

DAY ONE: Class will begin shortly!

Please mute yourself and turn your camera off while we wait for everyone to arrive.
We'll turn them on and greet one another at **9:05AM**.

Early? Get a head start on the [first day survey](#)



7/26/2021 | Zoom

BTT Summer Guild

Upperline Code

Day 1: HTML & CSS





Switch to Gallery View:



WHIP AROUND

Name + Pronouns

Where you're calling from

What show are you currently watching?



TO DO:

- Complete the [BTT Day 1 Survey](#)
- Join our [Slack workspace](#)
 - Add a photo of an animal wearing clothes to the general channel in Slack
- Sign up for a [Repl.it account](#) (or login to your current one)
- Make sure you have Google Chrome installed!



Hi! I'm Illeini Melendez

- I'm from "The Boogey Down" Bronx, NY (Currently living in Mount Vernon, NY)
- Favorite TV show is "The Office"
- If I could create any app in the world, I would make an app that would allow me to collect any unwanted coupons/freebies in my surrounding area.



Hi! I'm Aaron Fink

- I'm from Brooklyn, NY
- Has a dog named Olive
- Thoroughly enjoys puzzles
- Terrible at cooking
- Just started rock climbing
- Currently binging Taskmasker



Hi, I'm Evelyn!

- Born and Raised: Brooklyn, NY
Favorite Place: Puebla, Mexico
- Rising Junior studying Computer Science at Brooklyn College
- Enjoy coding, hiking and trying new foods during my free time
- Started coding during my freshman year and with BTT's Summer Guild last year



Hi! I'm Emily!

- I'm from Charlottesville, Virginia.
- My favorite TV show is A.P. Bio.
- I am incoming freshman to the University of Virginia.
- If I could create any app in the world, it would be an alarm clock that would actually wake me up and not be something I can hit snooze on.



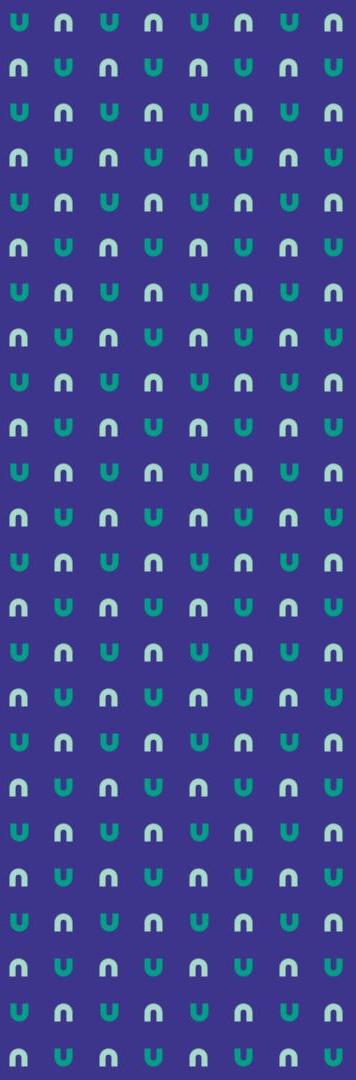


Get ready for a magical journey





Let's play some
GAMES!





Why did we do that?

- Coding is intimidating and complex - you'll make LOTS of mistakes.
- You HAVE to feel comfortable making mistakes and looking silly if you're going to grow.
- The only way to feel comfortable making mistakes is to know, care about, and trust the other people in the room.



Why are you here? (PM your response or choose a # below!)

1. You're here because you've coded before and you love it.
2. You're here because you've *never* really coded before but you think it might be cool.
3. You're here because you're interested in getting a job in tech.
4. You're here because your parents signed you up.
5. You have no idea why you're here.
6. Some totally different reason.



Big Goals

- **Build** something you're proud of!
- Meet new people, make new **friends!**
- Figure out how **you fit** into the world of code!
- Get so good at learning that you can **keep building** after class ends!





What we expect from you.

- Support each other
- Be on time and be present
(please communicate absences in advance)
- Always be learning
- See the best in each other
- Take risks! Embrace failure!
- No code snobs





What to expect from us.

We will push you.

We will be supportive.

We will explain why.

We will provide a safe, fun, & supportive environment.

We will make you feel welcome here.

We will give you breaks.

