

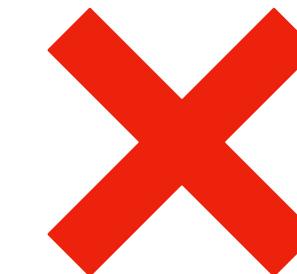
Web101 Intro

Members

HTML

CSS

Javascript



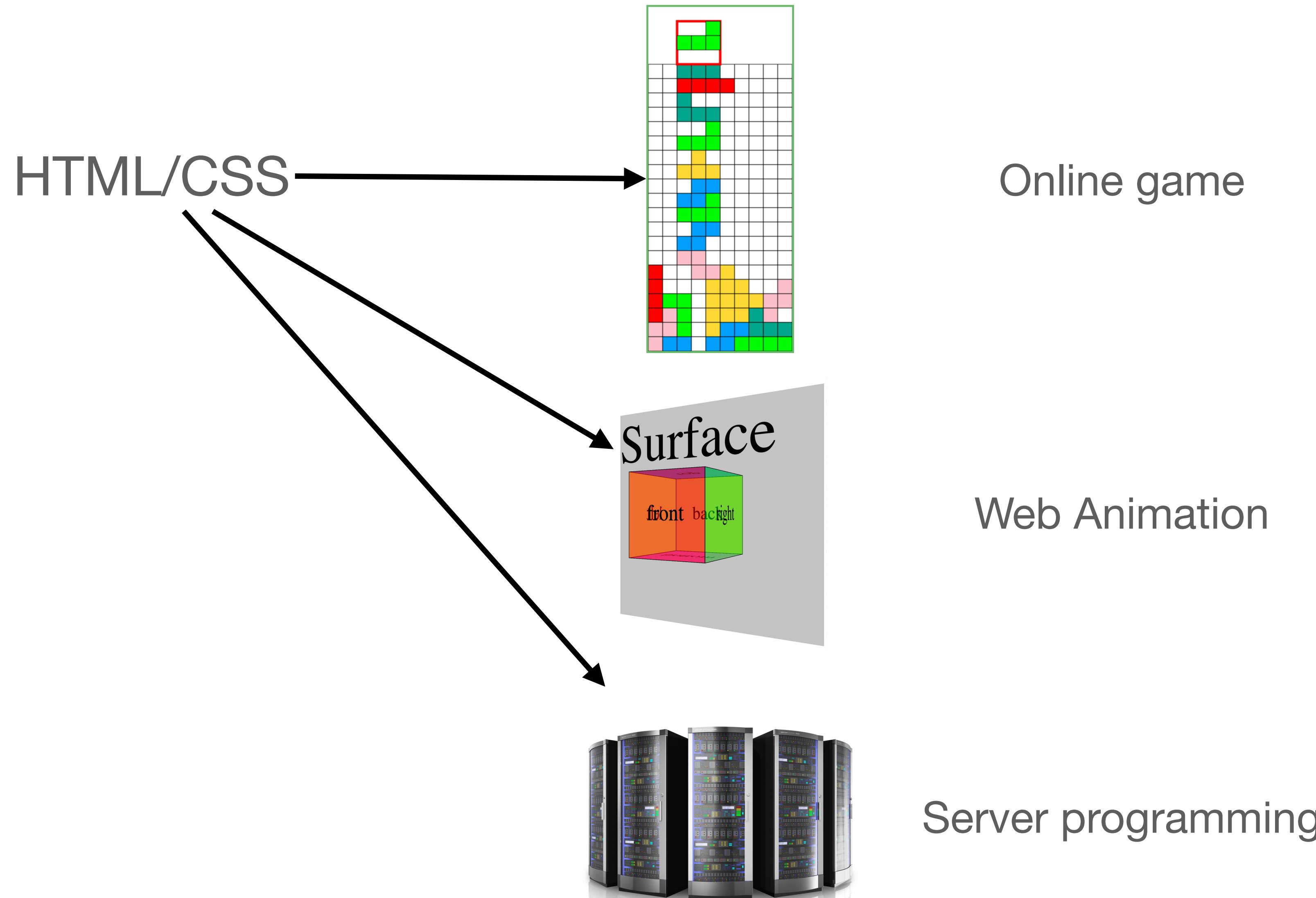
HTML for data



CSS for styling



HTML/CSS is the base



Web101 = Coding + Art

(Web user interface)

Including

- 2 languages: HTML, CSS
- 1 personal website for you and employers
- 2 pre-designed webpages
- regularly publish your work (homework or projects)
- you will get a certificate if you complete all

Download

- Brackets



<https://brackets.io>

- Chrome



<https://www.google.com/chrome/>

- ZOOM

Brackets extensions

- emmet
- beautify (edit -> beautify on save)
- Confetti

File structure

- C:_a\web101

or

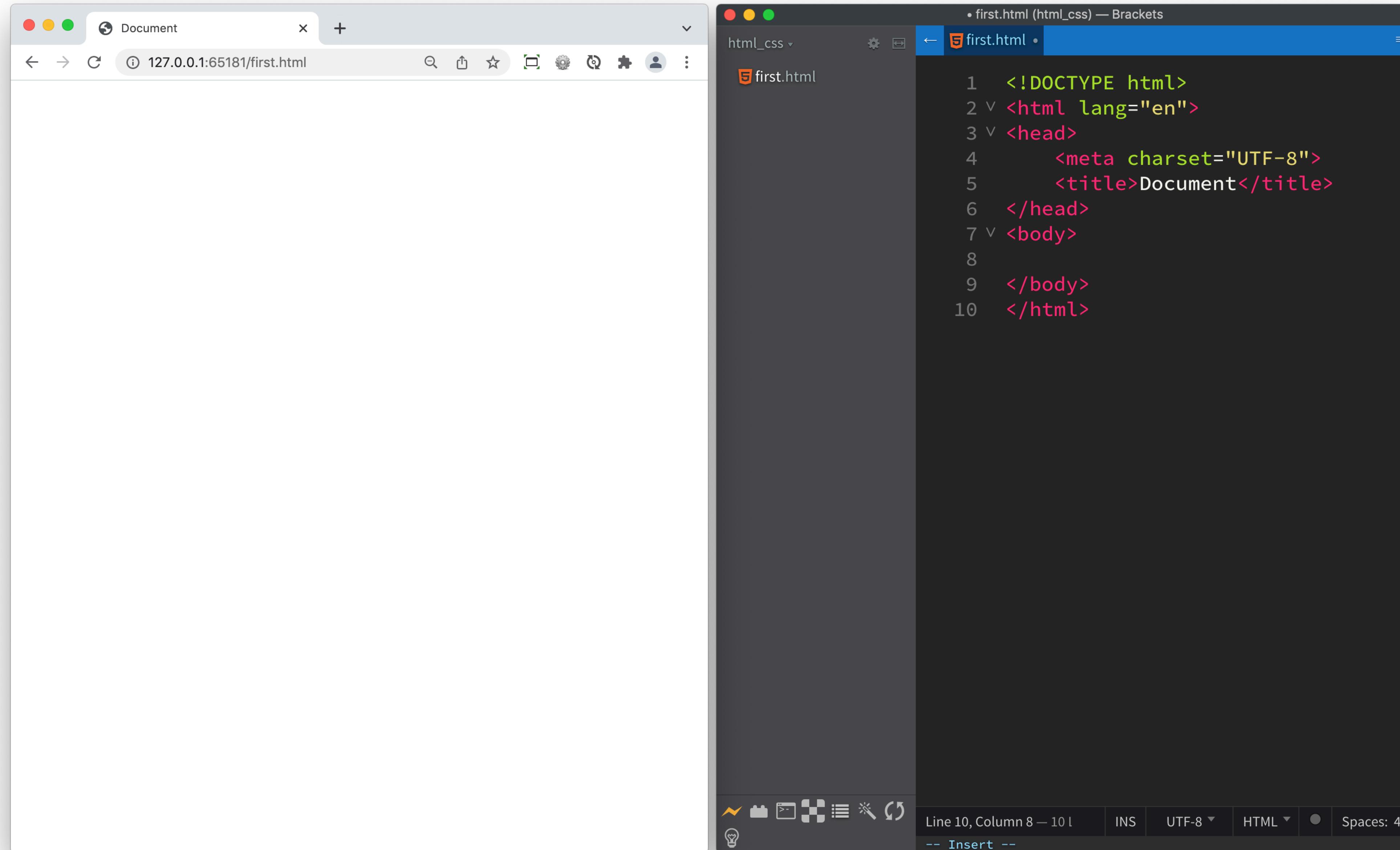
- ~/_a/web101

Live preview

127.0.0.1



Layout (half and half)



The image shows a 'half and half' layout where a web browser and a code editor are displayed side-by-side.

