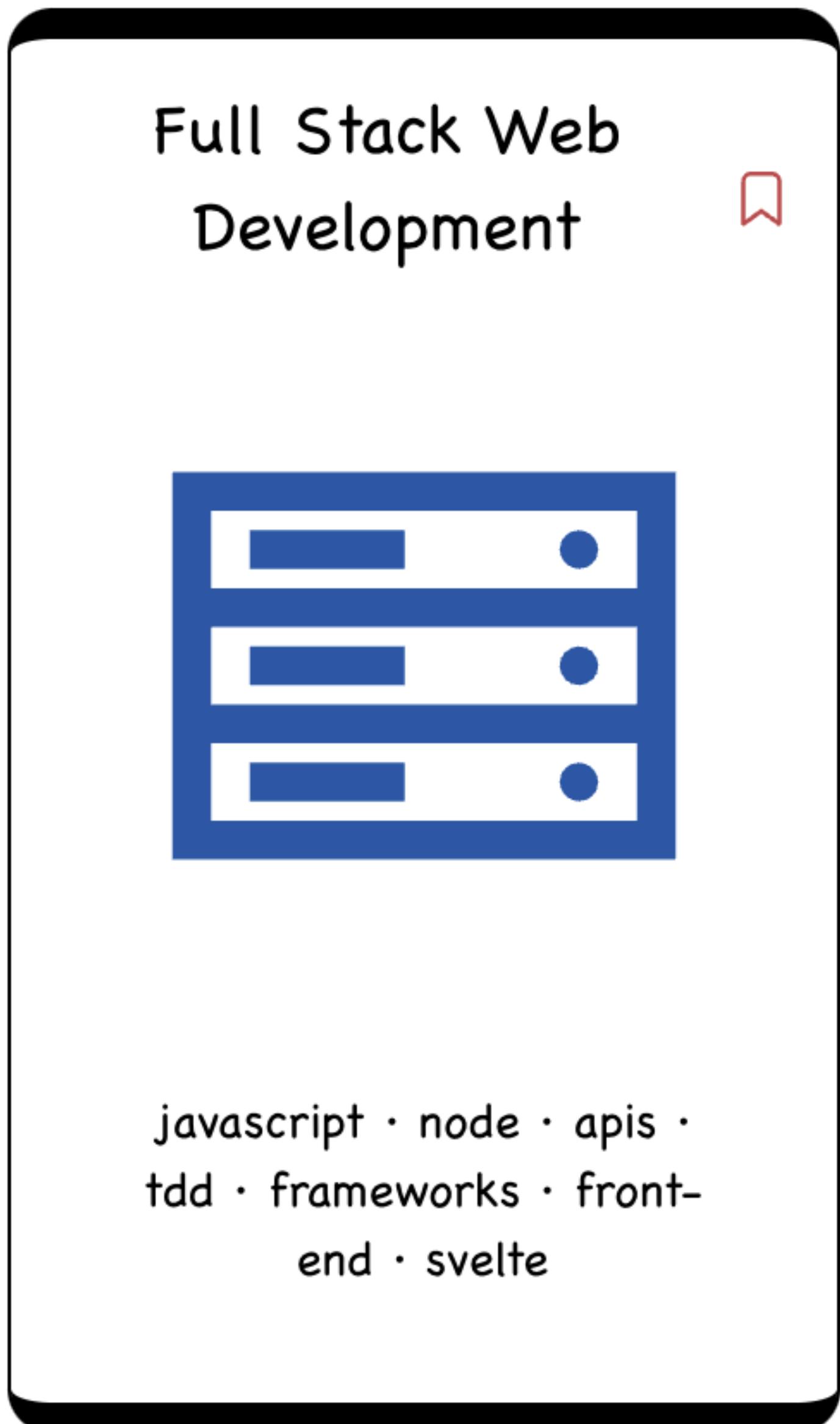


Agenda

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



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.



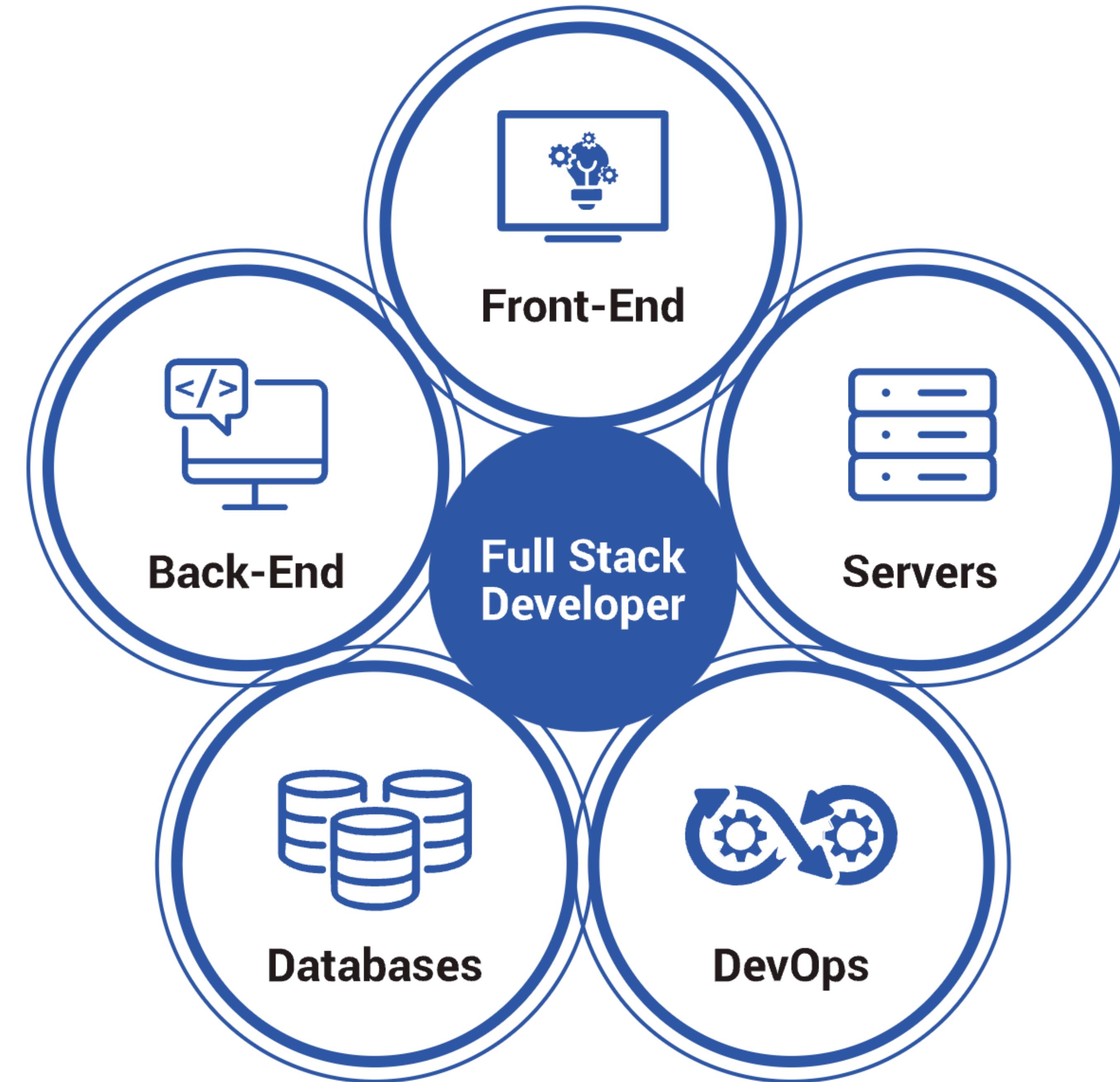
- **Web Applications:** Have experience building simple web applications, including the the fundamentals of templating, Model View Controller patterns, sessions & the basics of application deployment

Back End Web Development

Test Driven Development

Application Programmer Interfaces

Front End Web Development



Core
Concepts

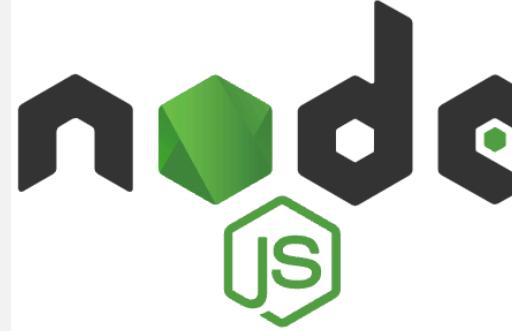
Back End Web
Development

Test Driven
Development

Application
Programmer
Interfaces

Front End Web
Development

Core
Concepts

01: Node 

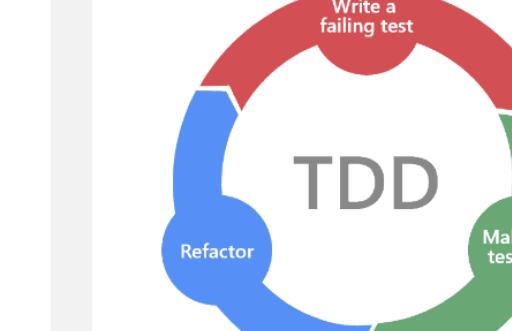
The fundmdnals of node.
A first node application.

02: Hapi.js 

The Hapi application
Framework

03: Joi 

Validation with Joi

04: TDD 

Write a failing test
Refactor
Make the test pass
Test Driven Development

05: Models 

Incorporate Mongo Models

Back End Web Development

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Core
Concepts

04: TDD

Test Driven Development

TDD Introduction

The fundamentals of Test Driven Development

Right BICEP

Guidelines for Tests · Right · Boundary · Inverse · Cross-check · Errors ...

C.O.R.R.E.C.T

More TDD guidelines · Conformance · Ordering · Range · Reference ...