ZONES of Development



Problem Solving Protocol (PSP)

1. Try Something!
2. Google
3. Rubberduck your code
4. Ask a peer
5. Ask a teacher/TA
6. Take a break and come back to it



“The master has failed more times than the beginner has even tried.”

https://www.goodreads.com/author/quotes/4577067.Stephen_McCrannie

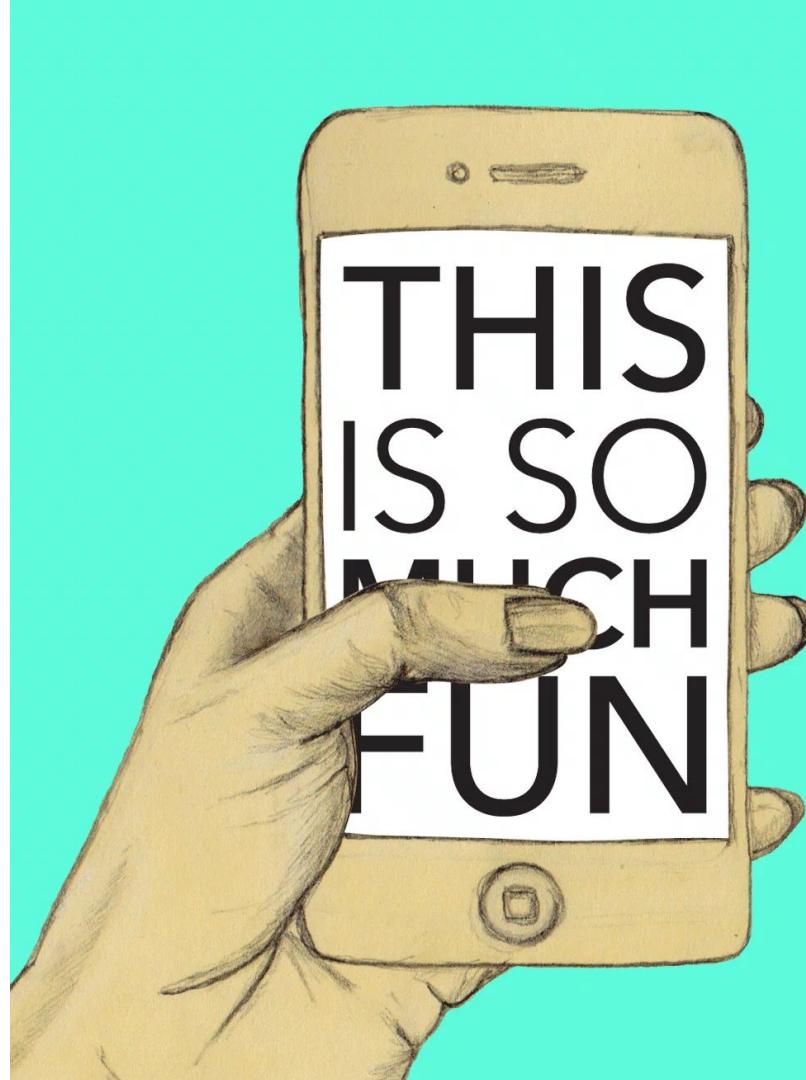


Distractions

- Phone
- Other tabs
- Real life around you

Solutions

- Minimize them, and...
- Tell us when it's too easy.
- Tell us when it's too hard.
- Proactively communicate with us.
- Let us know when you need a minute.





Choose Your Own Adventure Time

- While it is optional that you are on a zoom call, we expect you to use this time to work on developing the skills you learn in class!
- You decide how to spend your time (we'll give you some suggestion)!
- If you run into some bumps, don't worry! We will always be just one slack message away, and you can always log into Zoom to get help.
- This is a time for you to gauge your understanding and show how powerful you can be on your own!



Getting Set Up

- Click on the arrow next to the video camera, and click “Video Settings”, then “General”, then uncheck “Enter full screen when a participant shares their screen.”
- Make your zoom screen takes up only the half of your screen.
- Type **y** in chat when you’ve finished this part of the setup.

