



Introduction to course

HTML course: Lesson 1

Liza Pak

@sealeye

Senior HTML/Markup developer

Brain Rocket

Ex mentor

Solvery, HTML Academy

Ex code reviewer

Yandex Practicum

Ex tutor for kids

Digital Banana

Ex lecturer

GolT

Course creator and your mentor



Artem Pashynin

Hi, everyone! I'm Artem Pashynin from Ukraine. I started my career as a production engineer, working for around 8 years, including time at Boeing, before transitioning to QA at BrainRocket. For the past 2.5 years, I've been diving deep into frontend development, and I absolutely love it. I have 2 years of production engineers teaching experience to newcomers. My goal is to share my experience and show you how exciting and creative frontend development can be!



Let's Get **Acquainted**

- 1. Your Name
 - 2. Why did you join the course?
 - 3. One truth and one falsehood
-

I collect Pikachu from different countries

I have a professional chef certificate

What
we will study

Website Components

HTML

Skeleton,
foundation

CSS

Skin,
styling

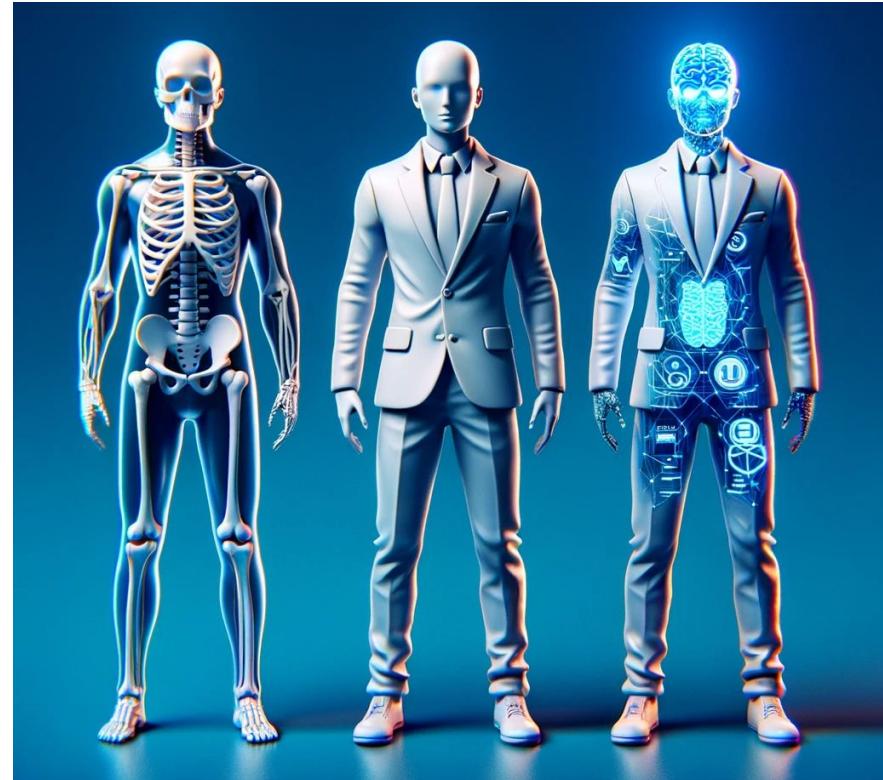
JS

Brain,
functionality

HTML

CSS

Java Script



Course Plan

1
Intro

2
GIT

3
HTML

4
Basic CSS

5
Images

6
Forms

7
Flex

8
Grid

9
CSS magic

10
Animations

Binabox

- [Home](#)
 - #
 - #
- [About](#)
 - #
 - #
- [Roadmap](#)
 - #
 - #
- [Collection](#)
- [FAQs](#)
 - #
 - #
- [Pages](#)
 - #
 - #

[Discord](#) [Connect](#)

WITH BINABOX EXPLORE NFT COLLECTION

We are the best way to check the rarity of NFT collection

Total Item
2200+
Profiles whitelisted
1000+

[Connect walet Whitelist now](#)

All items

-  [Product Description SKISIRS#2](#)
-  [Product Description SKISIRS#2](#)
-  [Product Description SKISIRS#2](#)
-  [Product Description SKISIRS#2](#)
-  [Product Description SKISIRS#2](#)
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About us

BINABOX

[HOME](#)
[ABOUT](#)
[ROADMAP](#)
[COLLECTION](#)
[FAQS](#)
[PAGES](#)

DISCORD

CONNECT

WITH BINABOX EXPLORE NFT COLLECTION

We are the best way to check the rarity of NFT collection

Total Item

2200+

Profiles whitelisted

1000+

[CONNECT WALET](#)

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SKISIRS#2



SKISIRS#2



SKISIRS#2



SKISIRS#2

ABOUT US

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
Excepteur sint occae cat cupidatat non proident, sunt in culpa qui officia dese runt mollit anim id est
laborum velit esse cillum dolore eu fugiat nulla pariatu epteur sint occaecat

Get In Touch

Browse through the most frequently asked questions

Name

Enter your email

Phone Number

Messanger

SEND MESSANGER

Q1
HIGH QUALITY

Lorem Ipsum is simply dummy text of the printing and
Ipsum typesetting industry.

Q2
BIG COLLECTION

Lorem Ipsum is simply dummy text of the printing and
Ipsum typesetting industry.

Q3
TOP RESOURCE

Lorem Ipsum is simply dummy text of the printing and
Ipsum typesetting industry.

Q4
BIG COMMUNITY

Lorem Ipsum is simply dummy text of the printing and
Ipsum typesetting industry.

WITH BINABOX EXPLORE NFT COLLECTION

We are the best way to check the nft of NFT collection

2240+ Total items **1000+** Profits generated

[Connect wallet](#) [Install now](#)

Label

[See all](#)

Our blog

[Read more](#)



Foundation for:

- **Markup developer**
- **Frontend developer**
- **Full-stack developer**
- **UI/UX designer**
- **QA**
- **Backend developer**



Practice

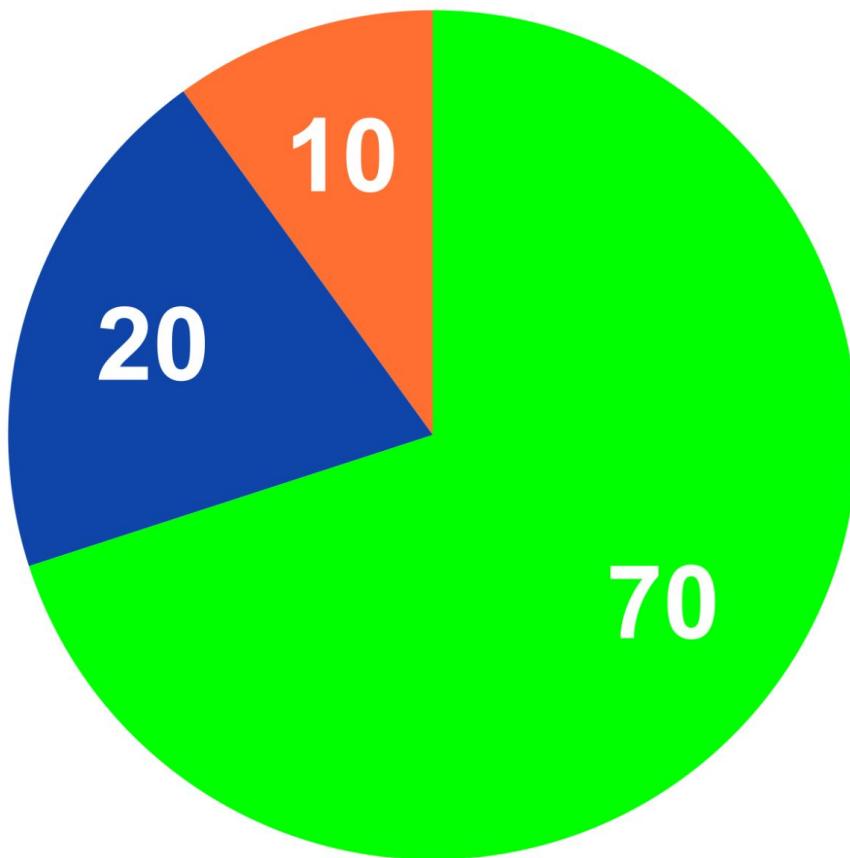
Try to change text in HTML
and colors in CSS

and what you want to
change 😊

Code Practice – <https://tinyurl.com/bro-start>

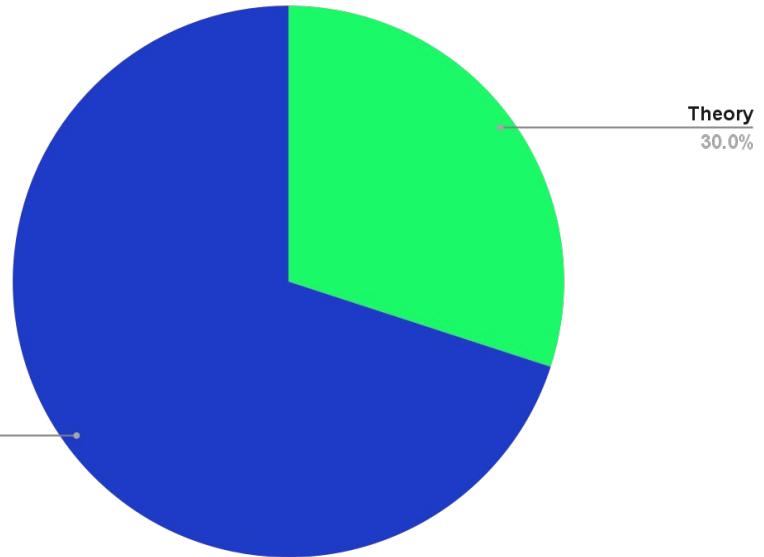
How we will study

How Adults Learn



- 70% - Learning through activity
- 20% - Development through relationships
- 10% - Learning with theory in a classroom/ lectures/ webinars/ reading books

