Interactive Graphics Programming with JavaScript

East House Enrichment Program @ RIT, June 2023

Overview

This workshop will provide an introduction to core software programming concepts. Each student will work individually and in small groups to write programs that generate pictures of their own design. On day two, we'll work together to add interactivity to the images by changing what the program does depending on the user's mouse and/or keyboard actions.

We'll be writing *JavaScript* programs that utilize the *p5.js library* to support drawing shapes onto a digital canvas.

Since our time is limited, the primary goal is to give everyone a chance to:

- See what is possible wih p5.js
- Run some pre-made programs
- Learn a few programming concepts so that you can customize the programs
- Edit the demo code a bit to play with how things work
- Try your hand at designing your own program

Workshop activities

We'll get as far as we can on Day 1 while leaving plenty of time for you to play around and brainstorm things you'd like to try. On Day 2, we'll wrap up some demos and then focus on helping you make your own programs!

1. [Getting Started](#)
2. [Hello East House!](#)
3. [Shapes & Colors](#)
4. [Letting the computer do the math](#)
5. [Adding interactions & movement!](#)

Quick Links

- Workshop Website: https://esmesh.github.io/east-house-intro-programming/
- Online p5.js Editor: https://editor.p5js.org/
- Other References: https://esmesh.github.io/east-house-intro-programming/topics/References.html