

## Homework 3

The deadline for Homework 3 is February 27, 11:59PM.

### Problem: Design and Implementation of Custom Brushes and Paper

In this assignment you will gain familiarity with a basic JavaScript-based drawing package and experiment with designing and implementing custom brushes and paper. You will implement **two new brushes** and **two types of textured paper** for the JS drawing package posted on Canvas. **Students enrolled in CPSC 579 will implement three new brushes.** Note that we offer samples to help you get started. You will find documentation about the code posted under Assignments.

This assignment is in three parts:

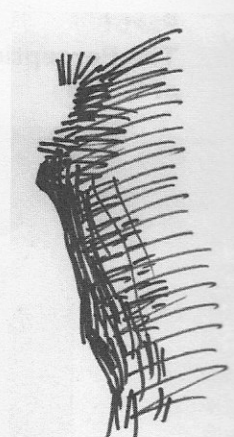
1. Add new brushes and types of paper to the JavaScript source code posted on Canvas. You have complete freedom to experiment as you see fit. Please use the file names `brush1.js` and `paper1.js` to upload your submissions. Add brief comments to describe each brush. Ideally, we'd like to see some distinct brushes. If you would like to experiment with variations on a theme, you are welcome to submit additional examples (using the convention `brush{n}.js` and `paper{n}.js`).
2. Describe the design and implementation of each brush and paper. What effects did you seek to generate? How did you approach the implementation? Were you able to generate the effects you hoped to achieve, or did you compromise or alter your objectives in some way? Other comments or implementation details are welcome.
3. For each brush and each type of paper, create a representative image demonstrating how the paper and brush work in practice. Feel free to use one of the attached examples to demonstrate your results.

Henri Matisse, *Standing Nude*, 1901–03. Brush and ink, 10 $\frac{3}{8}$  × 8 inches. Collection, The Museum of Modern Art, New York. Gift of Edward Steichen.

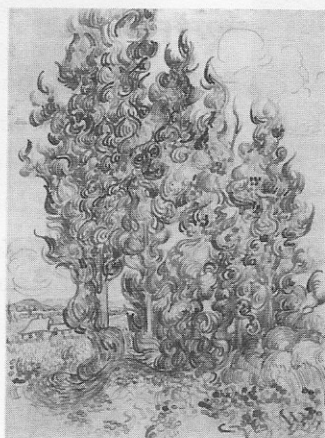


Matisse marks.

Very fast.



Vincent van Gogh, *Grove of Cypresses*, 1899. Reed pen and ink, 24 $\frac{1}{2}$  × 18 $\frac{1}{8}$  inches. Gift of Robert Allerton. Courtesy of the Art Institute of Chicago.



van Gogh marks.

Medium-fast.



Eugene Delacroix (1798–1863), *Études de Bras et de Jambes*, 1901–03. Pen and sepia ink on buff paper, 217 × 350 mm. Worcester Sketch Fund Income. Courtesy of the Art Institute of Chicago.



Delacroix marks.

Medium-slow.



Ben Shahn (1898–1969, Russian-American), *Dr. J. Robert Oppenheimer*, 1954, brush and ink, 19 $\frac{1}{2}$  × 12 $\frac{1}{2}$  inches. The Museum of Modern Art, New York.



Ben Shahn marks.

Very slow.