Settings



General



Video



Audio



Share Screen



Chat



Background & Filters



Recording



Profile



Statistics



Feedback



Keyboard Shortcuts



Accessibility

Window size when screen sharing:

- Fullscreen mode
 - Maximize window
 - Maintain current size
-
- Scale to fit shared content to Zoom window
 - Side-by-side Mode ?
 - Silence system notifications when sharing desktop



Share applications

- Share individual window
- Share all windows from an application

When I share my screen in a meeting

- Automatically share desktop ?
- Show all sharing options

When I share directly to a Zoom Room

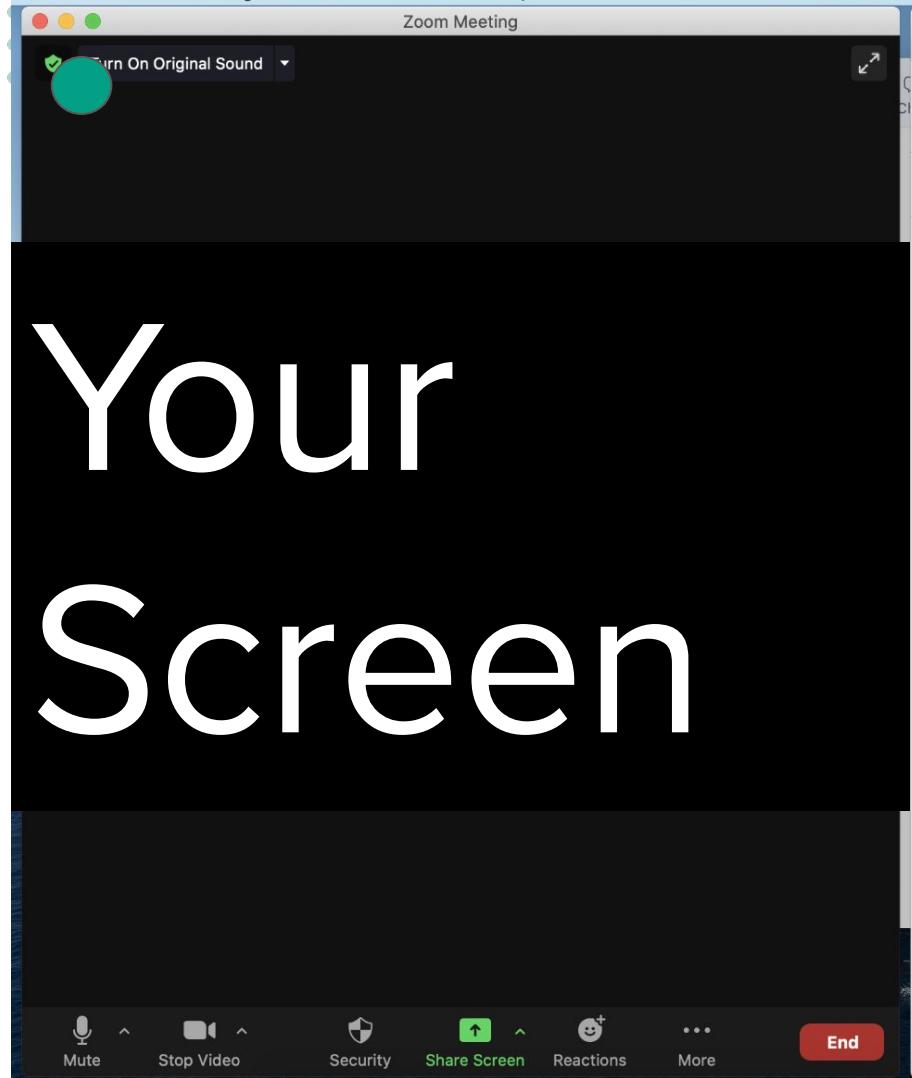
- Automatically share desktop ?
- Show all sharing options

[Advanced](#)



Getting Set Up

- On the right half of your screen, open a browser window (Chrome or Firefox recommended)
- When we share one: open the repl.it link from the zoom chat in your browser window (so you have repl.it on one half of your screen and zoom on the other half)!

A screenshot of a web-based code editor on glitch.com. The title bar says "sketch.js – pong-workshop-practice X". The URL in the address bar is "glitch.com/edit/#!/pong-workshop-practice?path=sketch.js". Below the address bar, there are tabs for "Apps", "2020 Finances", "2021 Finances", and "Uppercase PM". On the right side of the header, there are links for "Other Bookmarks", a user profile, and a search bar containing "sketch.js".