Course Structure



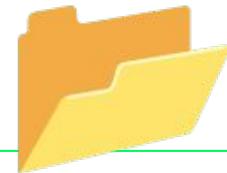
01. Lectures

02. Practice

03. Homework

04. Additional materials

Additional materials



Mandatory Reading Materials



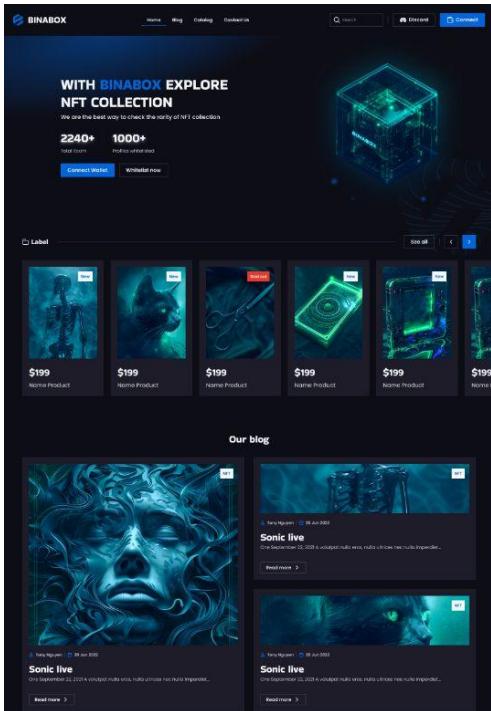
Optional Reading Materials

Demos

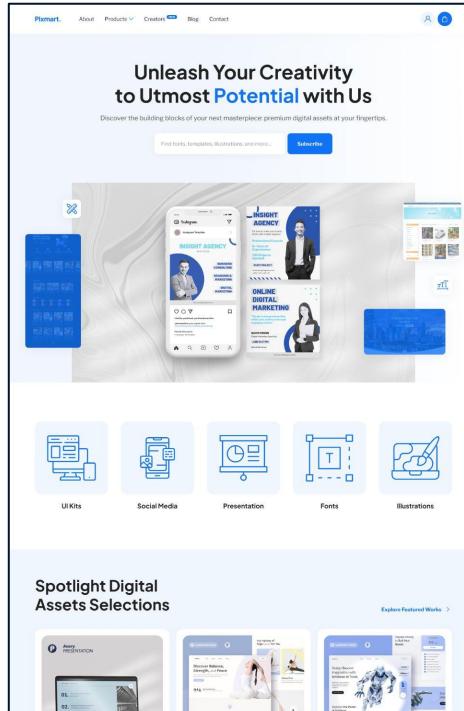
Courses

ChatGPT

Projects



Homeworks project



Diploma project

Work with personal mentor



Code review

Question

Personal consultations – 30 min per week

Homework



One topic – one homework

Deadline – 1 week

Diploma

Independent Work

You can start working on it at any time

Ask your mentor for help

Random mentor for code review in the end of the course



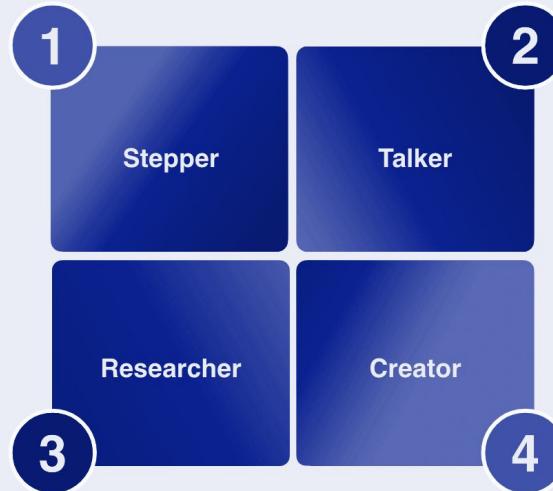
Learning Styles 4MAT model

Stepper

- Structured material
- Step-by-step instructions
- Curriculum and learning plan
- Make detailed notes
- Practice with guidance first, then independently
- Understand why to do things in a certain way and why the material is useful to them

Researcher

- Explore and reflect on concepts
- Question, debate, and discuss the material
- Answer questions that provoke critical thinking
- Study, read, and seek additional information
- Build connections between ideas



Talker

- Verbalize information, experiences, or concepts in a group
- Discuss key points with a partner
- Ask questions
- Reflect and articulate thoughts out loud
- Answer questions
- Think out loud

Creator

- Develop solutions and come up with their own answers to questions
- Reinterpret information and make summary notes
- Solve cases and puzzles
- Jump into practice immediately and only seek help after making mistakes
- Organize material in their own way

Quality Criteria for HTML Course

When developing a website, there are many conditions that must be met to ensure the site displays correctly.

❤️ Mandatory for passing the course

💛 Required for the highest grade

💚 Optional

- 1.1 The document must begin with <!DOCTYPE HTML>.
- 1.2 Each page must have the lang attribute set according to the page's language.
- 1.3 The document must have a specified encoding.
- 1.4 Title Tag must be set on all pages.
- 1.5 Description meta tag must be set
- 1.8 No critical markup errors.
- 1.9 Semantic Markup
- 1.10 The layout must be valid.

Developers Tools



Search FINOS



11



FINOS ▾



#fdc3 ★

Add a topic

**Riko Eksteen** 3:27 PM

hello 😊

Yesterday ▾

**James McLeod** 3:38 PM

Welcome @Riko Eksteen 🙌

It's great to see you here 😊

**James McLeod** 3:39 PM

Do you think more members of the FDC3 team will join if I invite them?



9 replies

Last reply 21 hours ago

**Matt Jamieson** 5:03 PM

joined #fdc3.

**Matt Jamieson** 5:04 PM

afternoon



1



7 replies

Last reply 19 hours ago

**Kris West** 5:06 PM

joined #fdc3.

Messenger: Slack

Send a message to #fdc3



Aa

@





Home



DMs



Threads

Unreads



Drafts & sent



Starred



Activity



Later



More

Bro Academy ▾



html-main-3



Add canvas



html-main-3

You created this channel on September 27th. This is the very beginning of the **html-main-3** channel.

[Add description](#)[Add coworkers](#)

Friday, September 27th ▾



Liza Pak 18:36

joined html-main-3.

Today ▾



Liza Pak 12:33

Hello everyone! 🙌

My name is Liza, and I am creator and mentor of this course.

Here with me

[@Andrey Gurylev](#) [@Olga Odnokolova](#) [@Artem Pashynin](#) Anderii Ponomarev — lecturers on this course.

In Slack, we will be using the following channels:

- [html-main-3](#): for announcements and general information for everyone.
- [html-questions-3](#): for your questions. One message - one question to make it easier to answer them. Use treads for comments.
- [html-random-3](#): a channel where you can chat with each other and with course team about any topics.
- [html-common-mistakes-3](#): a channel where you can chat with each other and with course team about any topics.

After each lesson, you will receive a homework, which should preferably be completed before the next lecture to avoid piling up tasks.

If you encounter any difficulties while doing your homework, we can have a 1-on-1 consultation with your mentor, maximum 30 minutes per 1 topic.

Sessions will be held on Mondays and Wednesdays at 19:00 about 1.5-2 hours, depending on the topic.

For complex topics, we allow more time so we can cover everything in detail. There will be a break in the middle of the lesson to relax a bit, have some tea, and switch your attention.

Stay here! ✨

Message [html-main-3](#)

Bro Academy

Home

Unreads

Threads

DMS

Activity

Starred

html-main-3

html-common-mistakes-3

html-questions-3

html-random-3

Channels

html-main-2

html-questions-2

html-common-mistakes

html-random-2

test-channel

html-random

html-questions

html-main

random

first

general

Add channels

Direct messages

Apps

html-main-3

Messages Add canvas

Liza Pak 18:36 joined html-main-3.

Friday, September 27th

Today

Reply to thread

Liza Pak 12:33 Hello everyone! 🙋 My name is Liza, and I am creator and mentor of this course. Here with me @Andrey Gurylev @Olga Odnokolova @Artem Pashynin Anderii Ponomarev — lectors on this course. In Slack, we will be using the following channels: — html-main-3: for announcements and general information for everyone. — html-questions-3: for your questions. One message - one question to make it easier to answer them. Use treads for comments. — html-random-3: a channel where you can chat with each other and with course team about any topics. — html-common-mistakes-3: a channel where you can chat with each other and with course team about any topics. After each lesson, you will receive a homework, which should preferably be completed before the next lecture to avoid piling up tasks. If you encounter any difficulties while doing your homework, we can have a 1-on-1 consultation with your mentor, maximum 30 minutes per 1 topic. Sessions will be held on Mondays and Wednesdays at 19:00 about 1.5-2 hours, depending on the topic. For complex topics, we allow more time so we can cover everything in detail. There will be a break in the middle of the lesson to relax a bit, have some tea, and switch your attention. Stay here! 🌟

1 reply Today at 12:37

B I S | Ø | ᴮ | ᴯ | ᴰ | </> ᴭ

Message @html-main-3

+ Aa 😊 @ | 📲 💬 | ↗

Thread

@Artem Pashynin Anderii Ponomarev — lectors on this course.

