

Agenda

- Prerequisites
- Module Overview
- Components
- Full Stack Tech Roadmaps
- References

Full Stack Web Development 1



javascript · node · apis · tdd
· frameworks · front-end ·
sveltekit · typescript

Perquisites

- Intermediate level skills in:
 - **HTML:** Ability to effectively structure the html content of a small to medium static site, including the use of templates
 - **CSS:** Understand the fundamentals of CSS, and be able to realise simple layouts and designs. Be comfortably using a CSS framework
 - **Javascript:** Be familiar with the building blocks of the language and be able to compose realise algorithms to accomplish simple tasks.



- **Web Applications:** Have experience building simple web applications, including the the fundamentals of templating, Model View Controller patterns, sessions & the basics of application deployment

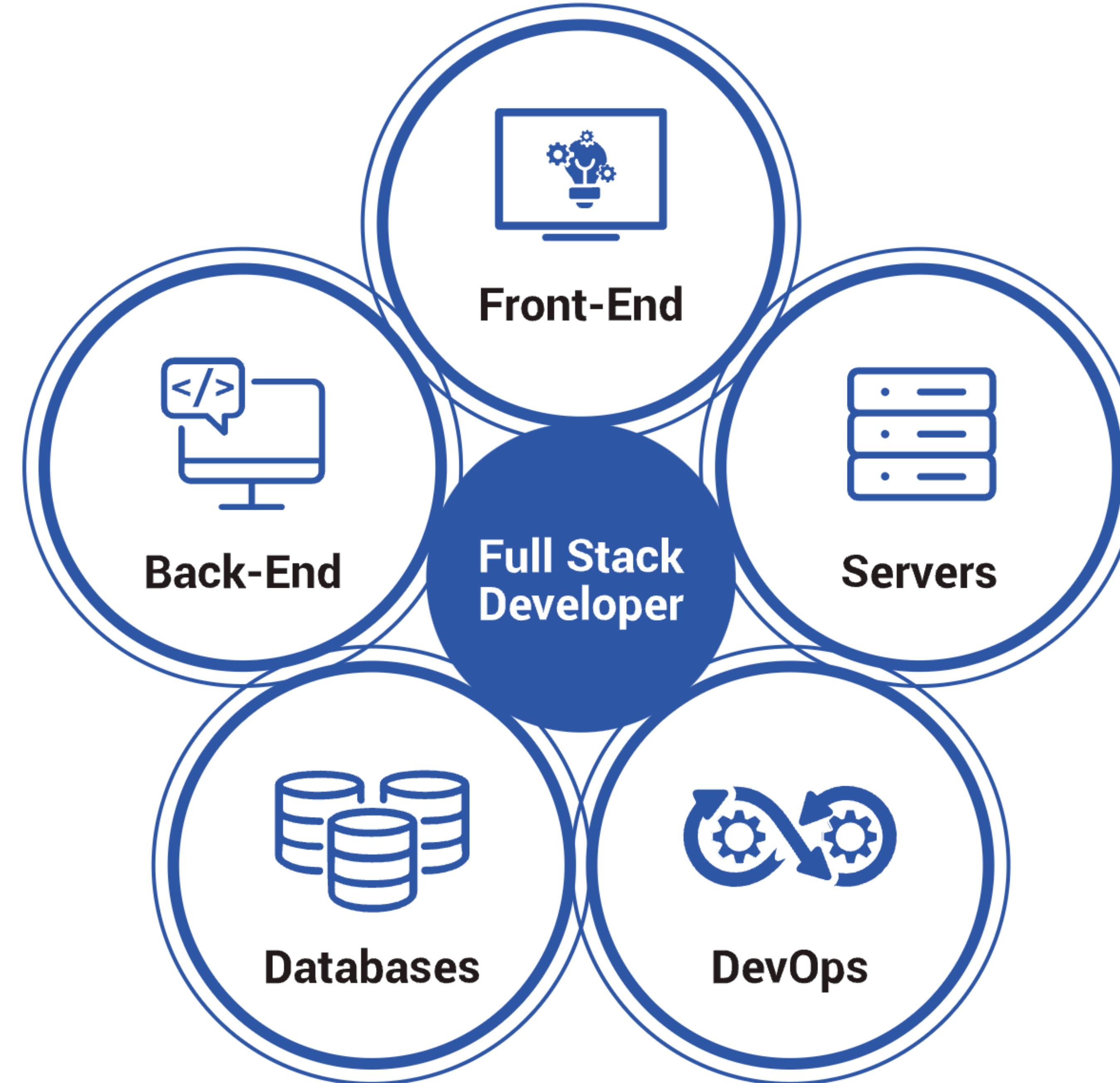
Back End Web
Development

Test Driven
Development

Application
Programmer
Interfaces

Front End Web
Development

Full Stack



Core
Concepts

Back End Web Development

Test Driven Development

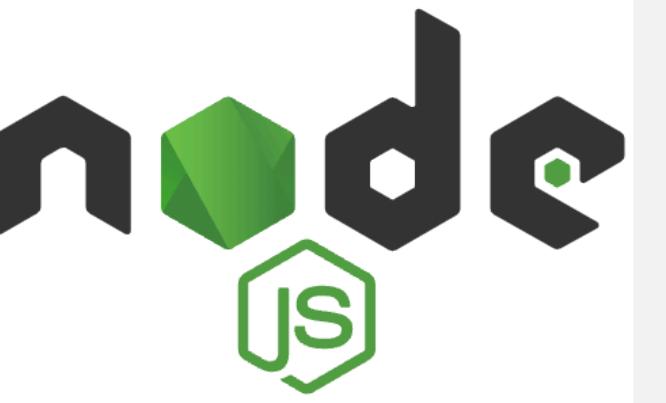
Application Programmer Interfaces

Front End Web Development

Full Stack

Core
Concepts

01: Node



The fundamentals of node.
A first node application.

02: Hapi.js



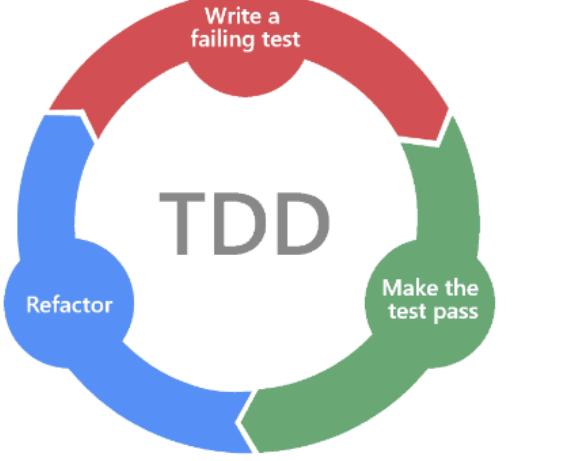
The Hapi application Framework

03: Joi



Validation with Joi

04: TDD



Test Driven Development

05: Models



Incorporate Mongo Models

Back End Web
Development

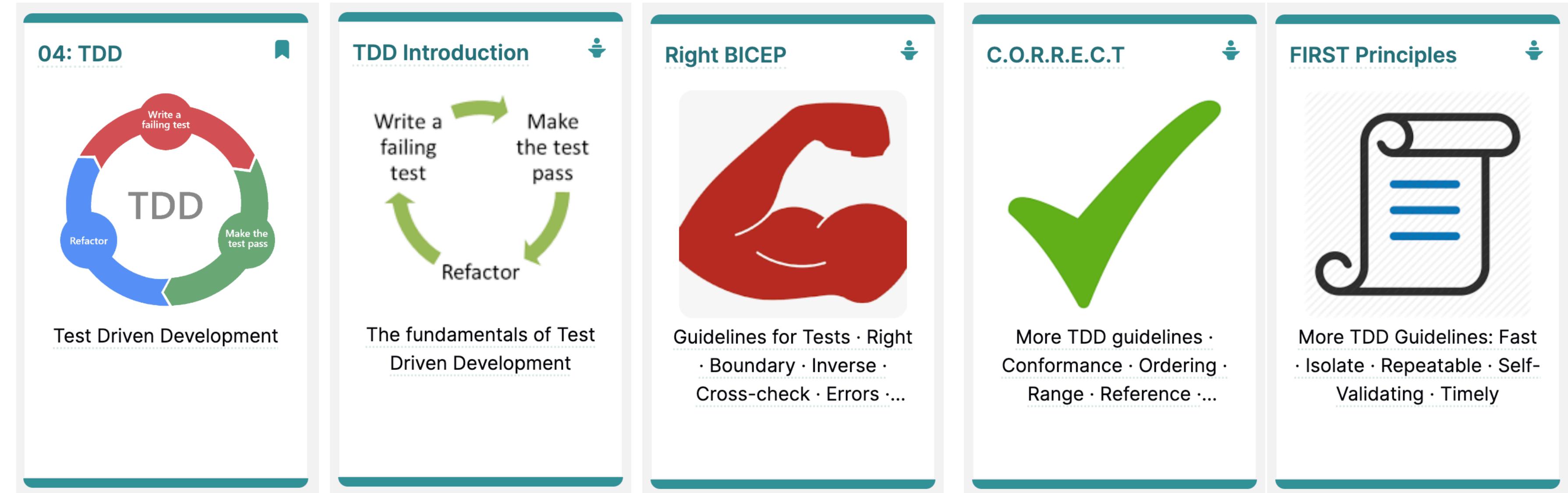
Test Driven Development

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Back End Web
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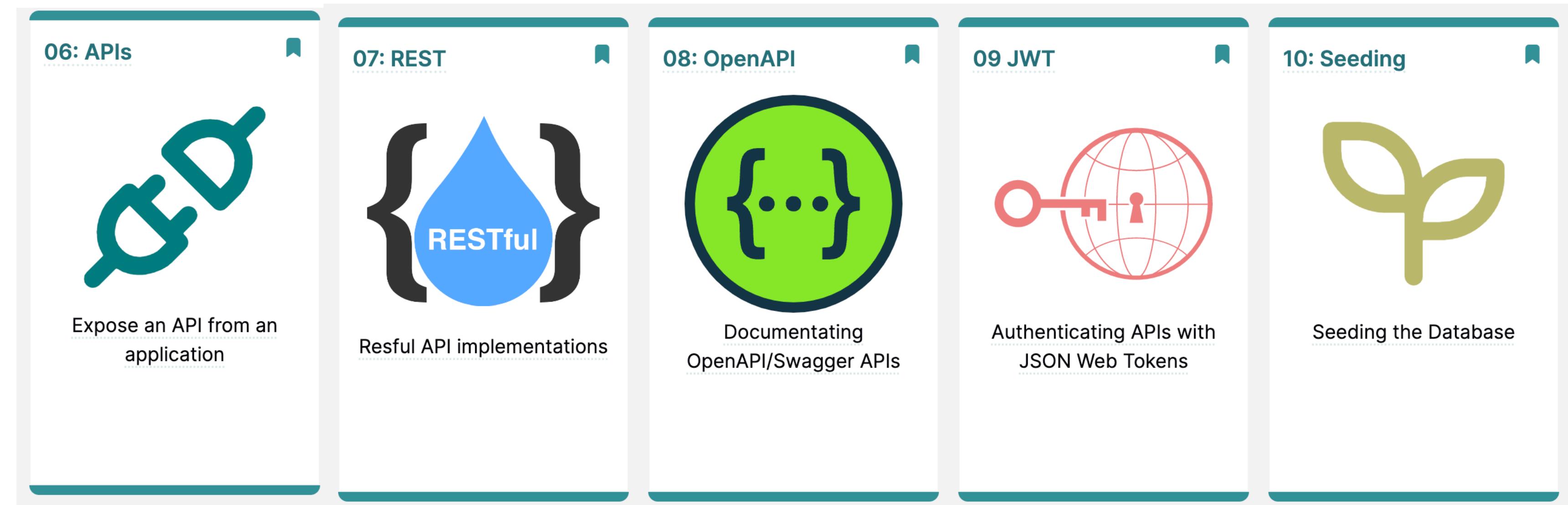
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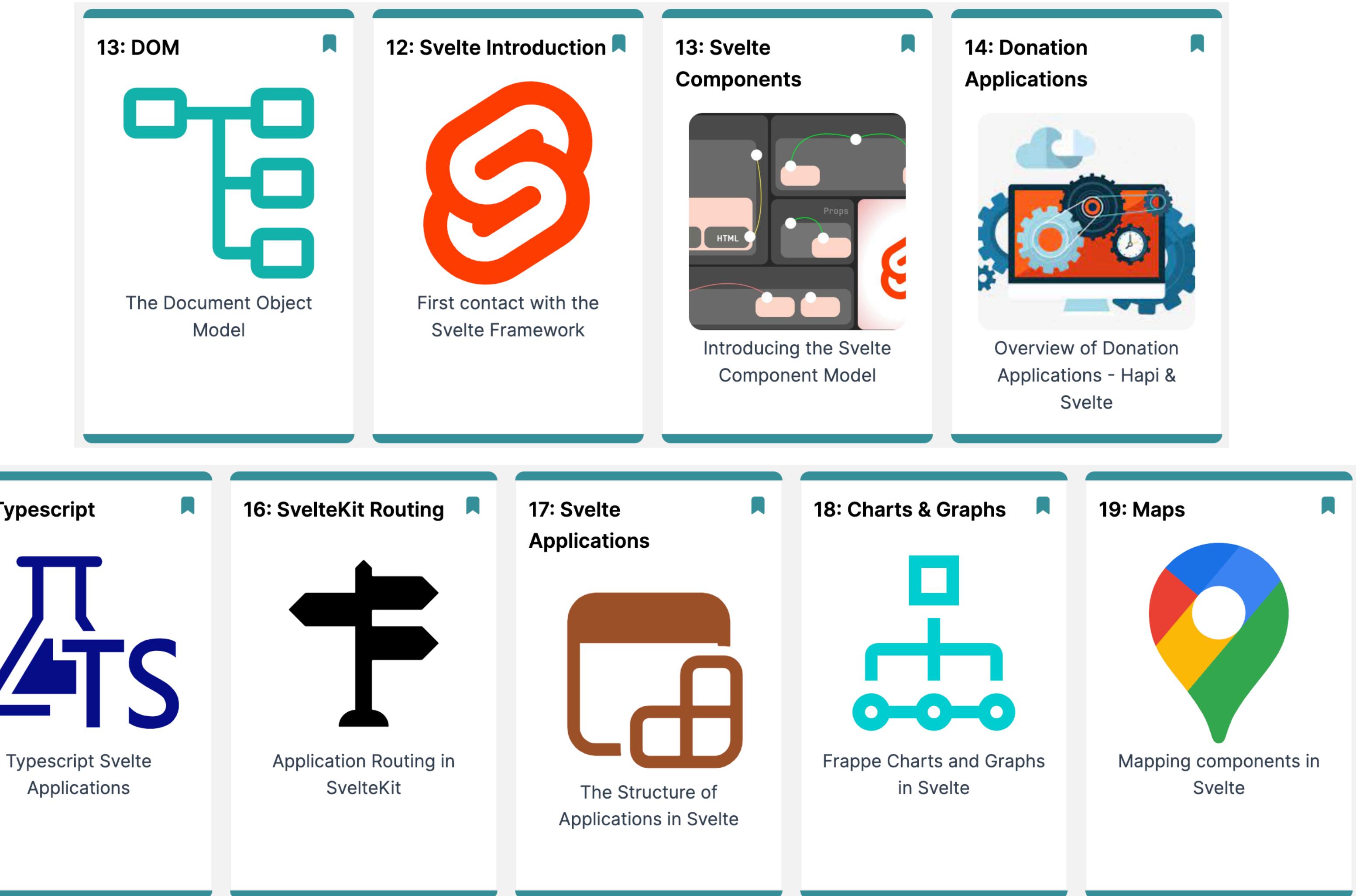
Back End Web
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**Front End Web
Development**

Full Stack



Back End Web
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Front End Web
Development

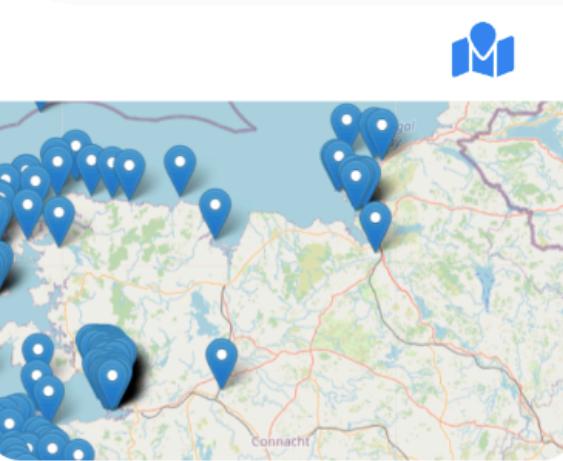
Full Stack

20: Serverless



Sveltekit / Firebase implementation

21: Oileain Case Study



Oileain
The Islands of Ireland

**22: Tutors Course
Generation**



Structure of a Tutors
Course + the Generators

**23: Tutors Reader
Application**



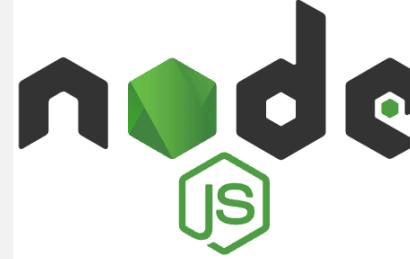
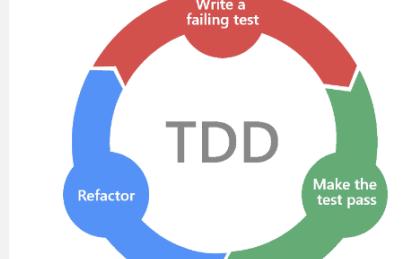
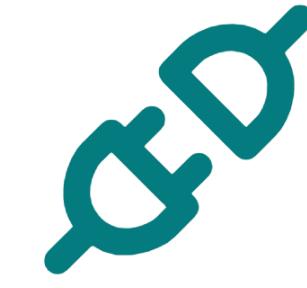
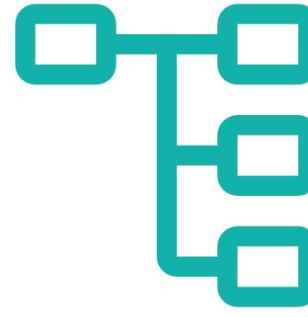
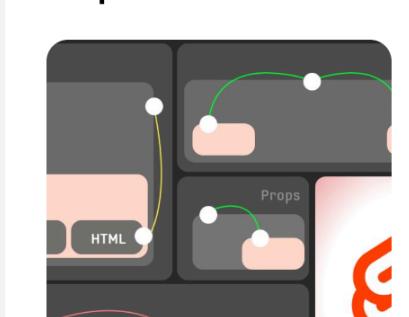
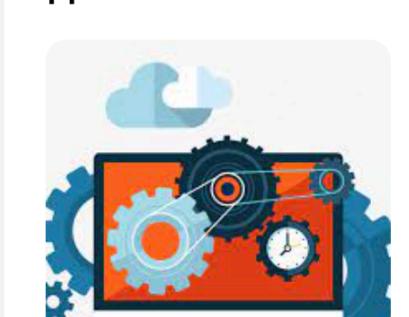
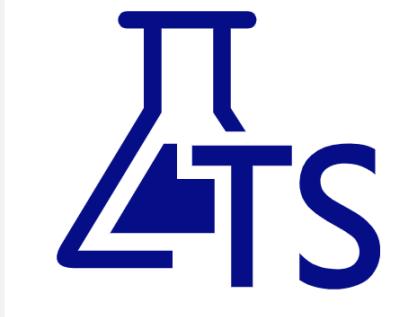
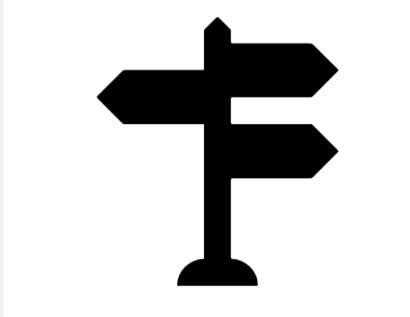
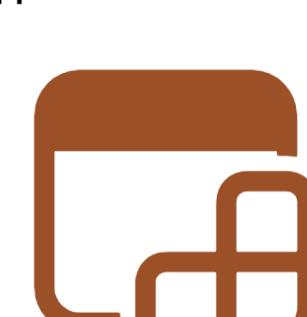
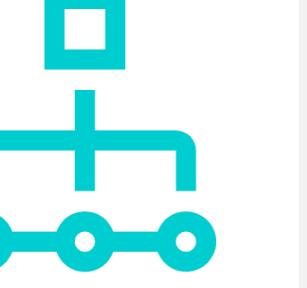
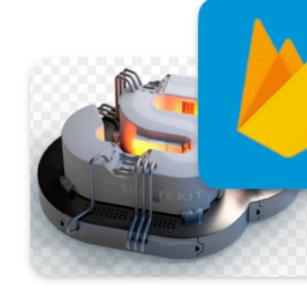
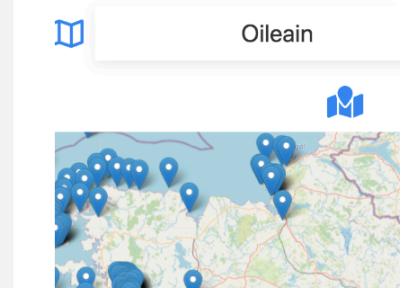
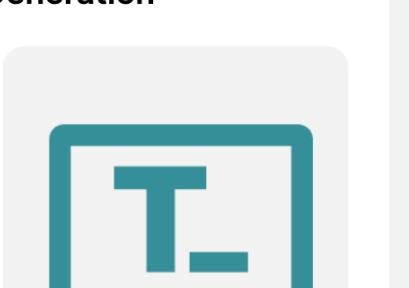
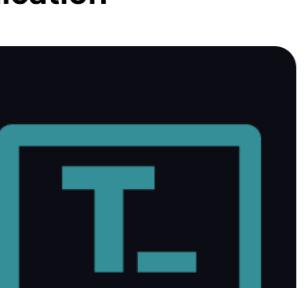
The Tutors front end
application - tutors.dev

