Google Developer Student Clubs

WEB BLITZ 3.0

DAY-3

CSS LAYOUTS & AN INTRO TO JS

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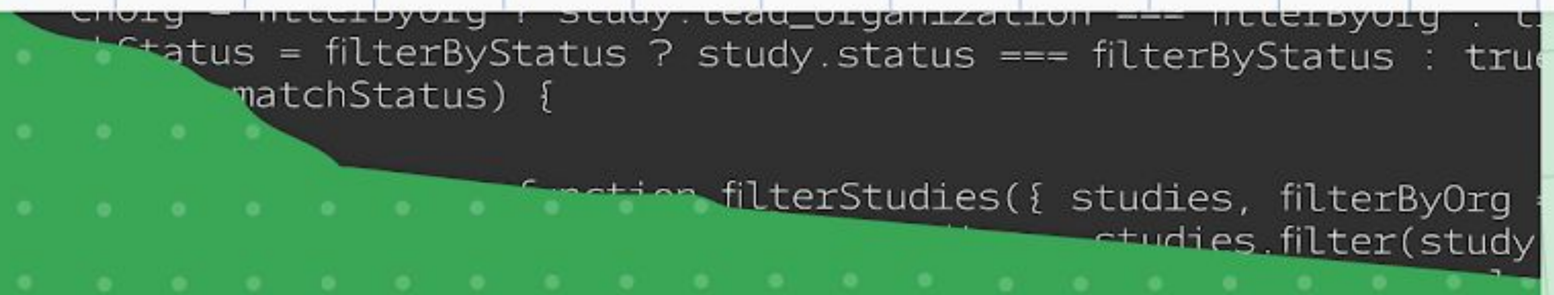

```
chOrg = filterByOrg ? study.lead_organization === filterByOrg : t
Status = filterByStatus ? study.status === filterByStatus : true
matchStatus) {
    function filterStudies({ studies, filterByOrg ,
        studies.filter(study
```

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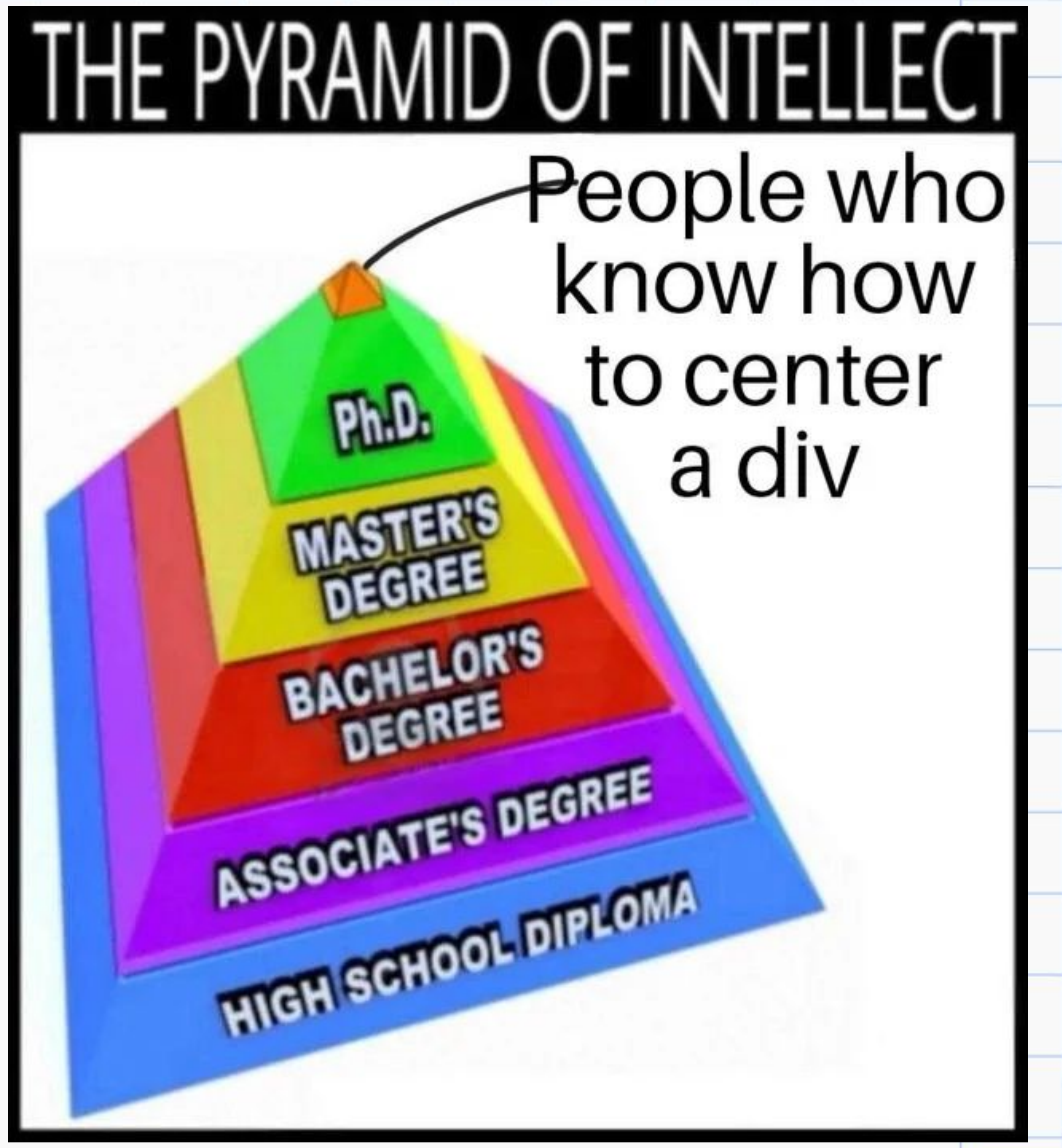
CSS Layouts

