

## **Explicit List of Features I Implemented:**

- **Cloth Simulation**
  - o It simulates a cloth that bounces off a sphere.
- **Multiple Ropes**
  - o It counts for multiple ropes because it is a cloth simulation.
- **3D Simulation & Rendering**
  - o The simulation is rendered fairly prettily in 3d with controls for moving the camera around

## **Breakdown of Files Submitted**

- **/Project\_2\_part\_2/**
  - o Folder containing all files necessary to run the simulation.
- **Cloth.mp4**
  - o A video that shows the cloth hitting the sphere from multiple camera angles.
- **Explicit List of Features + Writeup Project 2.pdf**
  - o Describes the following in detail:
    - An explicit list of all features I implemented in the project
    - A breakdown of all the files that were submitted for the project
    - A general writeup about how the simulation works and how it is written
    - All the hotkeys for the simulation
- **monke.png**
  - o My submission for the art contest.
- **image sources.txt**
  - o Lists all sources for all images used in the project.

## **Writeup**

### **How It Works:**

1. Cloth uses the same logic as slide 9 of 10Cloth.pdf from canvas
  - However the actual code for the ropes is more heavily based on RopeStarter\_Vec2.pde (the in-class activity)
2. The camera code is completely copied from the example on canvas
  - a. Only tweaked the hotkeys a little bit and removed the example code from the bottom
3. The image is tiled to the cloth using a method from this youtube video:
  - a. <https://youtu.be/FeXnJSCFj-Q>
  - b. Only sliiiiightly tweaked the code to make it fit my cloth scheme
4. All vectors use the processing in-built PVector class

## **Hotkeys:**

- **WASD:** Move the camera around side to side
- **Shift/Space:** Move the camera up/down
- **E:** Move the camera faster
- **Arrow Keys:** Rotate the camera
- **I:** Restart the camera
- **O:** Restart the cloth
- **P:** Restart the simulation entirely