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- html-questions-3: for your questions. One message - one question to make it easier to answer them. Use treads for comments.
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For complex topics, we allow more time so we can cover everything in detail. There will be a break in the middle of the lesson to relax a bit, have some tea, and switch your attention.

Stay here! 🌟

1 reply

Liza Pak Just now

Reply in threads like this 😊

B I S | Ø | ᴮ | ᴨ | ᴰ | </> ᴭ

Reply...

Also send to @html-main-3

+ Aa 😊 @ | 📲 💬 | ↗

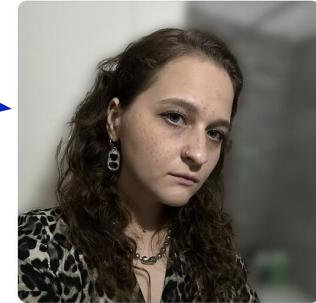
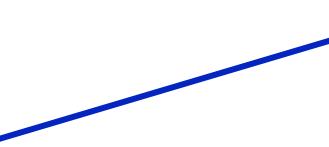
Profile

Actual photo

Fill in your profile

Name

Role –
Student course #3



Liza Pak

HTML course creator and mentor

+ Add name pronunciation

● Active



⌚ 12:34 local time

Edit status

View as



Contact information

Edit

✉ Email Address
pak.e@brainrocket.com

+ Add Phone

About me

Edit

+ Add Start Date



BRO Academy course #3 board

Search



GROUP BY

None

Insights

View sett...

TO DO 1

IN PROGRESS

FOR REVIEW

IN CODE REVIEW

REOPEN

Lesson 1. Prepare the environment for the start of the course

BAC3-1



+ Create issue

PLANNING

Timeline

Board

Calendar NEW

List

Goals

Issues

+ Add view

DEVELOPMENT

Code

Project pages

Add shortcut

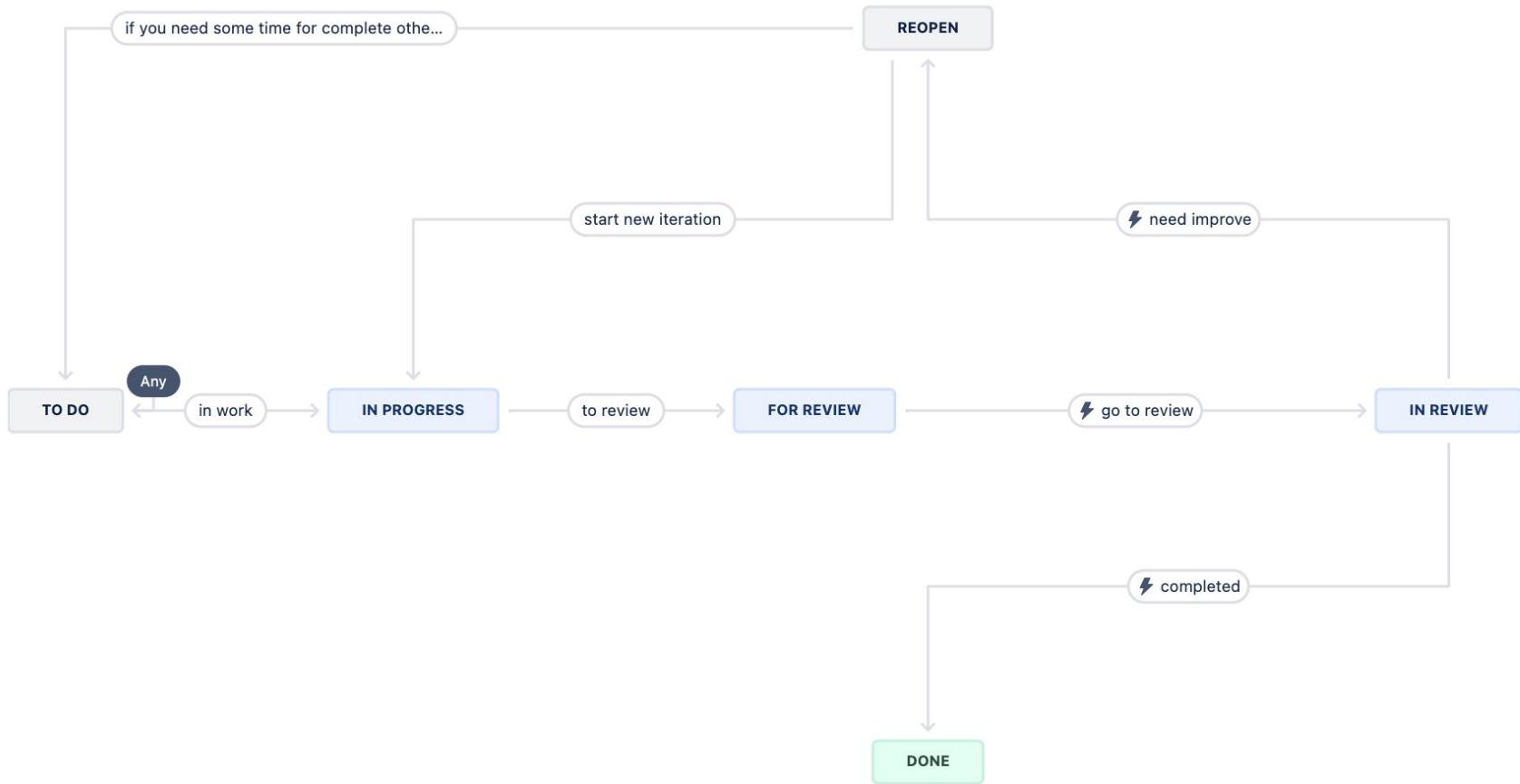
Project settings

Invite people

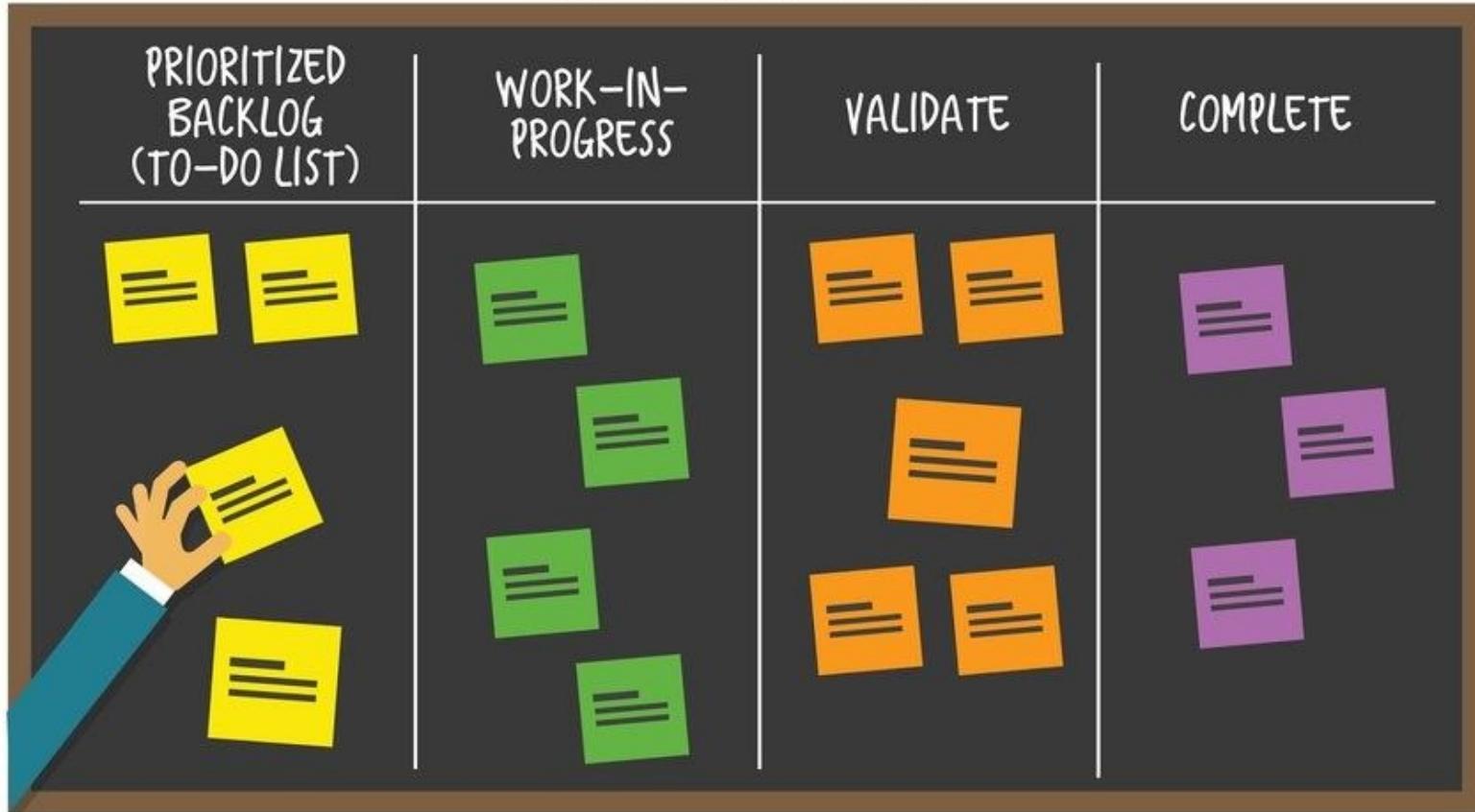
You're in a team-managed project

Learn more

Task tracker: Jira



KANBAN BOARD



Binabox Template x +

Team project / Binabox Template Free

B Share </>

Layers Assets 01_UI D...