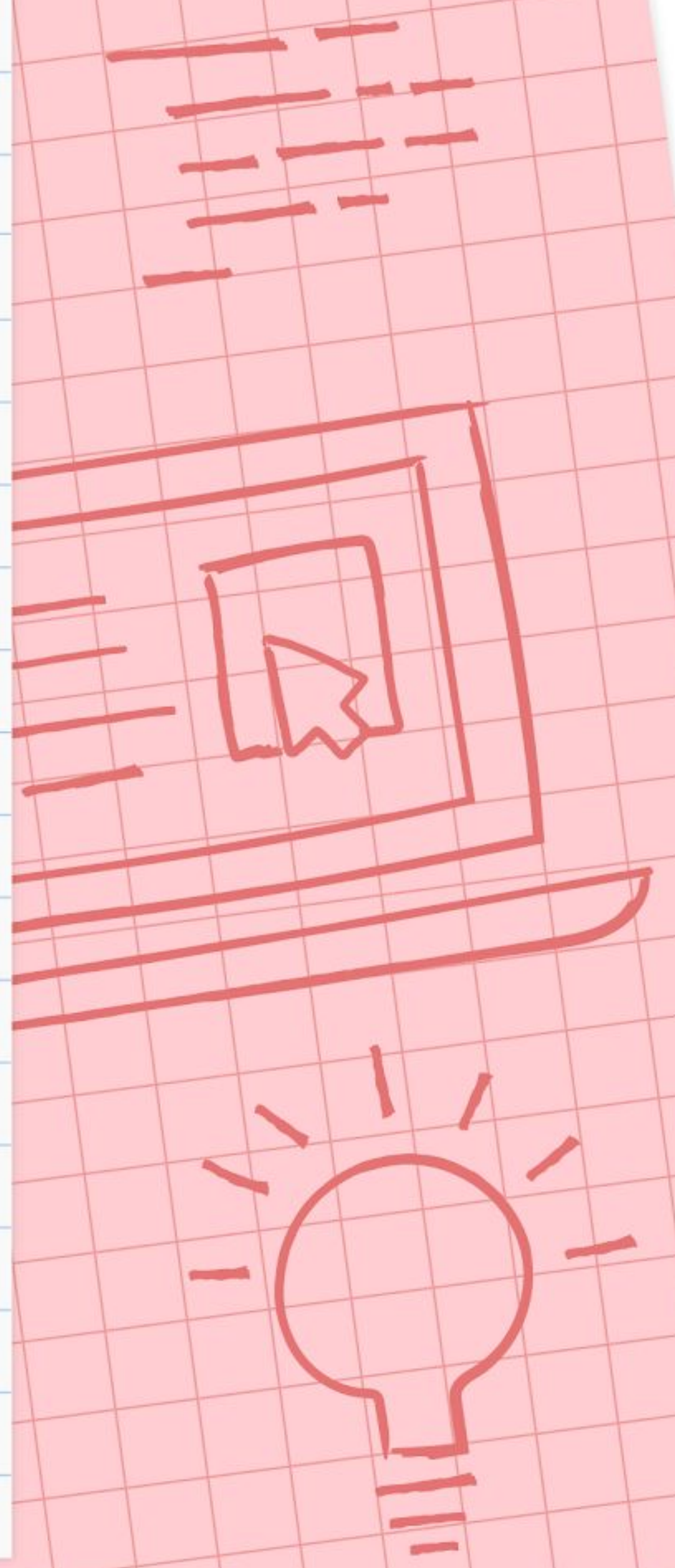
Or how to arrange your divs



Normal flow

`The way that webpage elements lay themselves out if you haven't changed their layout.`

- Each element will appear on a new line below the last one, with each one separated by whatever margin that's been specified.