Format This File

```
1 //Code to implement collision detection
2 console.log("### p5.collide ###"),p5.prototype._collideDebug=!1,p5.prototype.collide=
3
4 let ballX, ballY, ballXVelocity, ballYVelocity, gameStarted, lives, bricks;
5
6 function setup(){
7   // Code here runs only once
8   createCanvas(800, 600)
9   ballX = 50;
10  ballY = 50;
11  ballXVelocity = 0;
12  ballYVelocity = 0;
13  gameStarted = false;
14  lives = 3;
15  gameOver = false;
16  textAlign('center');
17  bricks = [];
18  for(let i = 0; i < 5; i++){
19    for(let j = 0; j < 5; j++){
20      let newbrick = new Brick(60 + (i * 90), 60 + (j * 30));
21      bricks.push(newbrick)
22    }
23  }
24
25 }
26
27 function draw(){
28   background(220)
29   noStroke();
30
31   setLives();
32   if(gameOver == false){
33     createBall();
34   }
35
36   bricks.forEach((brick) => {brick.draw()})
37 }
```



Break Through Tech Summer Guild - One Week

Day 1&2: HTML, CSS, & Design



Day 3: JS + Project Launch



Day 4&5: Project Mode



AGENDA: Day 1

5	9:00am Start work 6:00pm Finish work	6
---	---	---

9:00 - 10:00	Course Launch
10:00 - 10:45	Intro to HTML Lab : NYC Boroughs Lab Site / Docs : Student-facing HTML CSS JS Reference
10:45 - 11:30	Found a Restaurant - First Webpage
11:30 - 12:30	LUNCH
12:30 - 1:00	Design Principles Template : CSS Classes Template
1:00 - 1:15	CSS Class Selectors
1:15 - 2:00	Found a Restaurant - continued
2:00 - 2:30	Close
2:30 - 3:30	Choose Your Own Adventure Time



Break until _____

*If you had any trouble with Slack or repl.it
DM Emily or Evelyn*



Let's get started!



New York City Nesting Exercise

```
1 <USA>
2   <state id="New York">
3     <city id="NYC">
4       <area class="borough" id="Brooklyn">
5         <park class="public free" id="ProspectPark">
6           </park>
7         </area>
8       <area class="borough" id="Manhattan">
9         <park class="public free historic" id="CentralPark">
10          <landmark id="theObelisk" />
11        </park>
12        <museum class="science" id="MuseumOfNaturalHistory">
13          </museum>
14        </area>
15       <area class="borough" id="Queens">
16         </area>
17       </city>
18     </state>
19   <state id="Tennessee">
20     <city id="Nashville">
21       <street id="AndrewCrockettCt">
22         <house id="1725">
23           Rob and Mary!
24         </house>
25         <house id="1727">
26           Jeff's parents!
27         </house>
28         <house id="1729">
29           Gwen and Jody!
30         </house>
31       </street>
32     </city>
33   </state>
34 </USA>
```



HTML - Basic Structure

index.html

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <meta charset="utf-8">
5          <meta name="viewport" content="width=device-width">
6          <title>repl.it</title>
7          <link href="style.css" rel="stylesheet" type="text/css"
8              />
9      </head>
10     <body>
11         <script src="script.js"></script>
12     </body>
13 </html>
```

<!DOCTYPE html>

<HTML>

<HEAD>

</HEAD>

<BODY>

CONTENT

</BODY>

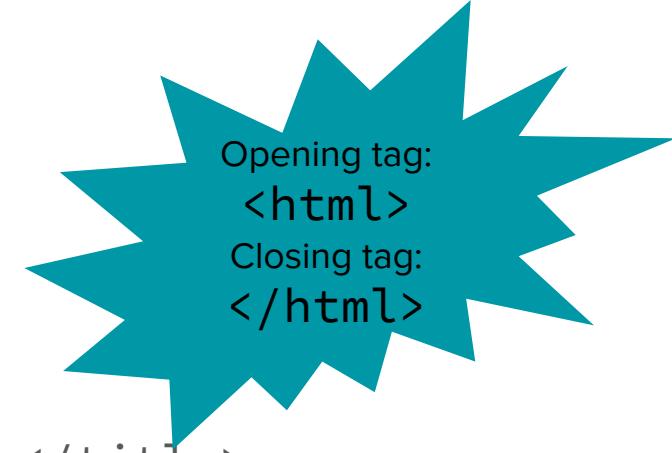
</HTML>

HTML Code Indenting



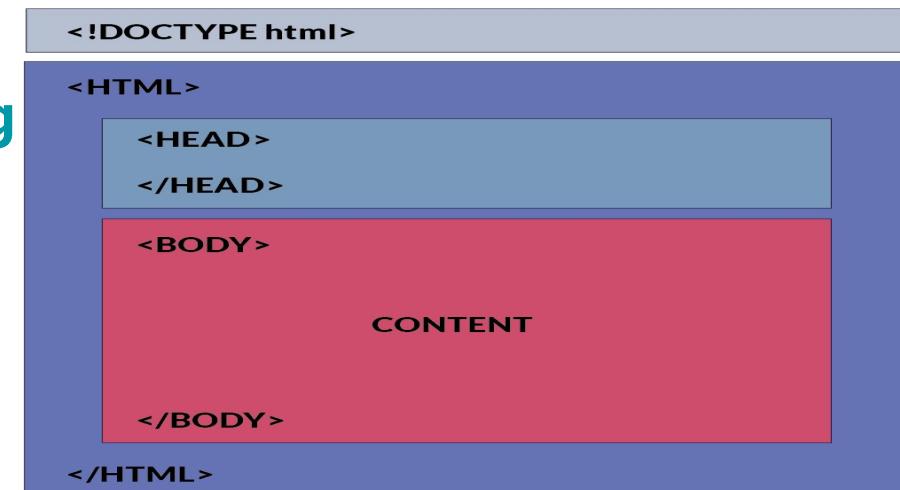
Indentations show how tags nest inside of each other!

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Webpage</title>
  </head>
  <body>
    <h1>Heading One</h1>
    <h2>Subtitle One</h2>
    <p>Some info about subtitle one</p>
  </body>
</html>
```



