Tearable Cloth Animation

Where is the public location of this code?

Code Pen & Github

Location of code:

http://codepen.io/dissimulate/full/KrAwx/

Why is it interesting?

I liked the tear cloth because it was fun to tear the cloth apart with the mouse.

Who owns the code?

Adam Brooks

What dependencies does this code have?

HTML, CSS, Animation Frame, and Javascript

What is Animation Frame:

Provides a native API for running any type of animation in the browser, using DOM elements, CSS, canvas, WebGL or anything else.

ABOUT THE CODE:

Created- July 2013

Updated- May 2016

What does the code do?

```
// This will handles multiple browsers for requestAnimationFrame()
  window.requestAnimFrame =
  window.requestAnimationFrame ||
  window.webkitRequestAnimationFrame ||
  window.mozRequestAnimationFrame ||
  window.oRequestAnimationFrame ||
  window.msRequestAnimationFrame ||

  //This is a call back to the animation code to be ran when the system is ready.
  function(callback) {
  //Evaluates an expression after a specified number of milliseconds have passed.
    window.setTimeout(callback, 1000 / 60);
  };
```

```
function update() {
//The clearRect() method clears the specified pixels within the rectangle.
// X= across/width
//Y= up/down(length)
//W = Width of the canvas to clear
//H = Height of the canvas to clear
//context.clearRect(x,y,width,height);
 ctx.clearRect(0, 0, canvas.width, canvas.height);

  //draw will loop continuously unless you tell it otherwise
  cloth.draw();

//Calls this function when you are ready to update your animation onscreen
  requestAnimationFrame(update);
}
```

```
//Execute JavaScript when pressing a mouse button over it.
document.getElementById('close').onmousedown = function(e) {

//The event.preventDefault() method stops the default action of an element
from happening.
  e.preventDefault();

//Set the element to not be displayed:
  document.getElementById('info').style.display = 'none';

  };
```

```
//This uses the DOM to assign an onload event to the element
window.onload = function() {
//returns by the Element ID
  canvas = document.getElementById('c');
 //canvas.getContext method returns a drawing context on the canvas and
uses 2D interface is used for drawing rectangles, text, images and other
objects onto the canvas element
  ctx = canvas.getContext('2d');
  //gives the width and height of the canvas when it's reloaded.
  canvas.width = 560;
  canvas.height = 350;
//starts the animation
  start();
};
```

```
//This is what make the cloth stay in the air. If you put at zero the cloth will fall off the screen.
  var physics_accuracy = 3,
 //The higher the number the easier it is to cut the cloth.
  mouse_influence = 20,
 //lower the number the harder to cut the cloth
  mouse_cut = 5,
  //How fast the cloth moves around basically the lower the number the slower it moves
  gravity = 1200,
  //how tall the cloth is on the page
  cloth_height = 30;
  //the width of the cloth
  cloth_width = 50,
  //Shows where it starts on the page
  start_y = 20,
  //Spacing between the string on the cloth. Basically the higher the number the more space it has
across the cloth. *width
  spacing = 7,
  //How hard you have to tear to get the cloth apart. The higher the number the harder it is to tear.
  tear_distance = 60;
```