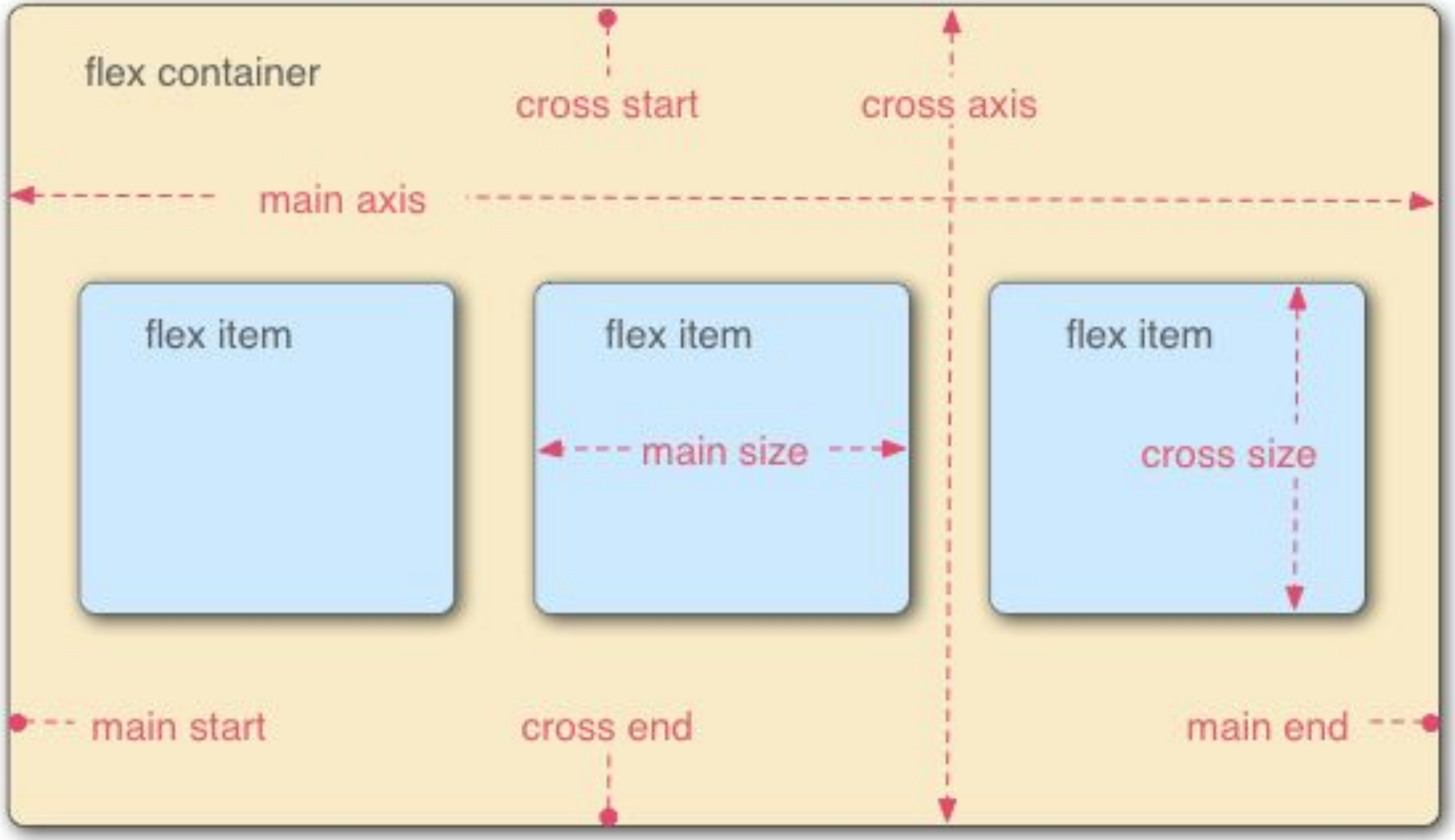
Flexbox

`Or flexible box`

- Items flex (expand) to fill additional space or shrink to fit into smaller spaces.
- Two components -
  - Flexbox container
  - Flexbox items

Flexbox layout

`justify-content`
`align-items`



- Laying out items:
    - justify-content: flex-start
    - align-items: stretch
- flex-direction: row, row-reverse, column, column-reverse
- Laying out flex items: align-self
- Sizing flex items: flex-grow, flex-shrink, flex-basis
- Flex wrapping: flex-wrap

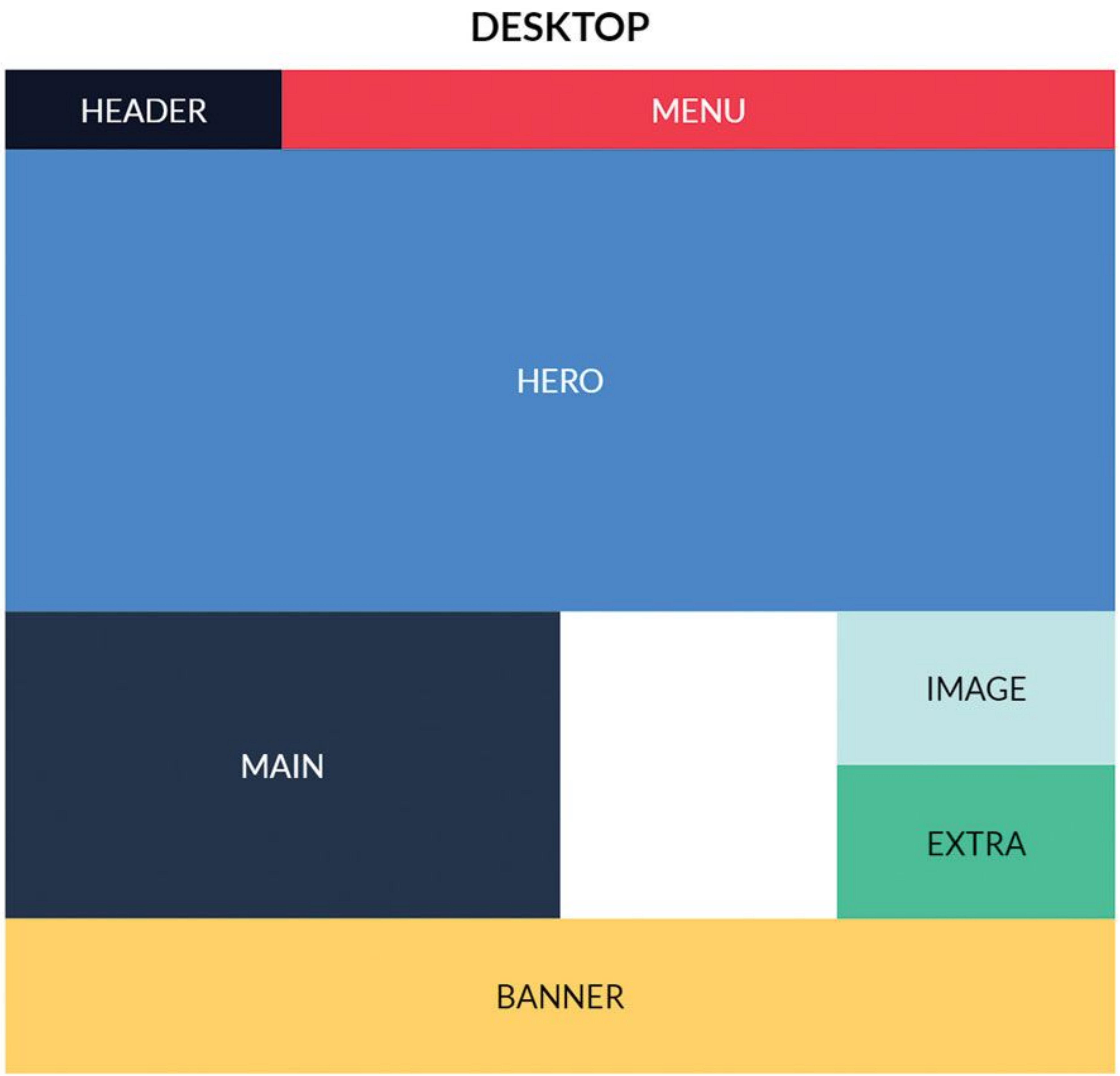
References:

- https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Flexbox
- https://youtu.be/fYq5PXgSsbE

Grid

Or layouts using rows, columns and gutters

- A grid is a collection of horizontal and vertical lines.
- Helps create a pattern against which we can line up our design elements.



Positions

how to override everything you just learnt

- relative - top, right, bottom, left
- absolute
- fixed
- sticky

References -
https://css-tricks.com/almanac/properties/p/position/

CSSBattle

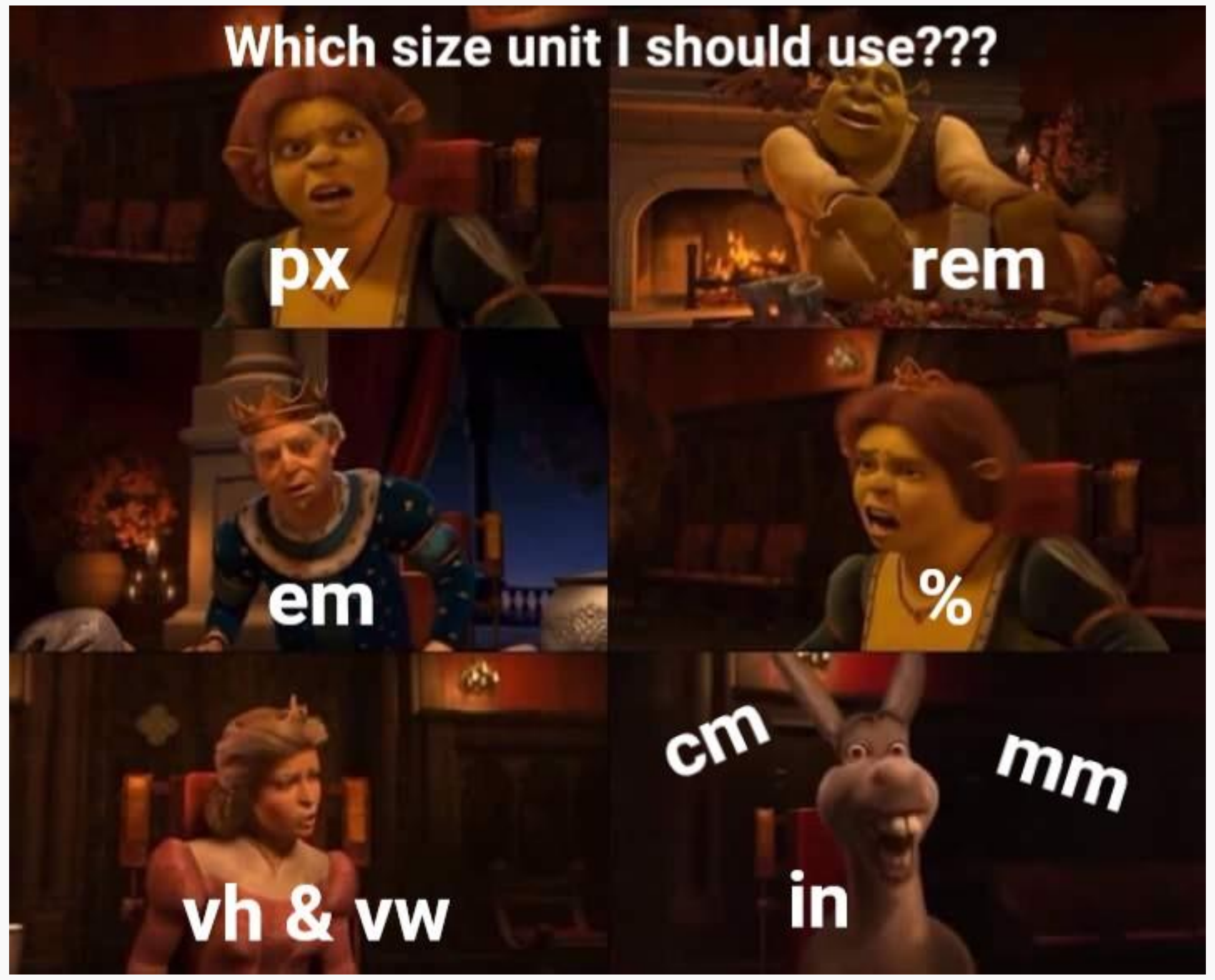
- Log on to https://cssbattle.dev/.
- Create account.
- Try the first game Target #1 (Simply Square)

What is Responsiveness?

- Responsive Web Design is about using HTML and CSS to automatically resize a website.
- Responsive Web Design is about making a website look good on all devices (desktops, tablets, and phones).