Pages

- ✓ 01_UI Design
- 02_Desgin System

1 free page left.
Get unlimited pages & more

33_Contact Us Dark

21_FAQs Dark

29_FAQs Dark

27_404 Page Dark

25_Comming soon Dark

23_Road map 3 Dark

21_Road map 2 Dark

19_Road map 1 Dark

17_About us Dark

15_About us Dark

11_Blog Detail Dark

13_Item Detail Dark

09_Blog Dark

07_Collection NFT Dark

01_NFT Homepage 1 Dark

40_Hover_Dark_Pages

39_Hover_Dark_Faqs

01_NFT ... 03_NFT... 05_NFT...

07_Coll... 09_Blog... 11_Blog ... 13_Item...

15_Abo... 17_Abo...

19_Roa... 21_Roa... 23_Roa...

25_Co... 27_404 ...

29_FAQ... 31_FAQ... 33_Con...

Design Prototype

Page

303030 100%

Local variables

Local styles

Text styles

- Heading
- Body
- Sub Heading
- Button
- Caption

Color styles

- Primary
- On Surface
- Secondary
- Surface main
- Interactive
- Critical

Graphic Editor: Figma

line

ENG-HTML-course

EXPLORER: EN... ⌂ ⌂ ⌂ ⌂ ...

lesson-1.md X lesson-2.md lesson-3.md lesson-4.md lesson-5.md lesson-7.md lesson-8.md lesson-6.md les ⌂ ⌂ ⌂ ...

> lesson-2
> manuals
> presentations
criteria.md
final.md
lesson-1.md
lesson-2.md
lesson-3.md
lesson-4.md
lesson-5.md
lesson-6.md
lesson-7.md
lesson-8.md
lesson-9.md
lesson-10.md
pre-final-practise.md
README.md
test-projects.md

Additional Materials eng > ## How to Learn

233 # Additional Materials eng
251 ## VS Code
extensions for Visual Studio Code that every developer should install to boost productivity and simplify development. (eng)

254 8. **[VS Code Extensions for HTML](https://www.scaler.com/topics/html/vs-code-extensions-for-html/)** - An overview of the best extensions for Visual Studio Code specifically designed to enhance HTML development. Tools that simplify layout and styling of web pages. (eng)

256 ## How to Learn

257 2. **[How To Learn Stuff Quickly](https://www.joshwcomeau.com/blog/how-to-learn-stuff-quickly/)** - A detailed guide on how to speed up the learning process and make it more effective, with specific tips and techniques. (eng)

260 3. **[Can Generative AI Teach You to Code?](https://www.codecademy.com/resources/blog/can-chatgpt-ai-teach-you-to-code/)** - An analysis of the potential of generative AI in teaching coding, discussing its potential and limitations. (eng)

263 4. **[How Engineers Actually Use ChatGPT in Their Daily Workflow](https://www.codecademy.com/resources/blog/how-software-engineers-use-chatgpt-for-productivity/)** - An exploration of how developers use ChatGPT to boost productivity in their daily work. (eng)

265 5. **[How to Ask Good Questions](https://jvns.ca/blog/good-questions/)** - Tips on how to formulate questions for effective problem-solving in software development. (eng)

267 15. **[Fail Faster at Habits](https://zenhabits.net/ship/)** - The importance of quick failure in habit formation and how it can contribute to personal growth. (eng)

269 ## Internet

271 1. **[How the Web Works](https://devdojo.com/aheer/how-the-web-works)** - An introductory guide to how the web works, covering the basic concepts and technologies that make the internet possible. (eng)

273 2. **[How Does the Internet Work?](https://www.codecademy.com/resources/blog/how-does-the-internet-work/)** - A clear explanation of how the internet works, including a description of how data is transmitted through computer networks. (eng)

275 3. **[What Is an IP Address?](https://www.codecademy.com/resources/blog/ip-address/)** - An explanation of the concept of IP addresses, their role in the internet, and how they are used to identify devices on a network. (eng)

276 277

Code Editor: VS Code

twork?](https://www.codecademy.com/resources/blog/what-is-a-computer-network/)** - An introduction to the concepts of computer networks, explaining how they allow devices to communicate with each other. This article is an ideal resource for beginners looking to understand the basics of networking technologies. (eng)

281

Version Control System: Git (GitHub)

broacademy / Delivery-project

Type ⌘ to search

Code Issues Pull requests 2 Actions Projects Wiki Security Insights Settings

Delivery-project Public

Pin Unwatch 1 Fork 3 Star 0

main ▾ 1 Branch 0 Tags Go to file Add file Code

Liza Pak	add markup	0a69504 · 2 months ago	2 Commits
img	add markup	2 months ago	
.DS_Store	add markup	2 months ago	
catalog-item.html	add markup	2 months ago	
catalog.html	add markup	2 months ago	
contact.html	add markup	2 months ago	
index.html	add markup	2 months ago	
login.html	add markup	2 months ago	
style.css	add markup	2 months ago	

About

No description, website, or topics provided.

Activity 0 stars 1 watching 3 forks

Releases

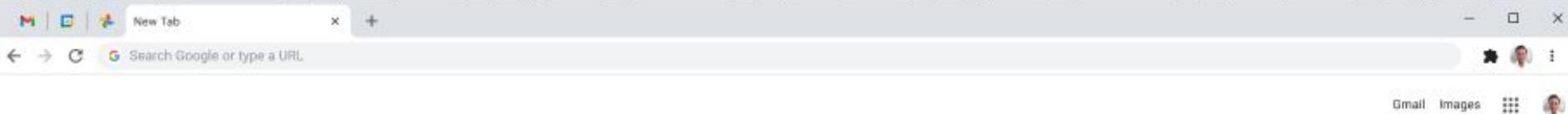
No releases published [Create a new release](#)

Packages

No packages published [Publish your first package](#)

Deployments 1

github-pages 2 months ago



Browser: Chrome

Google

Search Google or type a URL.



Gmail



Calendar



Drive



Meet



Keep



Photos



YouTube



Translate



News



Add shortcut

Chrome Dev Tools

The screenshot shows a Google search results page for "Google". The browser's address bar contains "Google". Below the address bar, there is a menu with keyboard shortcuts for Back (Alt+Left Arrow), Forward (Alt+Right Arrow), Reload (Ctrl+R), Save as... (Ctrl+S), Print... (Ctrl+P), Cast..., Translate to English, View page source (Ctrl+U), and Inspect (Ctrl+Shift+I). The "Inspect" option is highlighted with a green border.

The main content area displays the Google homepage with the word "Google" in its signature blue, red, yellow, and green colors. A search bar is present below the logo, with the placeholder "Search" and the button "I'm Feeling Lucky".

At the top right of the browser window, the "Sign in" button is visible. The tab bar shows "Gmail" and "Images". The Dev Tools sidebar is open, showing the "Elements" tab selected. The sidebar displays the DOM tree for the Google page, starting with the <!doctype html> declaration and the <html> element.

```
<!doctype html>
<html itemscope itemtype="http://schema.org/WebPage" lang="en-IN">
  <head>...
    <body jsmodel="" class="hp vasp big" id="gsr">
      <style>...
        <style data-jis="cc" id="gstyle">...
          <style>...
            <div class="ctr-p" id="viewport">
              <div id="doc-info">...
                <div id="cst">...
                  <style>...
                    <div id="gb" class="gb_Qf">...
                      <div class="jhp big" id="searchform">...
                        <dialog class="spch-dlg" id="spch-dlg">...
                          <div jscontroller="fEVMic" style="display:none" data-u="0" jsdata="C4mkuf;B7ZaYM" jSACTION="rcuQ6b:npT2md">...
                            <div jscontroller="WgDvvc" jsdata="hE2vdf;B7ZaYM" jSACTION="rcuQ6b:npT2md">...
                          </div>
                        <div class="content" id="main">
                          <span class="ctr-p" id="body">
                            <center>
                              <div id="lga">...
                                <div style="height:118px">...
                                  <div id="prmc-pt" style="margin-top:12px">...
                                    </div>
                                </div>
                              </div>
                            </span>
                          <div class="ctr-p" id="footer">...
                            <div id="footc">...
                              <div id="lb">...
                                </div>
                              </div>
                            </div>
                            <script nonce="hFHrEbb26d1azRdkp/X6CA==">...
                            <div class="gb_va">...
                              <style>...
                                <script>...
                                  <div id="lga">...
                                    <div style="height:118px">...
                                      <div id="prmc-pt" style="margin-top:12px">...
                                        </div>
                                    </div>
                                  </div>
                                </div>
                              </style>
                            </script>
                          </div>
                        </div>
                      </span>
                    </div>
                  </div>
                </div>
              </div>
            </div>
          </div>
        </div>
      </div>
    </body>
  </html>
```