FIRST Principles

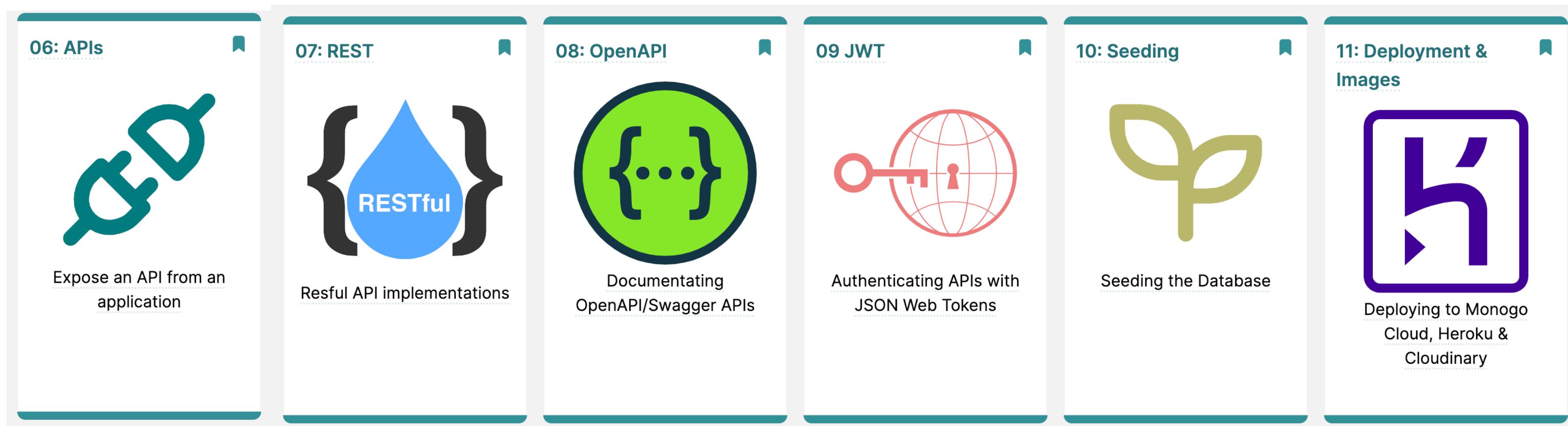
More TDD Guidelines: Fast · Isolate · Repeatable · Self-Validating · Timely

Back End Web Development

Test Driven Development

Application Programmer Interfaces

Front End Web Development



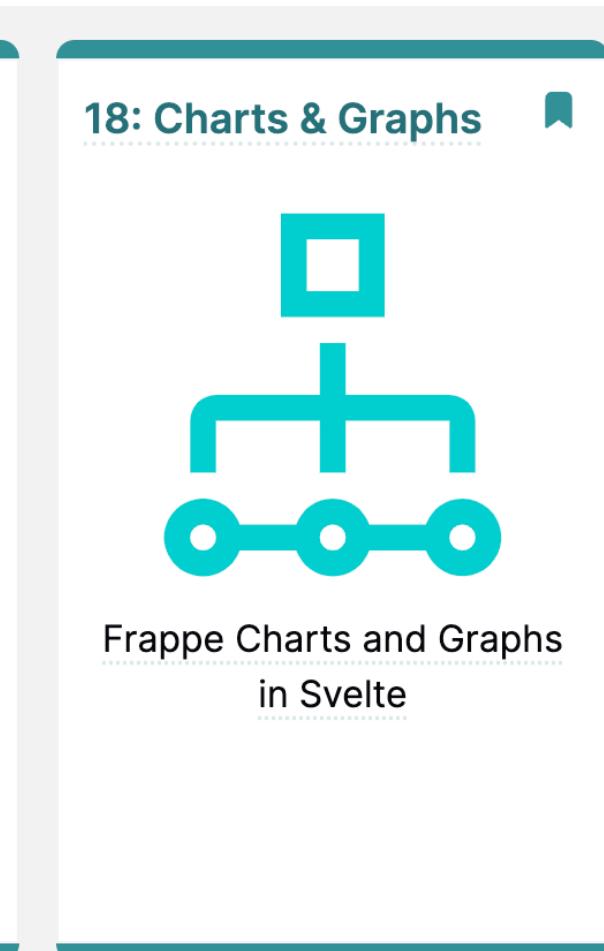
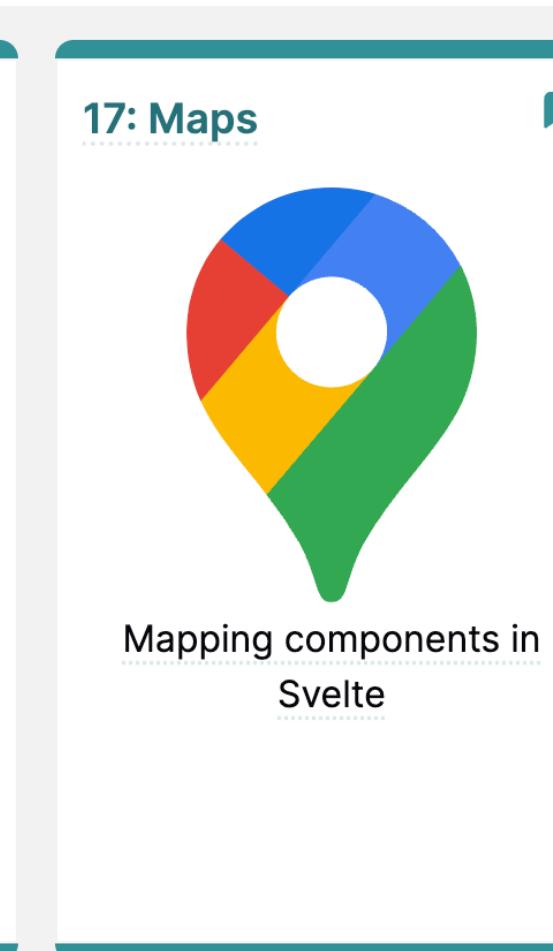
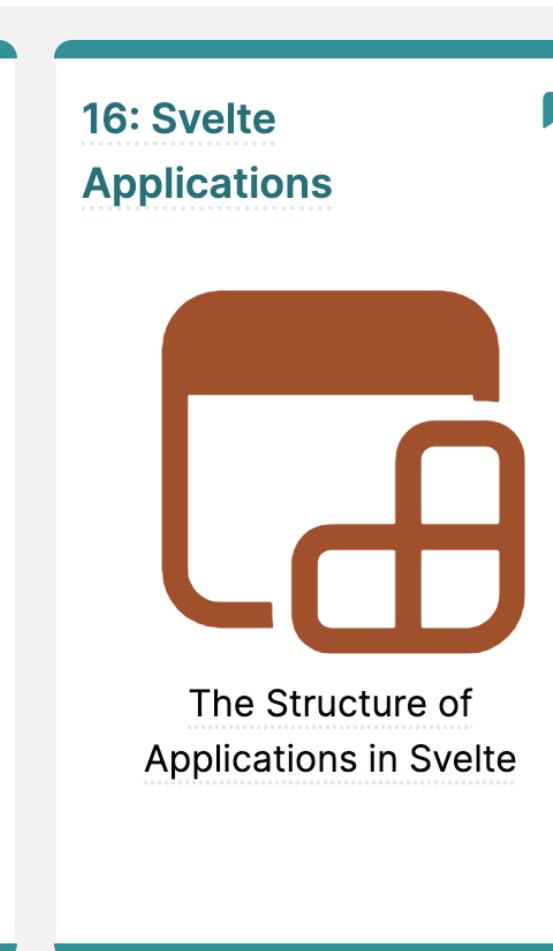
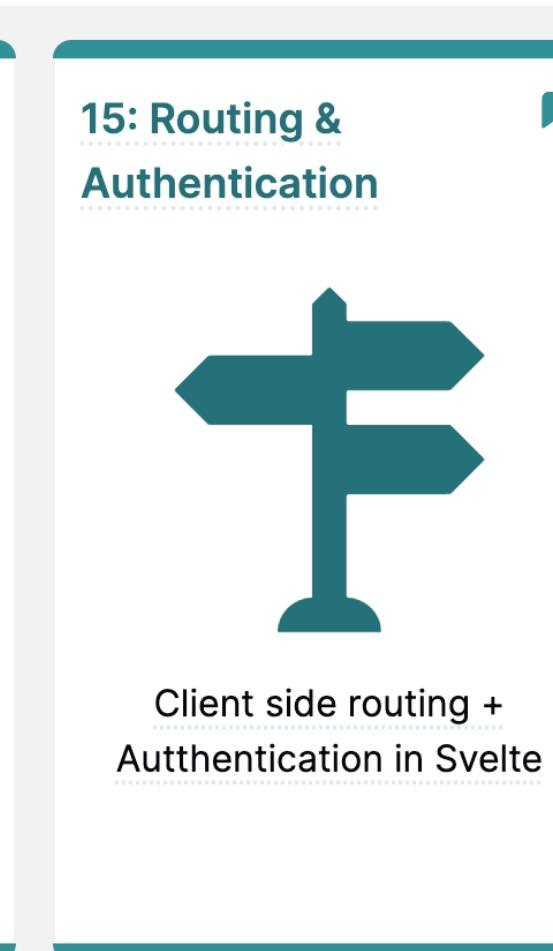
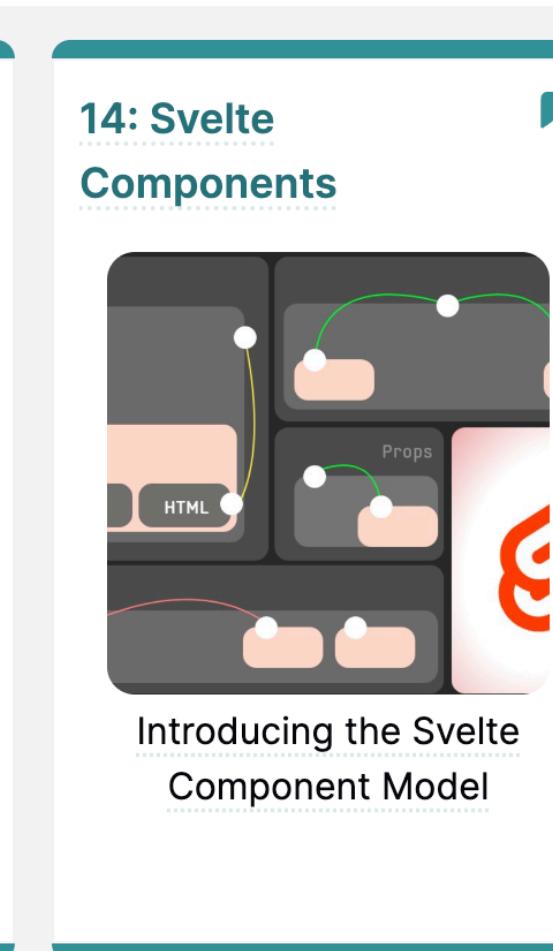
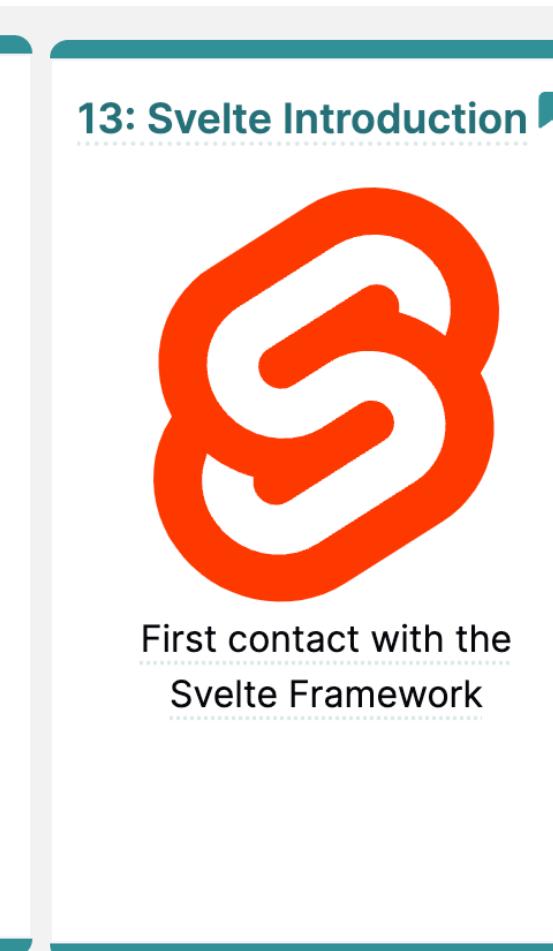
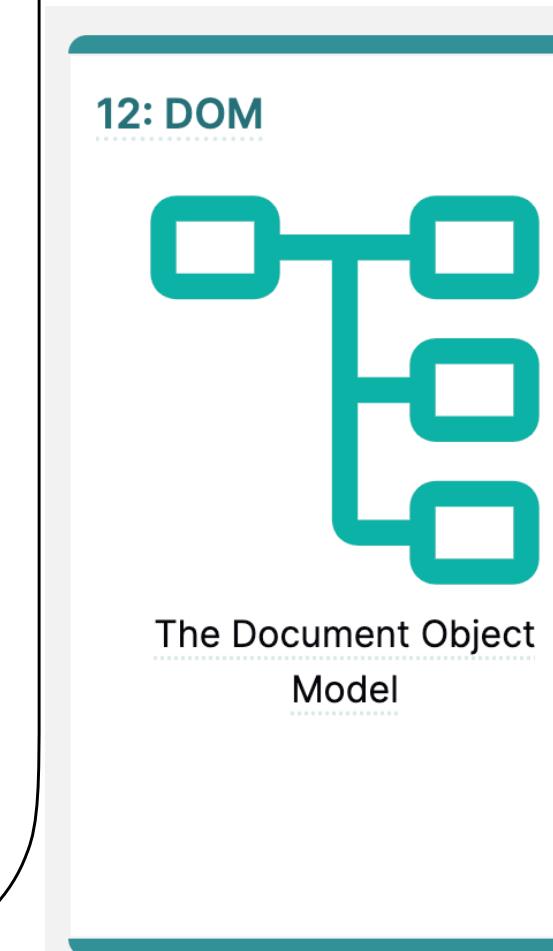
Core
Concepts