24: Tutors Live



The Architecture of Tutors
Live

24 Topics

01: Node  The fundamentals of Node. A first Node application.	02: Hapi.js  The Hapi application Framework	03: Joi  Validation with Joi	04: TDD  Test Driven Development	05: Models  Incorporate Mongo Models		
06: APIs  Expose an API from an application	07: REST  Resful API implementations	08: OpenAPI  Documentating OpenAPI/Swagger APIs	09 JWT  Authenticating APIs with JSON Web Tokens	10: Seeding  Seeding the Database		
13: DOM  The Document Object Model	12: Svelte Introduction  First contact with the Svelte Framework	13: Svelte Components  Introducing the Svelte Component Model	14: Donation Applications  Overview of Donation Applications - Hapi & Svelte	15: Typescript  Typescript Svelte Applications	16: SvelteKit Routing  Application Routing in SvelteKit	17: Svelte Applications  The Structure of Applications in Svelte
18: Charts & Graphs  Frappe Charts and Graphs in Svelte	19: Maps  Mapping components in Svelte	20: Serverless  Sveltekit / Firebase implementation	21: Oileain Case Study  The Islands of Ireland	22: Tutors Course Generation  Structure of a Tutors Course + the Generators	23: Tutors Reader Application  The Tutors front end application - tutors.dev	24: Tutors Live  The Architecture of Tutors Live

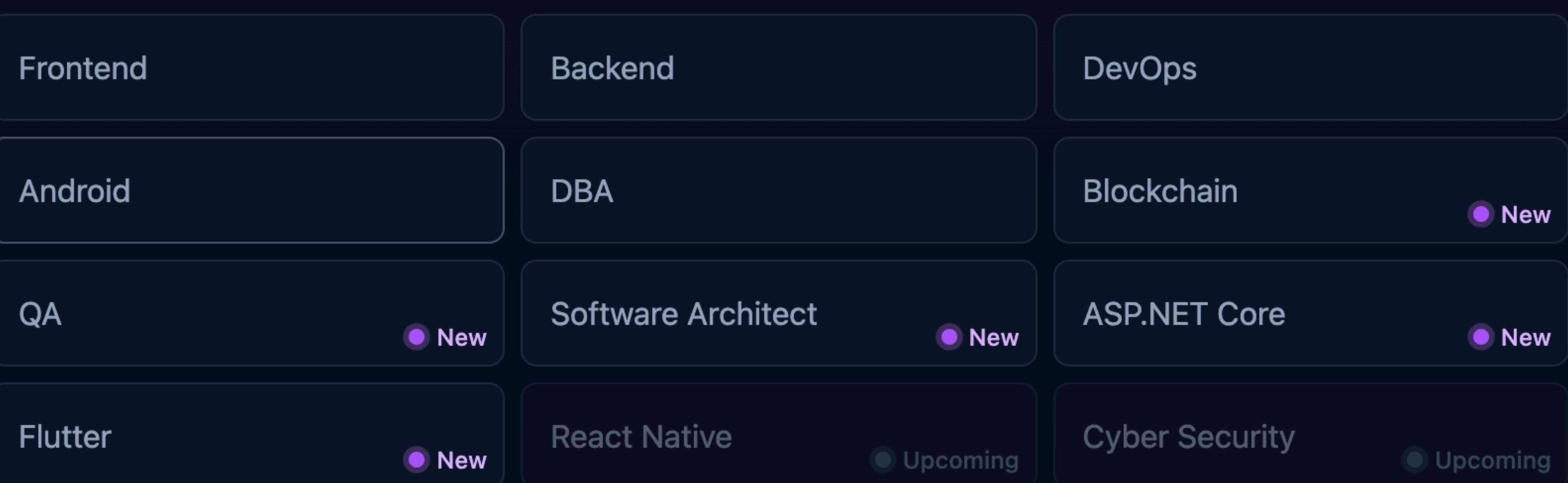


Developer Roadmaps

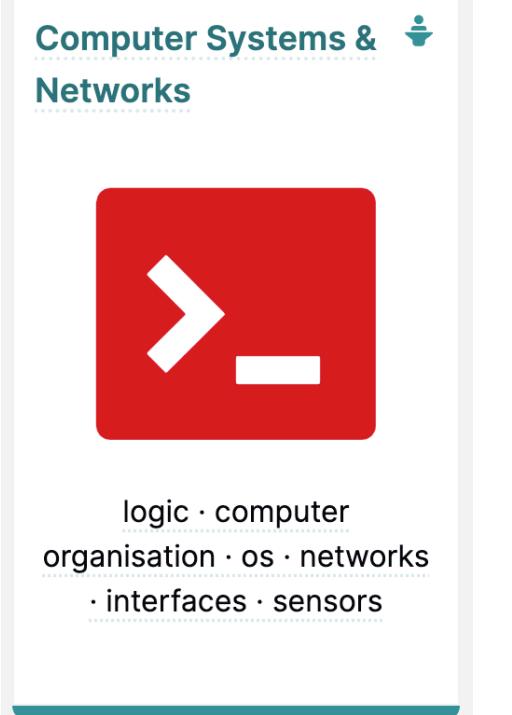
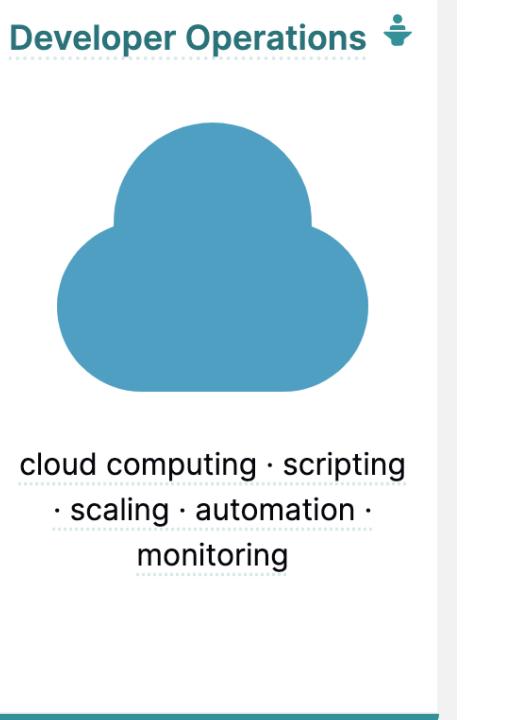
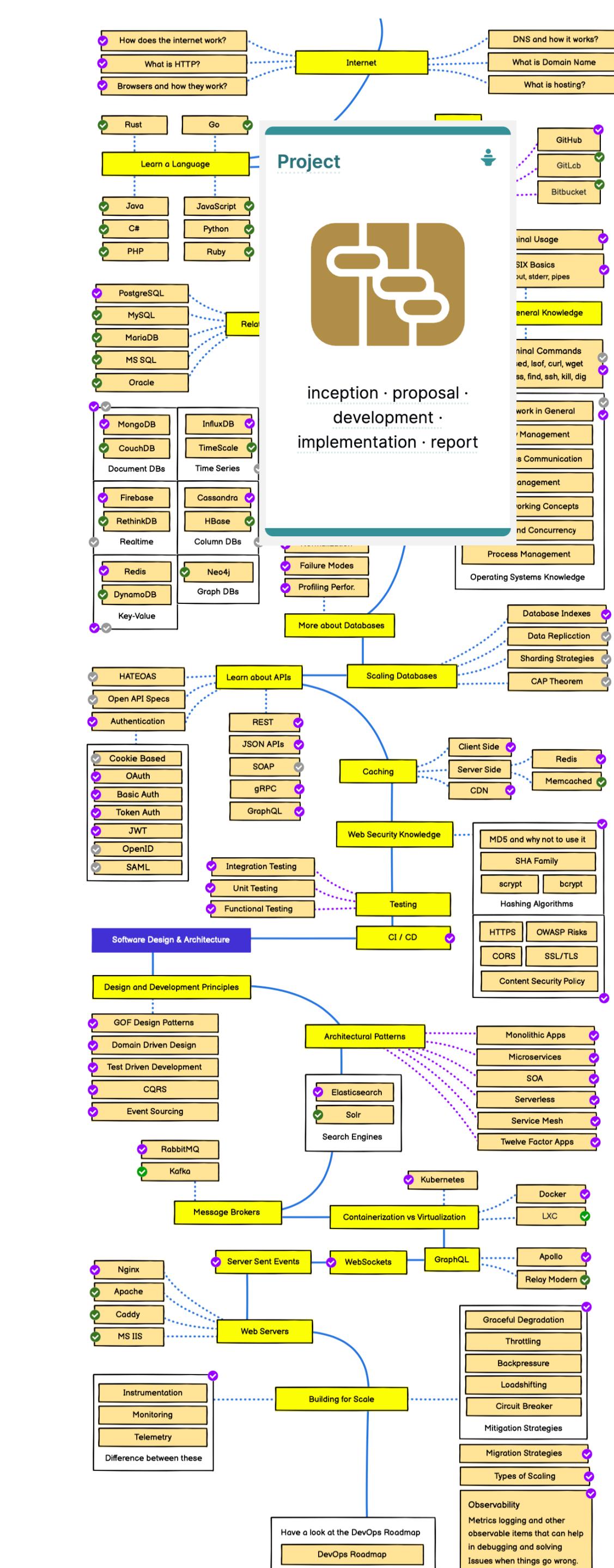
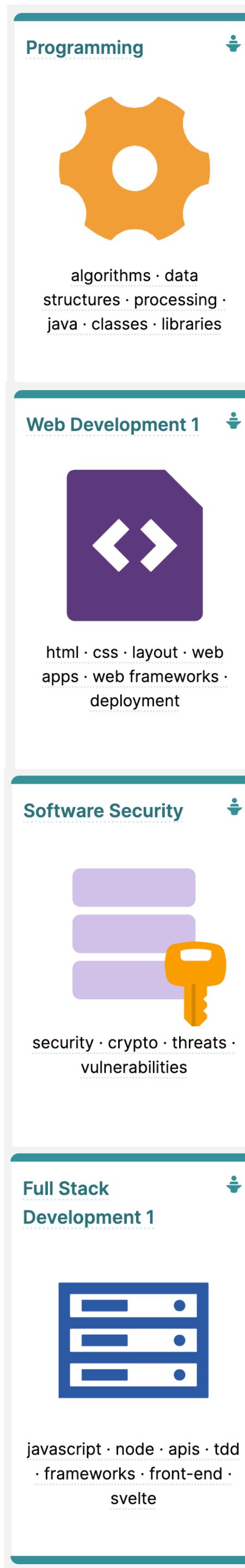
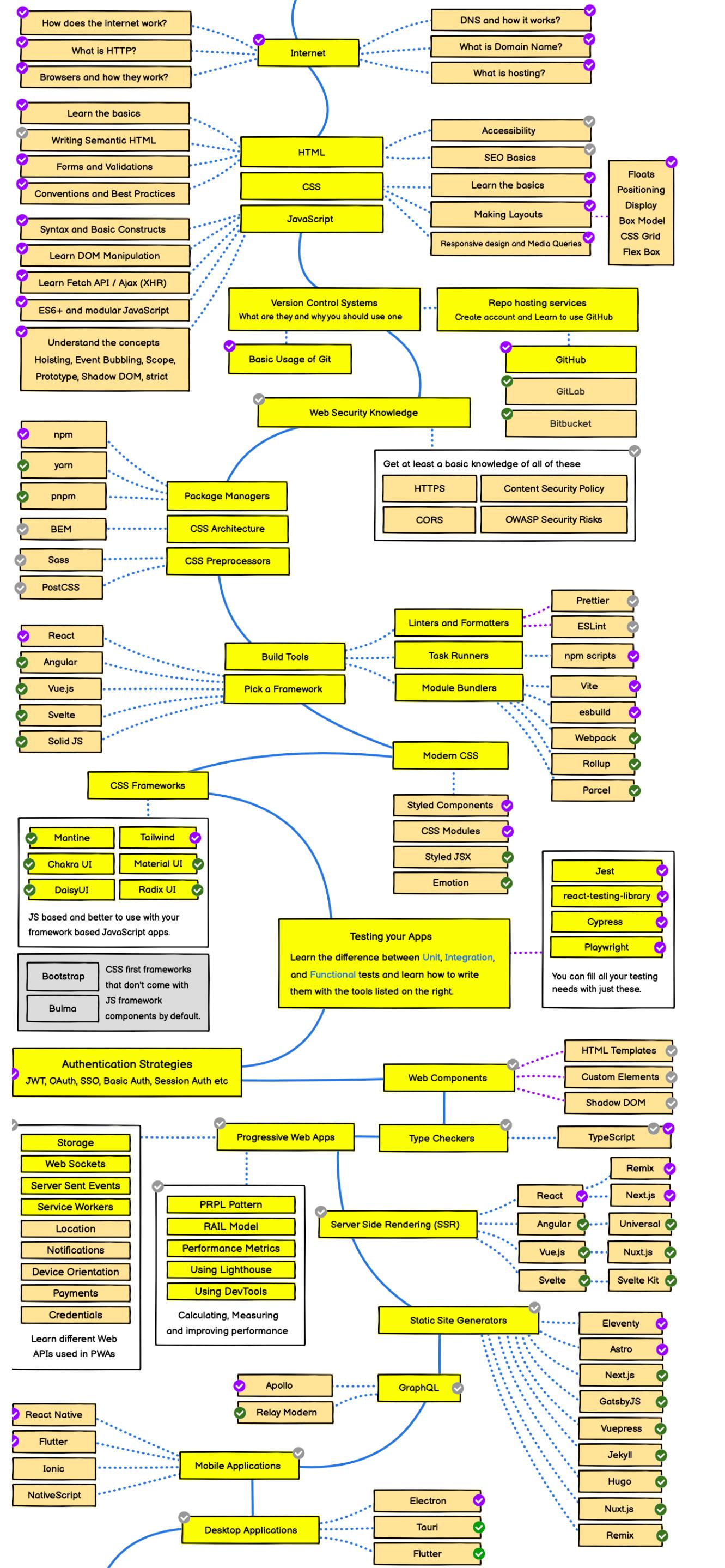
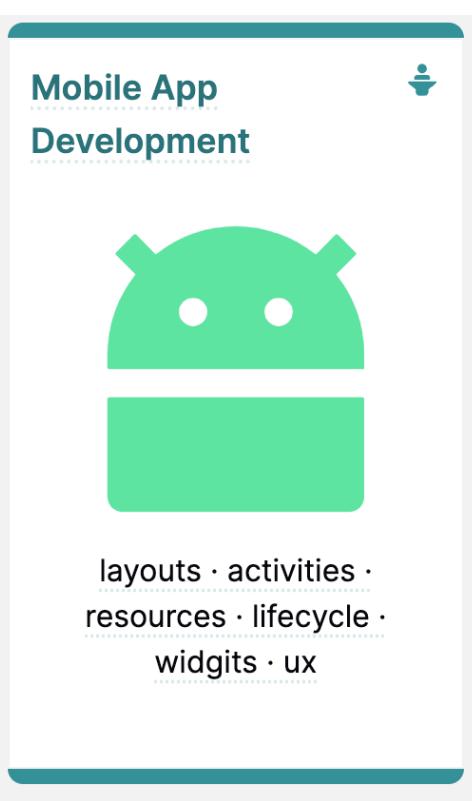
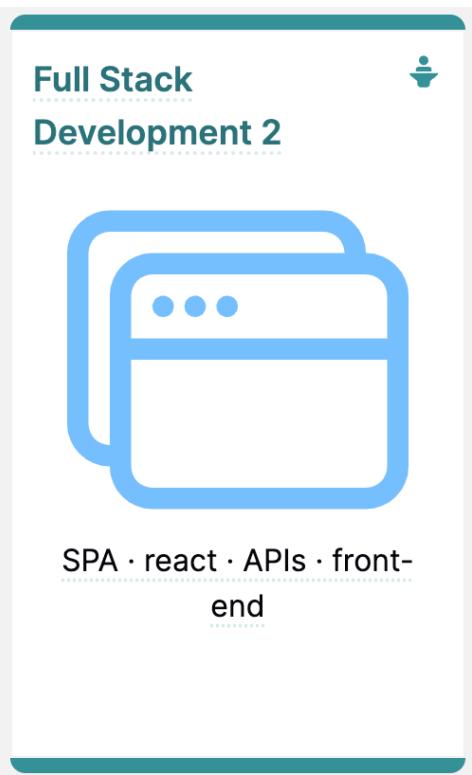
roadmap.sh is a community effort to create roadmaps, guides and other educational content to help guide the developers in picking up the path and guide their learnings.