Quick quizzes: Menti

Join at menti.com | use code 7833 8702



Instruction

Go to

www.menti.com

Enter the code

7833 8702



Or use QR code



**SET YOUR
GOALS**

RESULTS OF THE COURSE

Stages of Learning

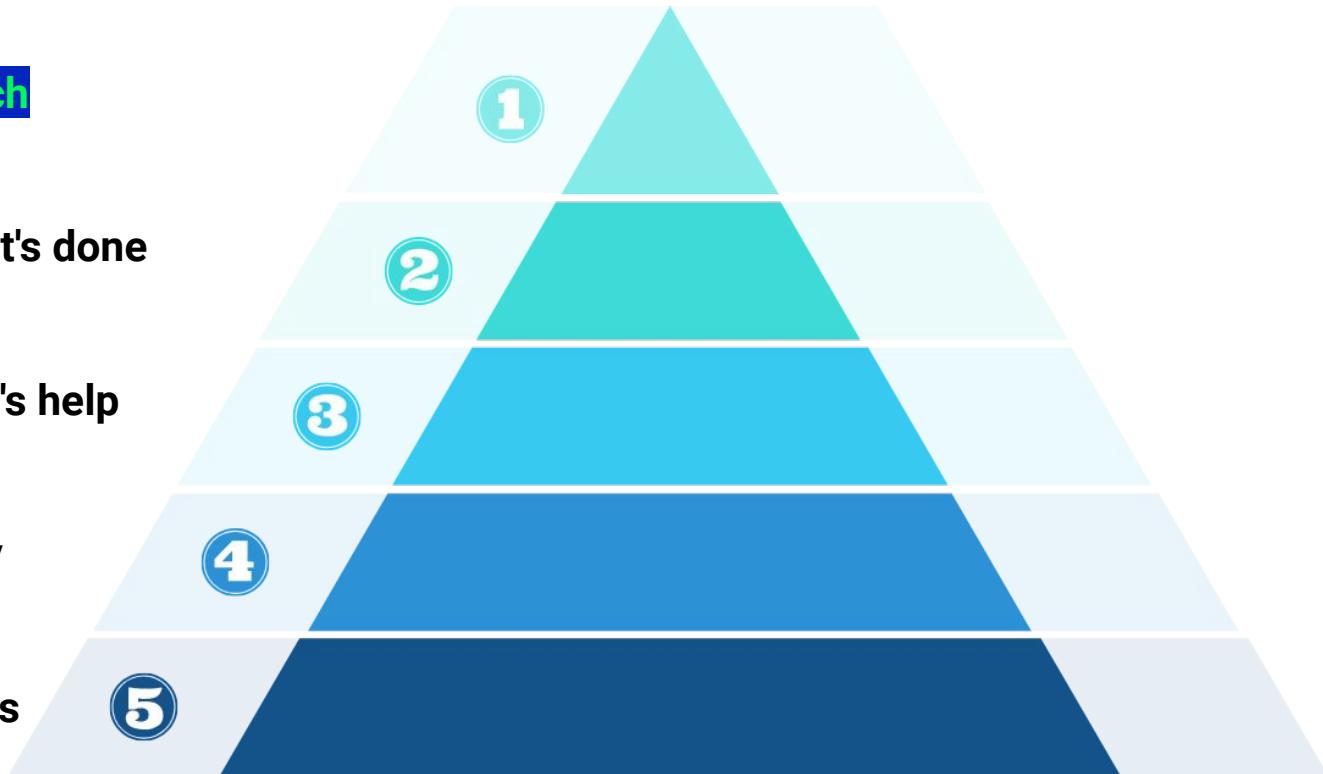
I still don't understand much

I see and understand how it's done

I can do this with someone's help

I can do this independently

I can teach others to do this



Stages of Learning

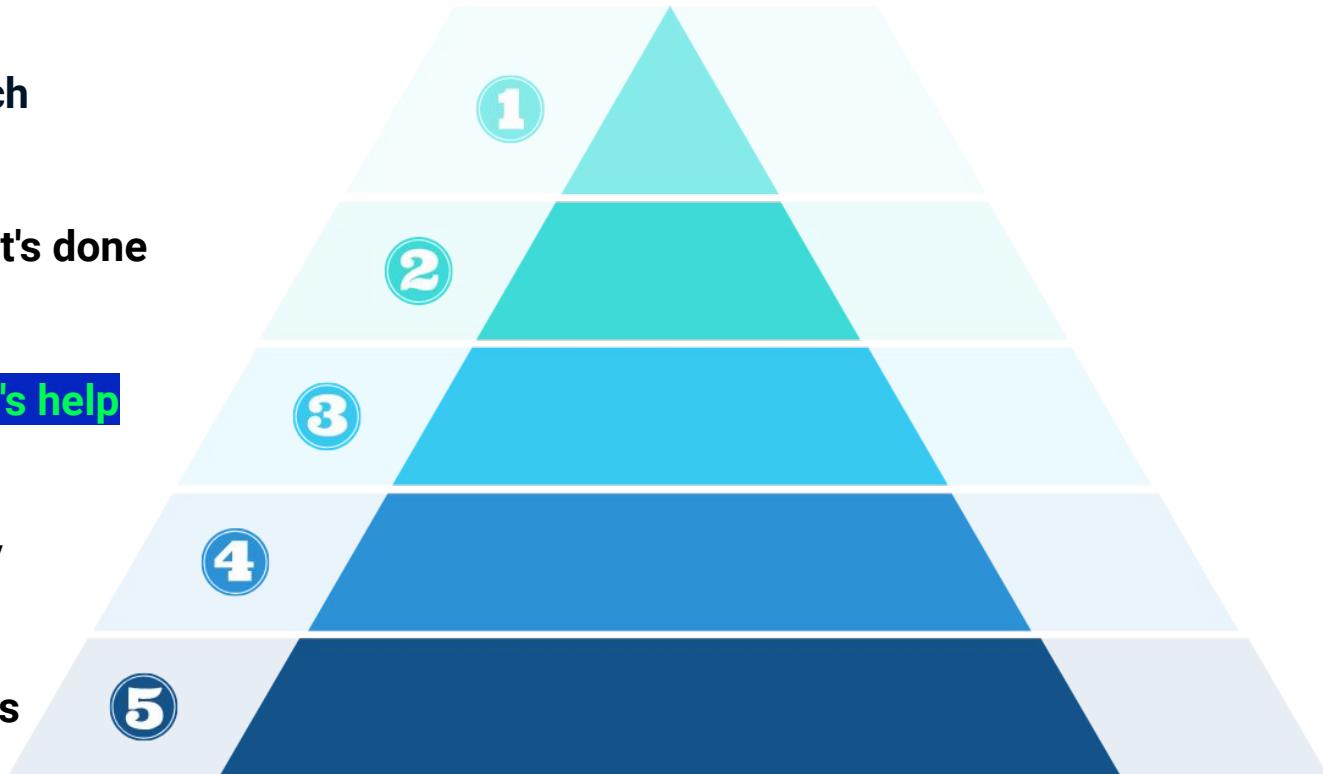
I still don't understand much

I see and understand how it's done

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I can do this independently

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Results

- Understand whether this is right for you or not
- Knowledge how to create simple websites
- Two projects for portfolio
- Continue learning
- Get an internship at our company

Homework

1. Install required apps:

- VS Code
- Figma
- Slack

2. Create accounts:

- GitHub
- Jira
- CodePen

3. Read additional materials





QUESTIONS?



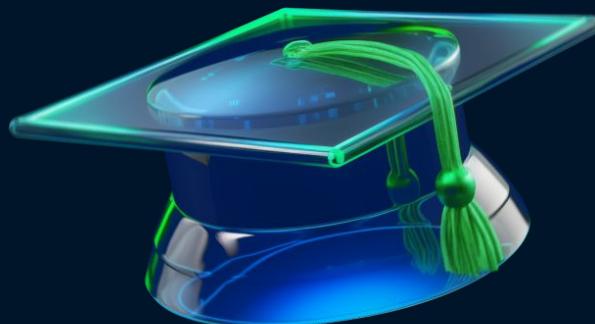
Please fill out the feedback form
It's very important for us



THANK YOU!
Have a good evening!

