

CS 91R: The Computational Image

Assignment 0: Dynamic Pictures

DUE January 29th at 11:55 PM

Use [p5.js](#) to create a **Dynamic Picture**, ala **Bret Victor**.

The first thing you should do is go take a picture of something real in the science center (or outside) with your phone. This image will serve as the background for your dynamic picture. Next, you will add [graphical components](#) on top of this picture to make it dynamic. Our first journey into augmented reality.

1 Getting started with p5.js

Your repository already has the necessary starter code, but it is still a good idea to walk through the [Getting Started](#) and the [overview](#) tutorials. Specifically, how to get [p5.js working locally](#) with any editor. For this lab, I ask you use Visual Studio Code, and install the [Live Server](#) and [p5.vscode](#) extensions. If you really want to use another editor you can use `python3 -m http.server` in the sketch folder instead.

2 Dynamic Pictures

Write in file `reflection.md` about what you hope to accomplish with your dynamic picture: what are you trying to explain (e.g., a scientific idea, a political ideology), express (e.g., an emotion, passage of time, season of the year) or explore (e.g., economics simulation, poker). If you are having a hard time thinking of an idea, I suggest you create a [clock](#), but be creative! Specifically, think about how the static, static animation, dynamic & interactive aspects of the sketch help you make your point. Be sure to chat with your instructor about your dynamic picture plan (during the lab period) before you start implementing it.

Next, realize your dynamic picture as a processing sketch in Javascript. Be sure to indicate using comments the pieces of your program that realize the static, static animation, dynamic & interactive aspects of your dynamic picture plan (part 0). Use your [image](#) as part of the static component. Consider using the [date](#), [time](#), [timers](#) or the [simple physics](#) for the static animation part, and [randomness](#) for the dynamic bits. You can use the [mouse](#) and [keyboard](#) for the [interactive](#) pieces. When you are finished add another paragraph in reflection about what you accomplished. Finally, add a collaboration statement to the top of the `reflection.md` file.

3 Learning Objectives

- introduce `p5.js`;
- learn how to load and draw images;
- explore Processing's graphics primitives;
- employ Victor's idea of Dynamic Pictures;
- augment reality.