<https://roadmap.sh/>

Role based Roadmaps



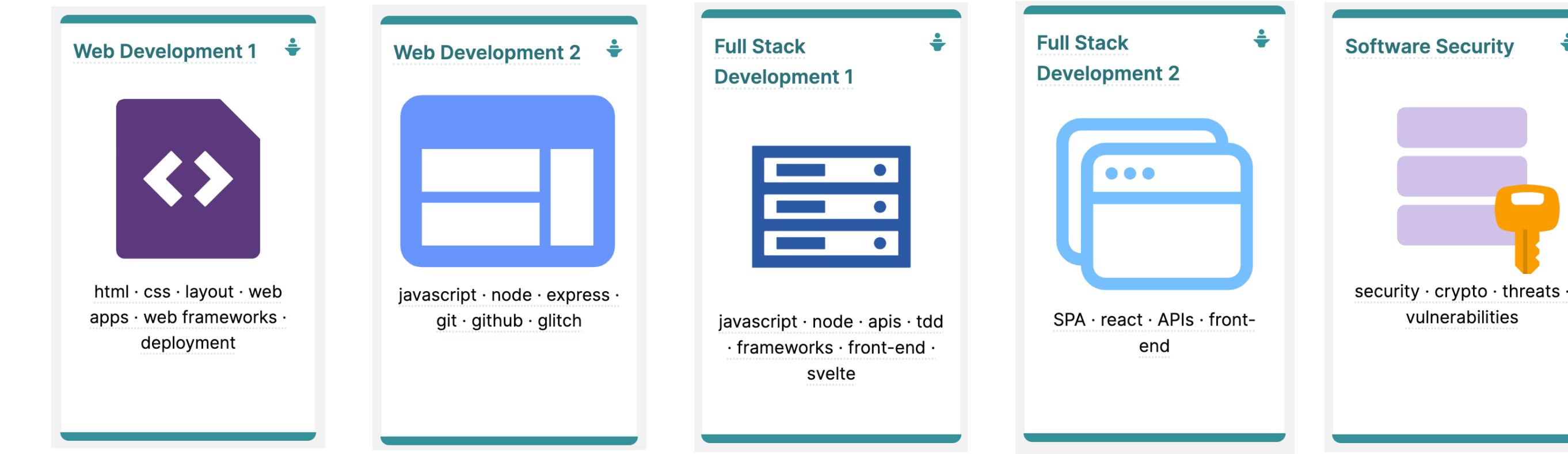
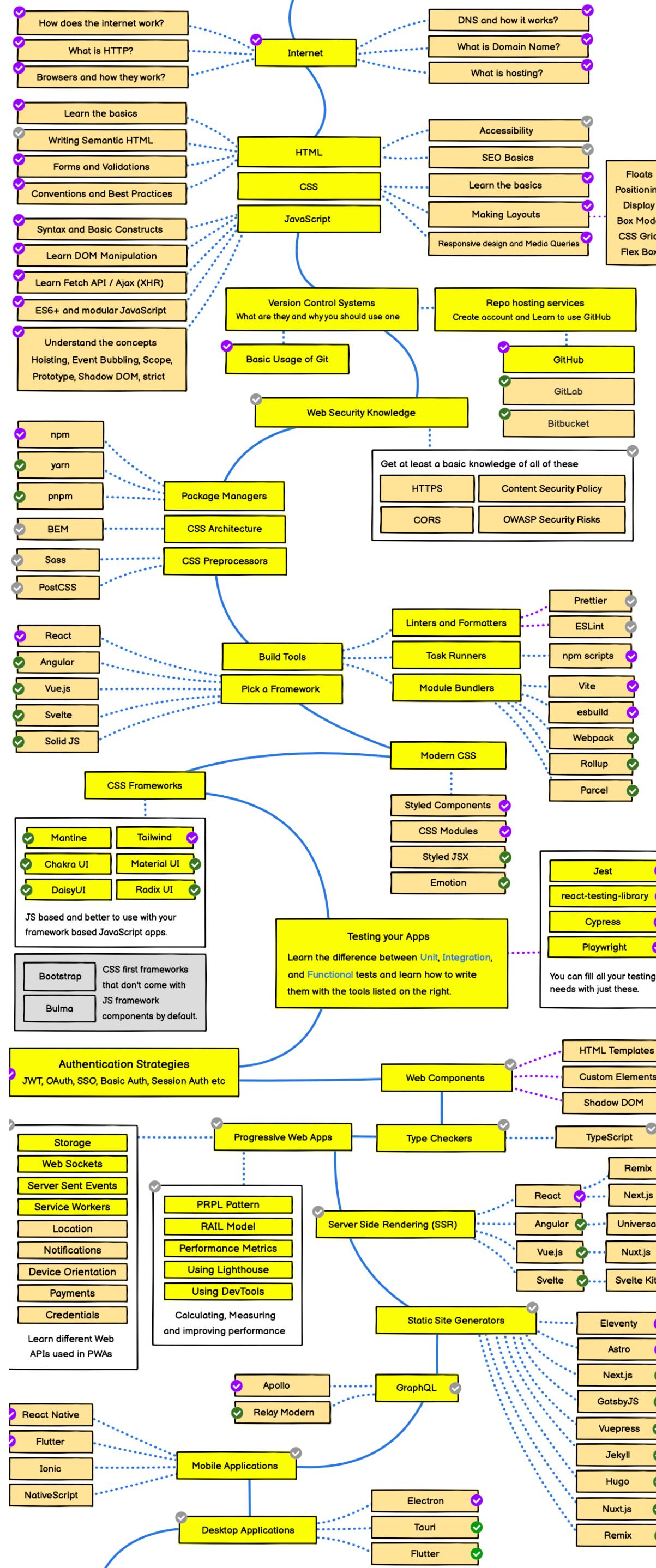
Frontend



Backend

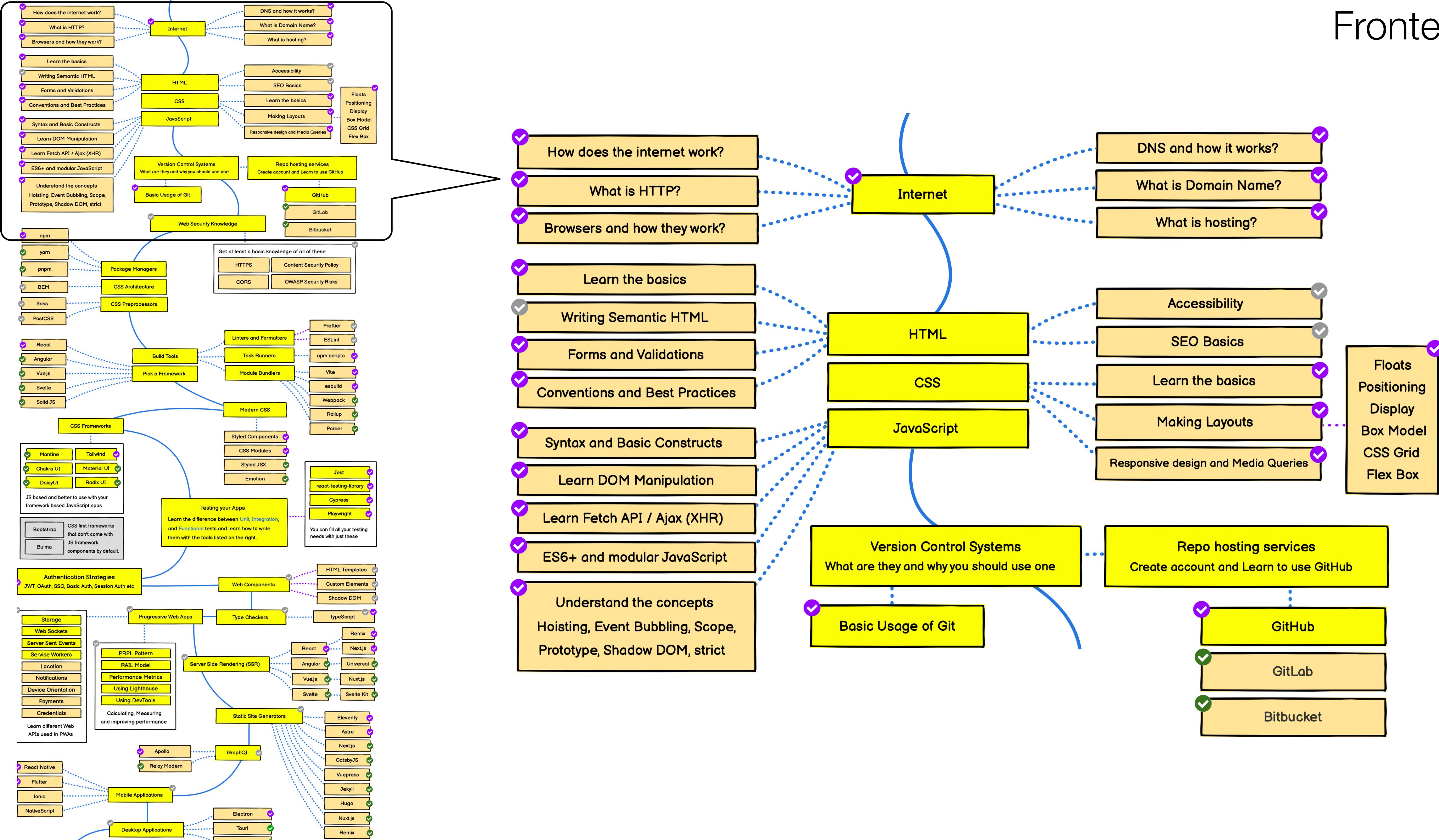
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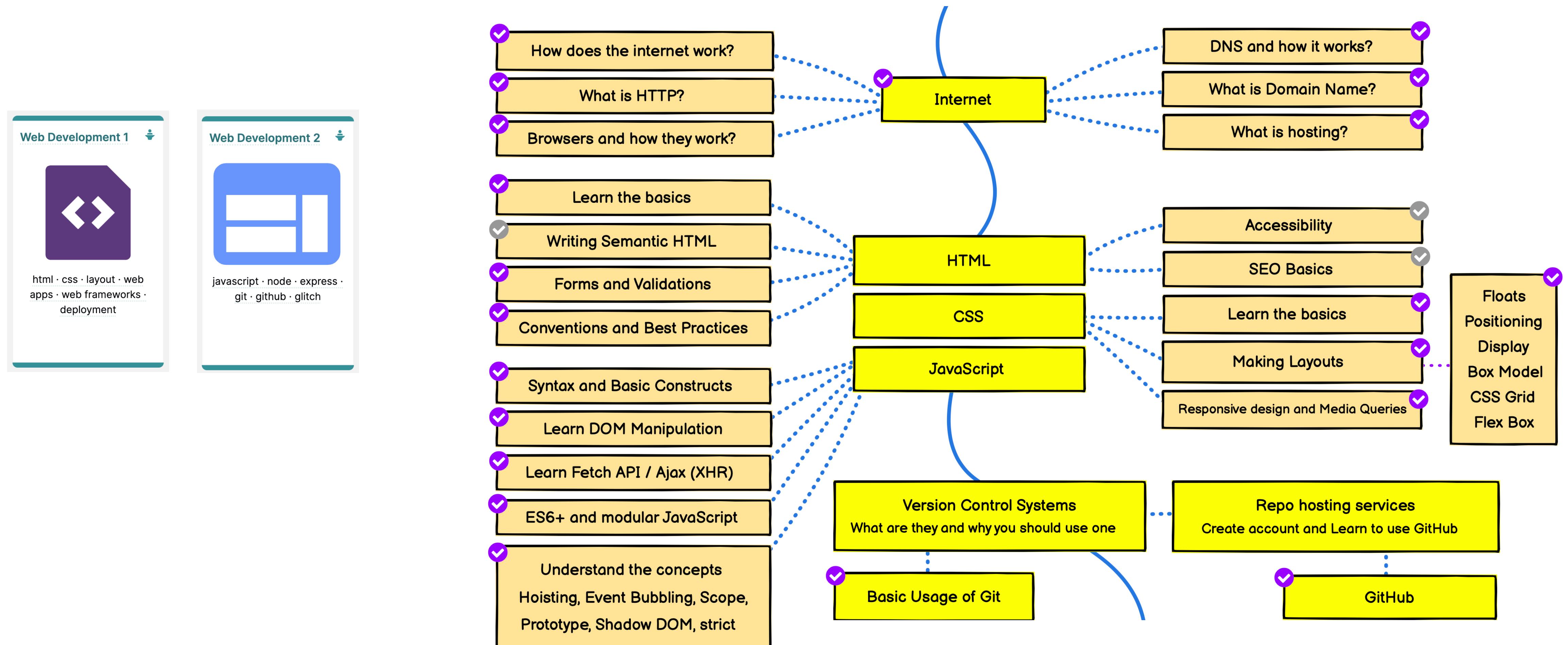
Frontend



- Building Blocks of the Web Experience
- Core Build Tools
- Framework Fundamentals
- CSS Frameworks
- Testing Strategies
- Browser API & Performance
- Site Generation

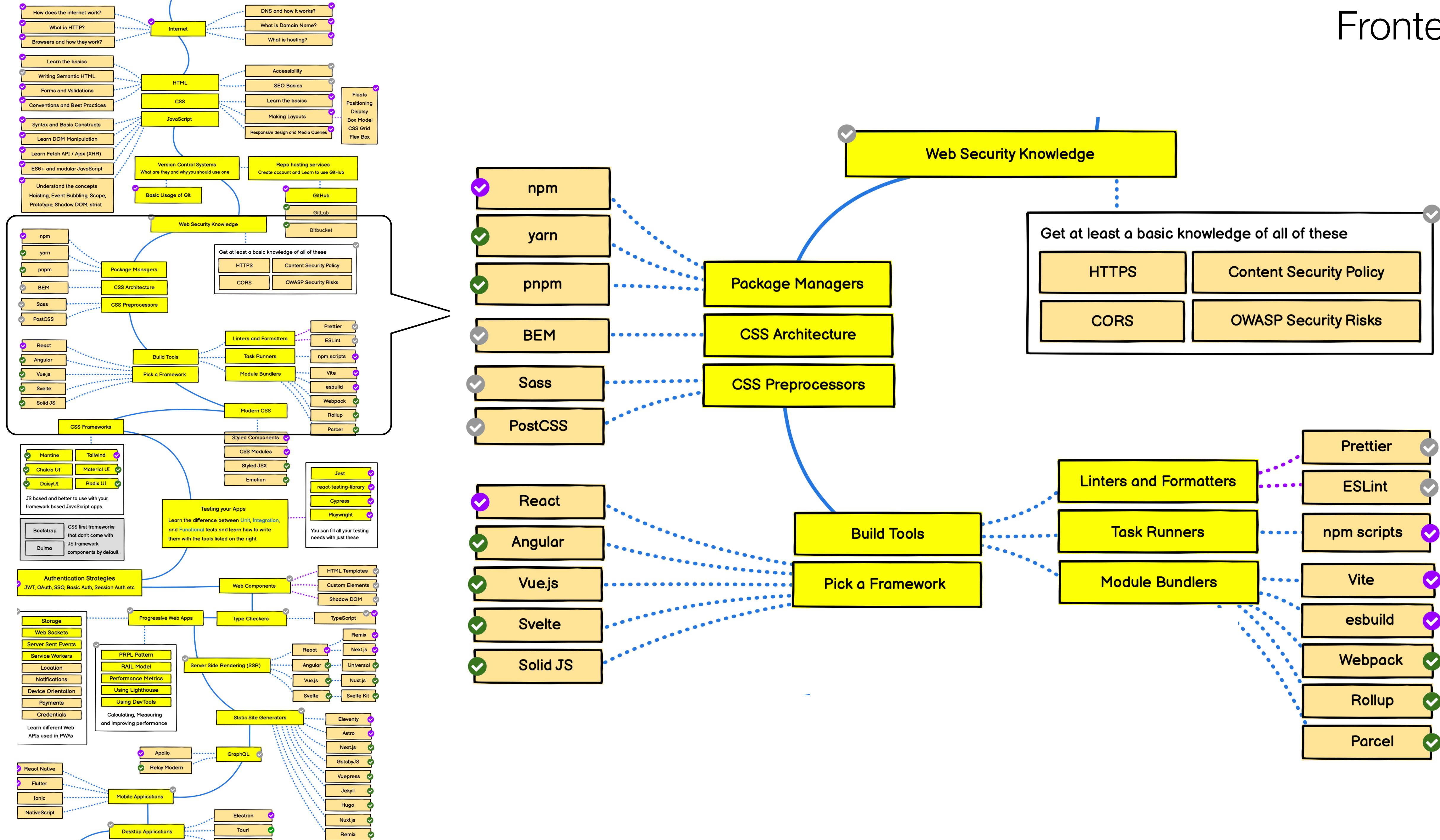
Frontend

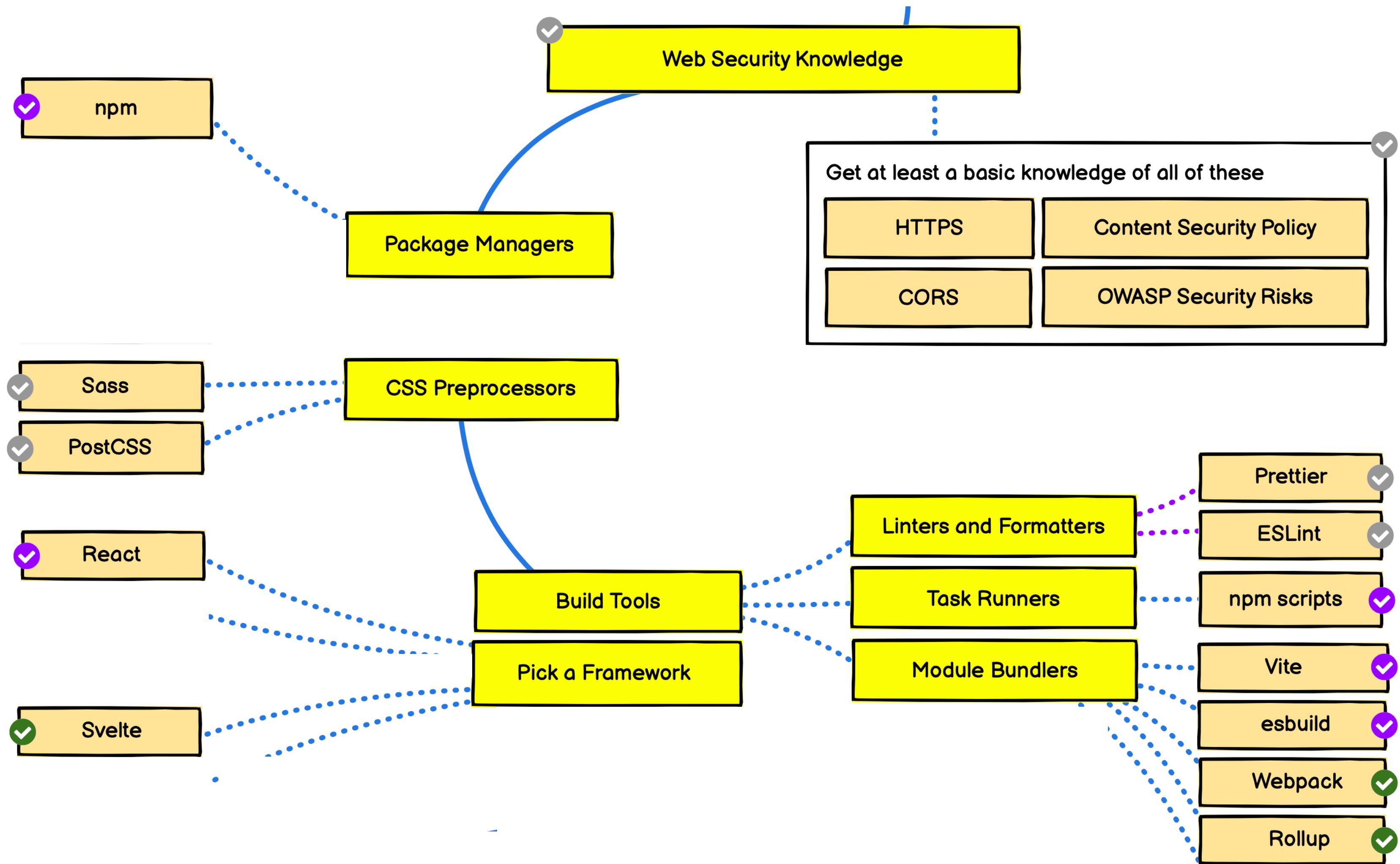
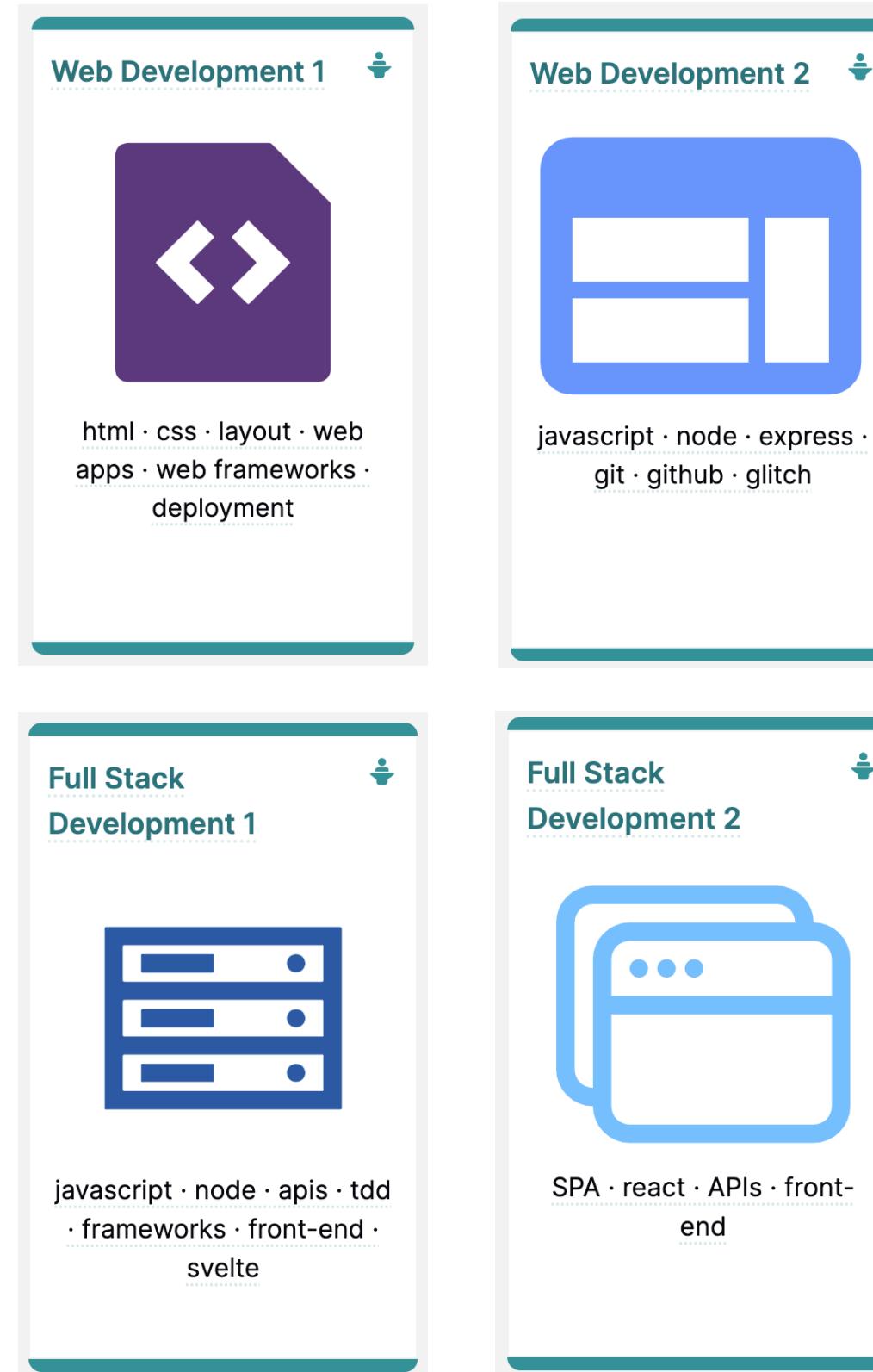