What We Learned Today

1. What the Internet is
2. What happens when we want to load a website
3. Different types of browsers
4. How a browser renders a page
5. Tools needed for the course



Lesson Plan

1

What we will study in the course

2

Processes on our course

3

How the Internet works

4

How a website is displayed in a browser

5

Developer tools



How the Internet **Works**

Terminology



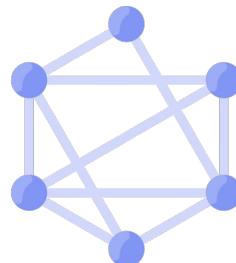
Computers and Servers



Cables



Routers
and Switches



Network Nodes



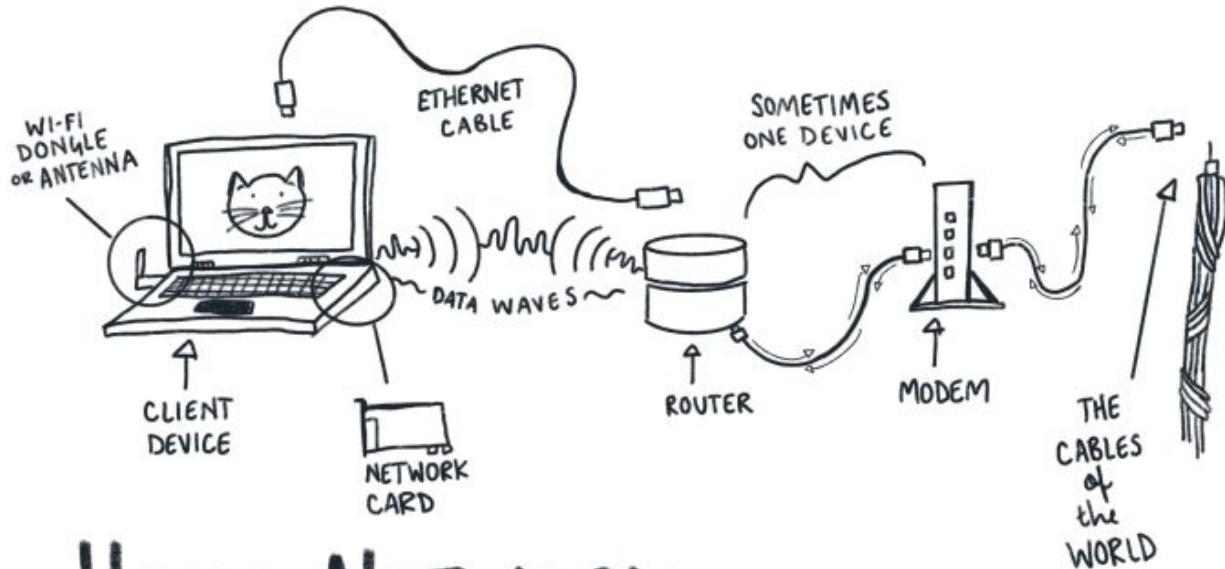
Internet Service
Providers



Data Centers

Beginning the Journey

- 01.** Computer
- 02.** Router
- 03.** Modem
- 04.** Cables



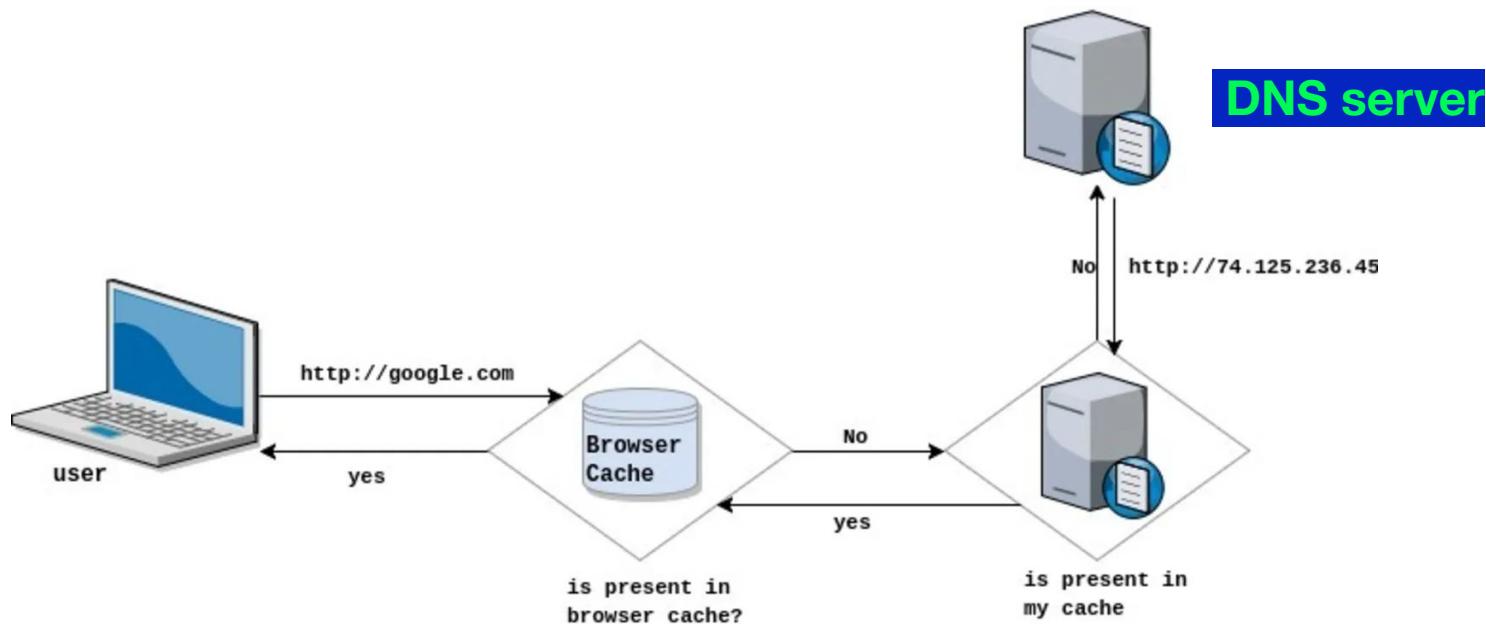
HOME NETWORK CONNECTIONS

PHYSICAL LAYER



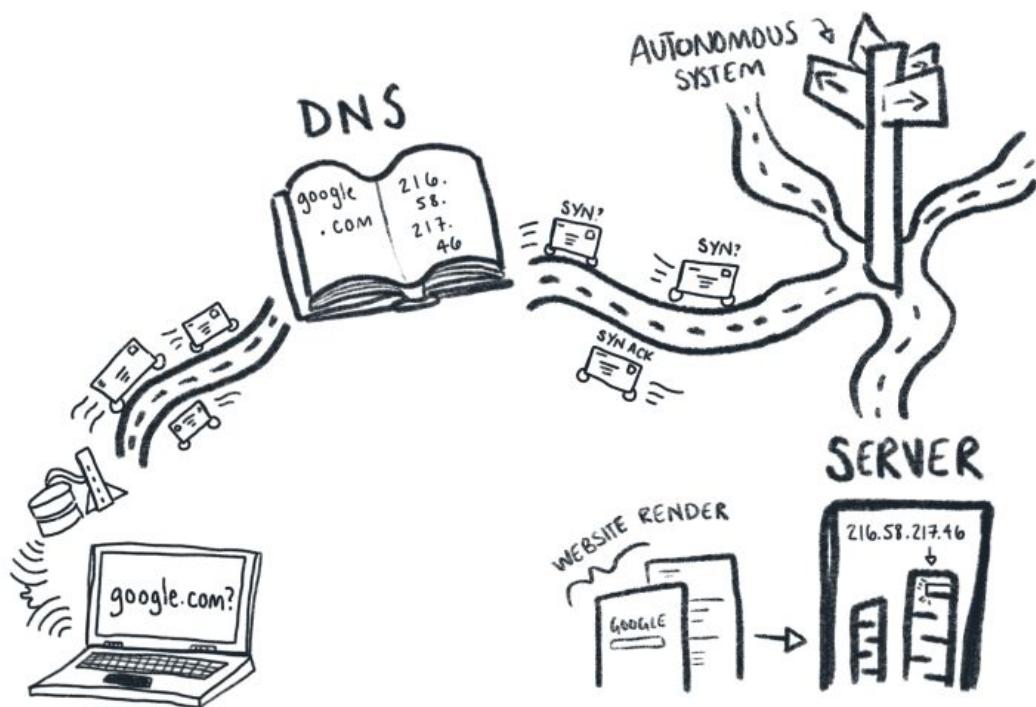
Physical Internet

What happens when you type a url in the browser address bar?



DNS (Domain Name System)

01. Enter **URL** in the browser's address bar
02. Request from **DNS server** for IP addresses of the domain zone
03. Request from the next **DNS server** for **the server location** of the website
04. Connect to **the server** and request all **site data**
05. Server sends **files** to the browser