Back End Web Development

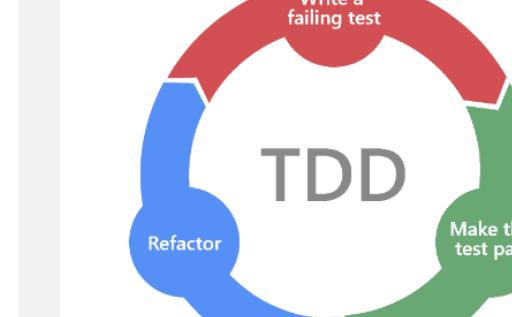
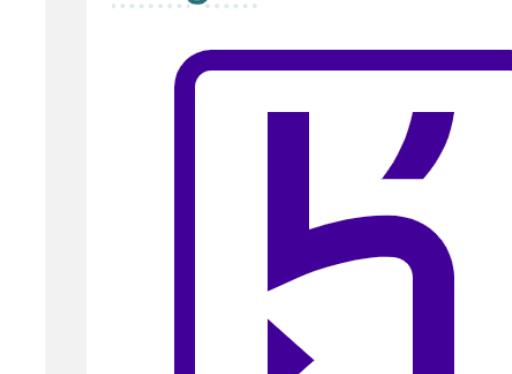
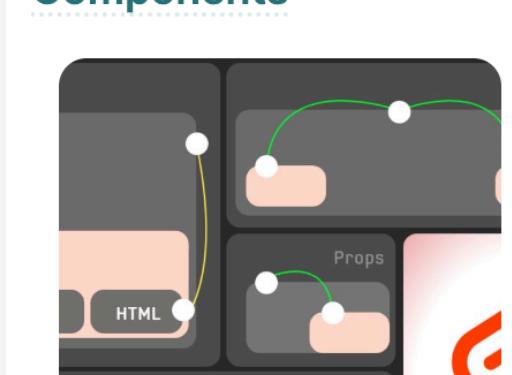
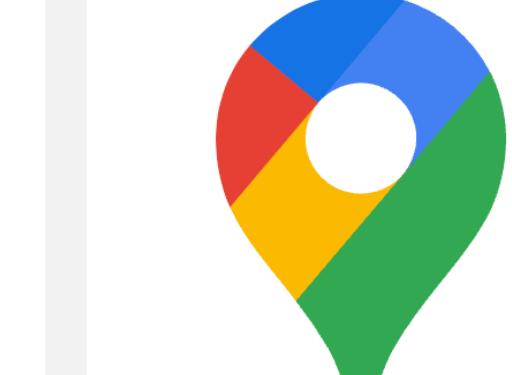
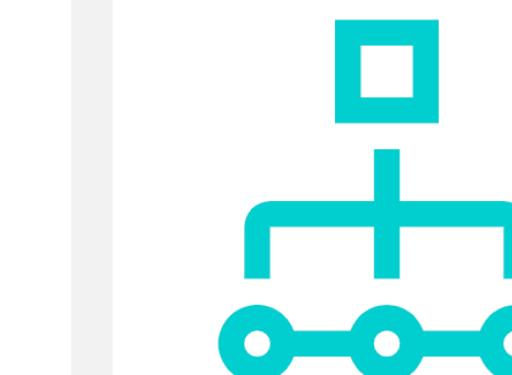
Test Driven Development

Application Programmer Interfaces

Front End Web Development



18 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	11: Deployment & Images  Deploying to Monogo Cloud, Heroku & Cloudinary	12: DOM  The Document Object Model
13: Svelte Introduction  First contact with the Svelte Framework	14: Svelte Components  Introducing the Svelte Component Model	15: Routing & Authentication 	16: Svelte Applications  The Structure of Applications in Svelte	17: Maps  Mapping components in Svelte	18: Charts & Graphs  Frappe Charts and Graphs in Svelte