Left Side (Web Browser): A browser window titled 'Document' is open at the URL '127.0.0.1:65181/first.html'. The page content is completely blank, showing only the white space of the browser's rendering area.

Right Side (Code Editor): A code editor window titled 'first.html (html_css) — Brackets' is open. It displays the following HTML code:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Document</title>
6  </head>
7  <body>
8
9  </body>
10 </html>
```

The code editor interface includes a toolbar with various icons, a status bar at the bottom showing 'Line 10, Column 8 — 10 l', and settings for 'INS', 'UTF-8', 'HTML', and 'Spaces: 4'.

Layout

The screenshot shows the Brackets IDE interface. The top bar includes the menu: Brackets, File, Edit, Find, View, Navigate, Emmet, Window, Debug, Help. A green status bar at the top right indicates "You are screen sharing" and "Stop Share". The title bar shows "list.html (html_css) — Brackets". The main area has three tabs: "first.html", "t.html", and "list.html". The "list.html" tab is active, displaying the following code:

```
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5    <meta charset="UTF-8">
6    <title>Document</title>
7  </head>
8
9  <body>
10
11   <ul>
12     <li>tennis</li>
13     <li>hiking</li>
14     <li>talk with friend</li>
15   </ul>
16
17 </body>
18
19 </html>
20
```

The left sidebar contains a navigation tree with sections: "Form", "List", and "Link". The "List" section is currently selected. Below the sidebar, the preview panel shows a bulleted list:

- tennis
- hiking
- talk with friend

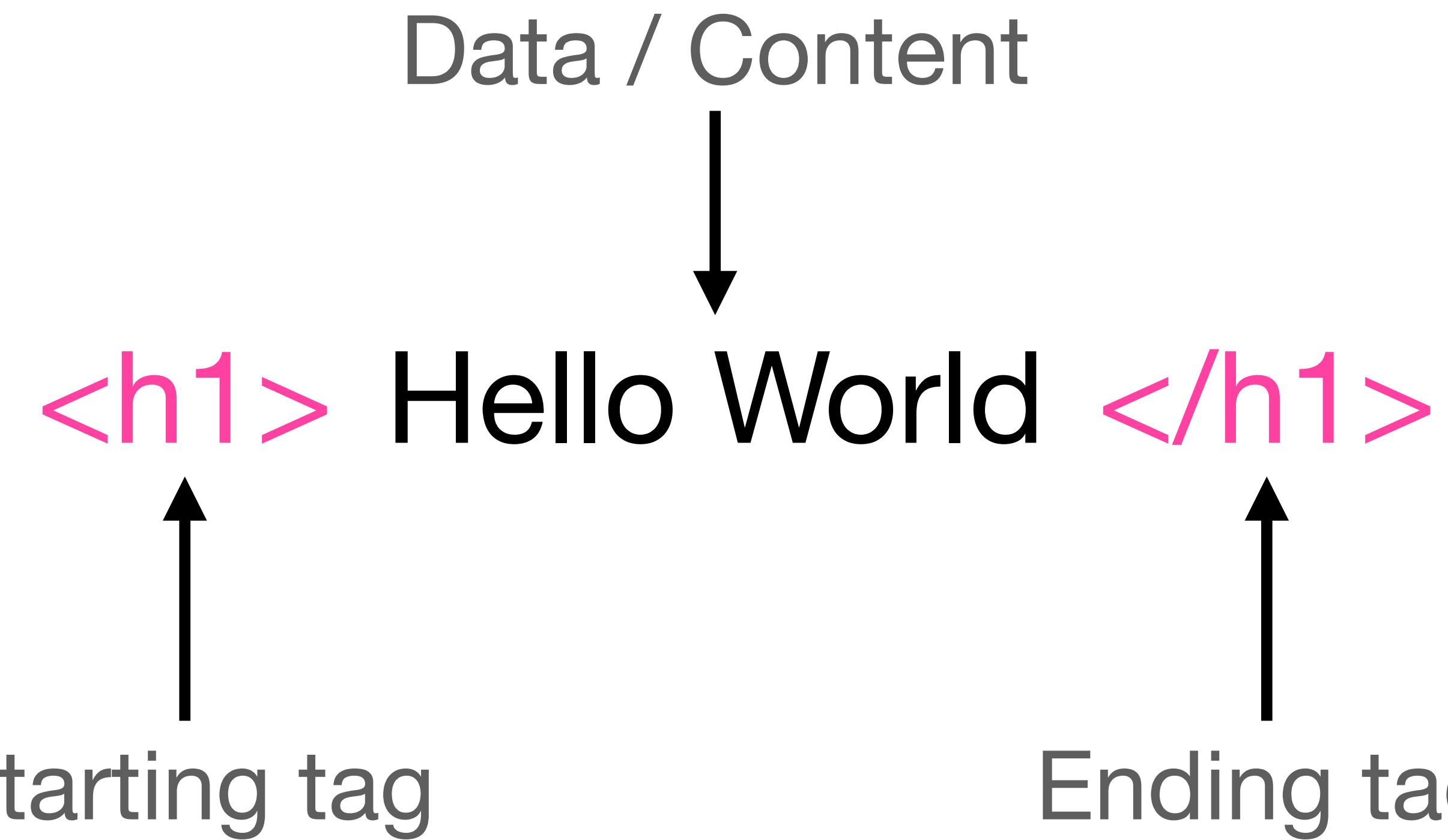
The bottom status bar shows "Line 20, Column 1 — 20 Lines", "INS", "UTF-8", "HTML", "Spaces: 4", and "-- Normal --".

HTML is all about Data:

- use tag to enclose data
- provide data a meaning (semantic)

`<h1> Hello World </h1>`

`<button> Ok </button>`



↑

Attribute

This diagram illustrates the structure of an HTML attribute. The text "" is shown in pink. A single upward-pointing arrow originates from the bottom of the attribute value "image address" and is labeled "Attribute".

HTML file structure

```
<!DOCTYPE html>
<html lang="en">

    <head>
        <meta charset="UTF-8">
        <title>Document</title>
    </head>