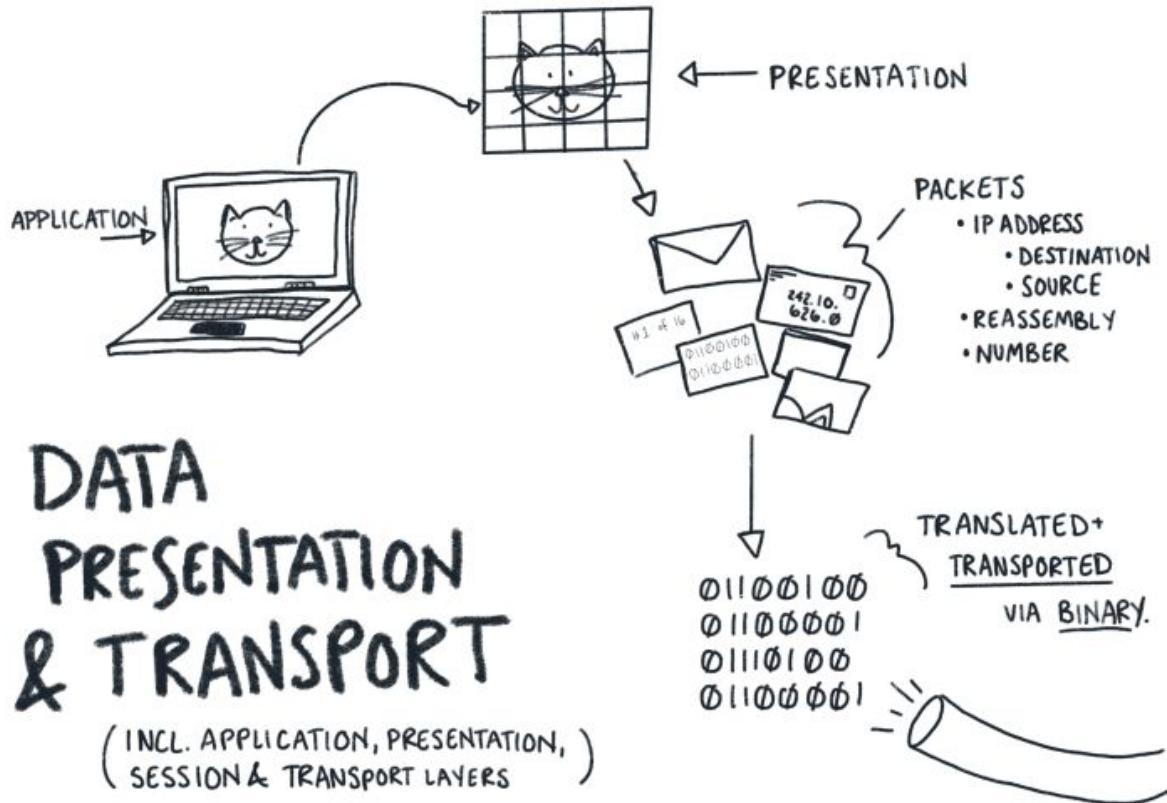
Data

01. Decomposition

02. Packet Creation

From: IP address
To: Request
What to retrieve
Part number

03. Conversion to Binary Code



How Data Moves

Protocols

logistics company like DHL

Packets

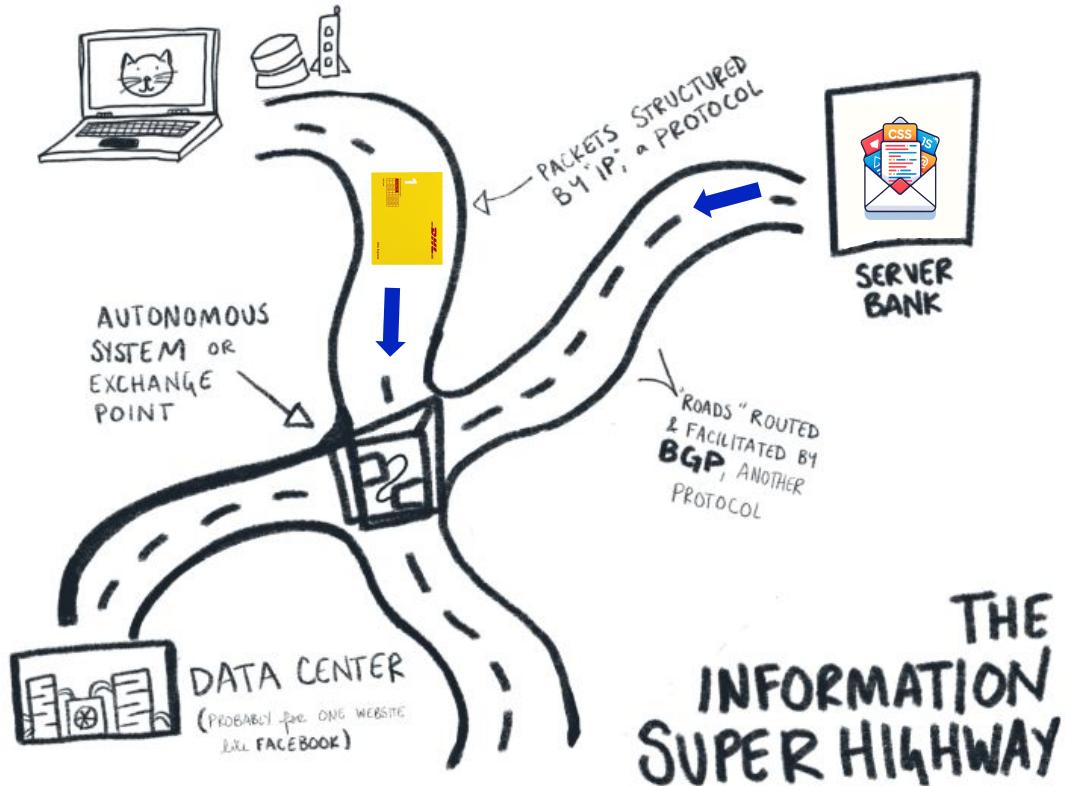
Envelope with letter inside

Network Nodes

Post sorting stations

Data Center

Addressee of your letter



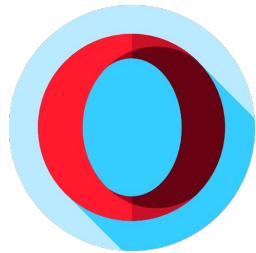
Browsers



Chrome



Firefox



Opera



Safari



Edge

Browsers



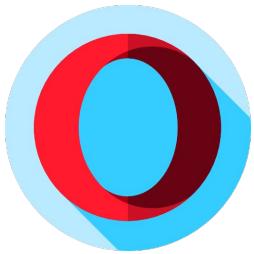
Chrome

65%



Firefox

3%



Opera

2.5%



Safari

19%



Edge

4.6%

Browser Engines



Blink



Gecko



Blink



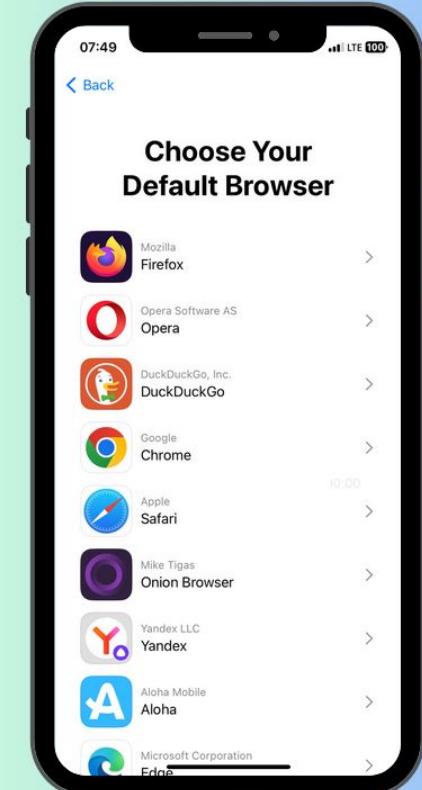
Webkit

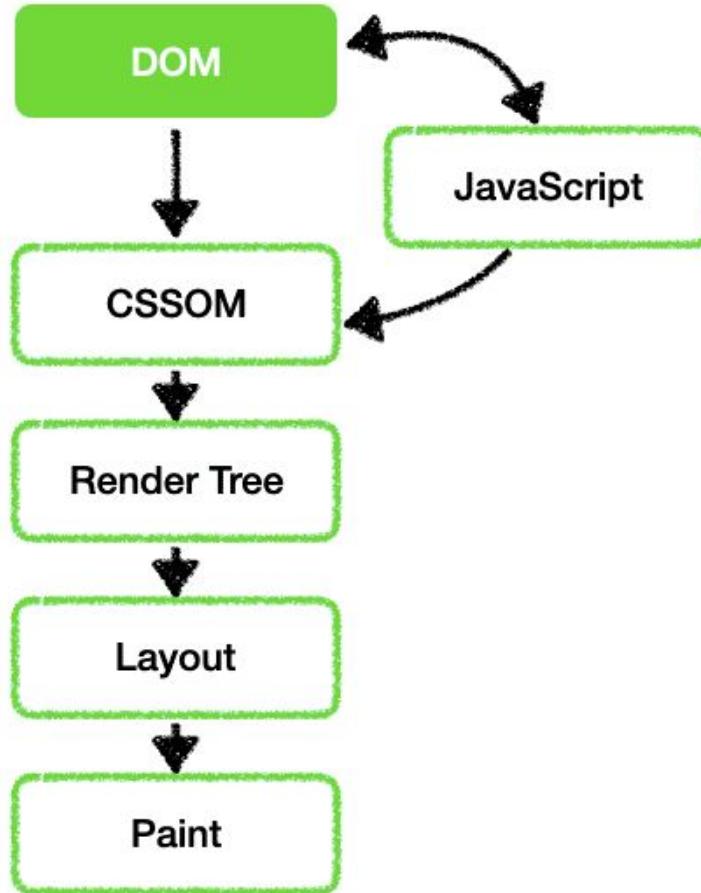


EdgeHTML

Why it's important

- Users access websites through various browsers
- Different browsers have different performance characteristics
- Different browsers may handle responsive design elements differently
- Bugs can be browser-specific