Building Blocks of the Web Experience

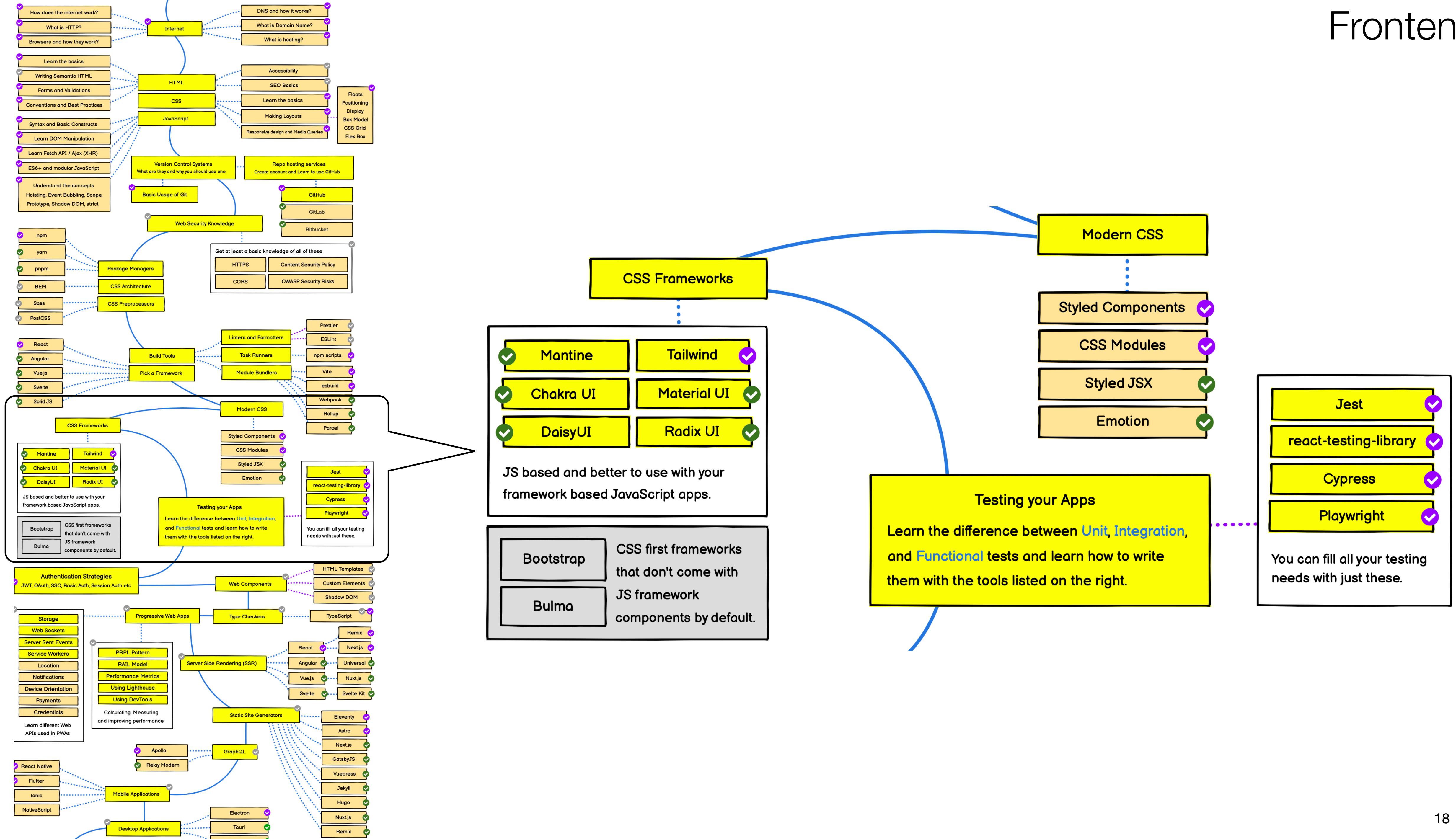
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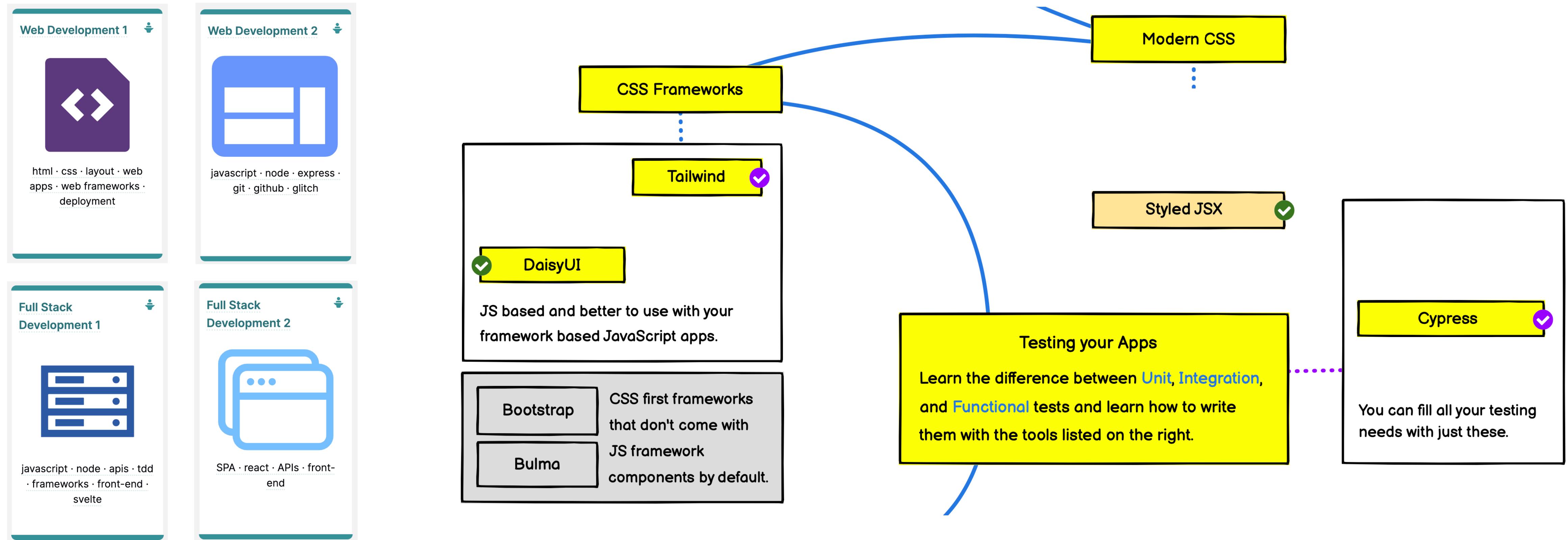




Core Build Tools + Framework Fundamentals

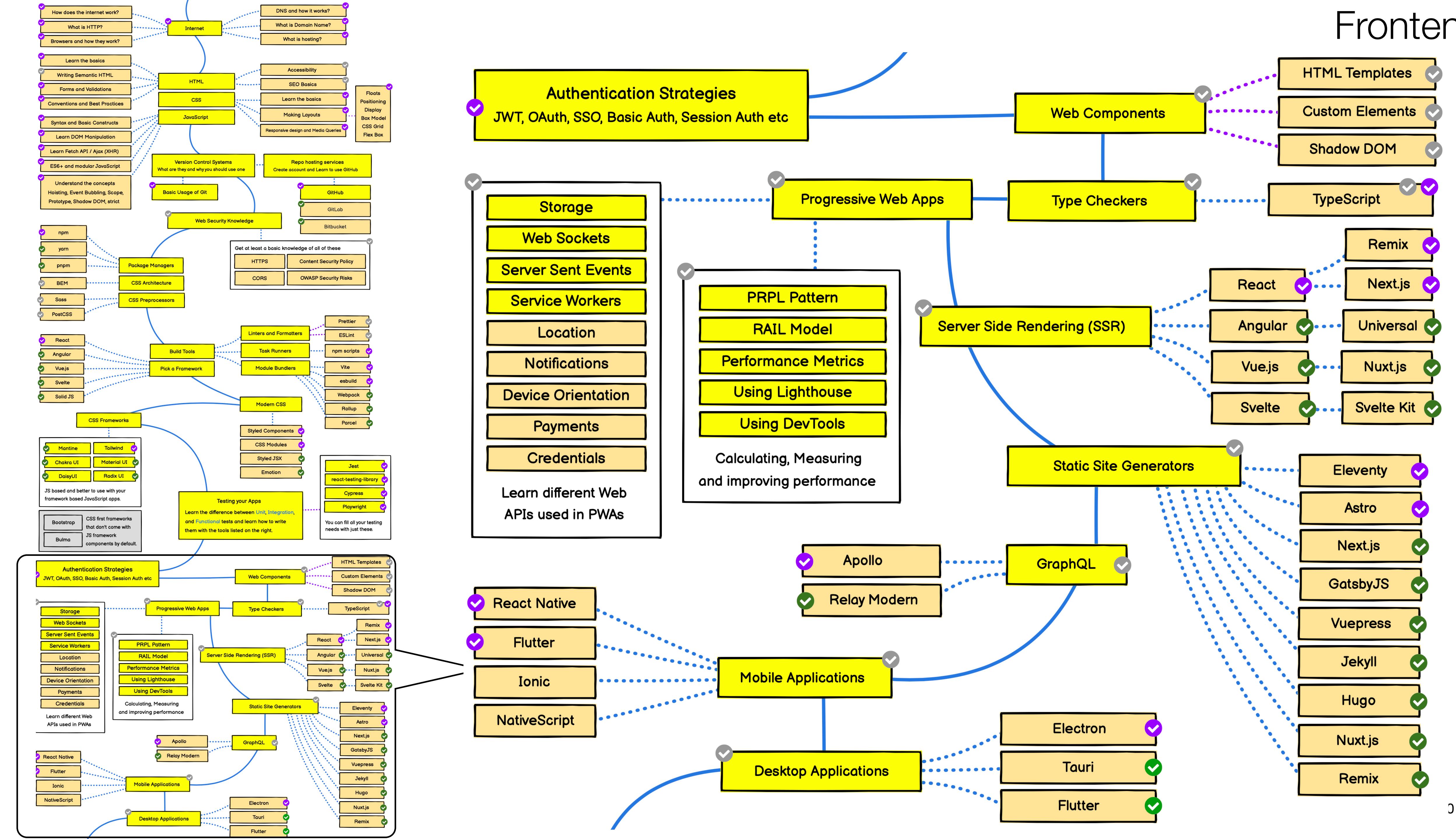
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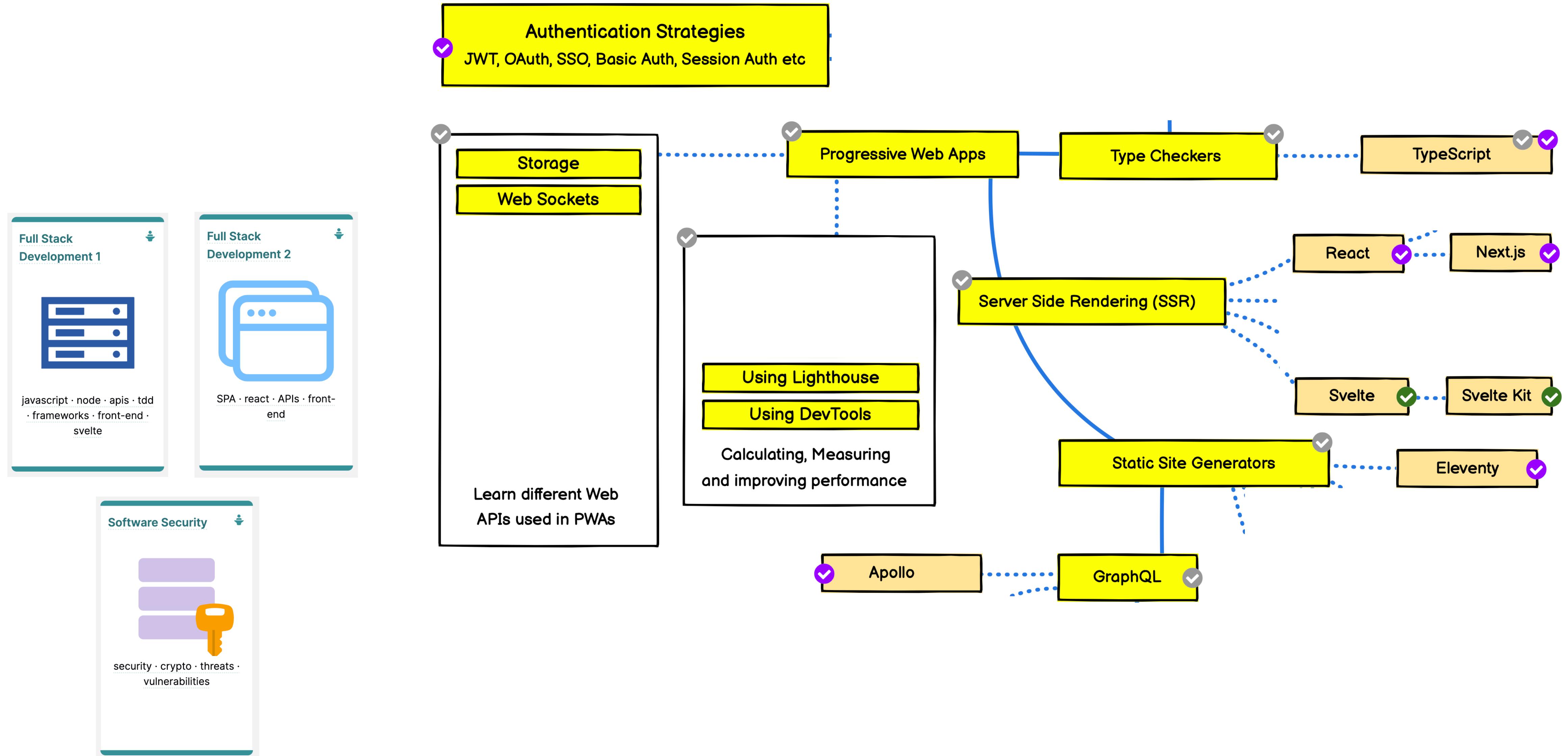