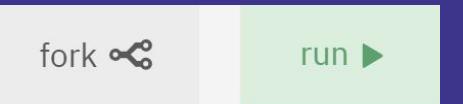
Things to Remember:

- **<html>** should be the first tag on the page
- **</html>** should be the last tag on the page
- **<head></head>** contains information that does not appear on the web page
- **<body></body>** contains information that will appear on the web page
- **Content goes INSIDE opening and closing tags**
- **Indent to organize code**



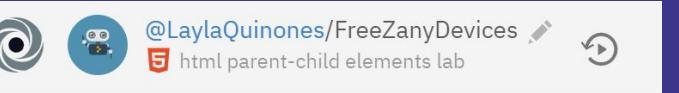
Boroughs Lab:

1. Click on the following [link](#)



2. Click on “Fork”

3. Rename by clicking on the pencil

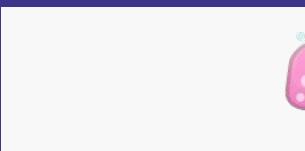


4. Give a green check in participants window when you are ready



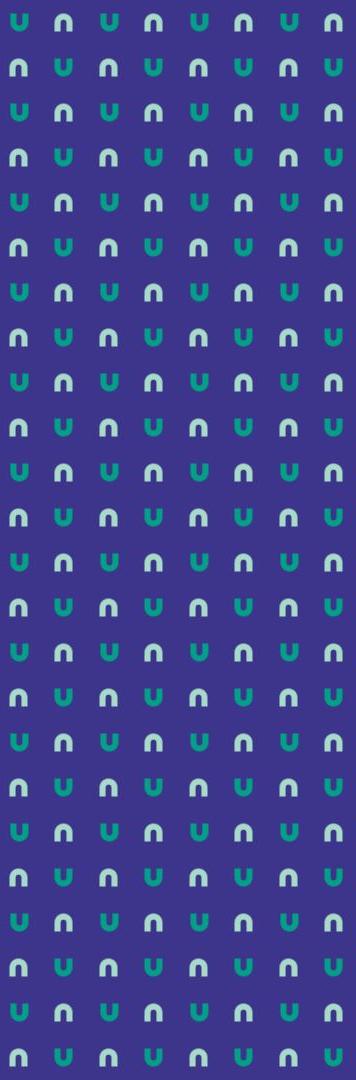
5 min Bio Break!

1. Turn off your camera if you are leaving the meeting
2. When you return turn on your camera
3. While you wait, think of a restaurant you would like to create!





GAME BREAK!





HTML Tags to KNOW

- **<div></div>** : Divides sections in your web page
- **<h1></h1>** to **<h6></h6>** : Heading tags with varying sizes
- **<p></p>** : paragraph tag for basic text
- **** and **** : List tags (each list element must be inside of **** tags)
- ****: adds an image from **URL** (does not have closing tag)
- **Text Goes Here**: adds link to URL



Notes and References

- [W3Schools Reference](#)
 - Our go-to site for reference materials
- [Student Notes](#)
 - An organized & succinct list of tips and references for your coding journey!



DEMO Restaurant Page

Found a Restaurant Project - Brainstorm

When you are in **breakout rooms**

1. Greet your partner!
2. Nominate a **scribe** (share screen and take notes)
3. Brainstorm the following information for the restaurant page you will be creating together!