    <body>
        data → <h1>Hello World!</h1>
    </body>

</html>
```

Common format problems

<h1> Hello world </h1

<h1> Hello world <h1>

<h1> Hello world

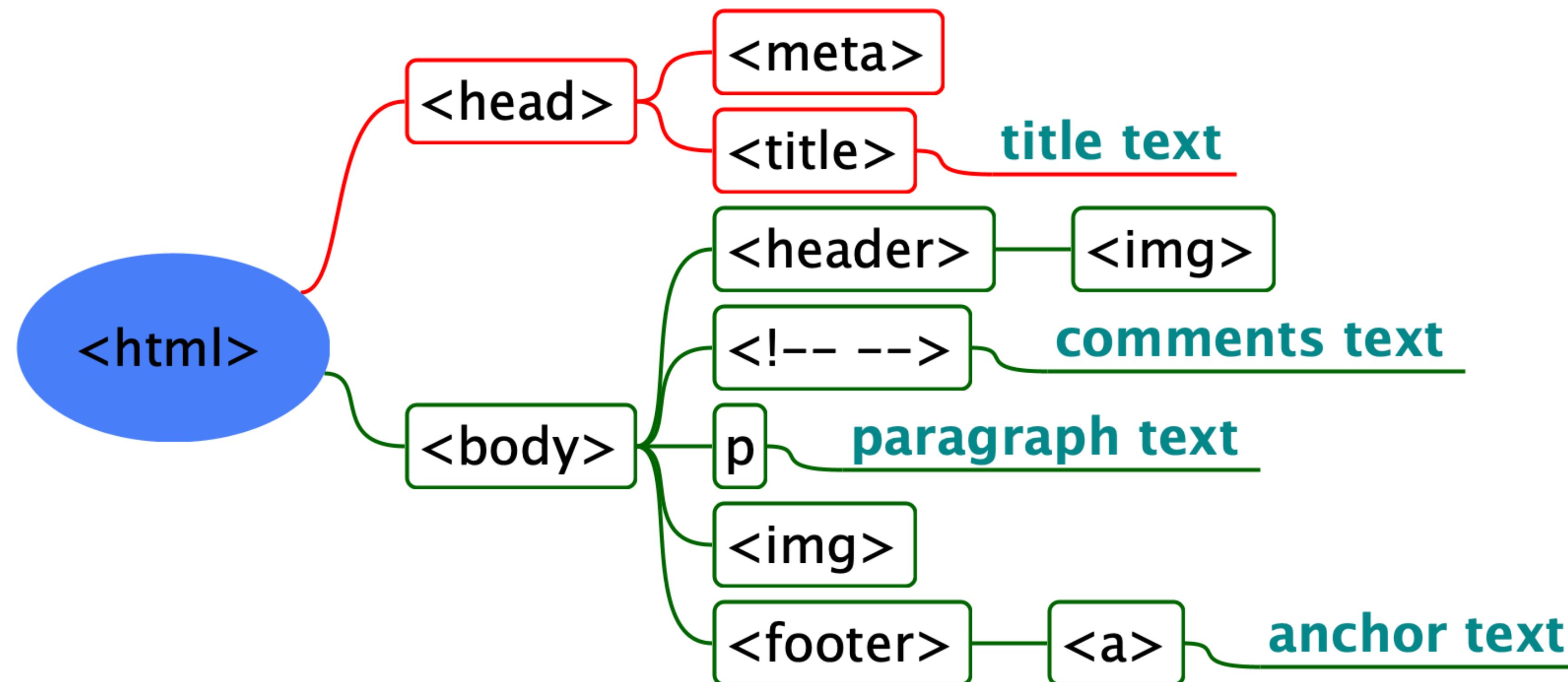
! <tab>
generate template

lorem200, lorem50

1st checkpoint:
Know how to write HTML
by yourself?

Share code (google doc)

HTML tree structure



url (universal resource location)

http://teensprogramming.com:8080?name=jason%20baker&password=123

protocol	domain (address)	port	key	value	seperator	query string