CSS Frameworks + Testing Strategies

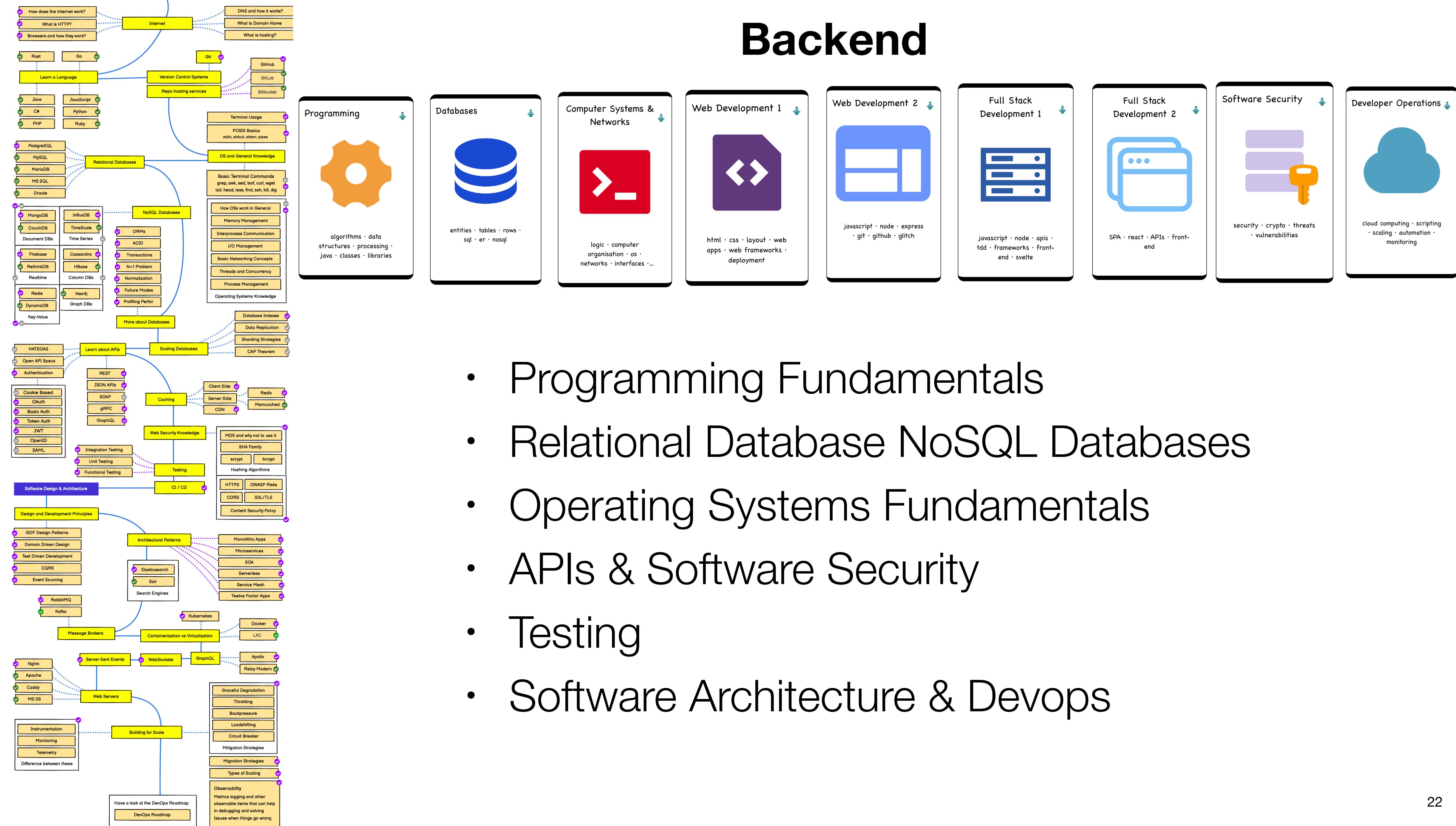
Frontend





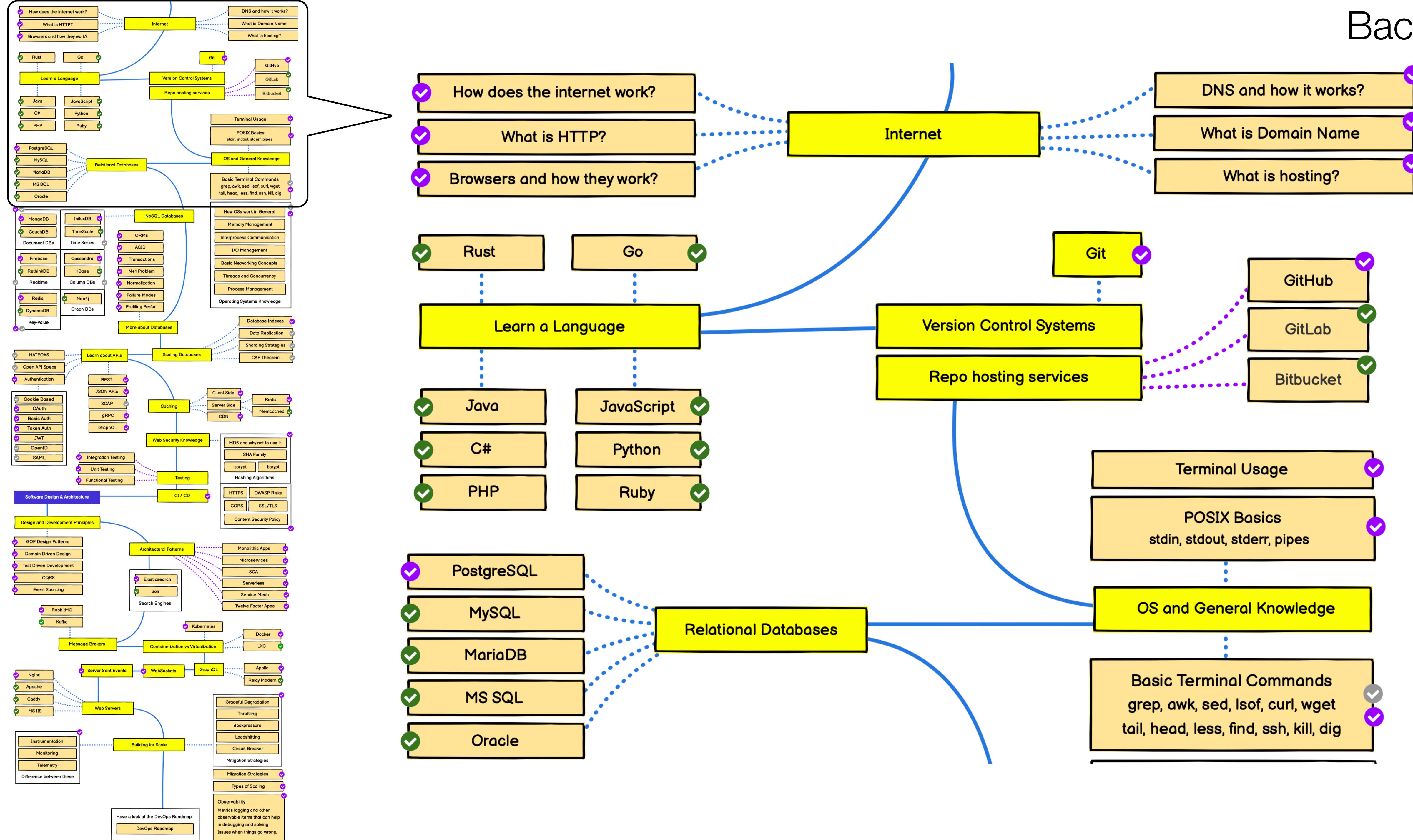
Browser API, Performance & Site Generation

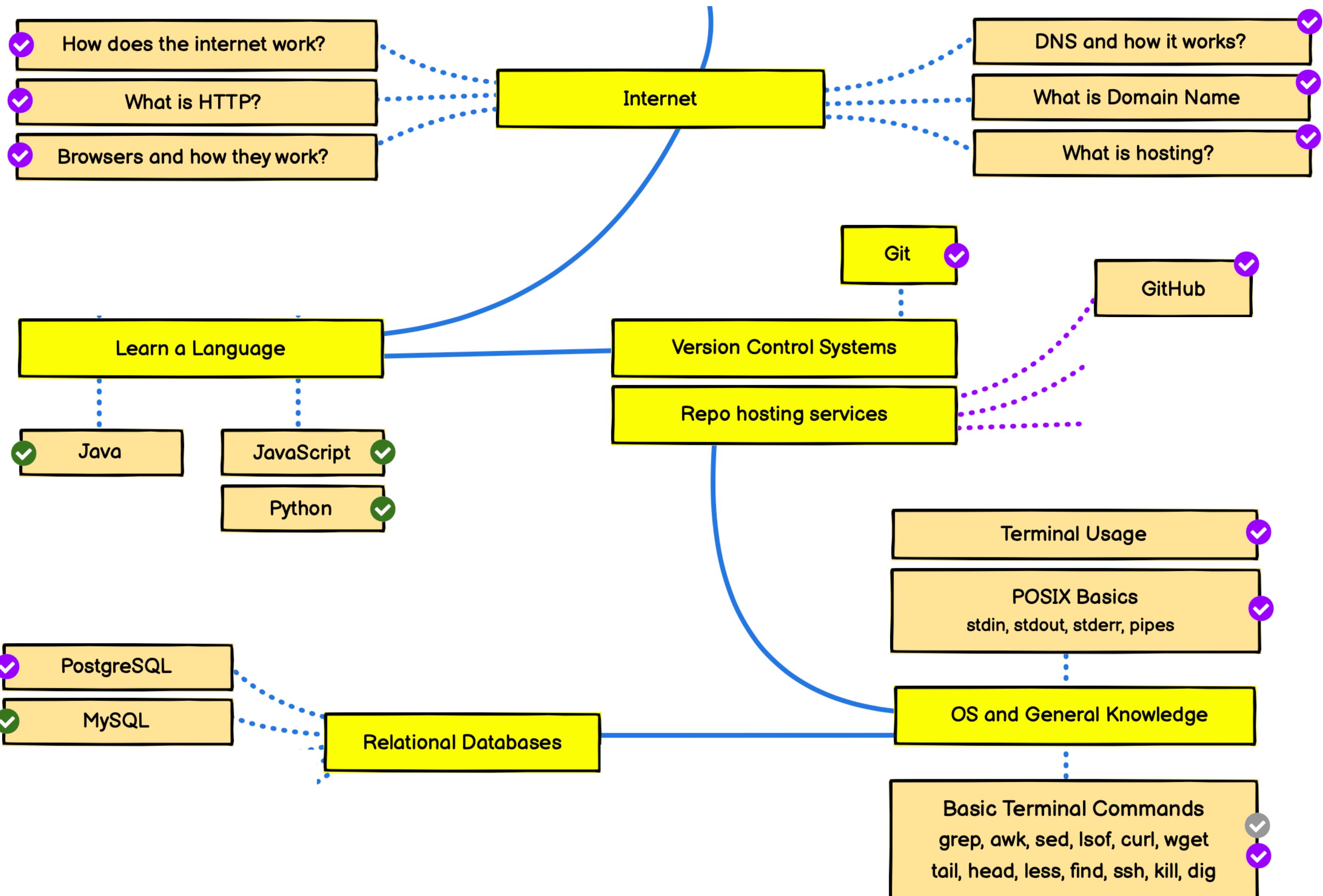
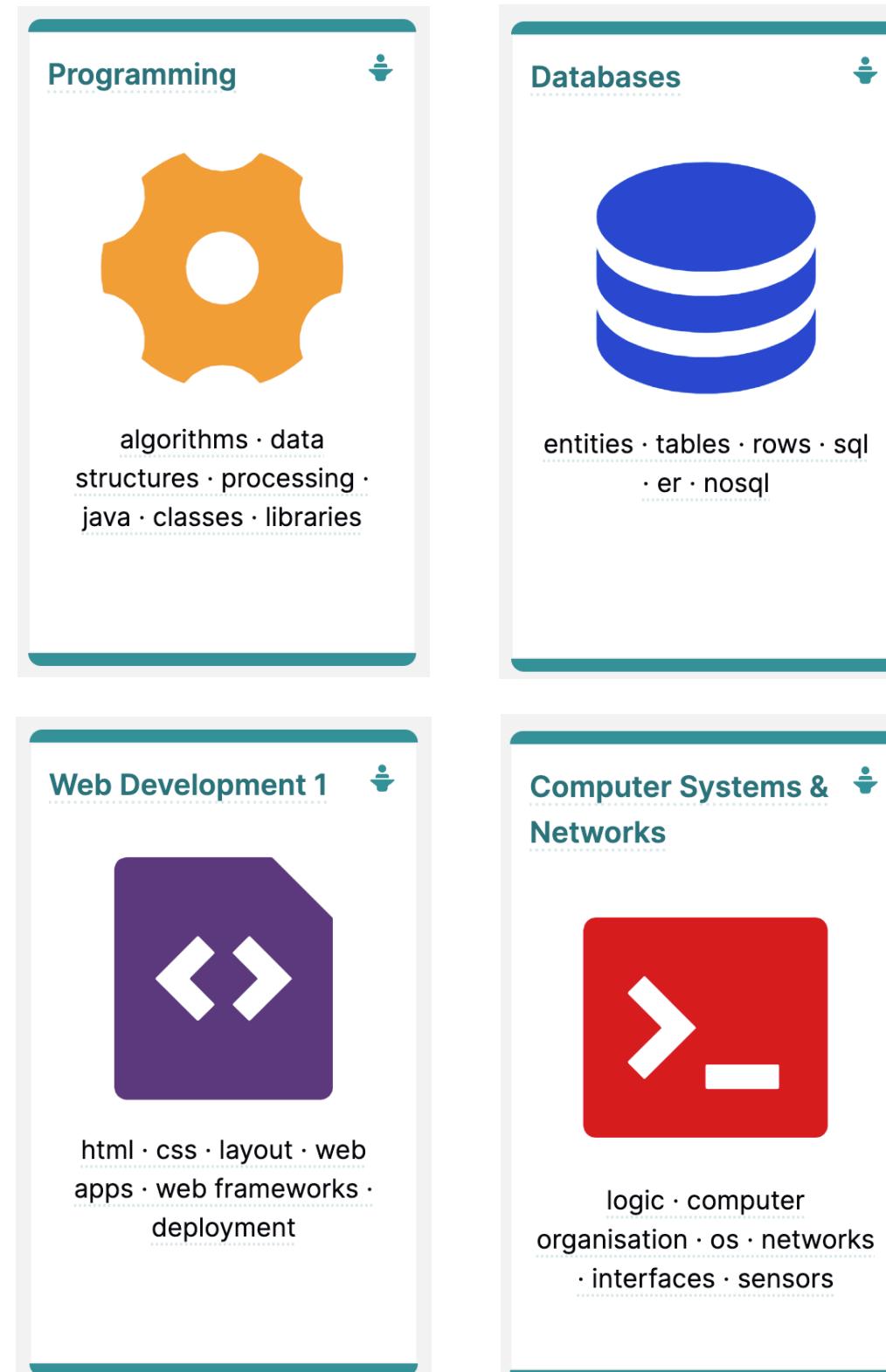
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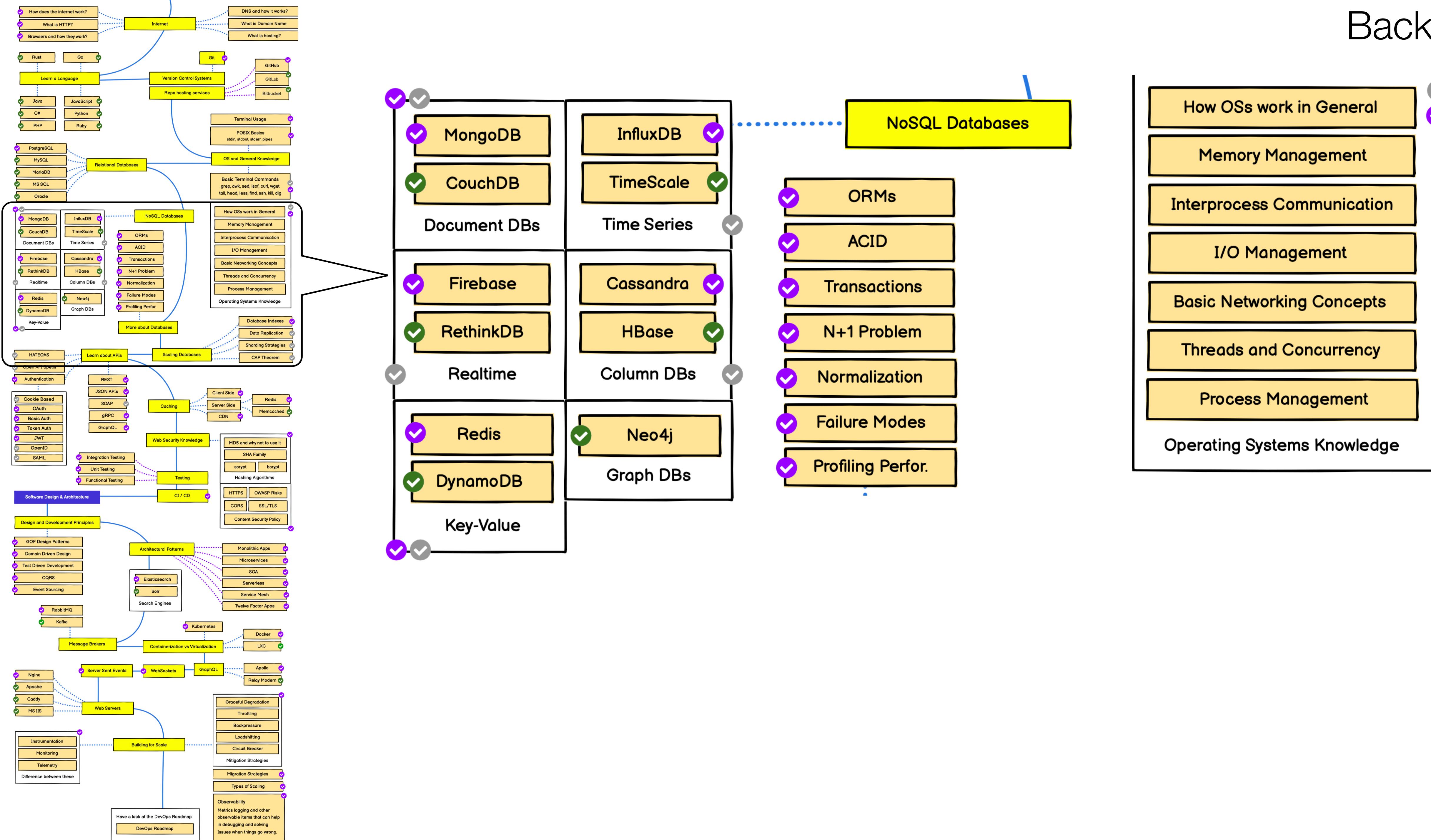
- Programming Fundamentals
- Relational Database NoSQL Databases
- Operating Systems Fundamentals
- APIs & Software Security
- Testing
- Software Architecture & Devops