- Name of restaurant
- Style of cuisine
- Where it will be located, contact info
- Top 3 dishes
- Motto or mission statement

Example Motto:

"Phish & Chipz is a fried tuna sandwich eatery that hopes to make even your most fried and fishiest dreams come true."



Lunch

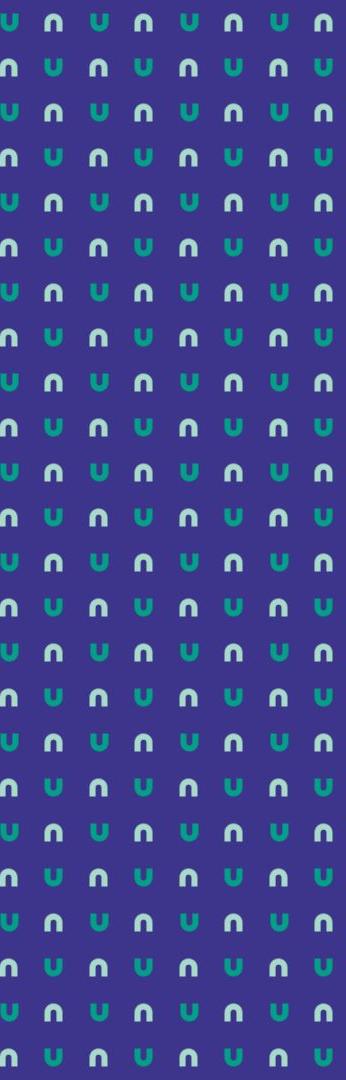
11:30 - 12:30

1. Turn off your camera to signify you've stepped away from your computer...
2. When you return from lunch, please turn on your camera to let us know you're back!



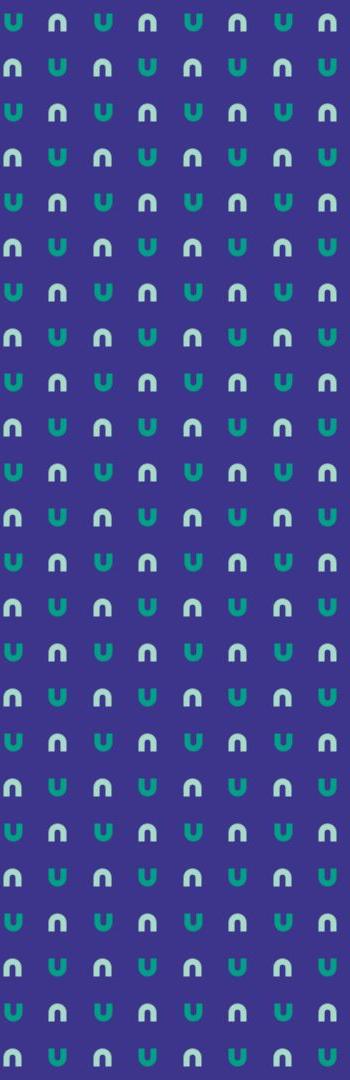


Let's play a GAME!



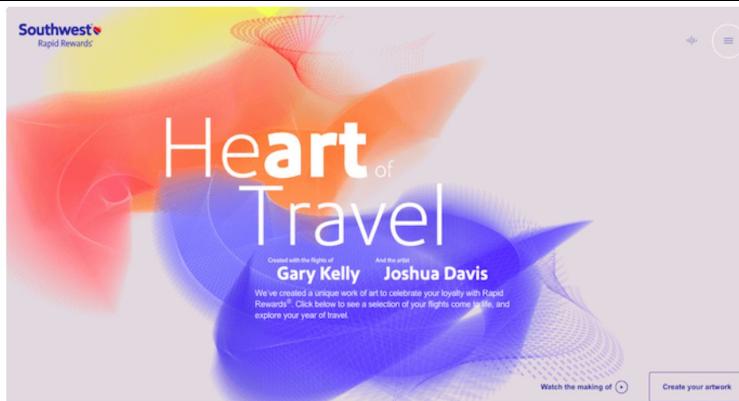


Design Principles



Effective Design

Ineffective Design	Effective Design
<ul style="list-style-type: none">• Abrasive/Harsh Colors• Disorganization• Too much text, usually without clear headers and subheaders• Very little negative space	<ul style="list-style-type: none">• Easy to interpret/Clear information• Leads the viewer to a focal point<ul style="list-style-type: none">◦ Colors◦ Layout◦ Fonts