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

DevOps

Android

DBA

Blockchain

● New

QA

Software Architect

ASP.NET Core

● New

Flutter

React Native

Cyber Security

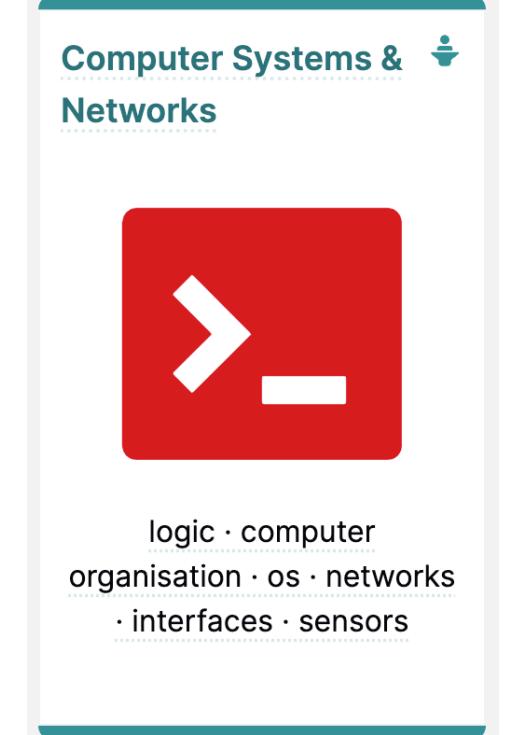
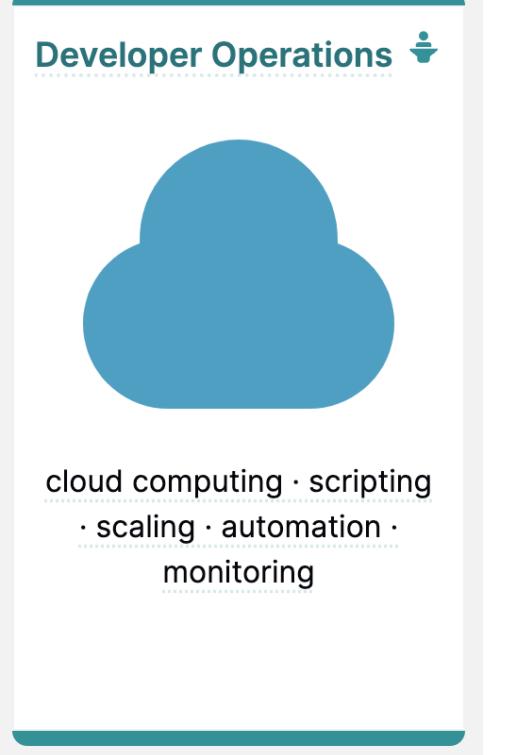
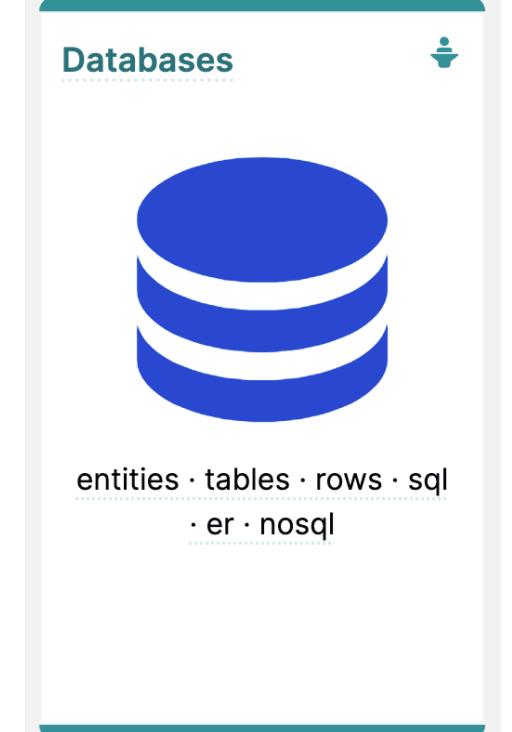
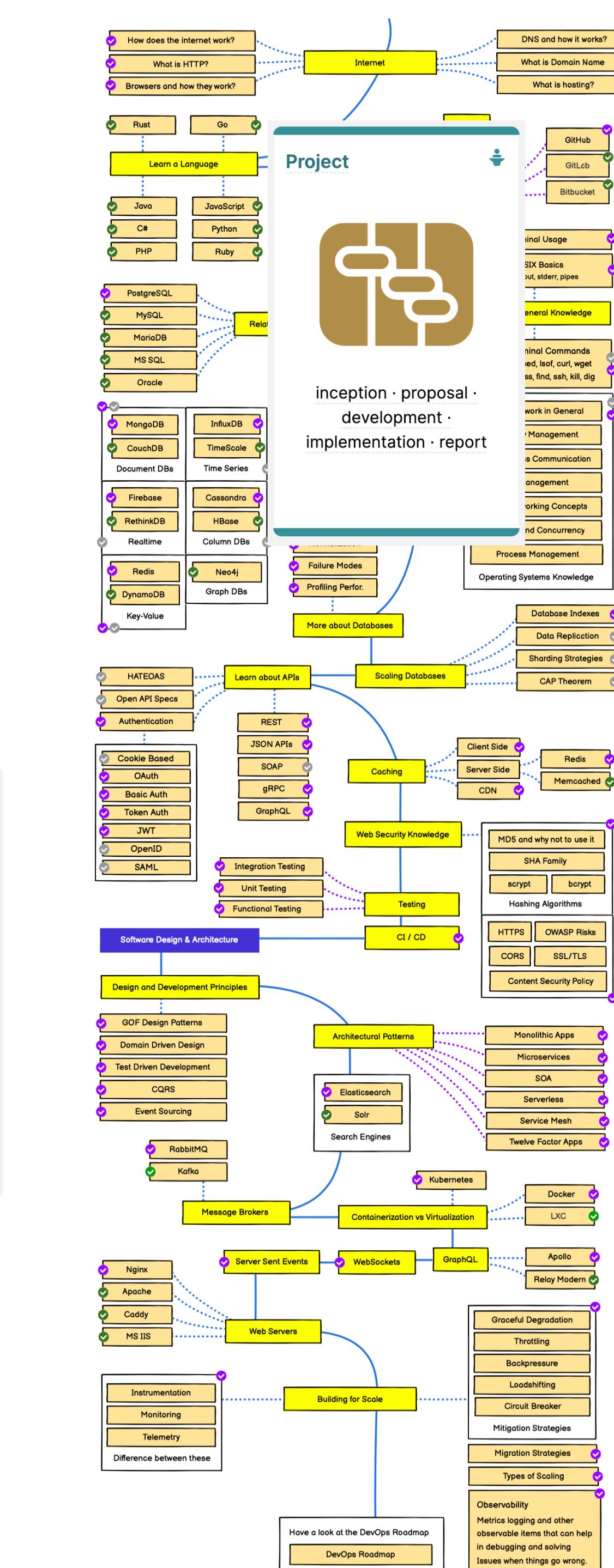
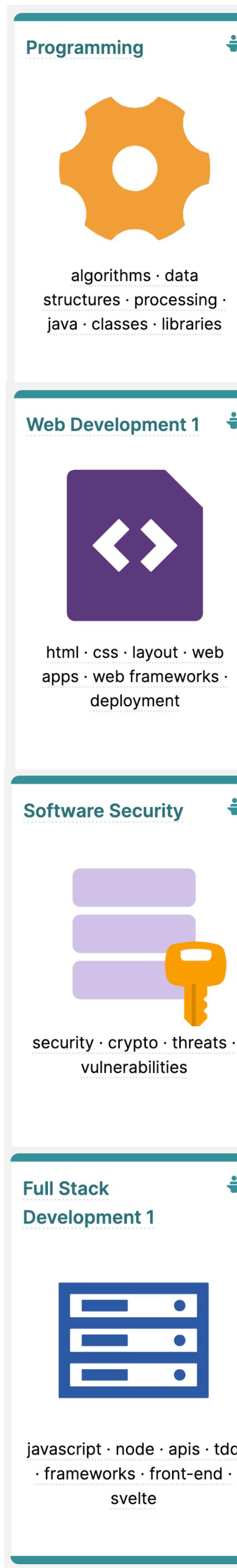
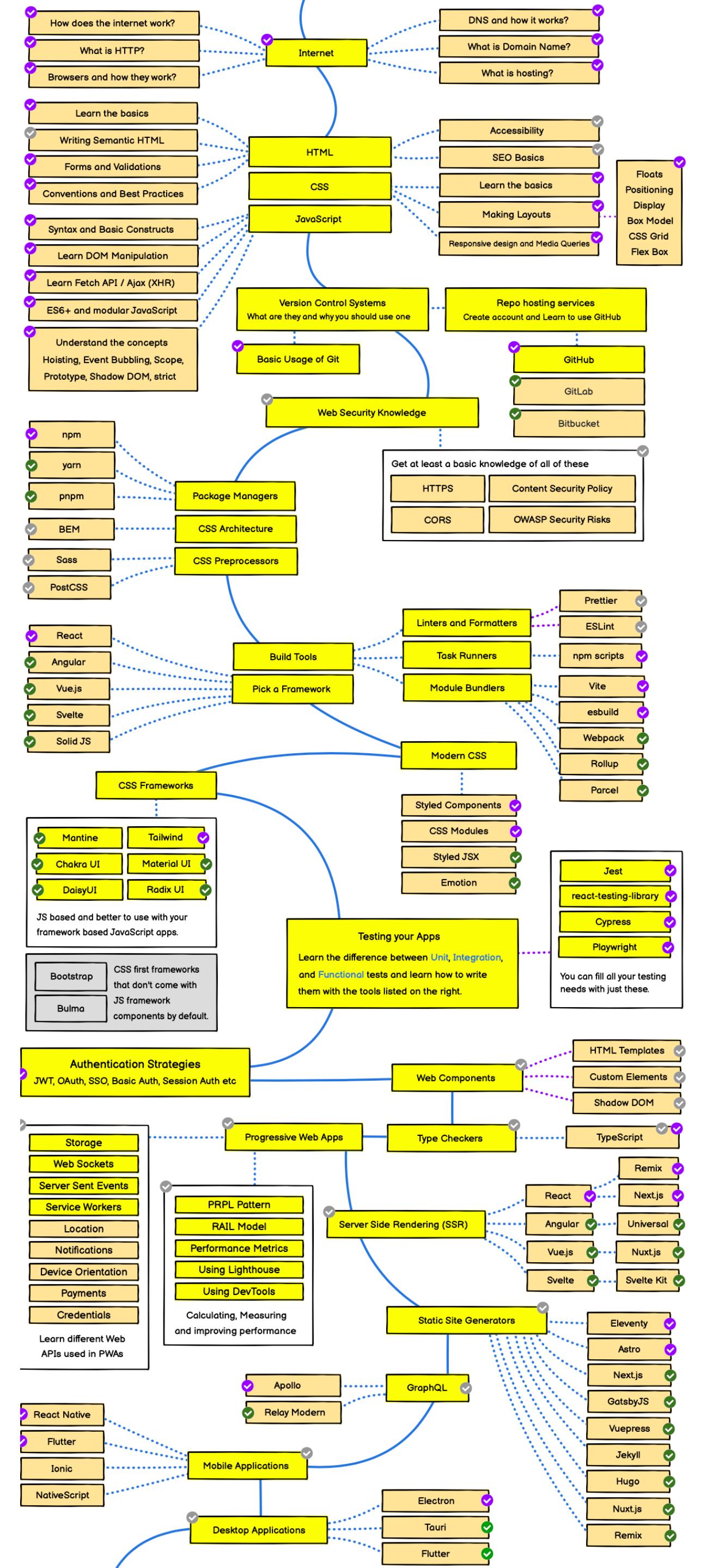
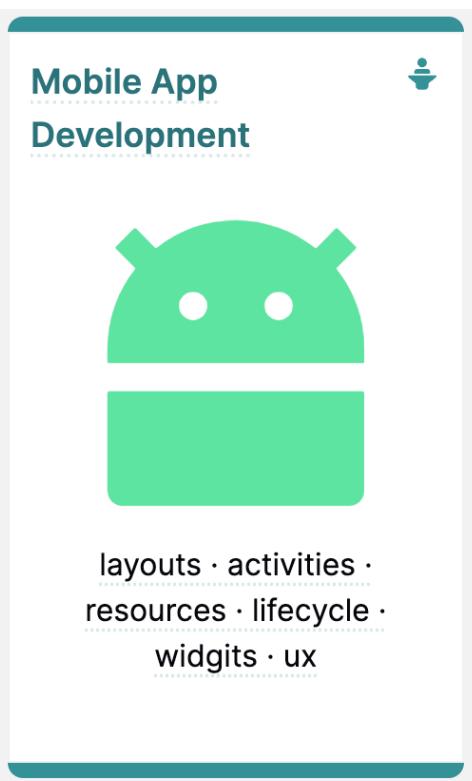
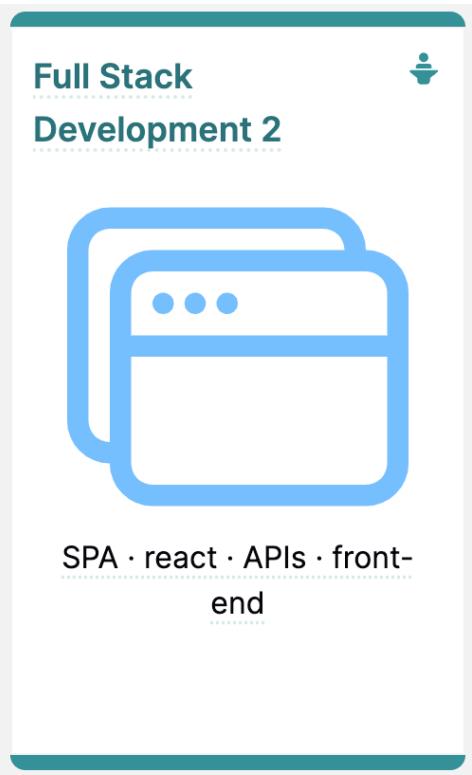
● Upcoming

