

The background is a dark navy blue. In the top-left and bottom-left corners, there are overlapping, semi-transparent geometric shapes in shades of blue, green, and orange. In the top-right and bottom-right corners, there are similar overlapping shapes in shades of green, blue, and orange. The text is centered in the middle of the image.

HCDE 438

MODERN

WEB

DEVELOPMENT

Today

- › Logistics
- › Git review
- › Break
- › Live dev demo + HTML/CSS
- › Work time

Logistics

Logistics

- › Stuff that is private is on Canvas, e.g. office hours, assignment submissions, Discord invite
- › Everything else is on the Github
- › Talk on Discord!

Grades

1000 points:

- 400 MP0/1/2/3 => (100x4)
- 300 Final project
 - 50 Proposal
 - 100 MVP
 - 150 Final Submission
- 100 Hair-Tear-Shares (50x2)
- 100 Final Portfolio
- 100 Peer Teaching

Course GitHub!

<https://github.com/branchwelder/web-technologies>

New: a schedule! Resource lists! These will be constantly updated over the quarter.

Git Review

What is Git?

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Git is a free and open source distributed version control system.

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In other words, Git is a tool that helps you record and manage the history of your files.

git != github

What is GitHub?

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GitHub is a collaboration platform that uses Git for versioning.

What is a repository?

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A repository is a project containing files and folders. A repository tracks versions of files and folders.

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A repository is a project containing files and folders. A repository tracks versions of files and folders.

On your computer, it just looks like a normal folder in your file system!

Git Demo Time

The Terminal

cd

change directory

ls

list of files in the current directory

mkdir

make a folder

touch

make a file

Break !

MP0 Walkthrough

HTML/CSS

Recap

HTML is the content of your website: a bunch of text and references to images wrapped in tags.

CSS is the design of your website. It targets the tags you wrote in your HTML and applies the style.

HTML Tags

There are A LOT of them! Some of the ones that you will use the most are:

- › div
- › headers (h1-h6)
- › button
- › break

- › Bold, italic, code (, <emph>, <code>)

HTML



In HTML, an element which contains content has a starting tag and a closing tag.

attribute



```
<button class="my-button">  
  click me!  
</button>
```

Closing tag



HTML



Elements without children can also be self-closing, which looks like:

```
<br />
```

```
<button />
```

HTML



Elements have “attributes” and “children”

attribute



```
<button class="my-button">  
  click me!  
</button>
```

children





CSS: Cascading Style Sheets

selector



```
.my-button{  
  background:  rgb(50,150,250);  
  color:  white;  
}
```

HTML



+



```
<button class="my-button">
  <div> click me! </div>
  <div class="smiley">😊</div>
</button>
```

```
.my-button{
  background:rgb(50,150,250);
  color:white;
}

.smiley{
  font-size:42px;
}
```



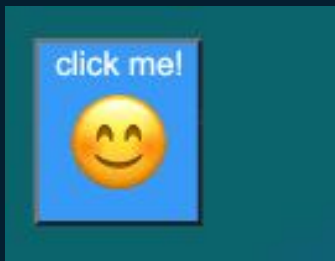
CSS: Cascading Style Sheets



```
1  .class{
2      /* layout */
3      height: 100%;
4      width: 100%;
5      padding: 10px;
6      margin: 20px;
7      /* text styles */
8      font-family: 'Helvetica Neue', arial, sans-serif;
9      font-weight: 400;
10     text-align: center;
11     color: #444;
12     /* visual things */
13     border: 1px solid grey;
14     border-radius: 4px;
15     background: url(http://hdwpro.com/wp-content/uploads/2017/01/3D-Cool-Image.jpg);
16     z-index: 100;
17 }
```



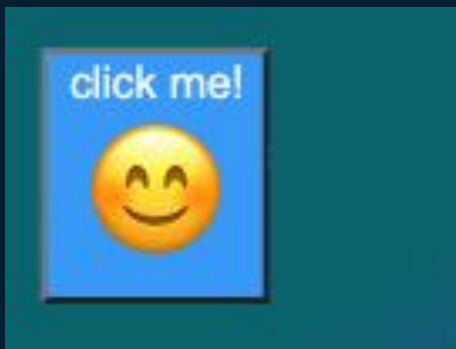
:hover



```
.my-button{  
    background:rgb(50,150,250);  
    color:white;  
    cursor:pointer;  
}  
  
.my-button:hover{  
    background:white;  
    color:rgb(50,150,250);  
}
```



:focus



```
.my-button:focus{  
  background:black;  
}
```

CSS: “position”



```
position: relative;
```

regular
(elements stack)

```
position: absolute;  
top: 10px;  
left: 20px;
```

elements don't
know about each
other

CSS: Flexbox

CSS Flexible Box Layout, commonly known as Flexbox, is a CSS web layout model. The flex layout allows responsive elements within a container to be automatically arranged depending upon screen size.

[Flexbox Froggy](#) is a *great* way to learn a bit more about flexbox.

CSS: “display”



```
display: block;
```

“block” is the default

```
display: flex;  
flex-direction: column;  
align-items: center;  
justify-content: center;
```

“flex” is awesome!!!

CSS: “display”



```
flex-direction:
```

```
row;  
column;  
row-reverse;  
column-reverse;
```

CSS: “display”



```
align-items:  
justify-content:
```

```
center;  
space-between;  
space-around;  
flex-end;
```

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CSS Units

- **px** - pixel values are the most basic and easy
- **%** - percent values are somewhat responsive
- **vw/vh** - viewwidth and viewheight
- **rem** - “root ephemeral unit”

Lab Time!