						url encoding

front-end developer
back-end developer
full stack developer

browser ————— **data** → server

Students need know how to try and learn HTML and CSS by themselves

CSS

css rule

selector property value

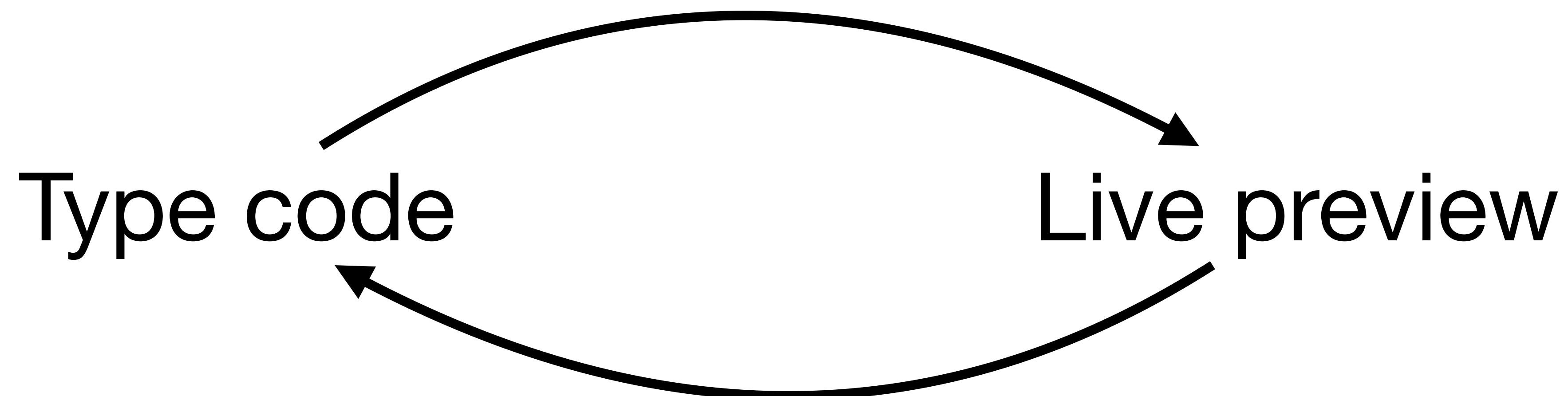
```
div { color: red; }
```

The diagram illustrates the structure of a CSS rule. At the top, the word "css rule" is written in orange. Below it, three orange labels are positioned horizontally: "selector" pointing