Twitter Thread by Swapna Kumar Panda ■



Swapna Kumar Panda ■
@swapnakpanda

■ Beginner's Roadmap for Front-End

HTML & CSS → ■■■ → JavaScript → ■■■
↓
■■■ ← React* ← ■■■ ← Tailwind*
↓
TypeScript → ■■■ → Next.js* → ■■■ → ■

■

What would we cover?

❶ HTML & CSS
❷ JavaScript
❸ CSS Frameworks
❹ UI Frameworks
❺ TypeScript
❻ Server-side Frameworks
❼ Practice, Practice and, Practice
❽ Other Skills
❾ Frequently Asked Questions

❶ HTML & CSS

■ Your Front-End journey shall always start from HTML & CSS and, ends with these as well.

■ Don't over burden yourself to learn everything at once. It's a continuous subject.

■ Do not separate HTML from CSS. That's unnecessary.

https://t.co/XiPrKuQrnB

Beginner's Roadmap for HTML & CSS

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— Swapna Kumar Panda \uea00 (@swapnakpanda) April 18, 2022

❷ JavaScript

JavaScript is essential. You should start with basics and move to complex subjects.

❍ JavaScript Syntaxes
(preferably ES6 onwards)
❍ HTML DOM API
❍ Event Handling
❍ Fetch API

https://t.co/MAkUW8h22i

\U0001f6e3 Roadmap for JavaScript Absolute Beginners

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— Swapna Kumar Panda \uea00 (@swapnakpanda) March 29, 2022

❸ CSS Frameworks

CSS Framework is necessary if you are planning to be a professional developer.

There are so many options available.

❍ Tailwind CSS
❍ Bootstrap
❍ Chakra
❍ Bulma
❍ Foundation
❍ Skeleton
❍ Pure CSS

Start with anything. You can switch any time.

❹ UI Frameworks

To build a complex application, you will start using a UI framework sooner or, later.

They are,

❍ React
❍ Vue.js

❍ Angular
❍ Svelte

Go through their documentations. Choose according to your requirement, future interest.

❺ TypeScript

❑ JavaScript initially looks to be enough. But once projects become complex and bigger, you will notice how tough it's getting to handle.

❒ The biggest drawback (biggest advantage as well) of JavaScript is its dynamic typing. TypeScript is for your rescue.

❻ Server-side Frameworks

Client-side UIs (or, Single Page Applications) are

❍ Slow at startup
❍ Not fully SEO friendly
❍ Difficult to grow

Adapt to Server-Side frameworks.

❍ Next.js
❍ Gatsby
❍ NuxtJS

❼ Practice, Practice and, Practice

❑ Don't just read books and, articles or, watch videos. To learn effectively, you have to practice.

❒ Practicing after each step is very very important.

I am here sharing few practice sets.

❼.① Practice Questions

https://t.co/bteEMoeFMV

> Practice 50+ "Difference" Questions
>
> \u274d HTML
> \u274d CSS
> \u274d JavaScript
>
> \u21e9
>
> — Swapna Kumar Panda \uea00 (@swapnakpanda) March 25, 2022

❼.② Practice CSS

https://t.co/WMbP2AtiBz

> 50+ CSS Problems for Practice
>
> \u21e9
>
> — Swapna Kumar Panda \uea00 (@swapnakpanda) March 4, 2022

❼.③.① Practice JavaScript

https://t.co/VgO5EM1ykb

> \U0001f469\u200d\U0001f4bb Practice 100+ Problems
>
> Using your favourite language
> \u274d C
> \u274d C++
> \u274d Python
> \u274d Java
> \u274d C#
> \u274d PHP
> \u274d JavaScript
> Or, anything.
>
> \u21e9
>
> — Swapna Kumar Panda \uea00 (@swapnakpanda) April 8, 2022

❼.③.② Practice JavaScript

https://t.co/B7ic7F6gR9

> \U0001f469\u200d\U0001f4bb Practice 50+ Problems
>
> Using your favourite language
> \u274d C
> \u274d C++
> \u274d Python
> \u274d Java
> \u274d C#
> \u274d PHP
> \u274d Golang
> \u274d JavaScript
>
> Crack your next Interview.

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— Swapna Kumar Panda \uea00 (@swapnakpanda) April 21, 2022

❼.④ Build Projects

https://t.co/kNf0P0JlBk

100+ Project Ideas for JavaScript Beginners

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— Swapna Kumar Panda \uea00 (@swapnakpanda) March 26, 2022

❽ Other Skills

These are some mandatory skills

① Git
Knowledge of Git is must. You can use clients like GitHub, GitLab etc.

② Data Structures
You should learn basic data structures like Array, Linked List, Stack, Queue, Tree, Graph etc.

Below are some "nice-to-have" skills

③ CSS Preprocessors

CSS is powerful but, sometimes we may need features which are not available in CSS. There, CSS Preprocessors help a lot.

We can choose from

❍ Sass
❍ LESS
❍ Stylus
❍ PostCSS

④ Web APIs

Apart from DOM API and Fetch API, you may have to use many other APIs for building a great web application.

https://t.co/ISM6631s7N

11 Web APIs for Advanced Web Development

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— Swapna Kumar Panda \uea00 (@swapnakpanda) April 1, 2022

⑤ State Management Libraries

Managing data (state) in a UI application becomes a tough task when they become abundant.

You may consider to use
❍ Redux
❍ Mobx
❍ React Query
❍ xstate

⑥ GraphQL

Traditional data fetching from server is a repetitive and slower operation.

GraphQL is a nice invention. It's grooming. Consider using any of the below GraphQL clients.

❍ Apollo Client
❍ Relay
❍ GraphQL Request
❍ AWS Amplify
❍ urql

❾ Frequently Asked Questions

① Can I learn JavaScript before HTML & CSS?
Yes. You can learn basic syntax.
For DOM API and Event Handling etc., you would need knowledge of HTML & CSS.

② Can I learn TypeScript before React & Tailwind?
Yes. This is for illustration only. You can always prepare these 3 in any order.

③ Why Tailwind, but no Bootstrap?
It's just for illustration. You can choose any CSS Framework of your choice.

④ Why no Angular?
It's just for illustration. You can choose any JS Framework of your choice.

⑤ Why are only JS frameworks mentioned?
I have prepared this roadmap keeping JS frameworks in mind. You can chose any framework.

⑥ There are no CSS Preprocessors?
CSS Preprocessors are helpful, no doubt. But, in most circumstances, you may not need them. Use them as per the need.

⑦ Does ■ mean, it's finished?
No. The Web Development is evolving every day. So, don't stop.

Hey ■

I am a Tech Educator from India ■■

Here, I am sharing Tutorials, Tips, Infographics, Cheat Sheets, Interview Questions, Project Ideas and Roadmaps on Web Development, DSA and, Database.

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*Final

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