● New

● New

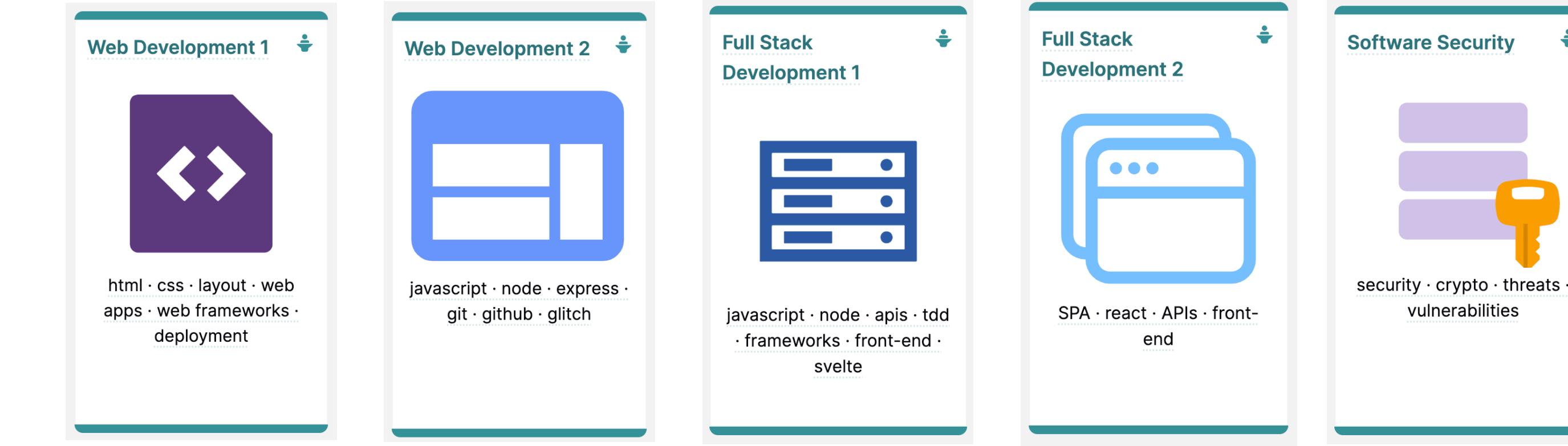
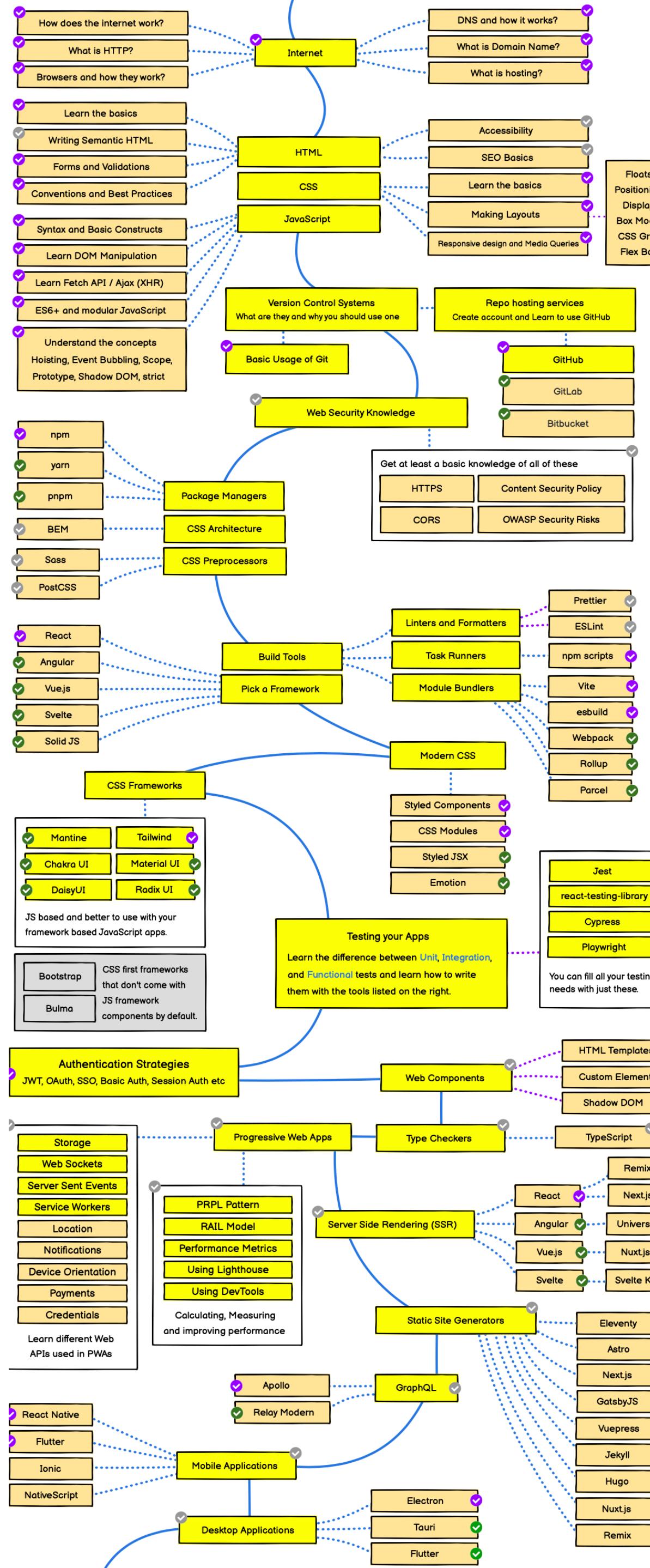
● Upcoming

Frontend



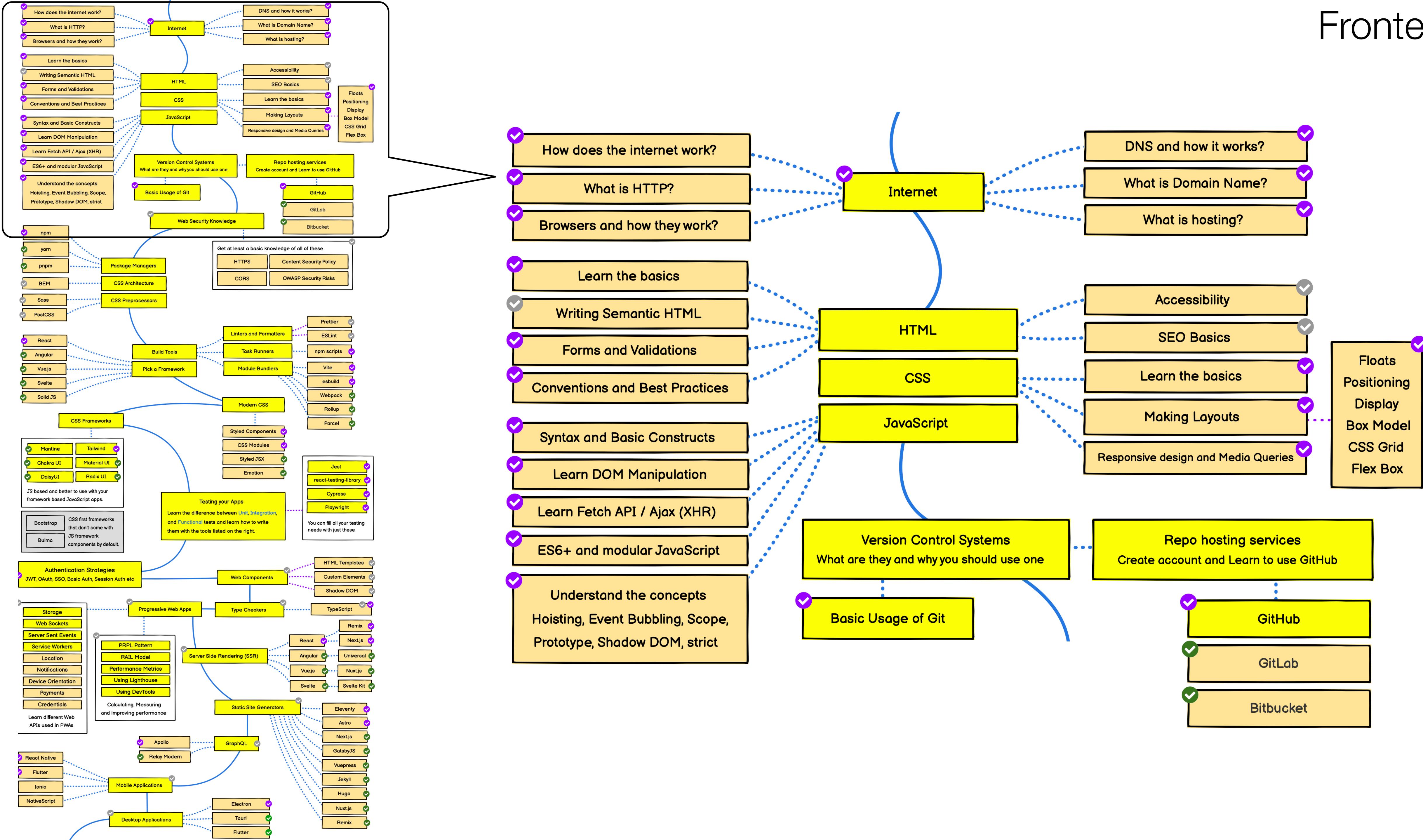
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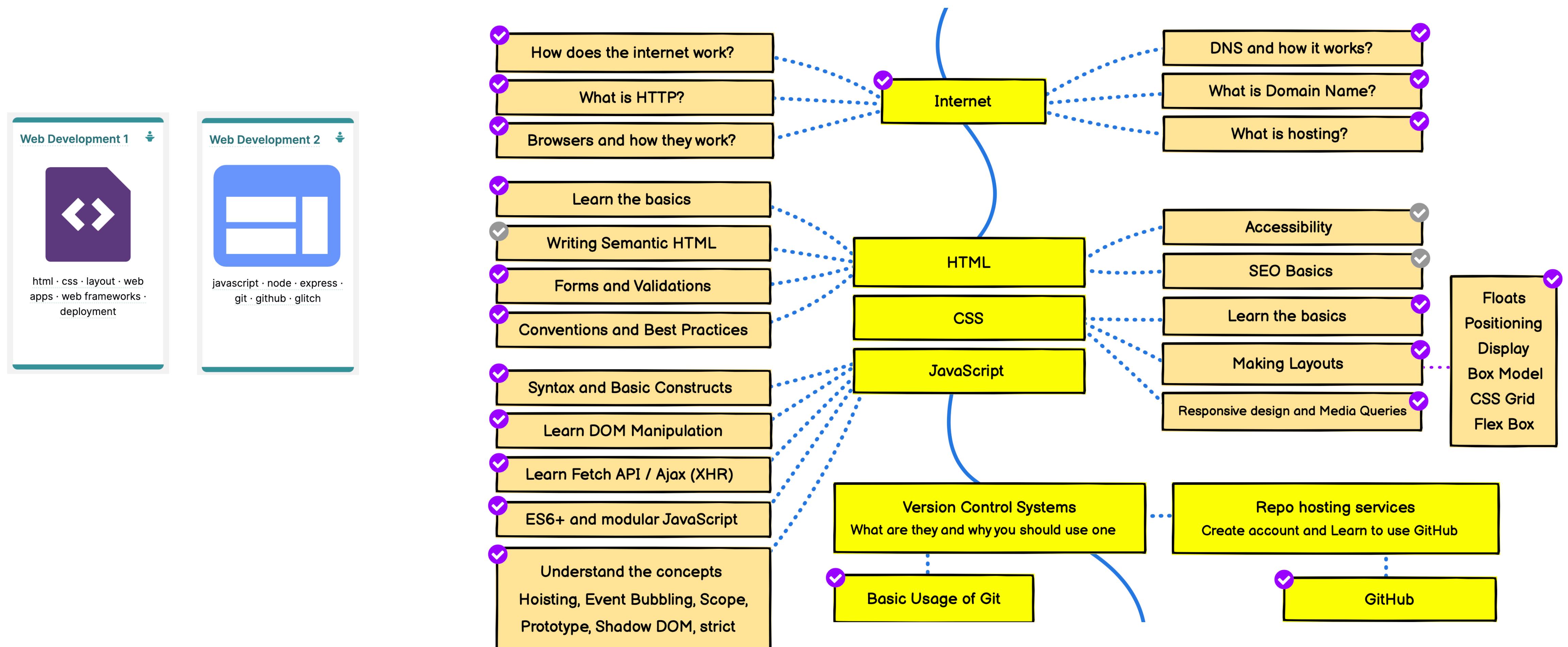
Frontend