to "div", "property" pointing to "color", and "value" pointing to "red". Below these labels is a block of CSS code: "div { color: red; }". The word "selector" has a black arrow pointing to the "div" in the code. The word "property" has a black arrow pointing to the "color" in "color: red;". The word "value" has a black arrow pointing to the "red" in "color: red;".

Shortcut

- mac: cmd-a, cmd-c, cmd-v
windows: ctrl-a, ctrl-c, ctrl-v
- undo: ctrl-z
- comments:
 - mac: cmd-/
 - windows: ctrl-/
- duplicate a line: ctrl-d
- remove a line: shift-ctrl-d
- live preview:
 - mac: opt-cmd-p
- open/close dev tools:
 - mac: opt-cmd-i
- make font larger:
ctrl-+

Practice interaction

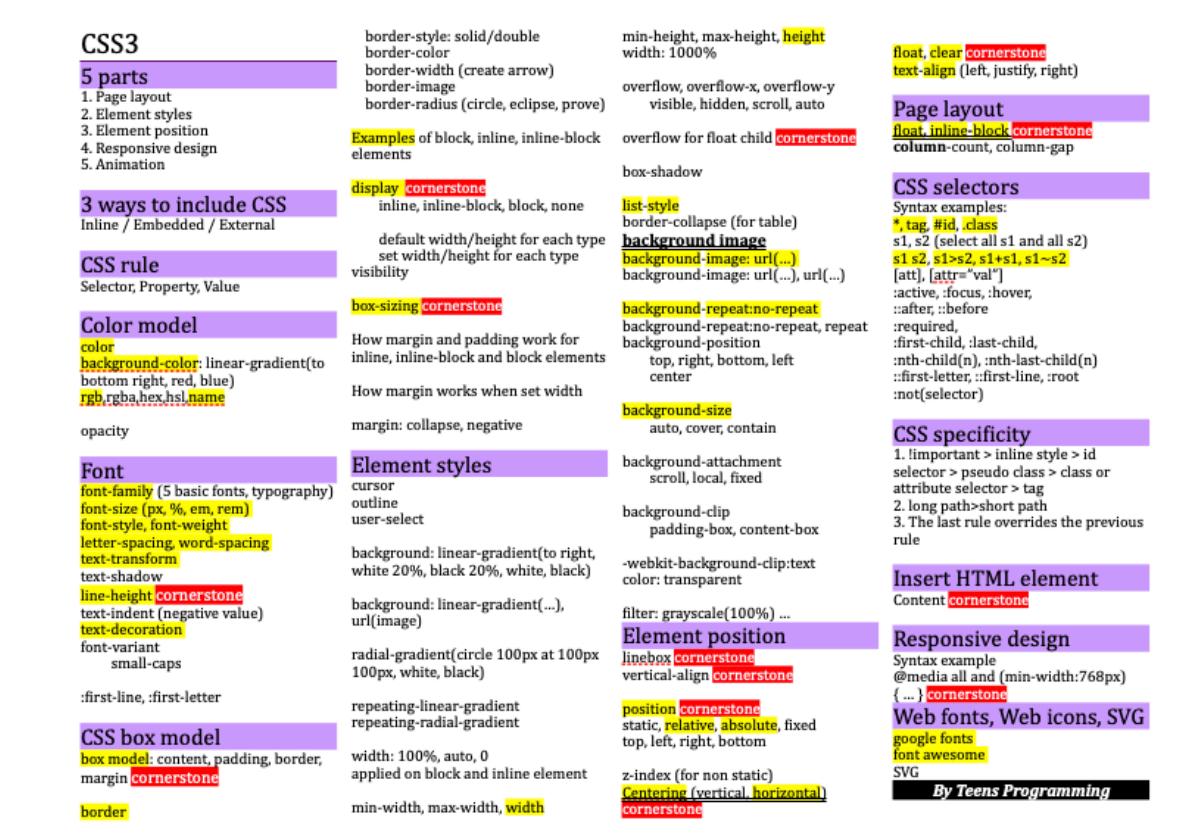


20 classes (40 hours)

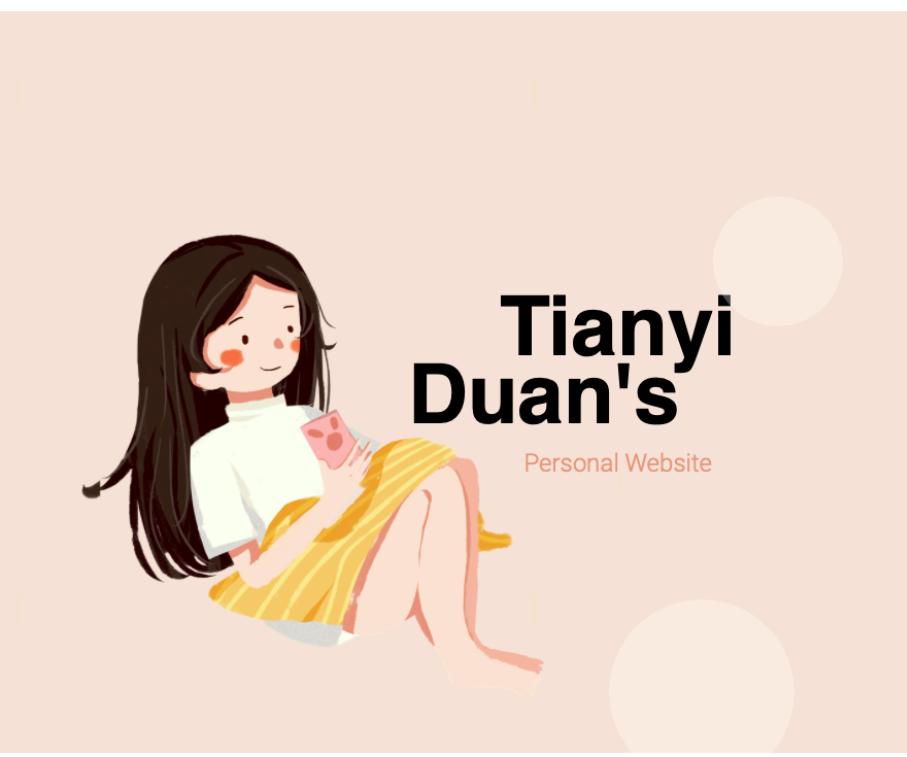
HTML cheatsheet



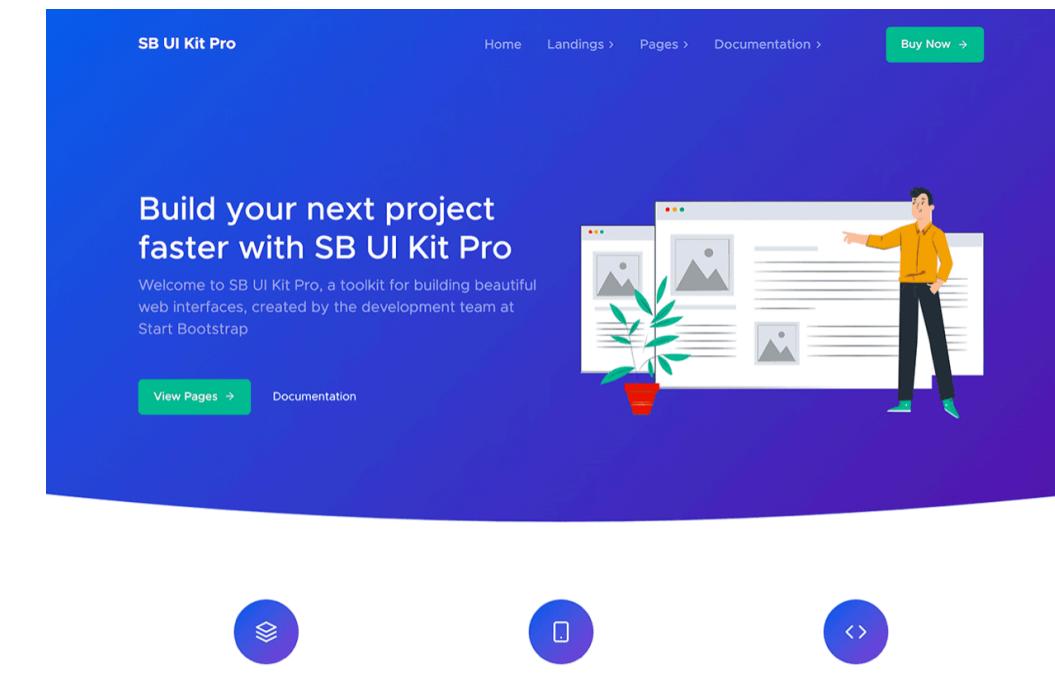
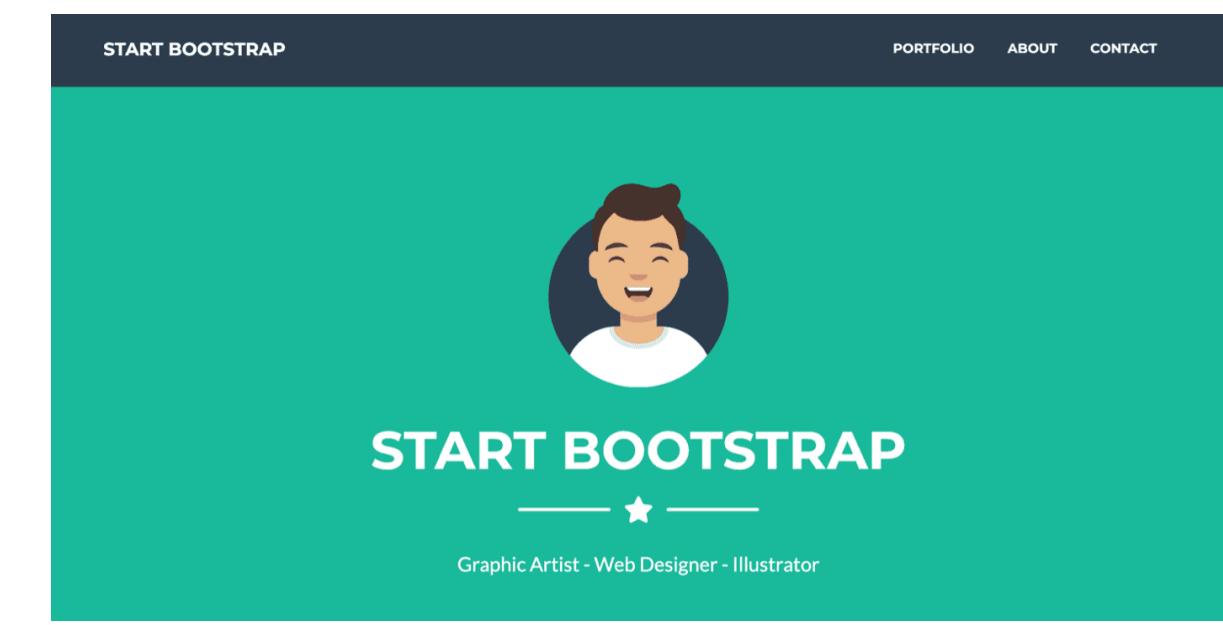
CSS cheatsheet



Your personal webpage



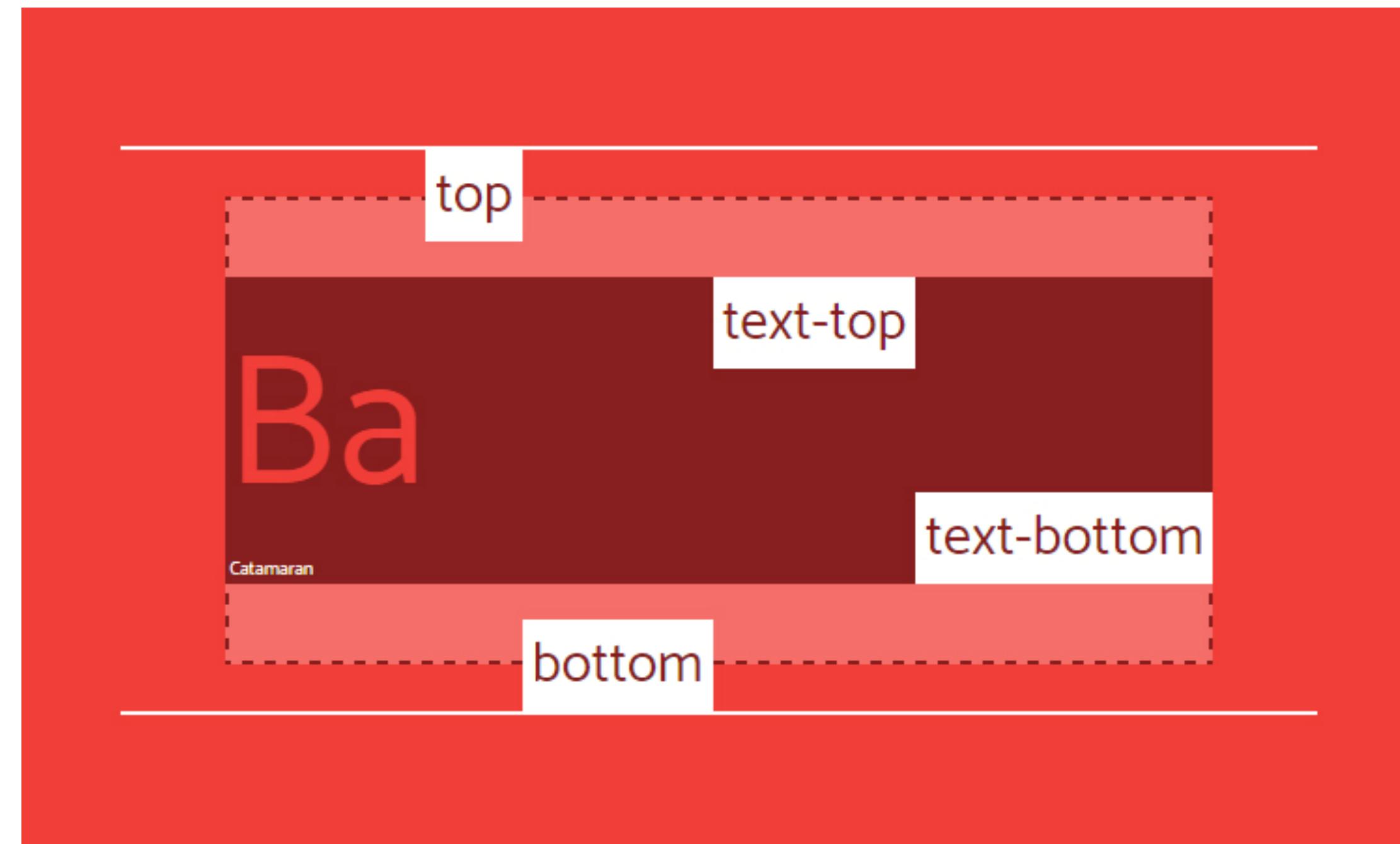