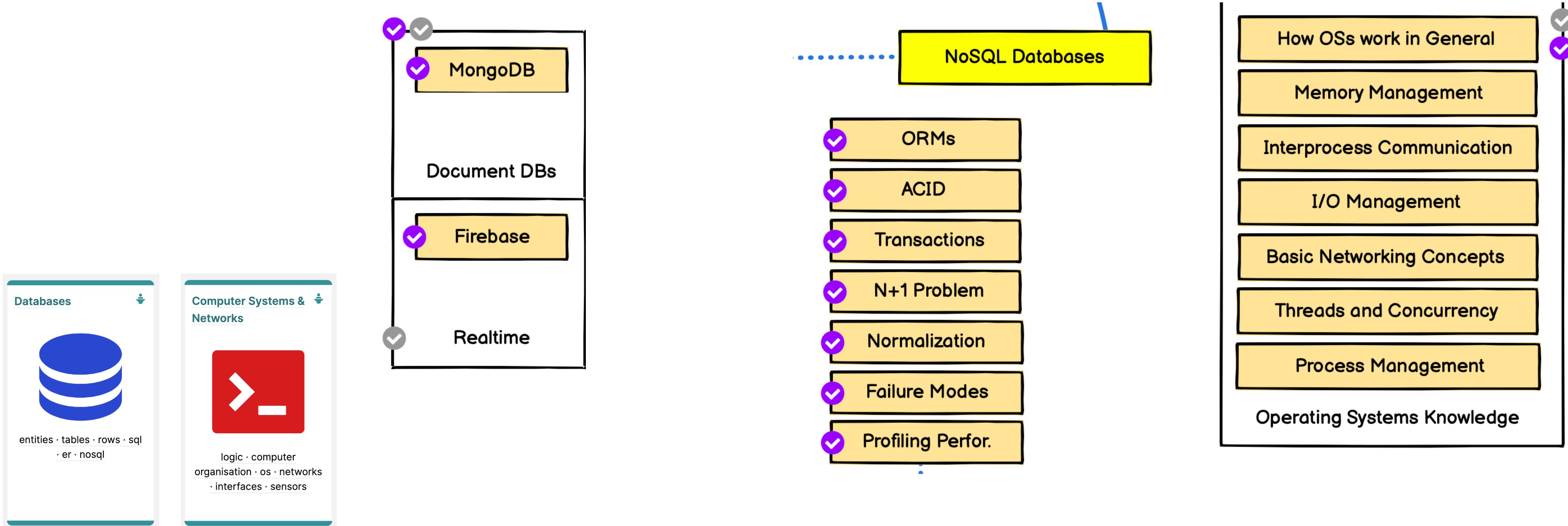
Backend





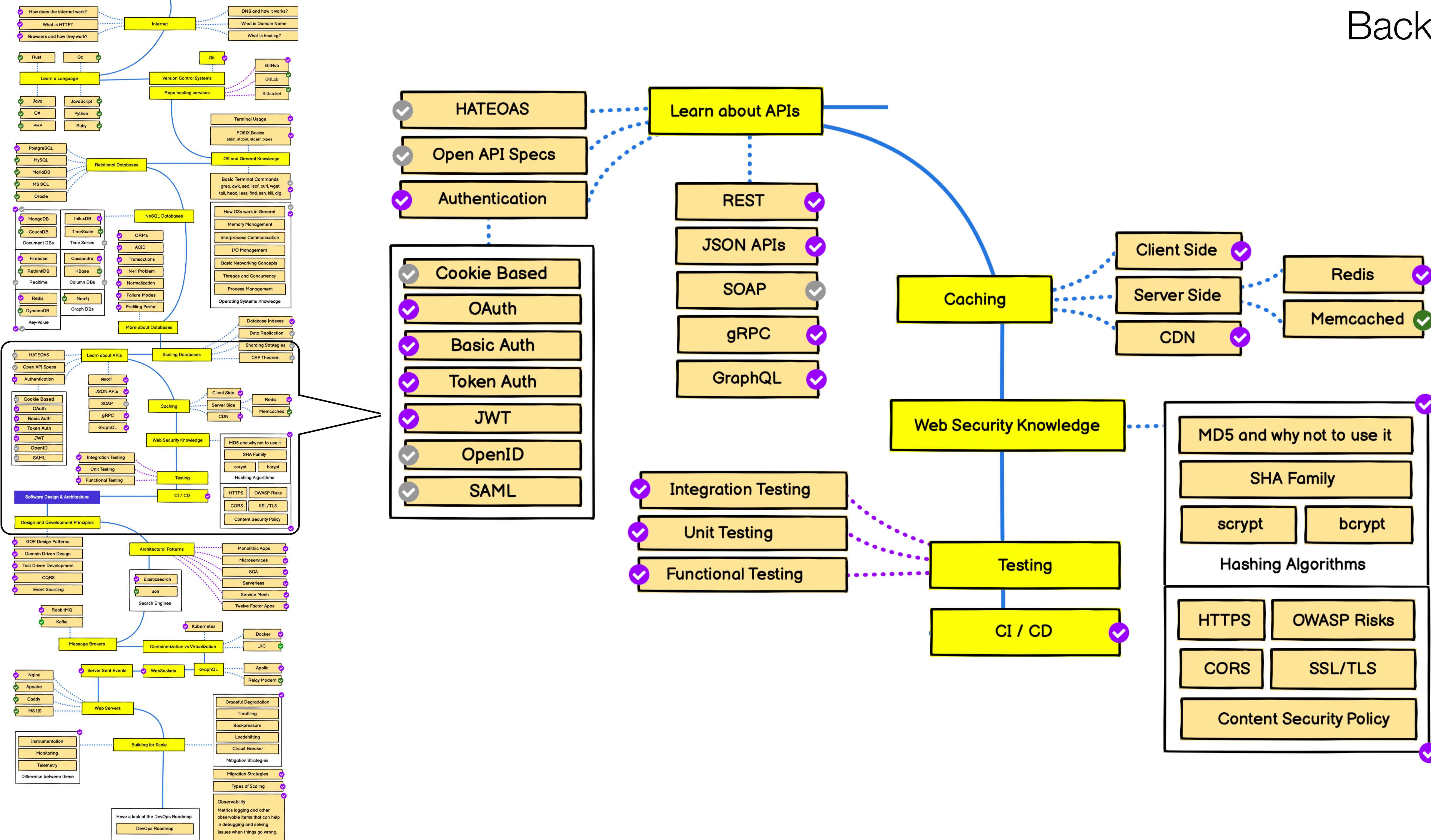
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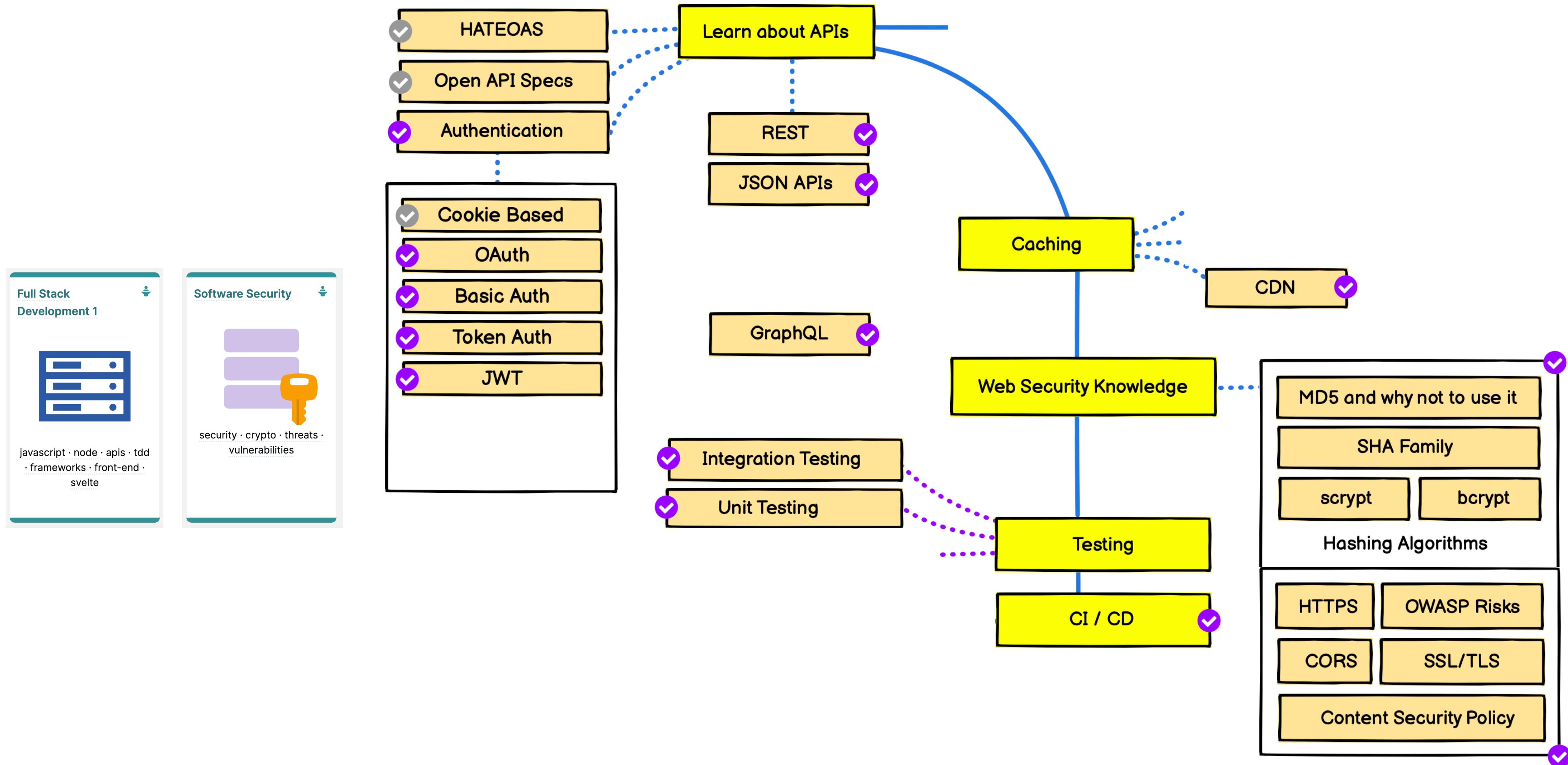




NoSQL Databases & Operating Systems

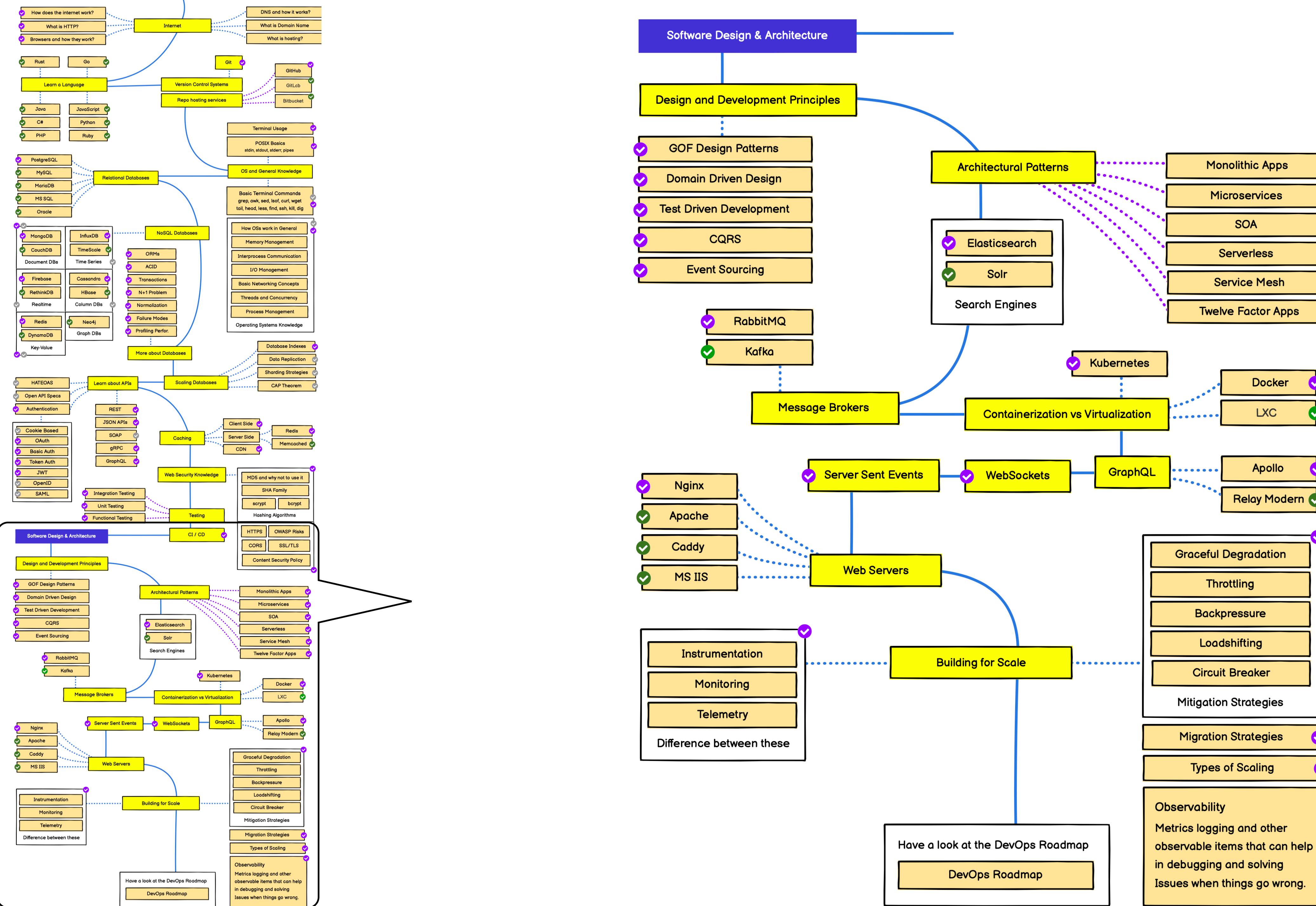
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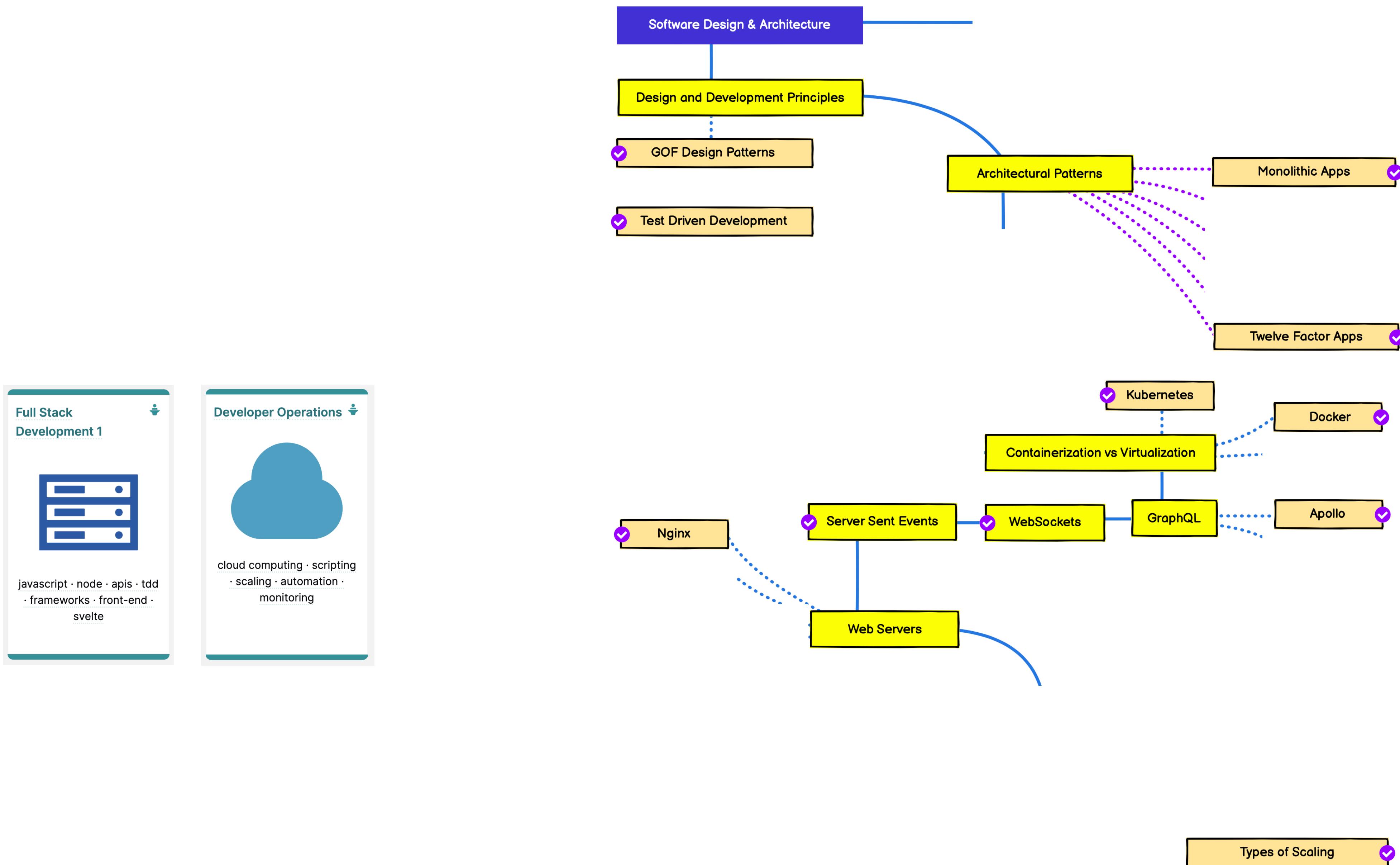




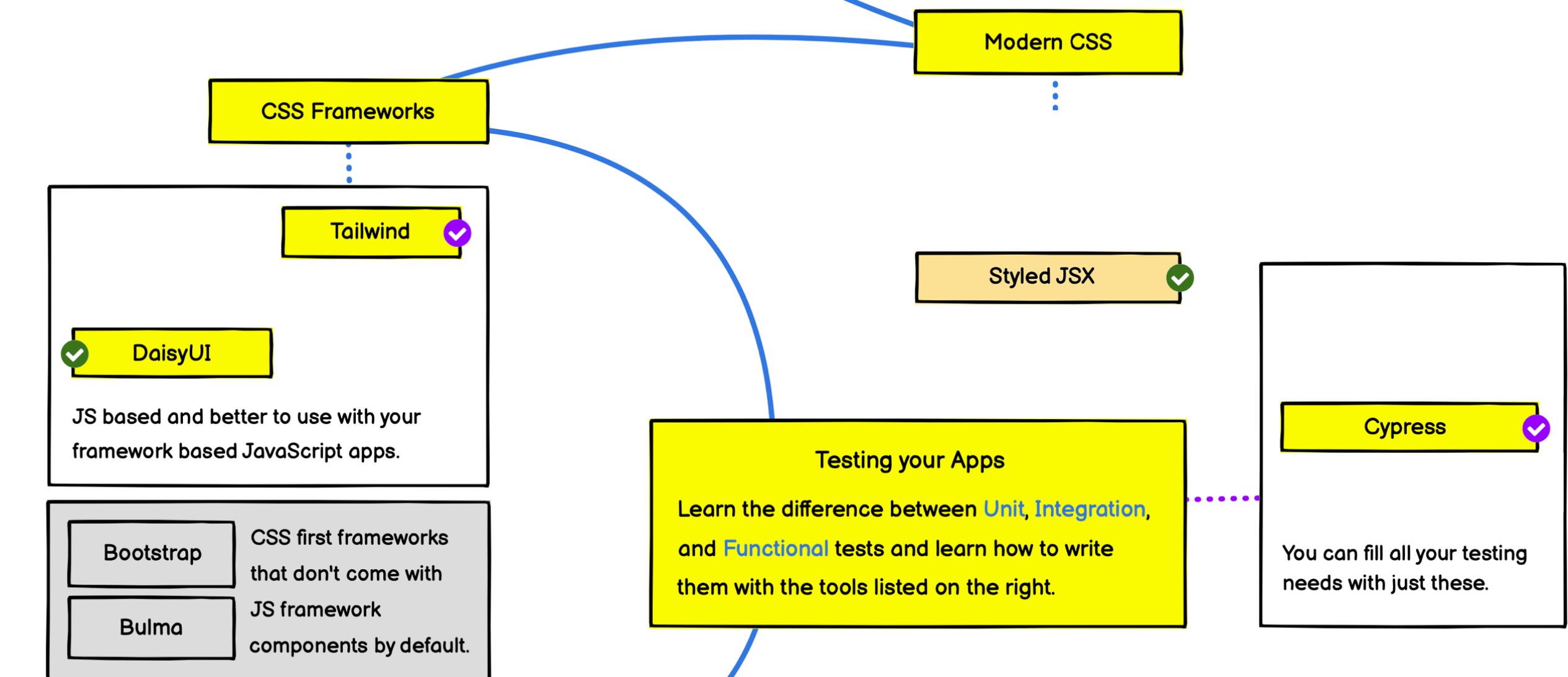
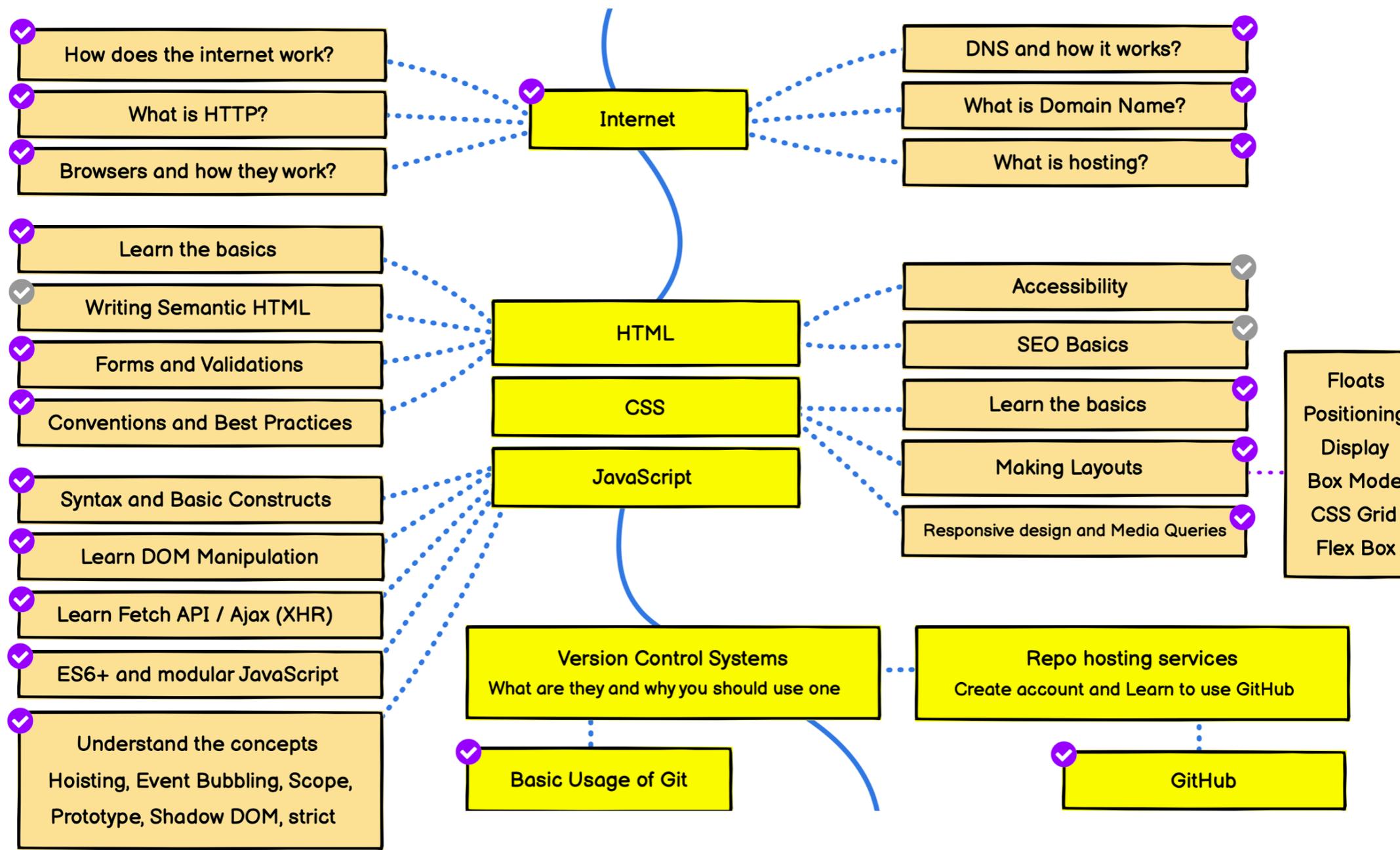
API, Software Security & Testing

