ceg9498.github.io/cs460student/Assignment01/webgl\\_loader\\_ldraw.html](https://ceg9498.github.io/cs460student/Assignment01/webgl_loader_ldraw.html)