Recreating 2 professional designed web pages



Marks

1. box model, display, horizontal center 60
2. page layout 70 (inline-block, float)
3. position, git 80
4. responsive design, vertical center 90
5. box-sizing, overflow for float, content 100

Vertical-align



<https://iamvdo.me/en/blog/css-font-metrics-line-height-and-vertical-align>

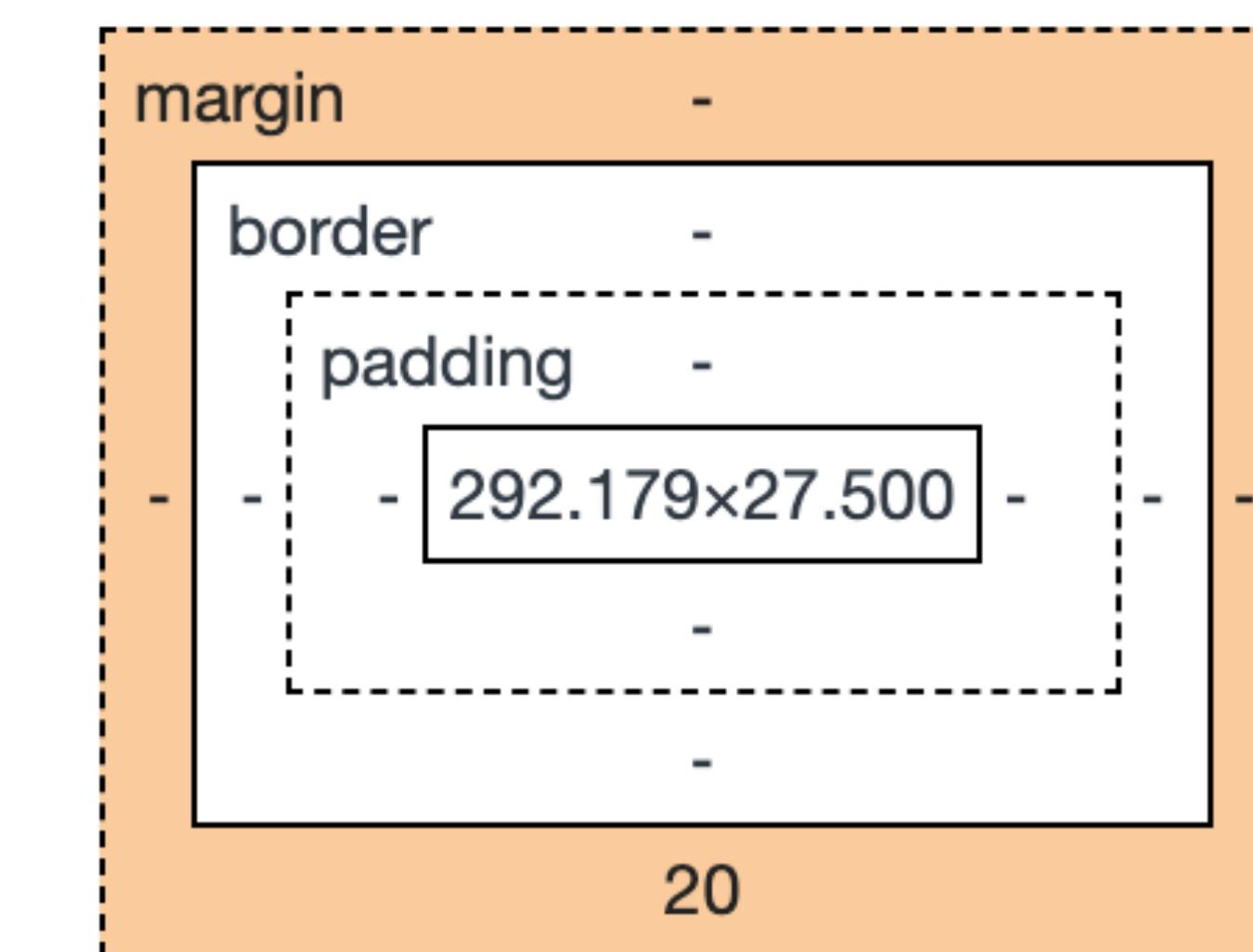
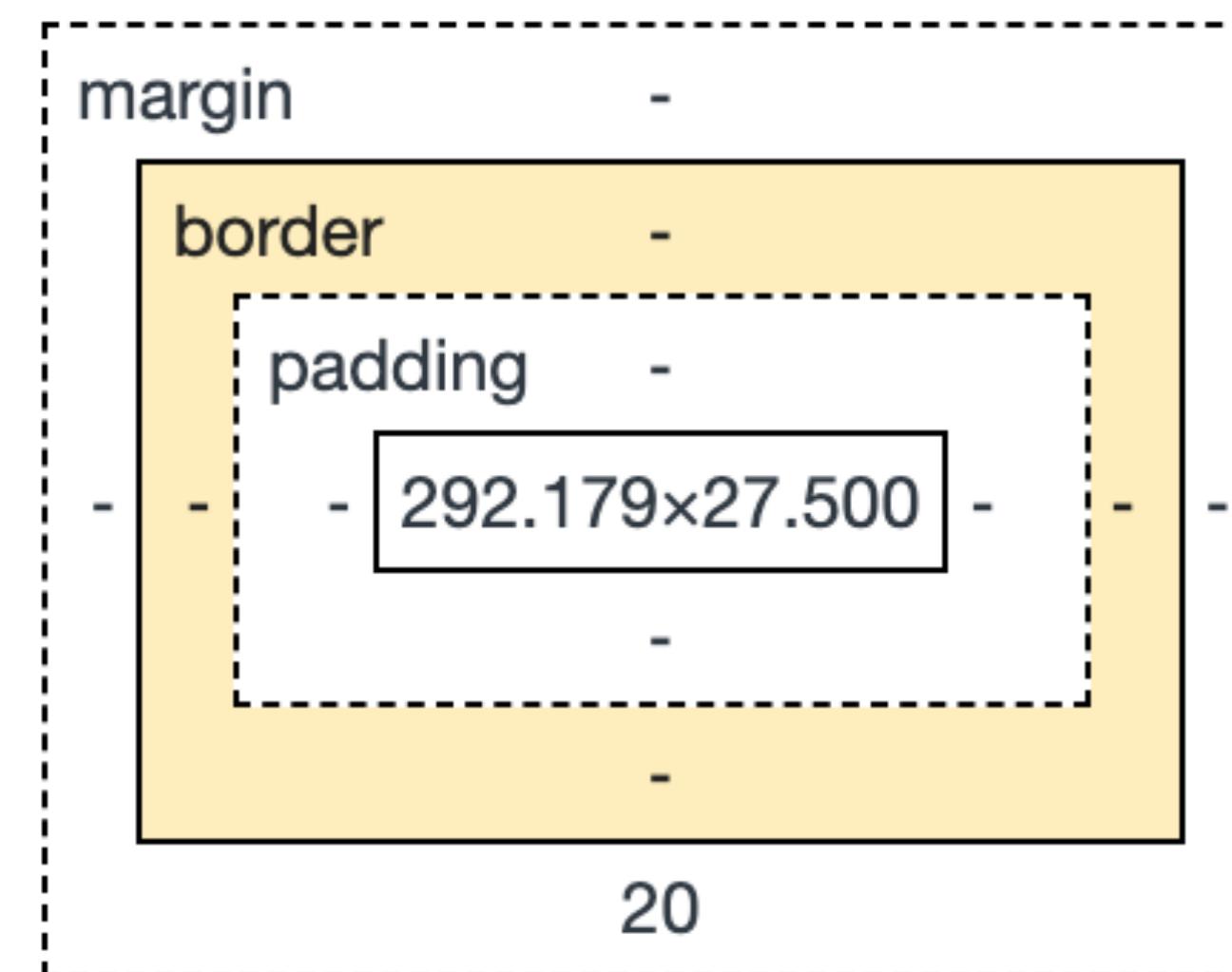
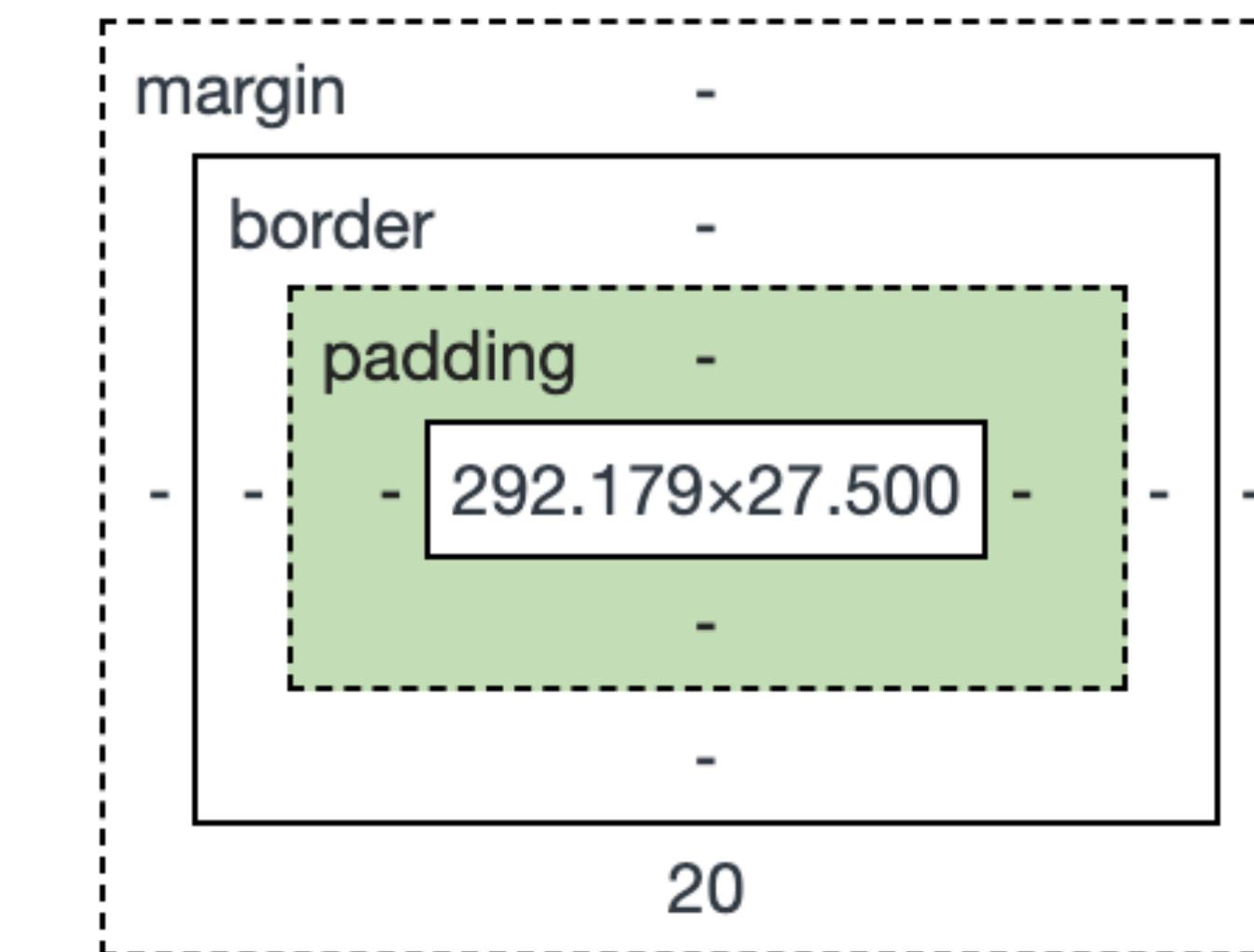
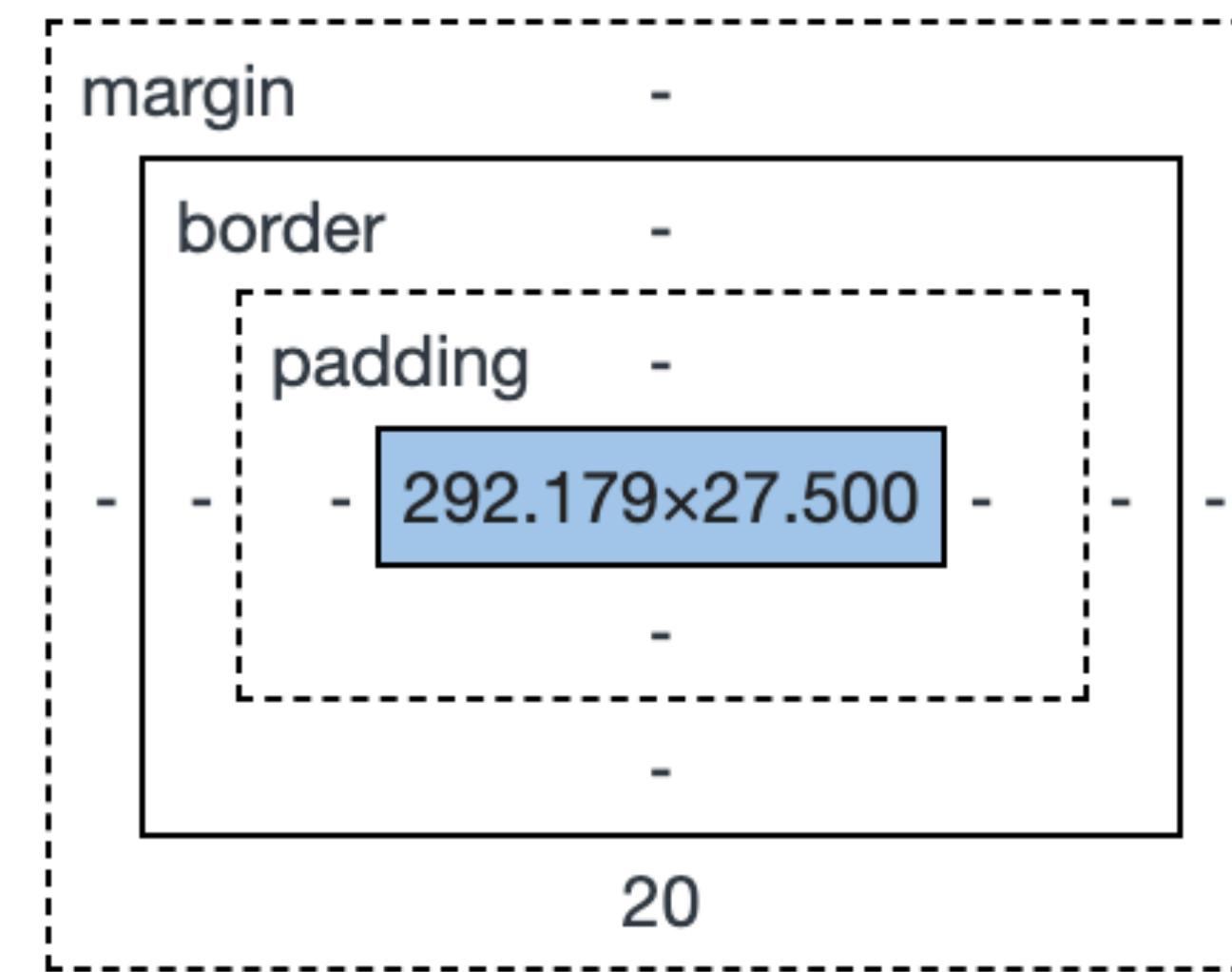
line box