How a Browser
Renders a Website

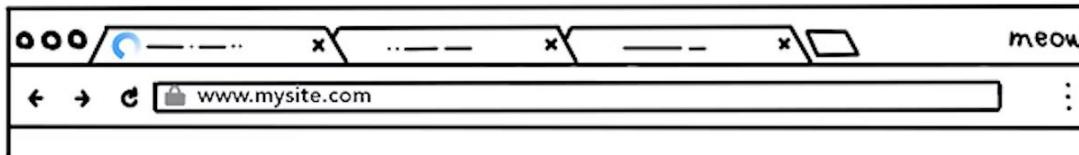
Critical rendering path

HTML to Node Tree

DOM

Document
Object
Model

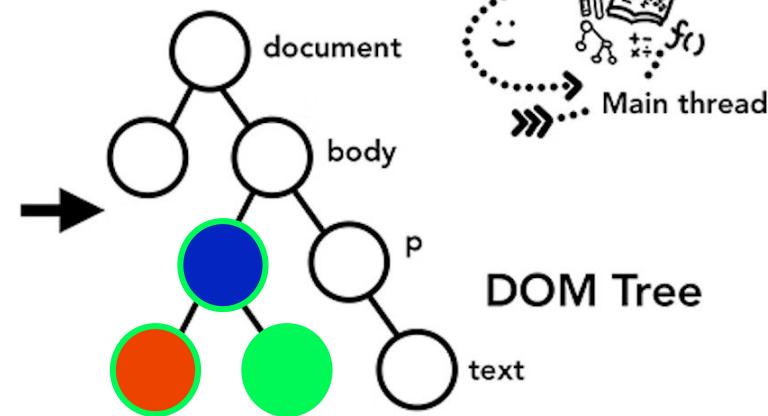
- parent
- child
- sibling



Renderer Process

```
<!DOCTYPE html>
<html>
  <head>
    ● <link href="zzz.css">
  </head>
  <body>
    ● 
    <p>
      Who is HorseJS
    </p>
    ● <script src="zzz.js">
    </script>
  </body>
```

Network
Request

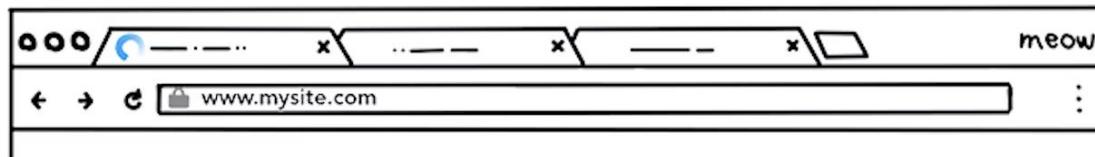


DOM Tree

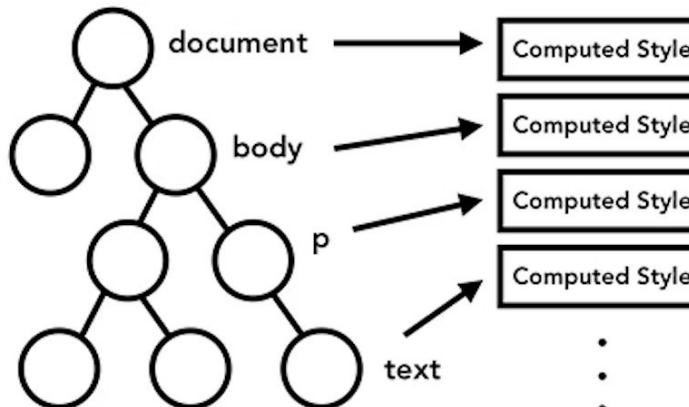
Define styles for tree elements

CSSOM

CSS
Object
Model



Renderer Process



```
* {  
    font-size: 12px;  
    font-family: serif  
}  
  
p {  
    color: blue;  
    margin: 10px;  
}
```

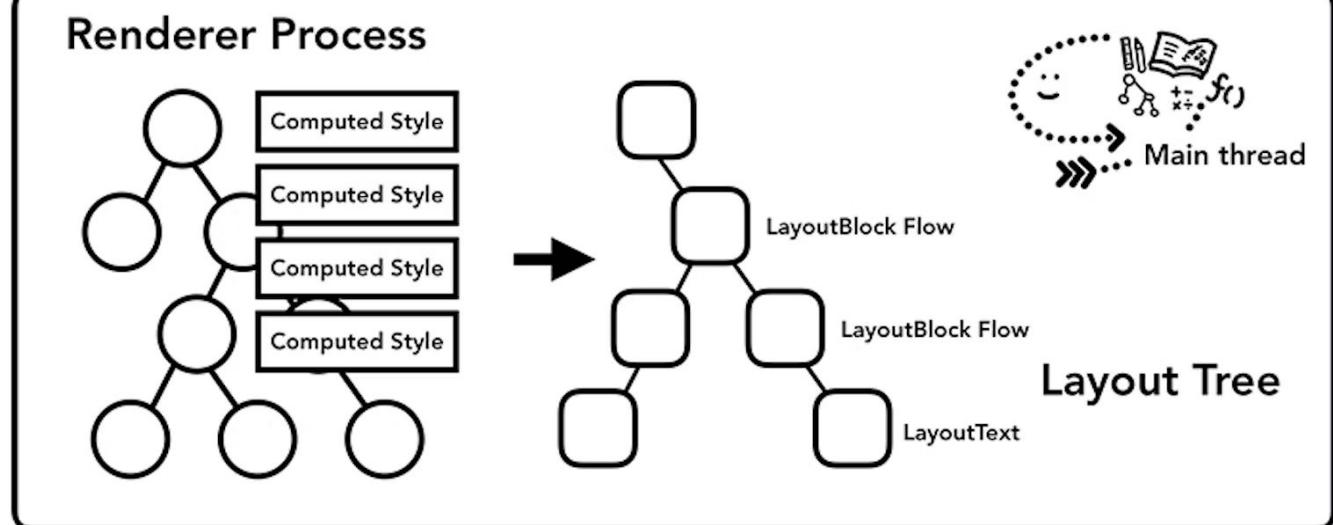
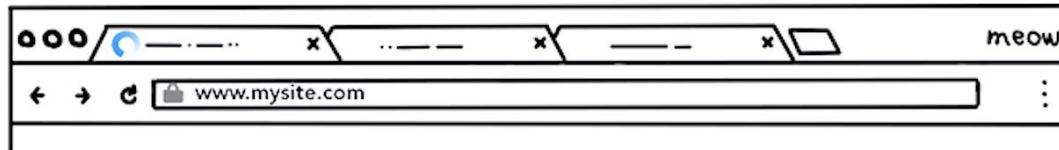


Main thread

Combine DOM and CSSOM

Render tree

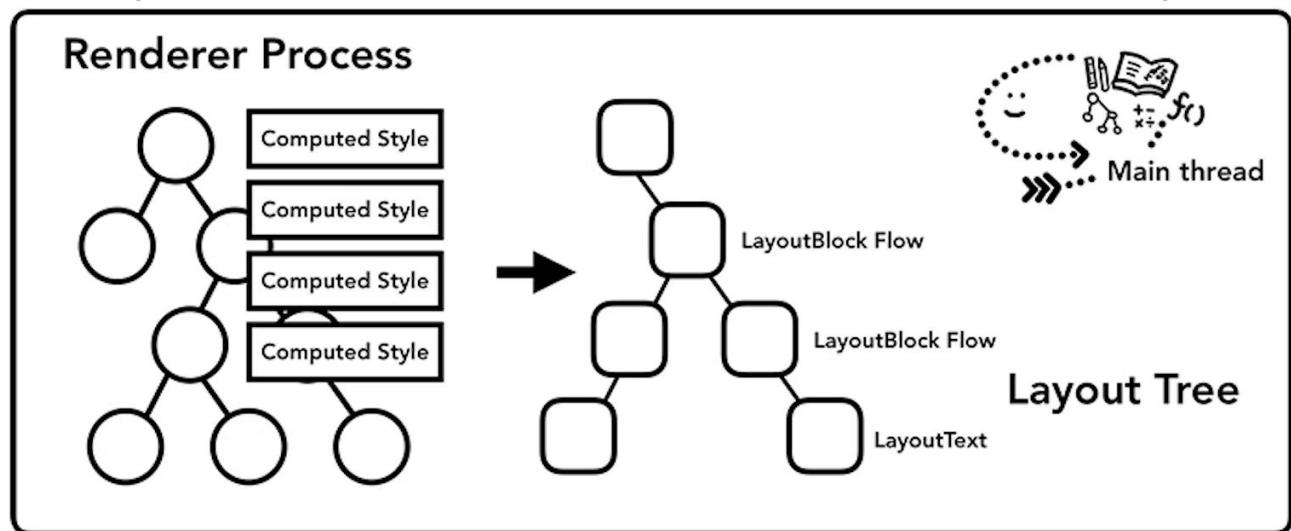
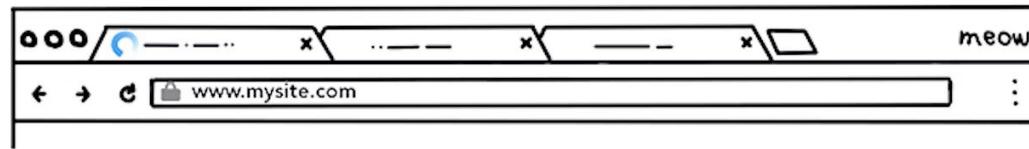
Map HTML
elements to CSS
styles



Layout

Calculate space for elements

Only considers visible elements



Painting

Instructions on the order and location of elements on the page

Render the page