RELATIVE UNITS

em v/s rem



Reference:
https://j.eremy.net/confused-about-rem-and-em/

MEDIA QUERIES

It allows content rendering to adapt to different conditions such as screen resolution (e.g. mobile and desktop screen size).

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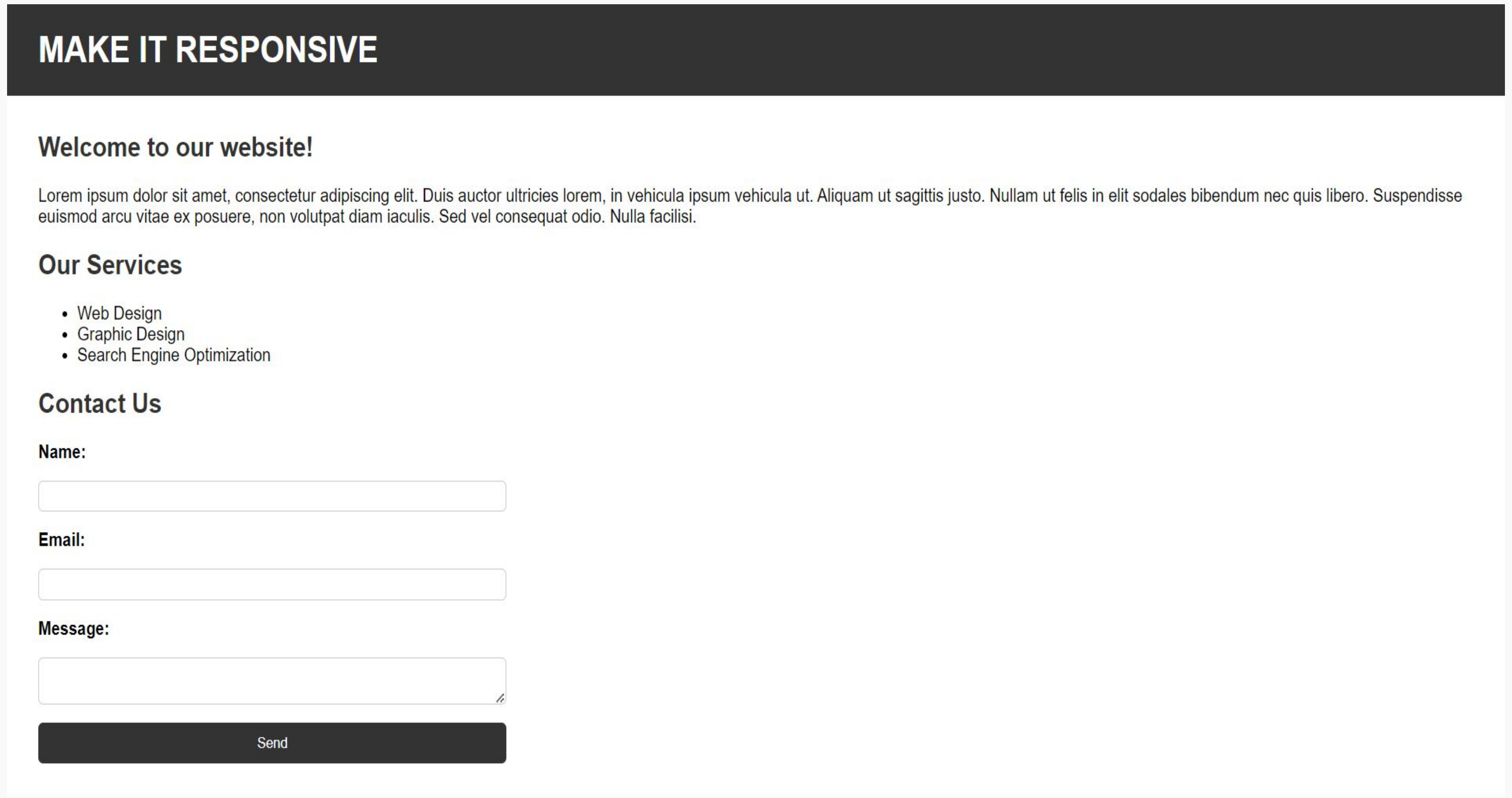
Task 02



MAKE IT RESPONSIVE

Welcome to our website!