Backend

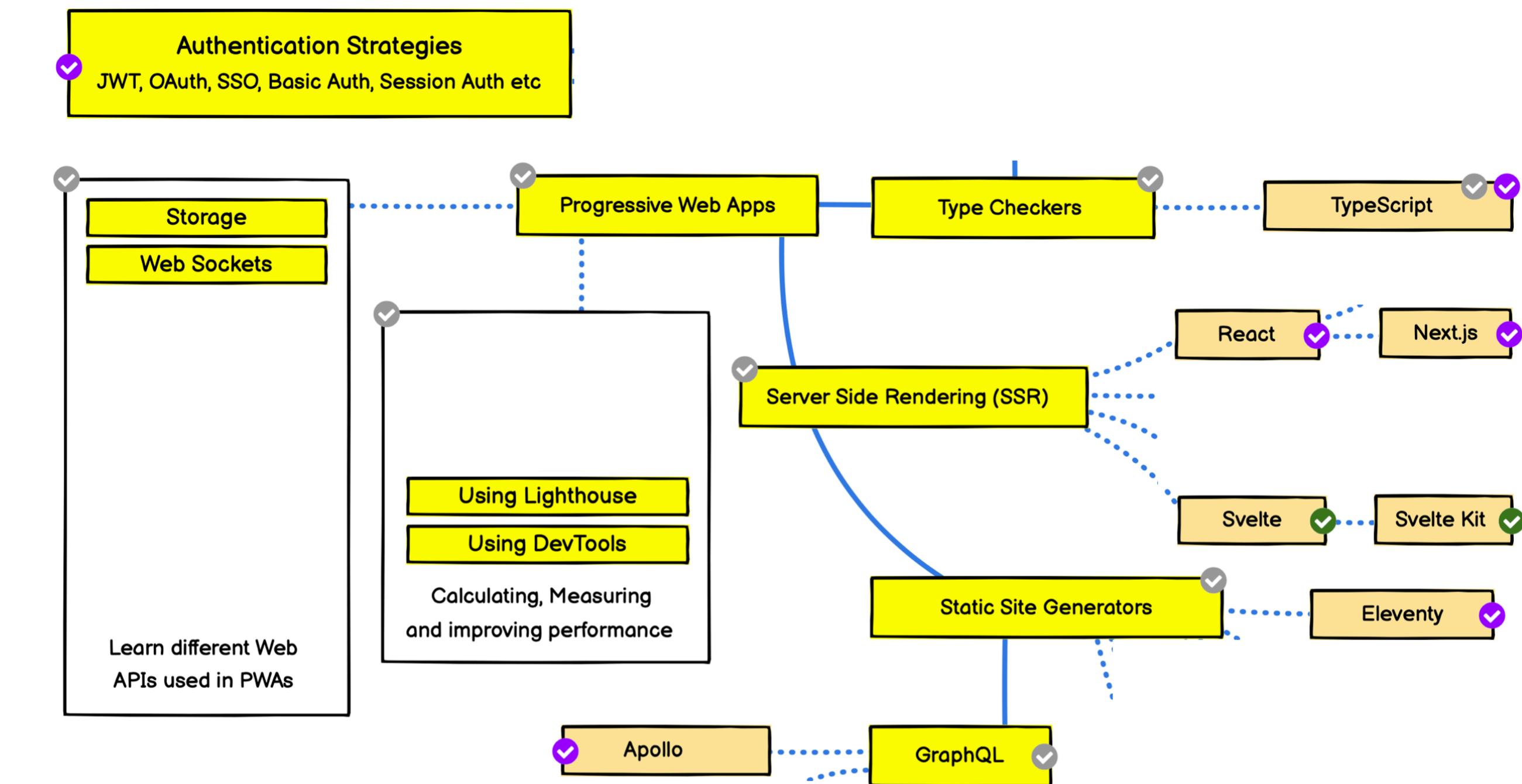
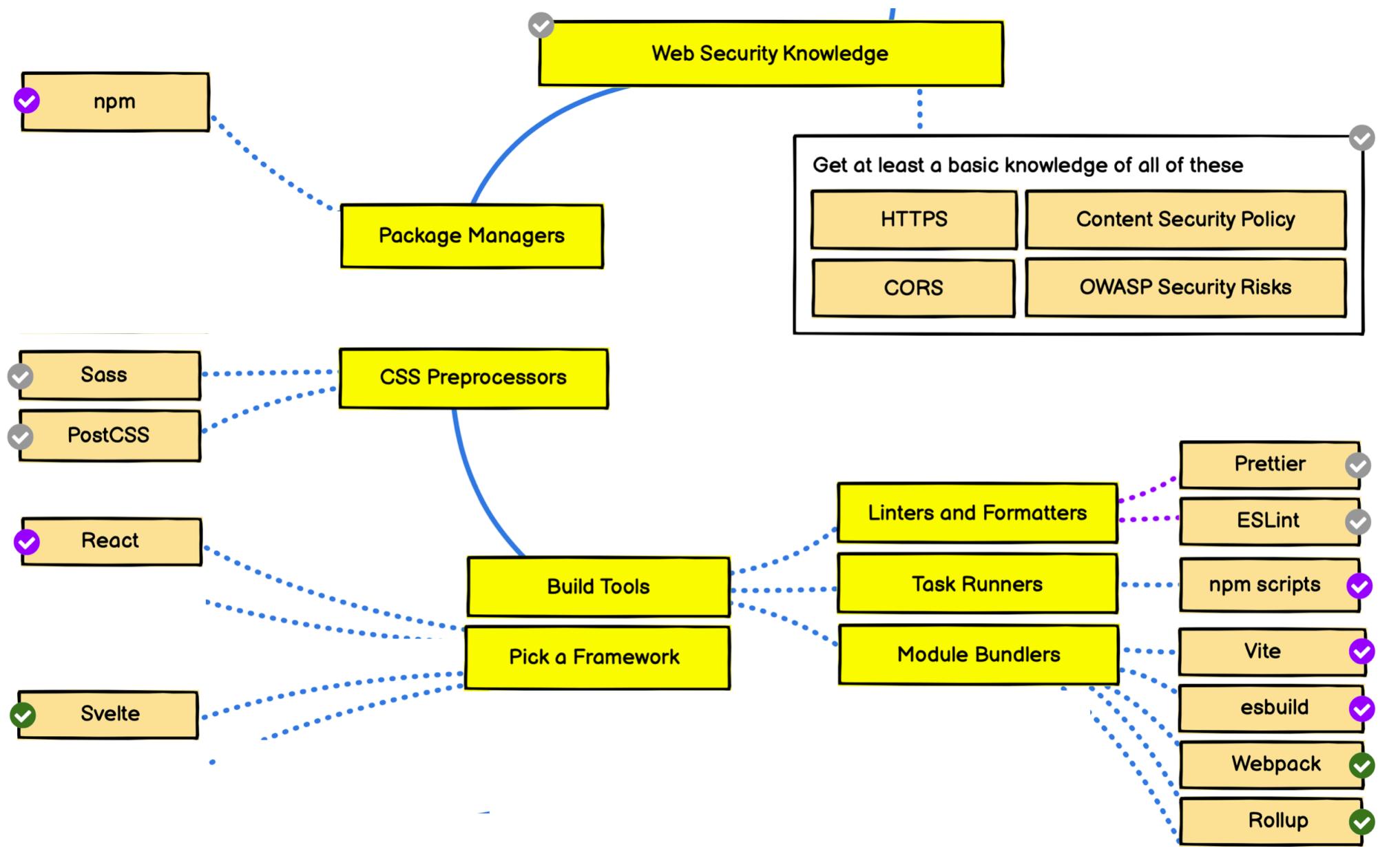


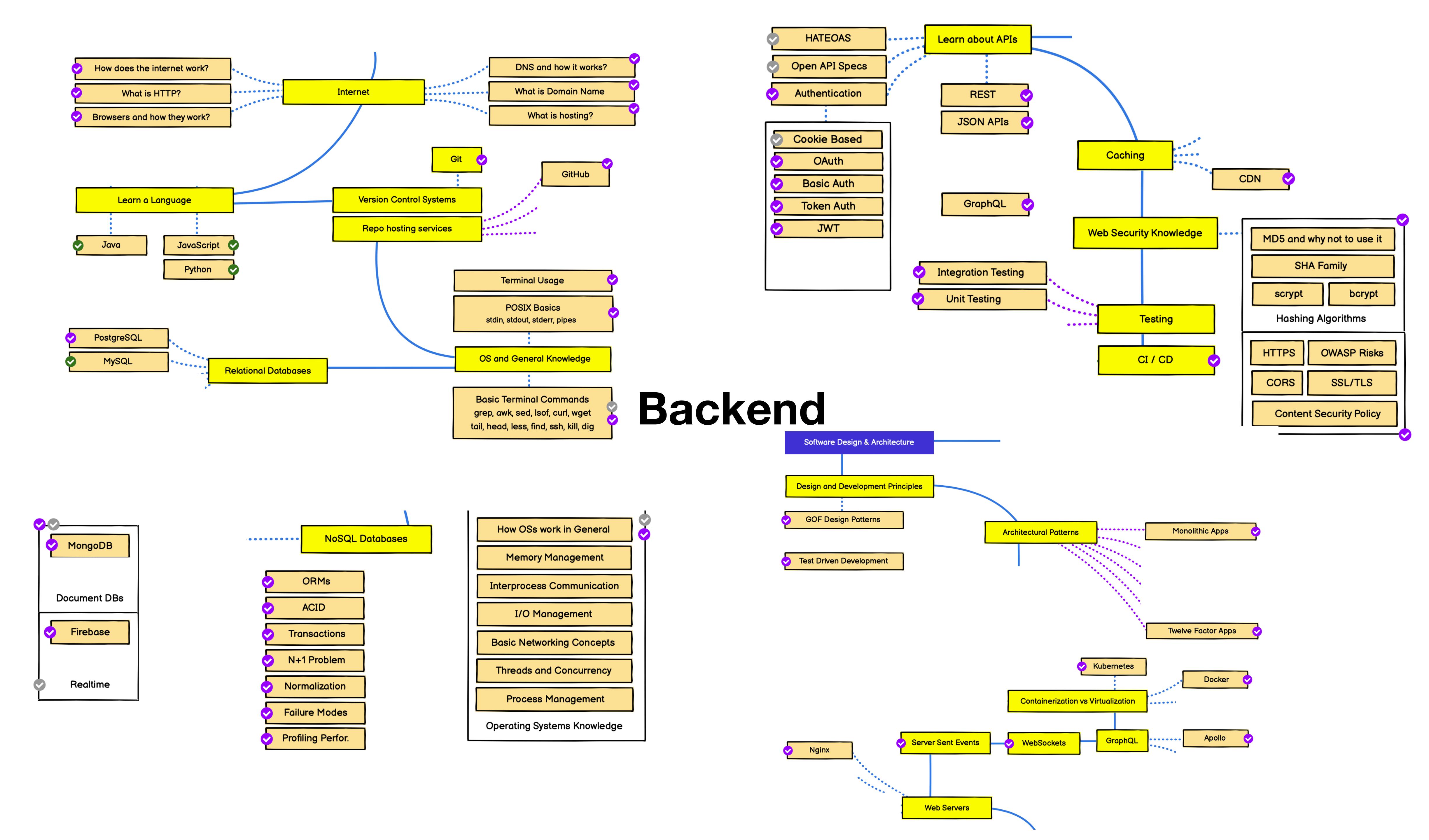


Software Architecture & Devops

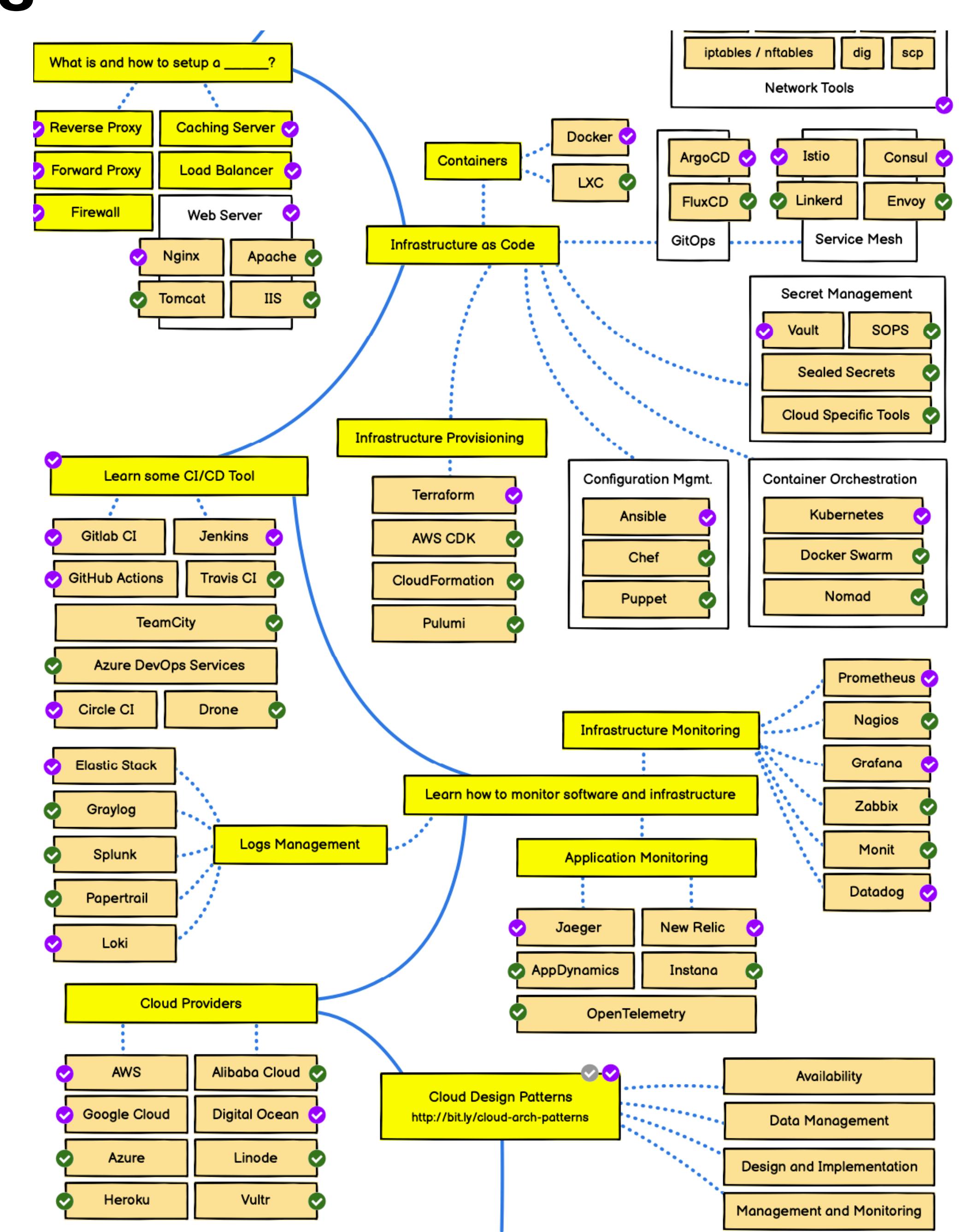
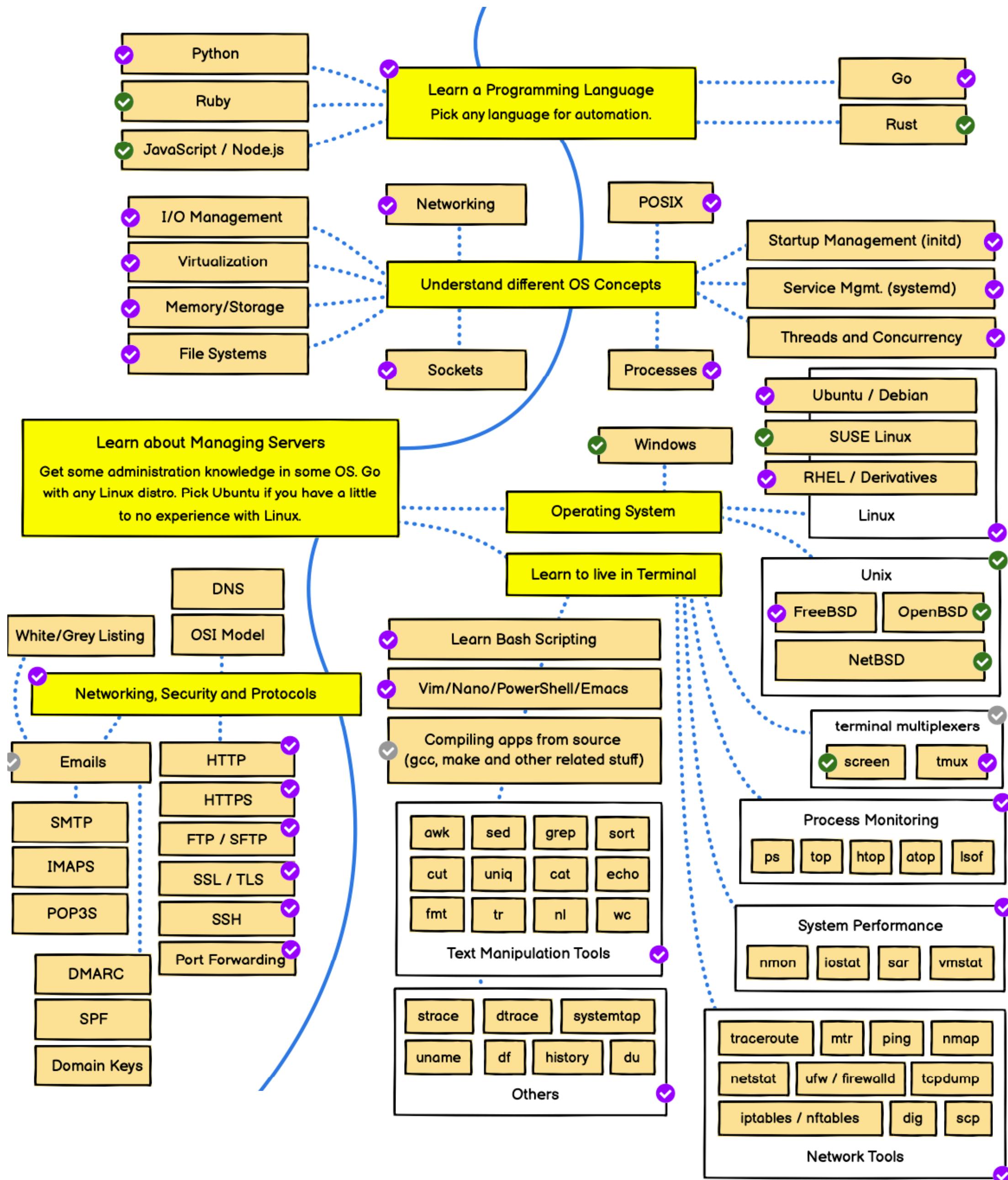