LINE CODE



HIERARCHY

ORGANISES AND DIRECTS A READER BY GROUPING TOGETHER RELATED ELEMENTS TO CREATE A FOCAL POINT OF INTEREST

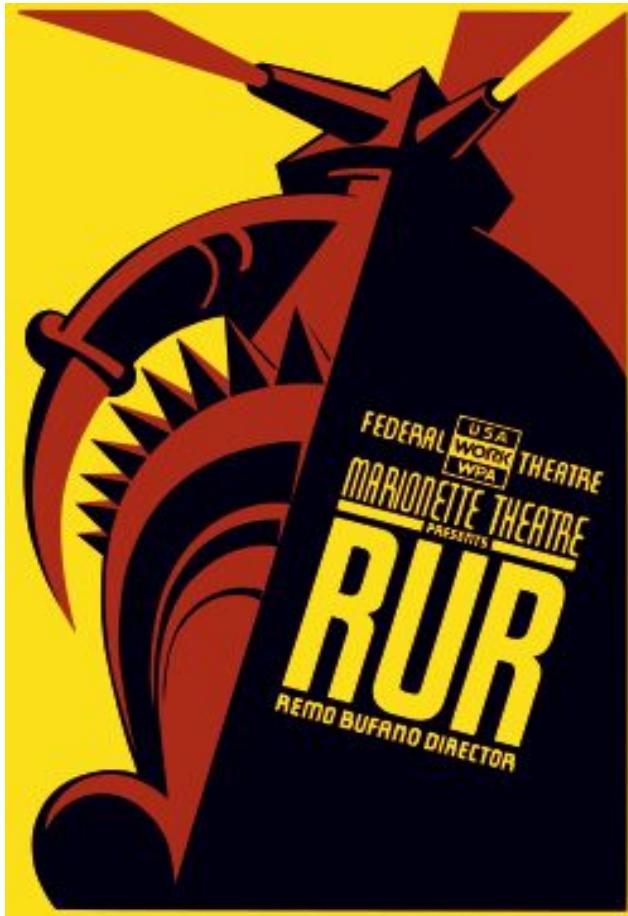
A well executed visual hierarchy will guide the reader effortlessly through your design from beginning to end.

This is **good**.

I know what word is important.
You have my attention.

**This is bad.
Everything is
the same size.
What's
important?**

Balanced Visual Elements





Effective Web Design Checklist

- ❑ Bold, graphic, intentional
- ❑ Utilizes white space to emphasize
focal point
- ❑ Design hierarchy
 - ❑ important info is up top
(large fonts)
 - ❑ specific info further down
(smaller fonts)
- ❑ Consistent & compatible

Google: Color Picker
[W3Schools - Color Names Reference](#)
[Color Schemes](#)

Color

- Text color:
 - contrast with background (emphasis)
 - black, white, shades of grey
- Background color:
 - gentle or bold colors
 - Want to complement the text color
 - Help to structure your page/group components together!

```
h1{  
    color: white;  
    background-color: black;  
}
```

```
h1{  
    color: #FFFFFF;  
    background-color: #000000;  
}
```



When adding style to our pages, we can style with...

- Element name - grabs every “p” and gives the same style

```
p {
```

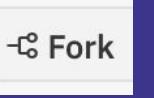
- Id tag - used for UNIQUE elements
(like the NYC Boroughs lab -- ex: #Brooklyn)

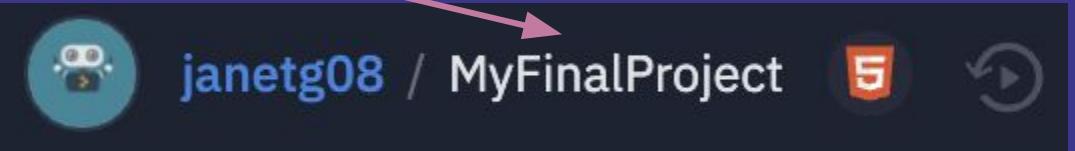
```
#nameId {
```

- Class tag - used for components you can group together

```
.nameClass {
```

CSS Class Selectors

1. Fork the [Template](#) 
2. Rename by clicking on the current file name



3. Work in the ids.css file for 3 minutes (complete as many as you can!)

Font Size & Weight:

- No more than 2 or 3 fonts
- Size
 - px
 - %
 - rem (2rem → 2x bigger than normal)
- font-weight (100 - 900)

```
h1 {
```

```
  font-family: Comic Sans MS;  
  font-size: 30px;  
  font-weight: 400;
```

```
}
```

SENTINEL
TIMELESS BEAUTY
Fann St to Broadway
effortlessly persuasive
1845–2009
a fresh take on this useful and lovely style
The definitive Clarendon
heavy duty, though gentle enough for daily use
THE SLAB SERIF THAT WORKS
charcoal gray suit, or a well-chosen pair of horn-rimmed glasses

Font Resources:

[W3Schools - Fonts](#)
[Google Fonts](#)
[Font Pairings](#)

Google Fonts: Quick Preview

Font - Imported from Google Fonts.

