Welcome to Hack Club!

Lab Day: Improve on past workshops

10/18/2021

Exciting events going on...

KaJam!
by Replit

Make a game in 7 days, have fun, and win prizes!

Oct 18 - Oct 25
https://replit.com/site/kajam

Try Kaboom.js, a JavaScript game library.
Kaboom tutorial

Congressional App Challenge

An app challenge hosted by the US Congress. Participate in your congressional district!

Submission Deadline: Nov 1
https://www.congressionalappchallenge.us/

Use ANY programming language and submit ANY app!

Lab Day

Objective

- Make something original!!!
- Improve on our previous workshops
  - Personal Website (Intro to HTML)
  - Splatter Paint
  - Cookie Clicker
  - Speak Colors
  - Painting App

What have we learned so far?

- Basic HTML/CSS
- Basic JS
- How to draw on a canvas (p5.js)
- Voice Recognition (p5.js)

Resources

- https://workshops.pages.dev/

- https://www.w3schools.com/tags/default.asp

- https://www.w3schools.com/cssref/default.asp

- https://p5js.org/reference/

- https://idmnyu.github.io/p5.js-speech/#reference

Hacking time

Possible Ideas?

If you don't have a good idea right now, how about trying to improve an existing project?

Personal Website	Splatter Paint	Cookie Clicker	Speak Colors	Painting App
CSS formatting for images	Circle distance/shape	Cookie Image	Shapes	Buttons that change the color
Add multiple Pages	Circle/Background color	Buy a grandma!	Two word colors	Slider to change stroke width
Create a Navbar	Add sound?	Selling cursors	On/Off	Clear Button + Save Button

Possible Improvements (Personal Website)

CSS Formatting for Images

Use various CSS properties to position images next to text, and where you want it!

Add multiple Pages

Create other html files to add pages to your website such as about.html

Create a Navbar

Use the href attribute on anchor tags and set it to the page you want to redirect to (Ex. href = "/about.html")

Possible Improvements (Splatter Paint)

Circle distance/shape

Randomize the distance between circles or the circle color!

Circle color/background color

Add some more randomness to color - maybe have a changing gradient to the background color?

Add sound?

Try using the Tone.js library to play synth sounds!

Possible Improvements (Cookie Clicker)

Selling cursors

Add the feature to sell cursors for cookies in return.

Buy a grandma!

Add grandmas to the shop, makes cookies faster than cursors.

Cookie Image

Replace the "click" button with an image of a cookie/

Possible Improvements (Speak Colors)

Shapes

Add a feature that draws a shape when you say the shape name. https://p5js.org/reference/ will help.

Two word colors

The script only recognizes the last word. Make an improvement so that it can recognize multi-word colors (like "SteelBlue") and display them correctly

On/Off

Make a switch that turns the recognition on or off. https://idmnyu.github.io/p5.js-speech/#reference will help.

Possible Improvements (Painting App)

Buttons that change the color

Add multiple buttons and inside of the JS change the strokestyle to "black"

Slider to change stroke width

Create a slider using the input tag and have the js set context.lineWidth whenever it changes

Clear Button + Save Button

Create buttons and inside of the js have it clear the canvas.