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

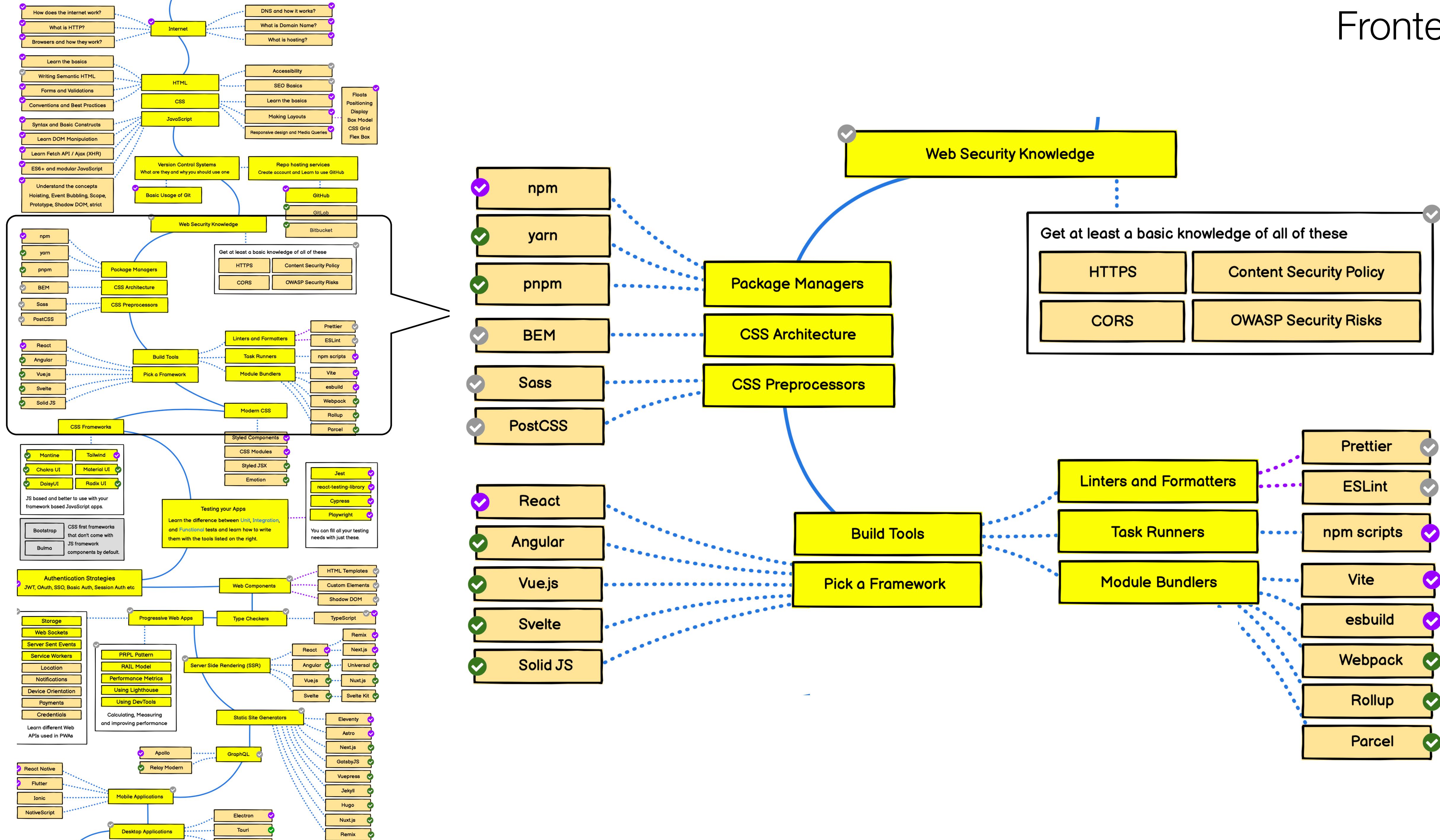
Frontend

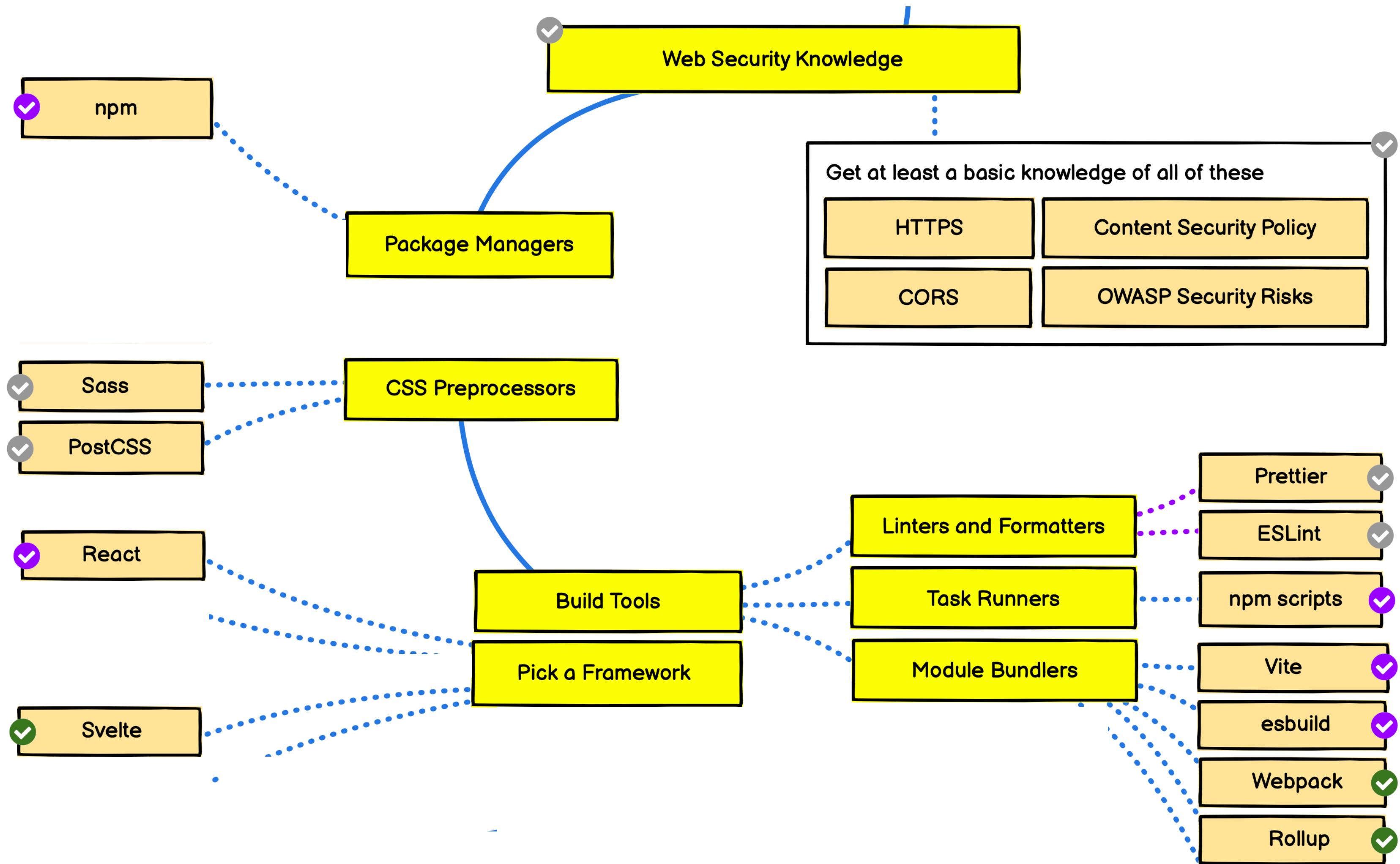
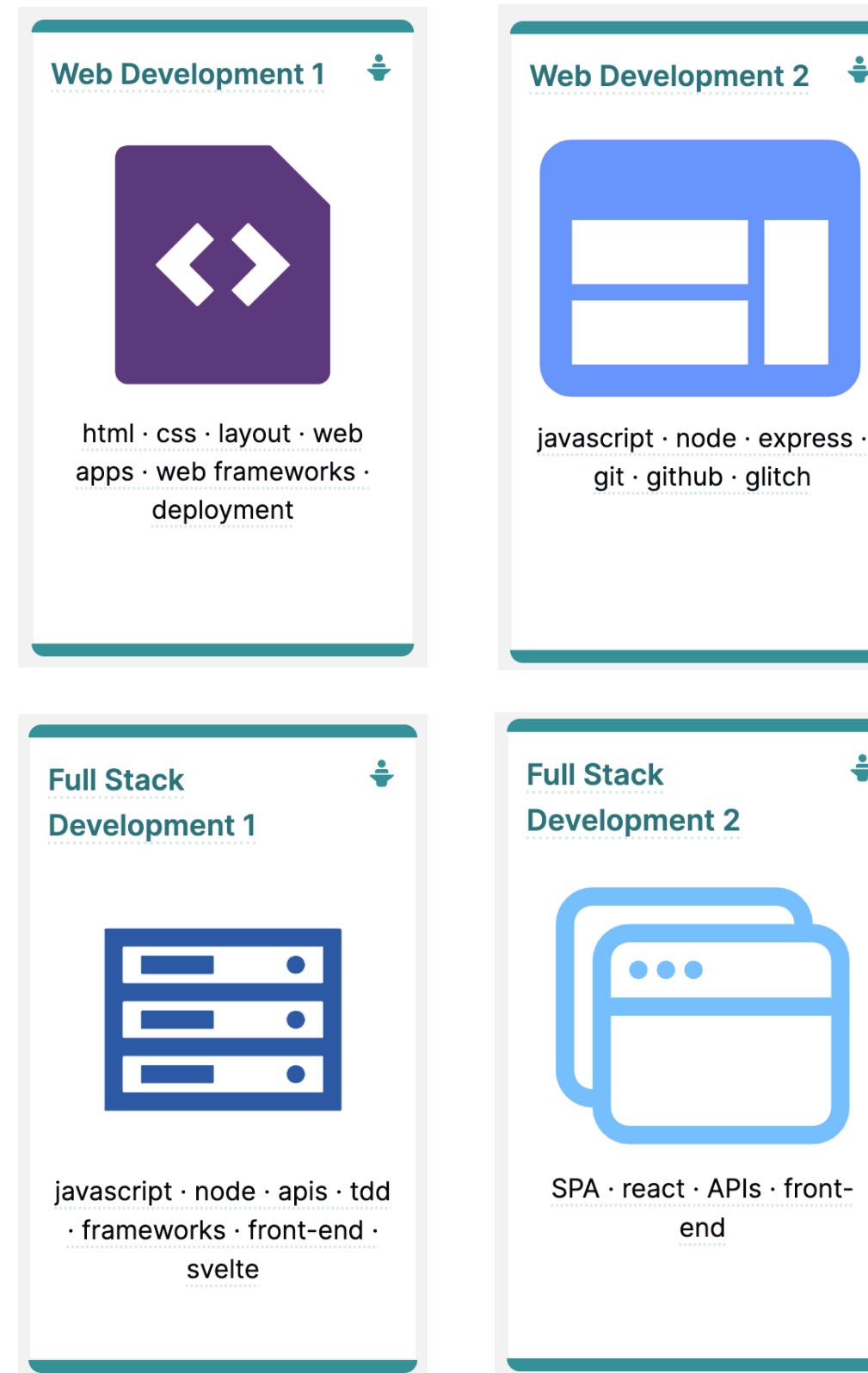