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Our Services

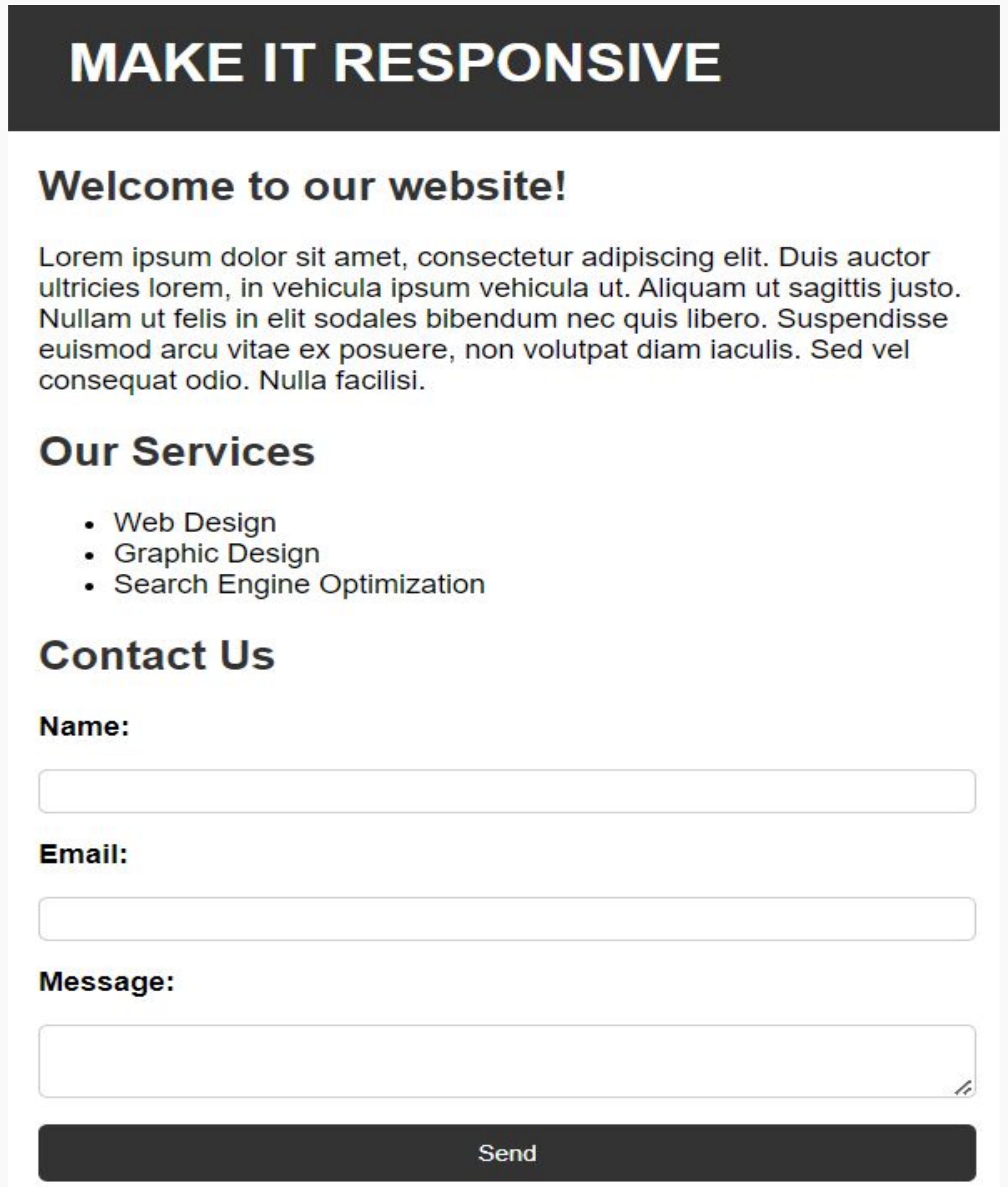
- Web Design
- Graphic Design
- Search Engine Optimization

Contact Us

Name:

Email:

Message:



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Welcome to our website!

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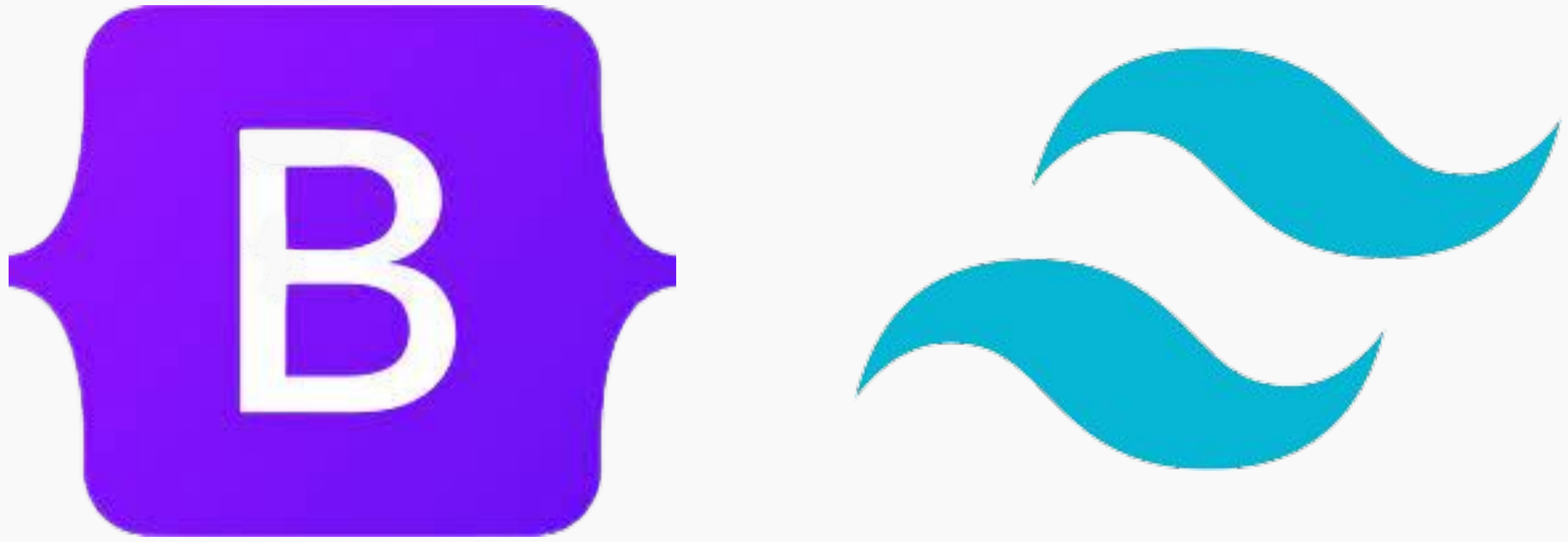
CSS FRAMEWORKS



I WILL BE THE GREATEST WEB DEV EVER
BECAUSE YOU'LL LEARN HTML & CSS PROPERLY, RIGHT?
YOU'LL LEARN HTML & CSS PROPERLY, RIGHT?
imgflip.com