<https://fonts.googleapis.com/>

```
/* load in the font from google fonts at the top of the stylesheet */
@import url('https://fonts.googleapis.com/css?family=Economica');

li {
  font-family: 'Economica', sans-serif;
  /* Use the font (with a fallback) in the elements you want to style. */
}
```

Padding & Margins

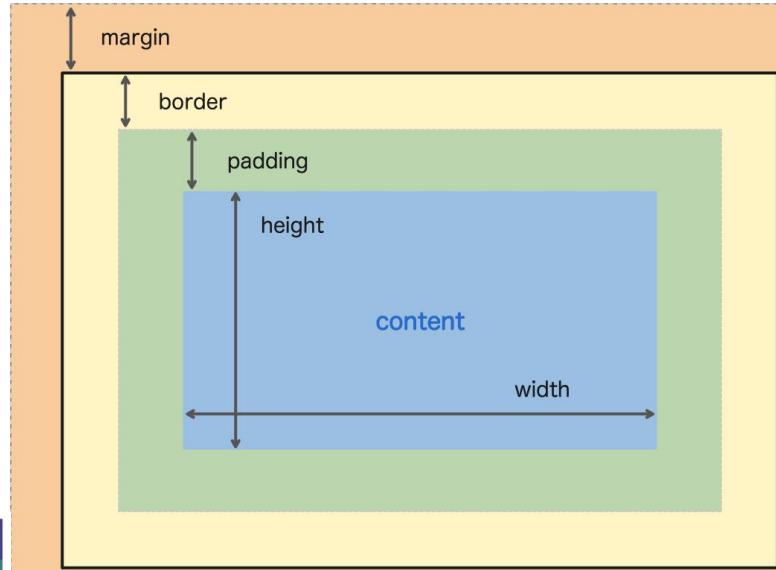
- Create **whitespace** around objects on your page
- Used to organize important information
- Facilitates focal point

This element has a NO padding, NO margin

This element has a 30px padding, NO margin

This element has a NO padding, 30px margin

This element has a 30px padding, 30px margin





The Web Inspector



1. Right click on the webpage on your **google chrome browser** (make sure the page is displayed in a new window)
2. Click “Inspect”

[CSS References](#)[W3Schools CSS References](#)[Background Images](#)[Fixed Background/No Repeat](#)

Other Styling:

Text Shadow

Use the `text-shadow` property to add a shadow to the text on a page.

Use four values: `text-shadow: offsetX offsetY blur color;` To get a crisp shadow, use 0 for the blur value.

```
h1 {  
  text-shadow: 2px 2px 0px black;  
}
```

Box Shadow

Use the `box-shadow` property to add a shadow to the entire rectangular area of an element.

Use four values: `box-shadow: offsetX offsetY blur color;` To get a crisp shadow, use 0 for the blur value.

```
h2 {  
  box-shadow: 10px 10px 0px rgba(0,0,0,0.3);  
}
```

CSS Syntax

Selector

Declaration

Declaration

h1

{ color:blue; font-size:12px; }

Property

Value

Property

Value

The selector points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

Wrap Up

Stretch & Share

Daily Microfeedback

Today's Choose Your Own Adventure Lab:
New York News Lab

Finish Your First Webpage

Don't forget to drop us
the link before you leave!

**Not done yet? Don't worry! You'll have more
time to work in just a few minutes :)**

Your Turn!

Now you can apply these amazing tools to your restaurant pages!

Requirements:

Your site should have the following:

- Skeleton HTML (**html, head, title, body**)
- At least **two** header elements (h1, h3, etc.)
- At least **one** image
- At least **one** paragraph
- At least **one** anchor (a) element linking to another page

Design Tips:

- Use white space to lead the viewer's eyes around the page (**padding & margins**)
- Use custom color codes for unique colors
- Consider fonts that pair well together

Choose Your Own Adventure

1. Complete and submit restaurant web page
2. Finish the labs we started in class
3. [New York News Lab](#)