Building Blocks of the Web Experience

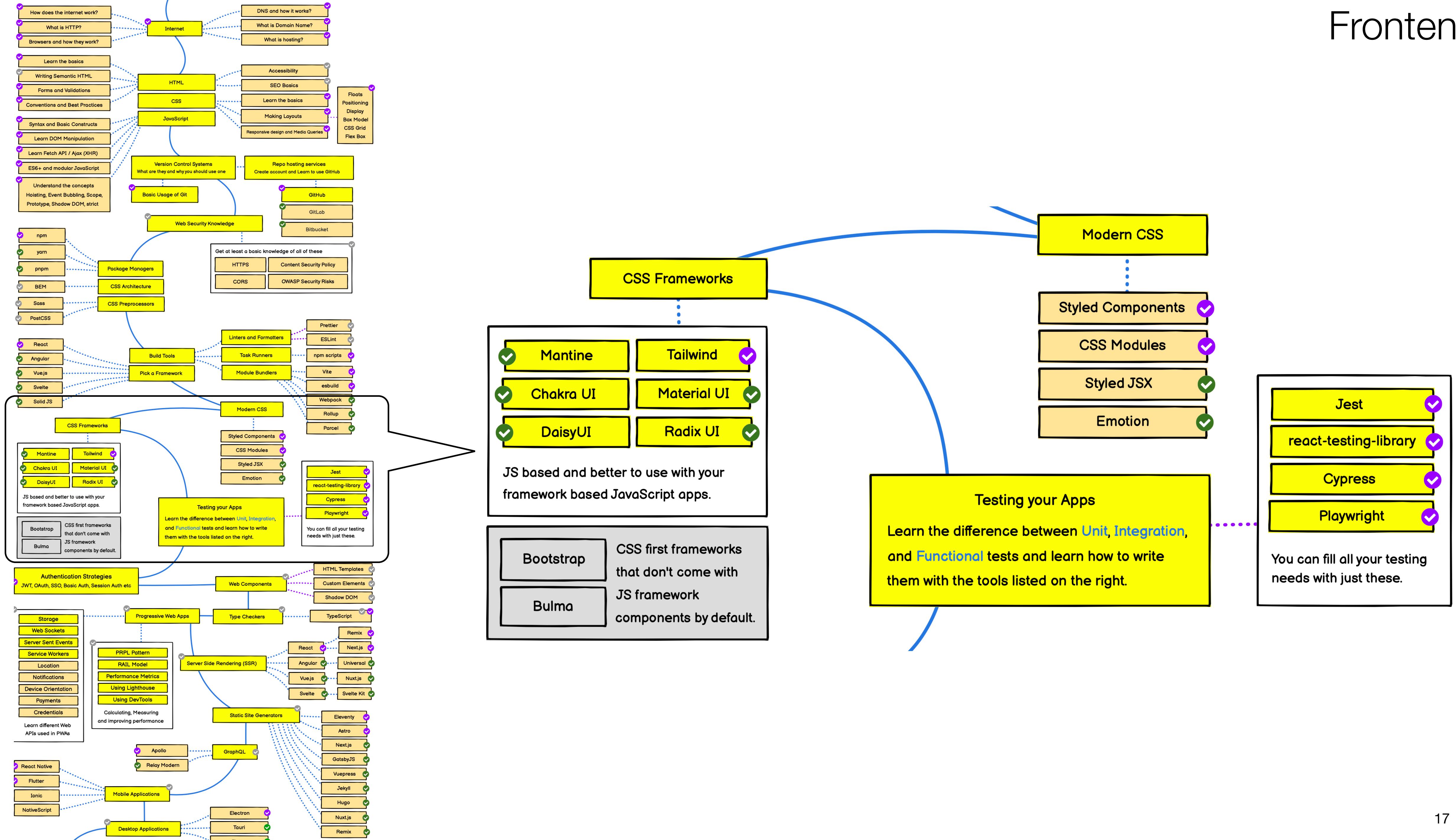
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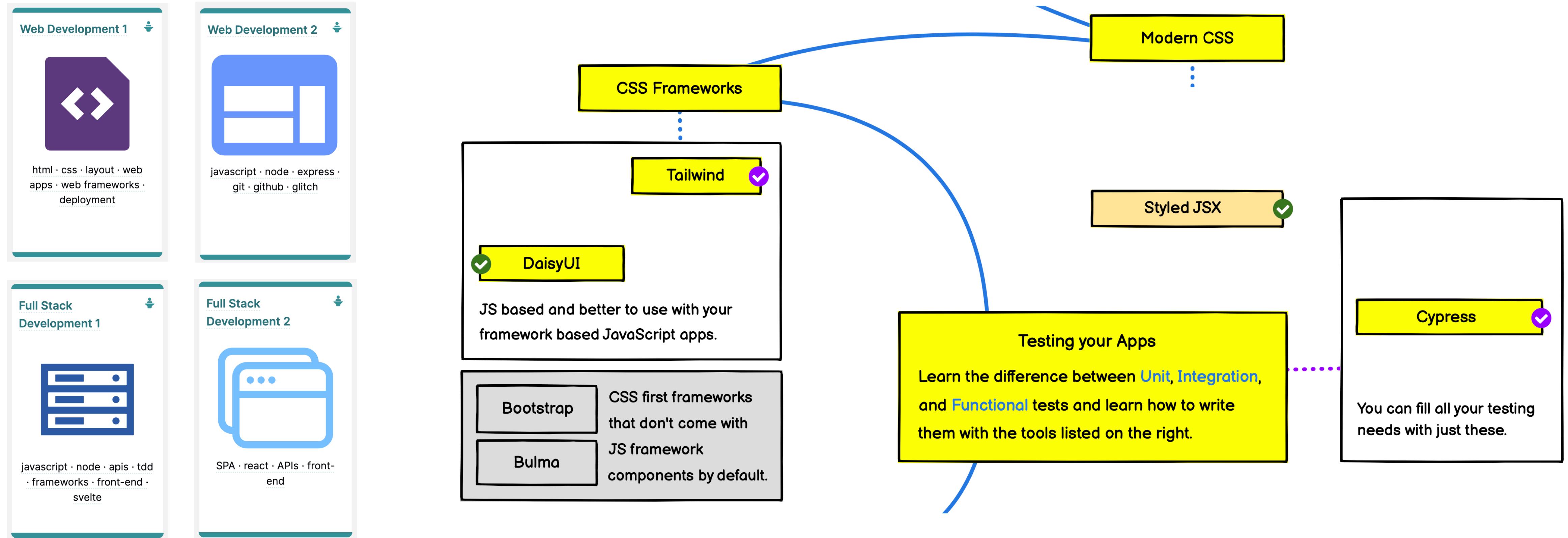