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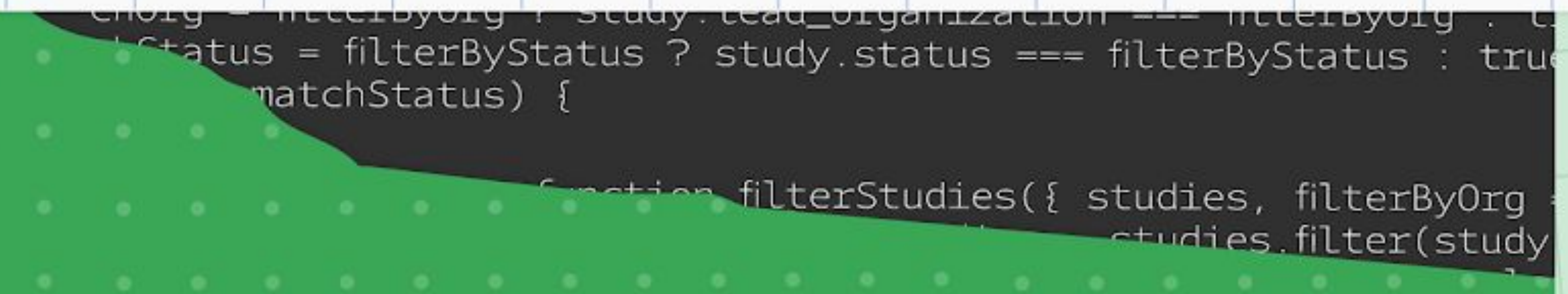
CSS FRAMEWORKS

- A CSS framework is a prepped and ready-to-use CSS library that makes the job of a UI developer easier.
- Rather than starting every project from scratch, a CSS framework gives developers tools to quickly create a user interface that developers can repeat and tweak during a project.



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JavaScript 101

Web Blitz 3.0 - Day 3

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Java !== JavaScript

Why JavaScript

- They can be written right in a web page’s HTML and run automatically as the page loads.
- Today, JavaScript can execute on any device that has a special program called the JavaScript engine.

JS
* Me Explaining That I use JS for Automation , AI , Mobile apps,Backend APIs, IoT, Web Apps, CLI programs and etc.,
My Friend who knows javascript runs on Web Browser
ifunny.co

What can in-browser JavaScript do?

`Everything related to webpage manipulation, interaction with the user, and the webserver.`

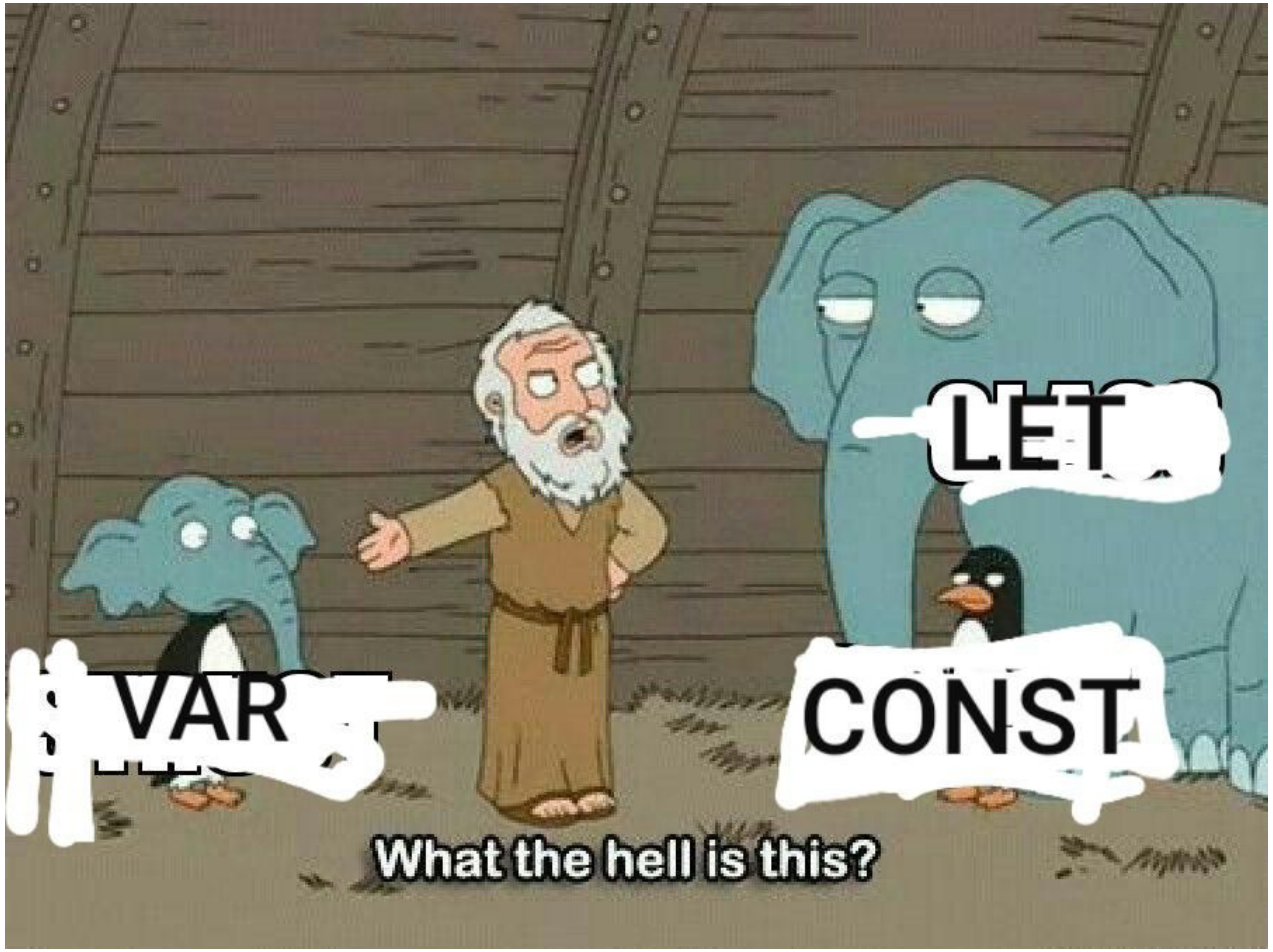
- Add new HTML to the page, change the existing content, modify styles. Full integration with HTML/CSS.
- React to user actions, run on mouse clicks, pointer movements, key presses.

```
<!DOCTYPE html>
<html>
 <body>
   <p>Before the script...</p>

   <script src="alert.js"></script>

   <p>...After the script.</p>
 </body>
</html>
```