```
a {  
    border: solid;  
    text-decoration: none;  
    height: 200px;  
    width: 300px;  
    text-align: center;  
}
```

```
a {  
    border: solid;  
    text-decoration: none;  
    height: 200px;  
    width: 300px;  
    text-align: center;  
    /*           */  
    line-height: 300px;  
}
```

Content, Padding, Border, Margin



display: block, inline-block, inline



Horizontal Centering

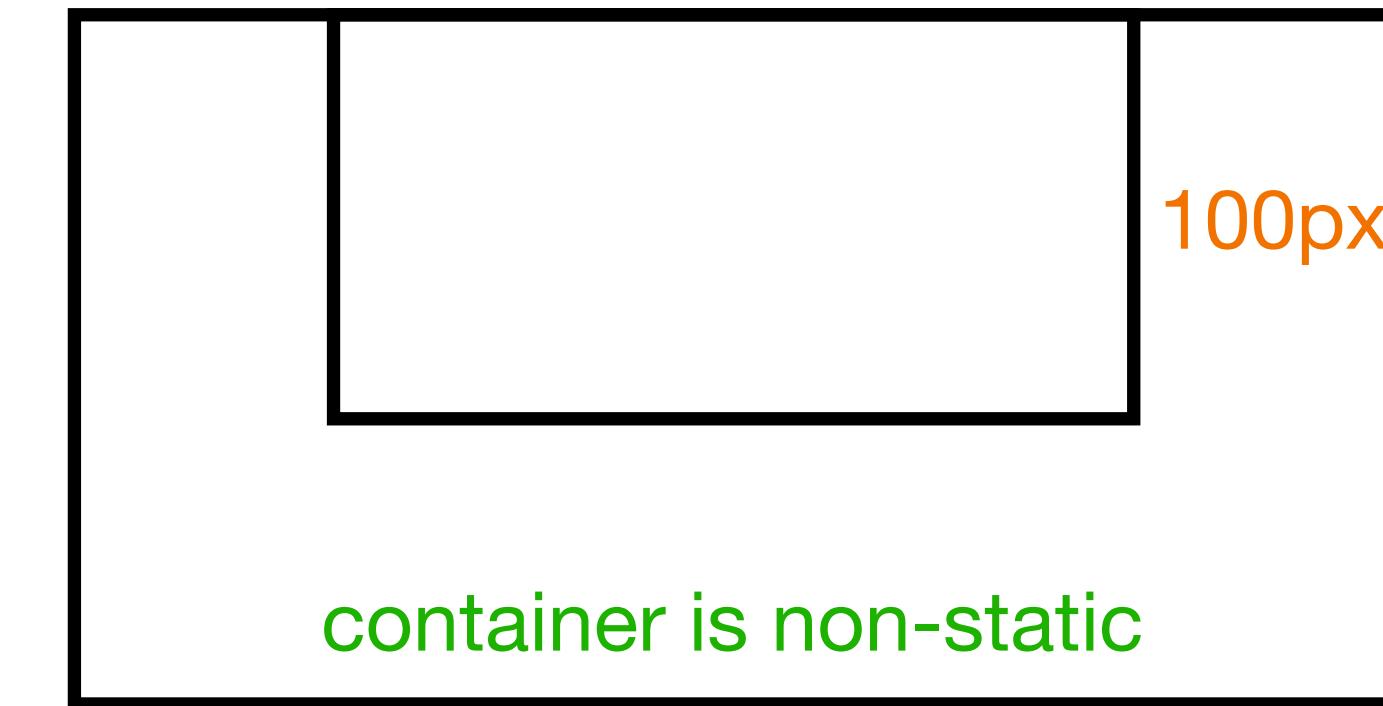
- For block element, using ‘margin:auto’
- For Inline element including inline-block: using ‘text-align:center’ in the element’s container

Position

position: relative
right: 100px



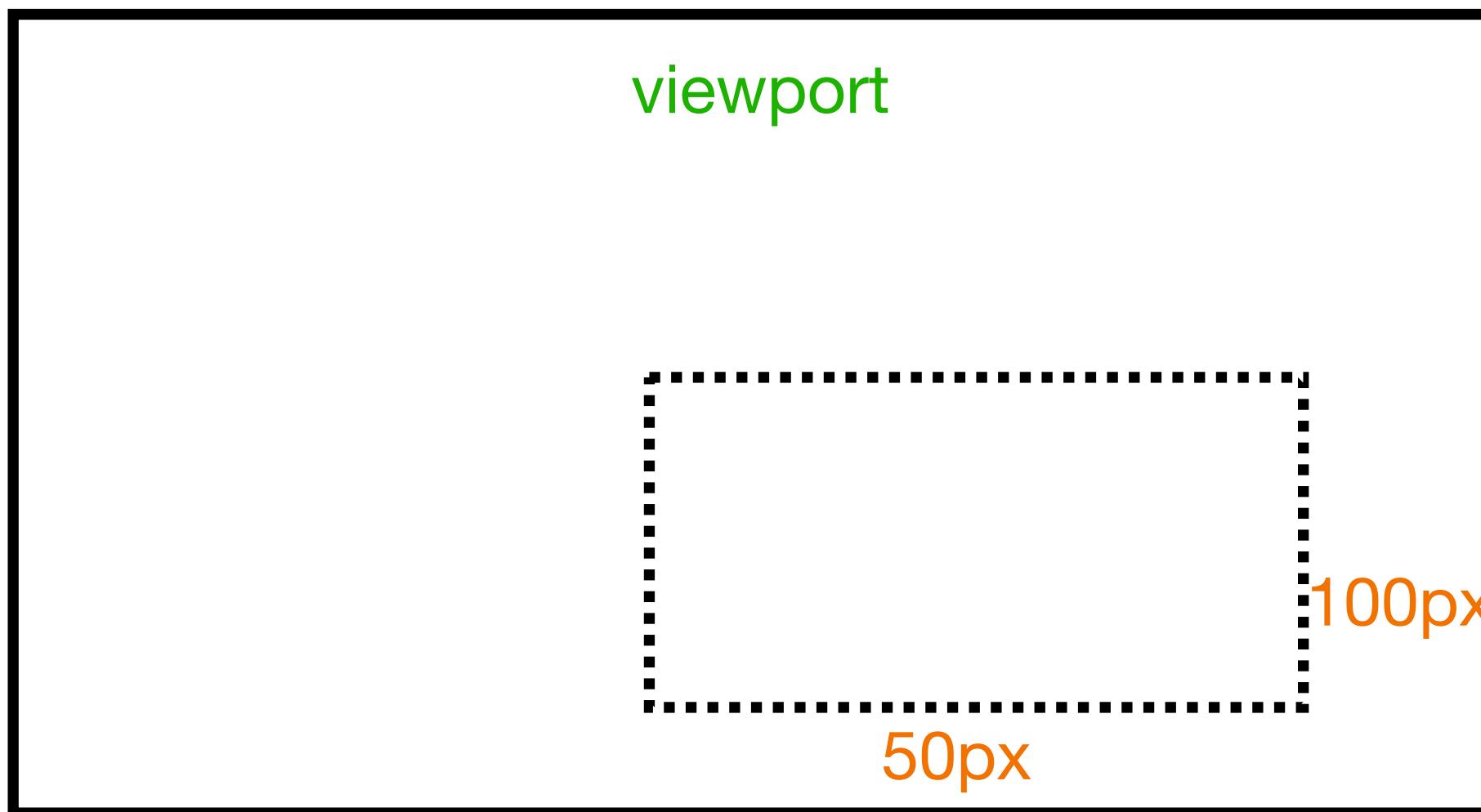
position: absolute
right: 100px



viewport

50px

position: fixed
right: 100px
bottom: 50px



box-sizing

float, clear

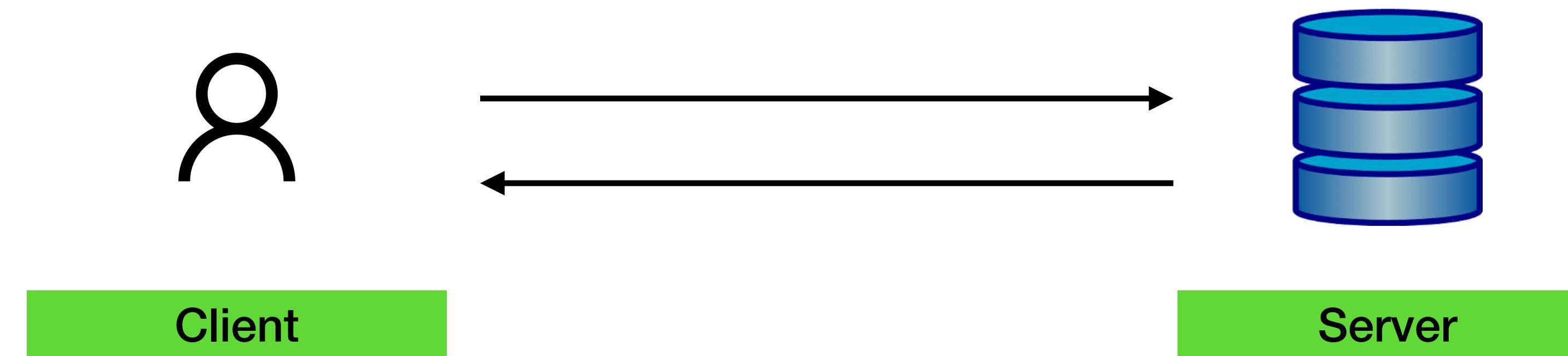
Do Layout

inline-block float

Find out your device CSS dimensions

<https://www.mydevice.io/>

Client - Server



Environment part 1

Code remote repository	Github
Web hosting	Github pages
Editor	Brackets, extensions
Chrome	Dev tools

Environment



Environment part 2

Code manage tool

Git and its 3 commands

Code local repository

Clone remote repository to c:\

Environment



git

1

1. register github account
2. create new repository:
your_account_name.github.io
3. check your website

2

1. download git and install
2. (for windows) open git bash; cd /c/_a
(for mac) open terminal; cd ~/a
3. git clone remote_repository
4. open brackets,
open repository folder,
create 'index.html'

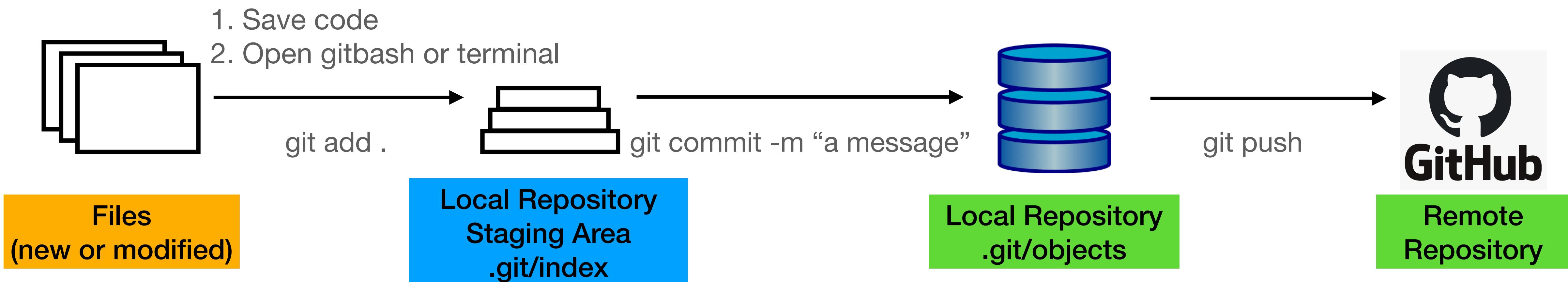
3

1. (for Windows) cd /c/_a/your_repository
(for Mac) cd ~/a/your_repository
2. git config --global user.email "your_email"
3. git config --global user.name "your_name"

4

1. (for Windows) cd /c/_a/your_repository
(for Mac) cd ~/a/your_repository
2. git add .
3. git commit -m "message"
4. (optional) create github token
5. git push
6. check github repository contents
7. check website

Git 3 commands



Home

Outdoor

Package

Truck