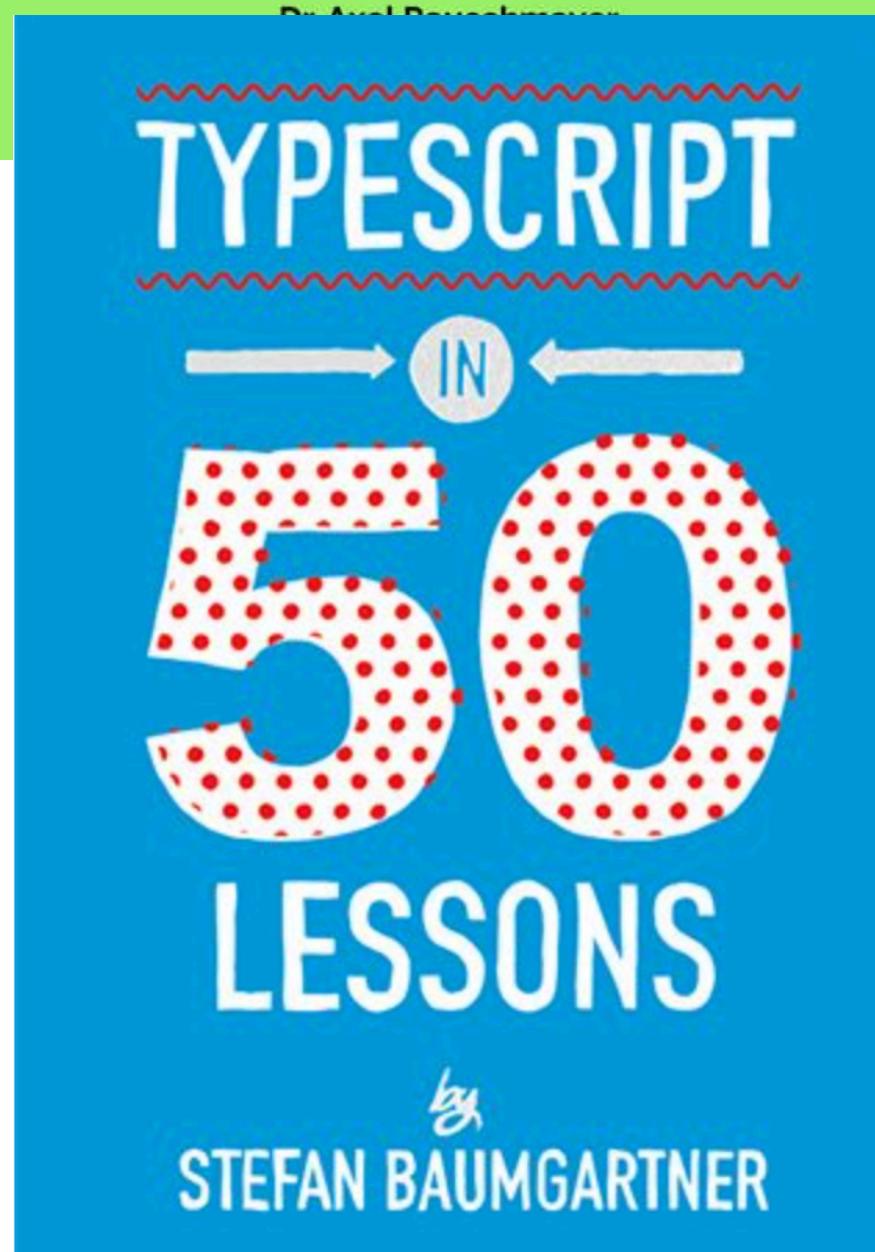
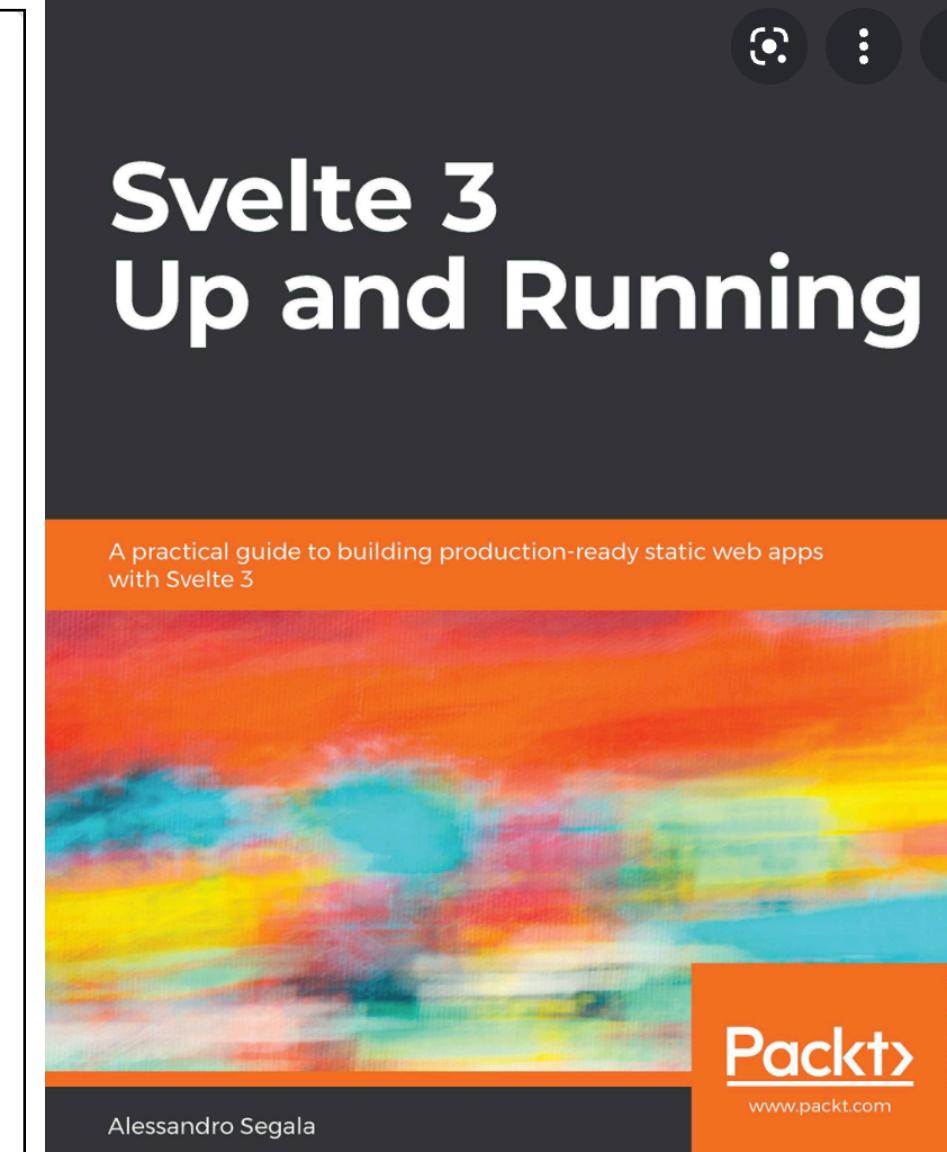
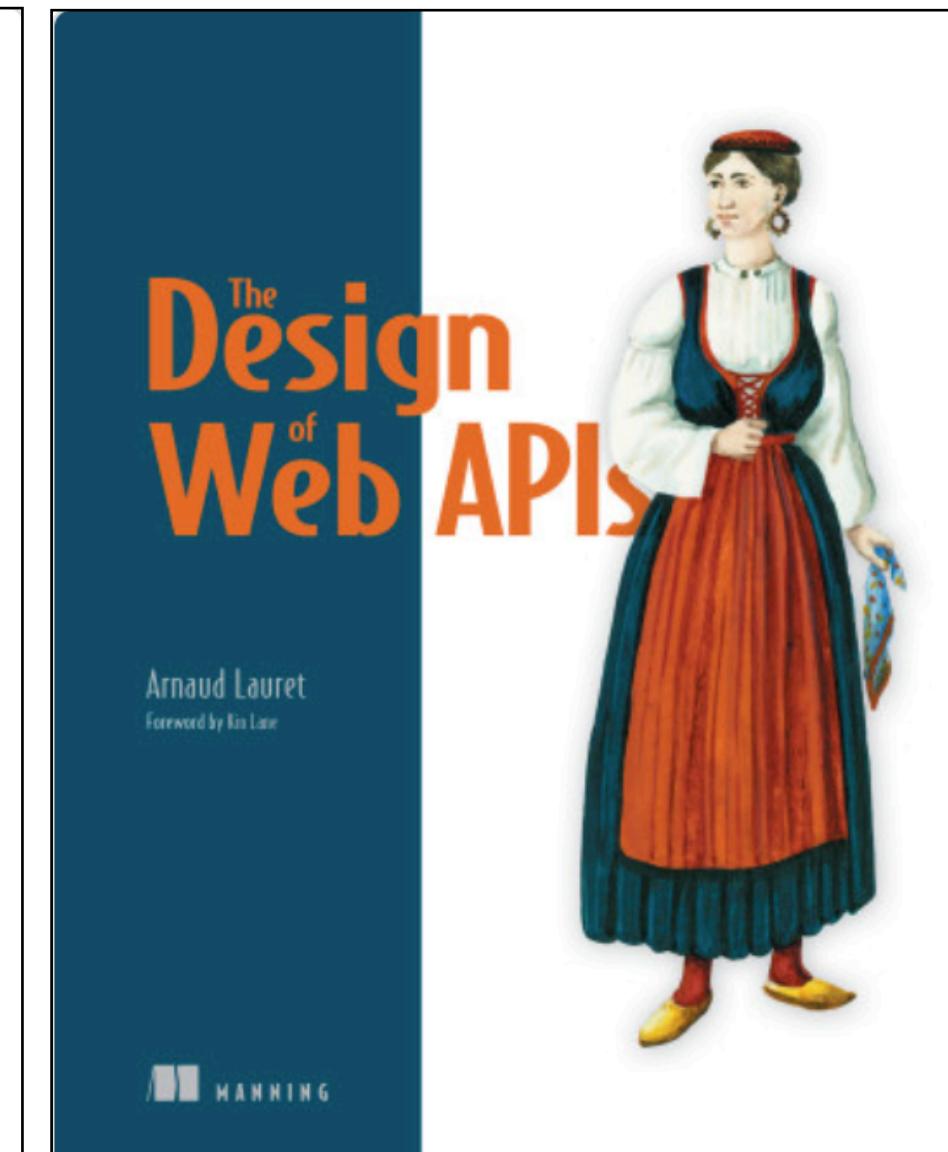
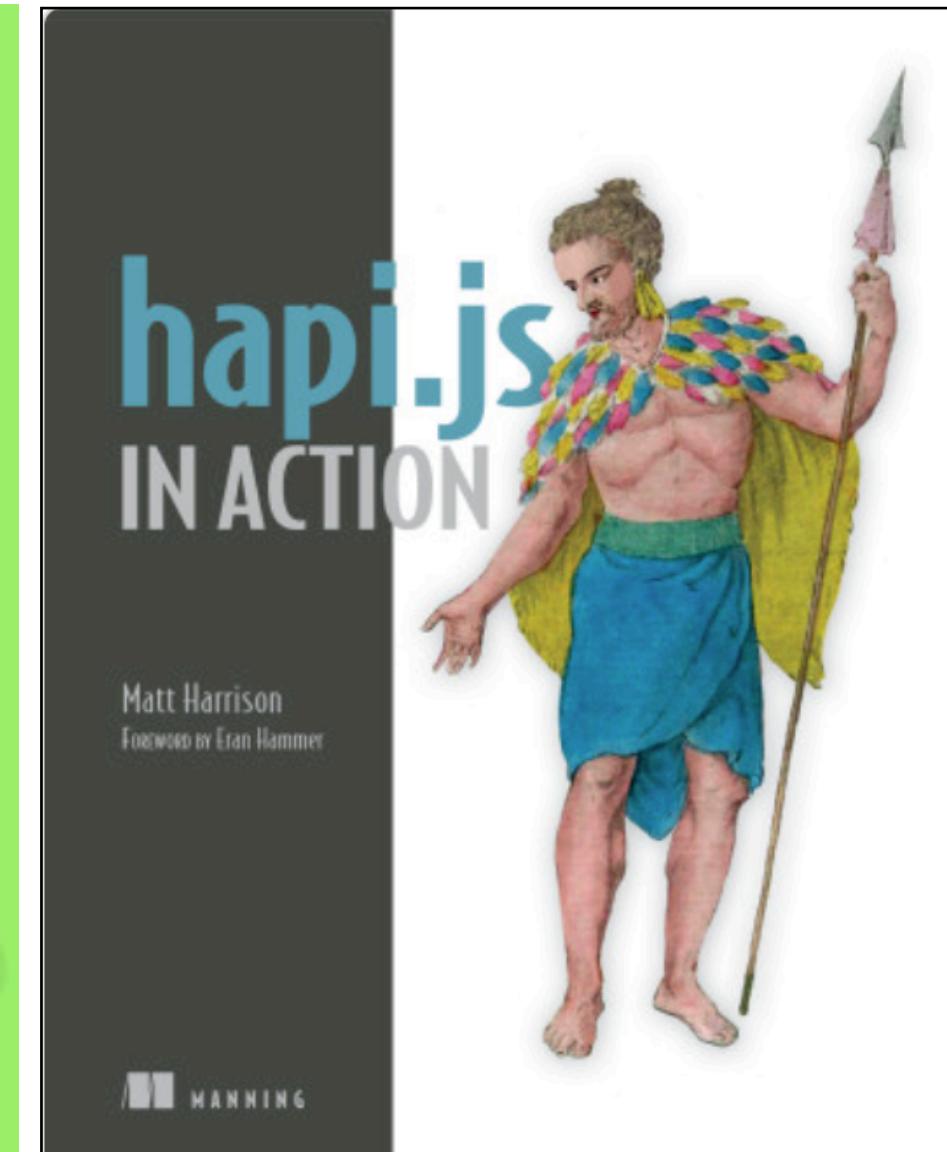
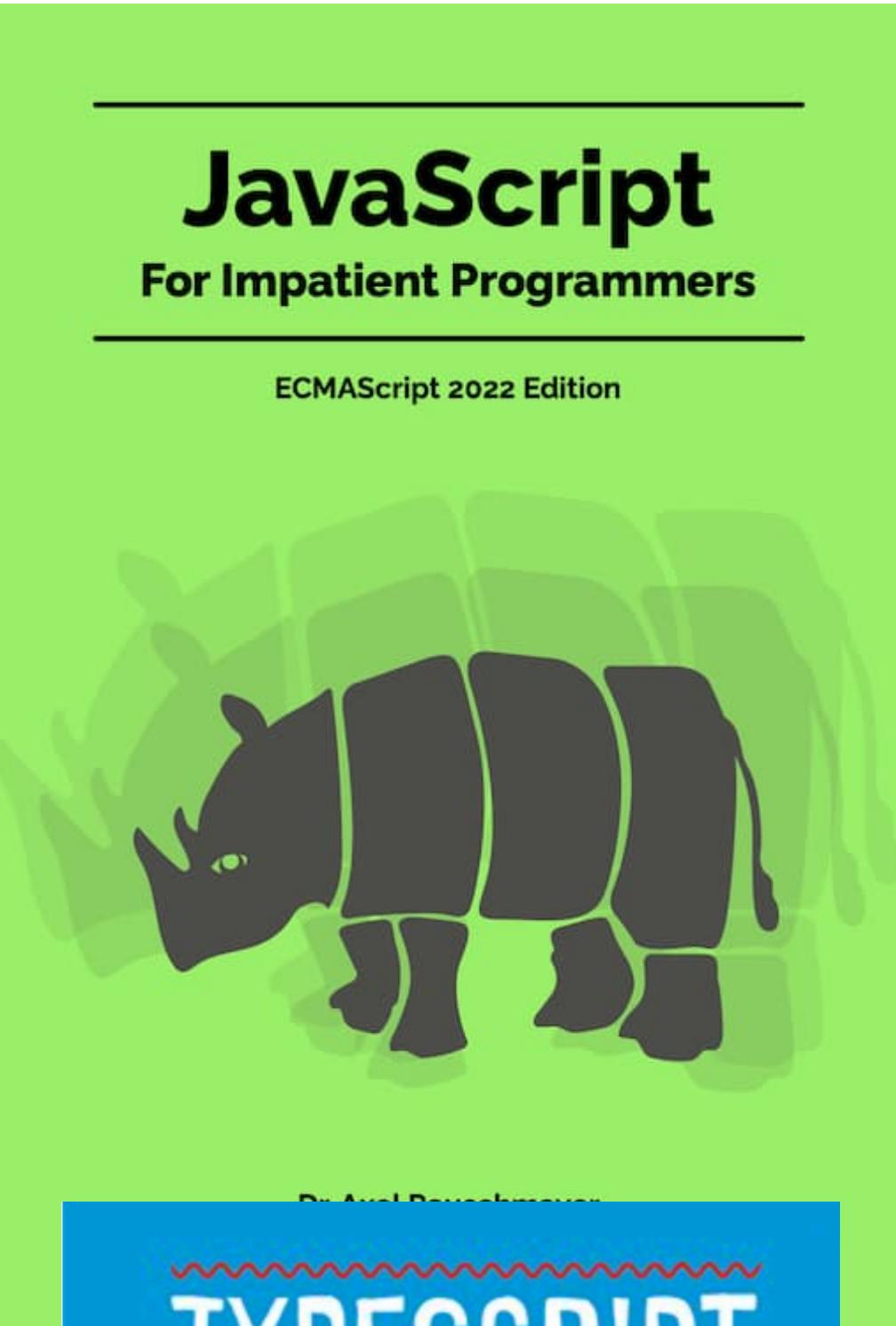
Frontend





Devops





- <https://exploringjs.com/impatient-js/toc.html>
- <https://nodeweekly.com/>
- <https://javascriptweekly.com/>
- <https://frontendfoc.us/>
- <https://svelte.dev/blog>