Variables

`let, var, const`

A variable is a "named storage" for data.



Variables

`var, let, const`

var	let	const
Function scoped	Block scoped	Block scoped
Hoisting allowed	Hoisting not allowed	Hoisting not allowed
Reassigning a value allowed	Reassigning a value allowed	Reassigning a value not allowed
Redeclaration of a value allowed	Redeclaration of a value not allowed	Redeclaration of a value not allowed

Data types

- JavaScript is a dynamically typed language.
- We can put any type in a variable.
- Variables are not bound to any of them.

ME
JAVASCRIPT
Strongly Typed inherently Safe Compiled Programming Languages

Seven primitive data types:

1. number for numbers of any kind: integer or floating-point, integers are limited by ±(253-1).
2. bigint for integer numbers of arbitrary length.
3. string for strings. A string may have zero or more characters, there’s no separate single-character type.
4. boolean for true/false.
5. null for unknown values – a standalone type that has a single value null.
6. undefined for unassigned values – a standalone type that has a single value undefined.
7. symbol for unique identifiers.

And one non-primitive data type:

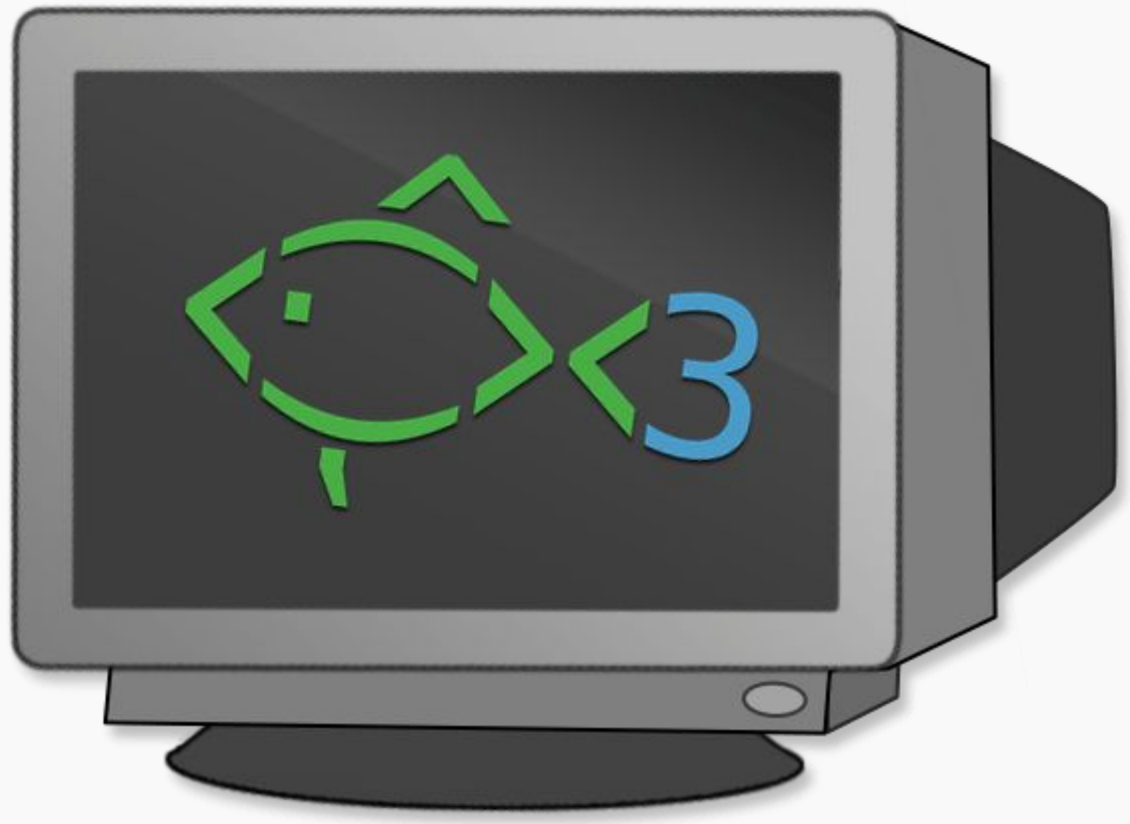
1. object for more complex data structures.

References and sources -

- https://javascript.info
- https://eloquentjavascript.net/
- https://nodeschool.io/
- JavaScript | MDN

First step in learning Programming
Learn Basic Syntax, Data Types and Variables.
Learn how to Google.

So long and thanks
for all the



```
filterStudies({ studies, filterByOrg = false, filte
studies.filter(study => {
organizat
```