Core Build Tools + Framework Fundamentals

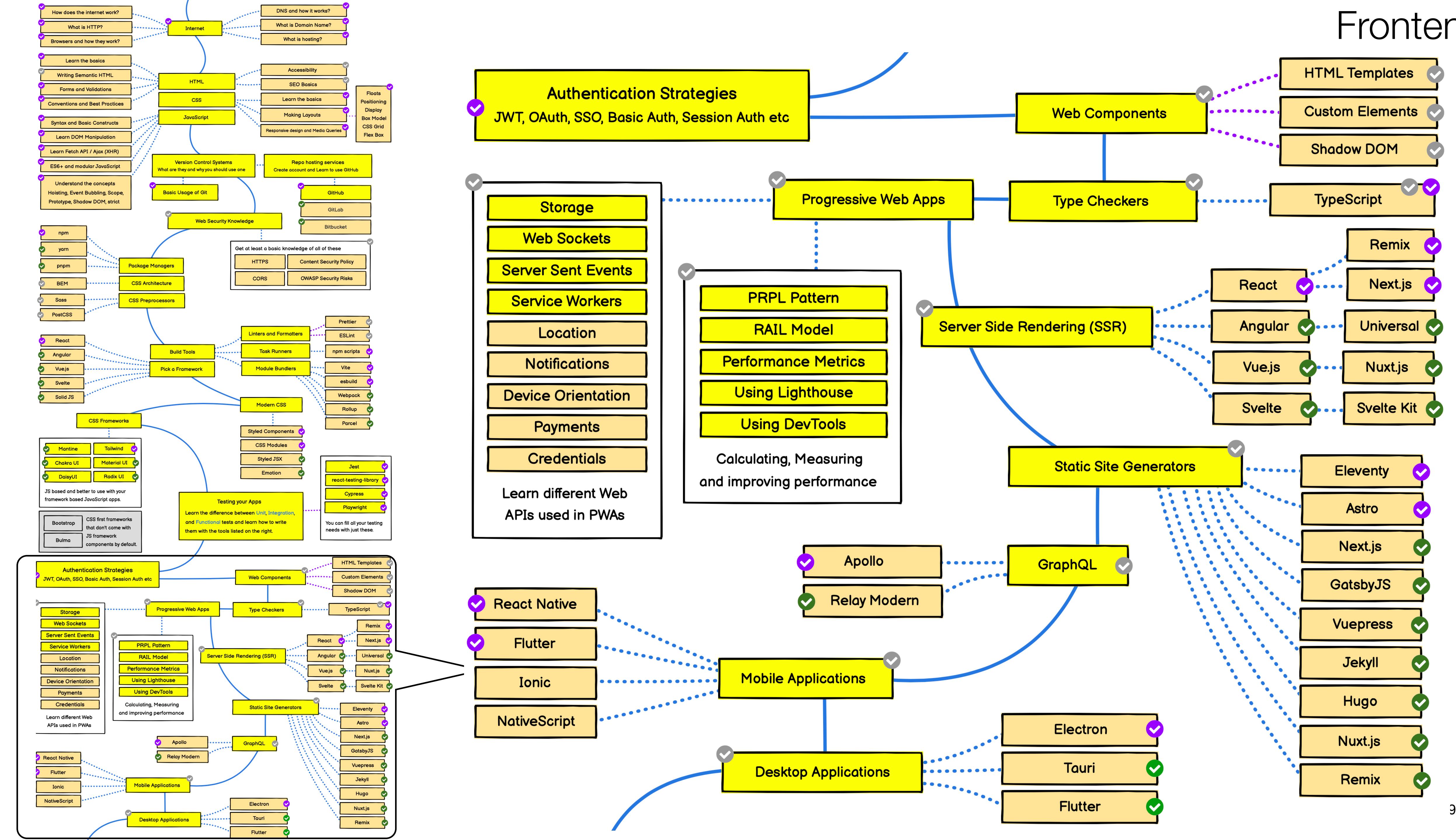
Frontend

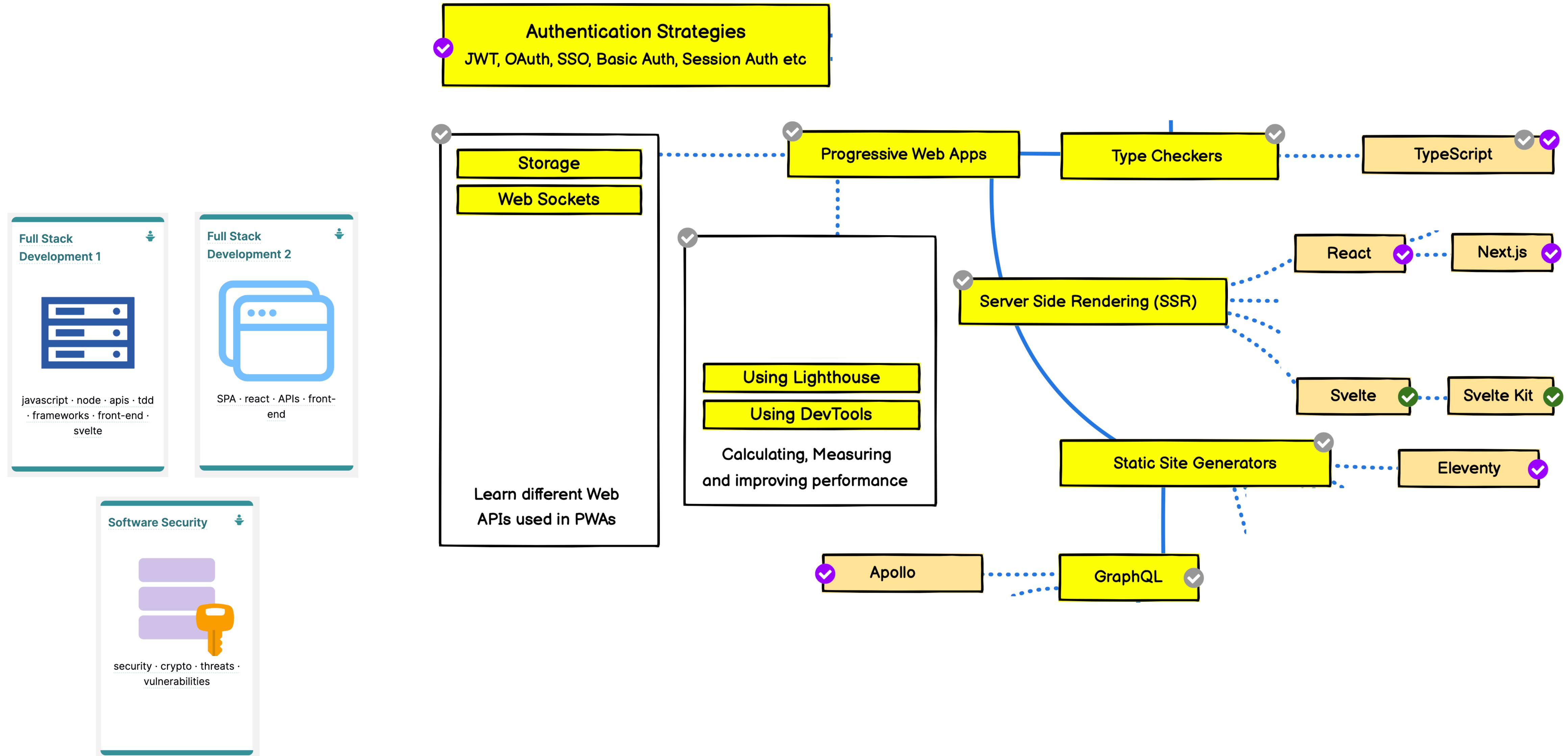




CSS Frameworks + Testing Strategies

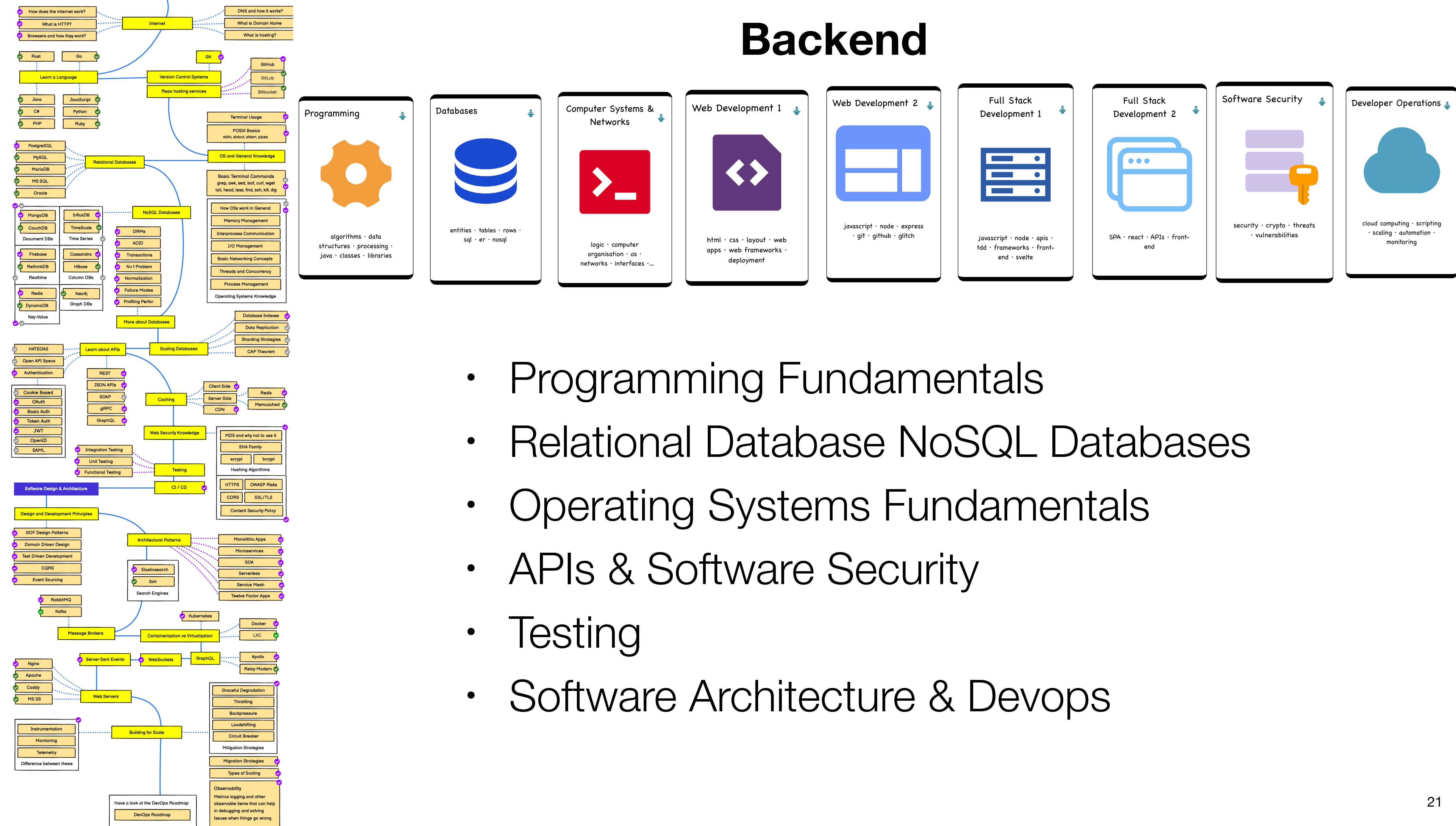
Frontend





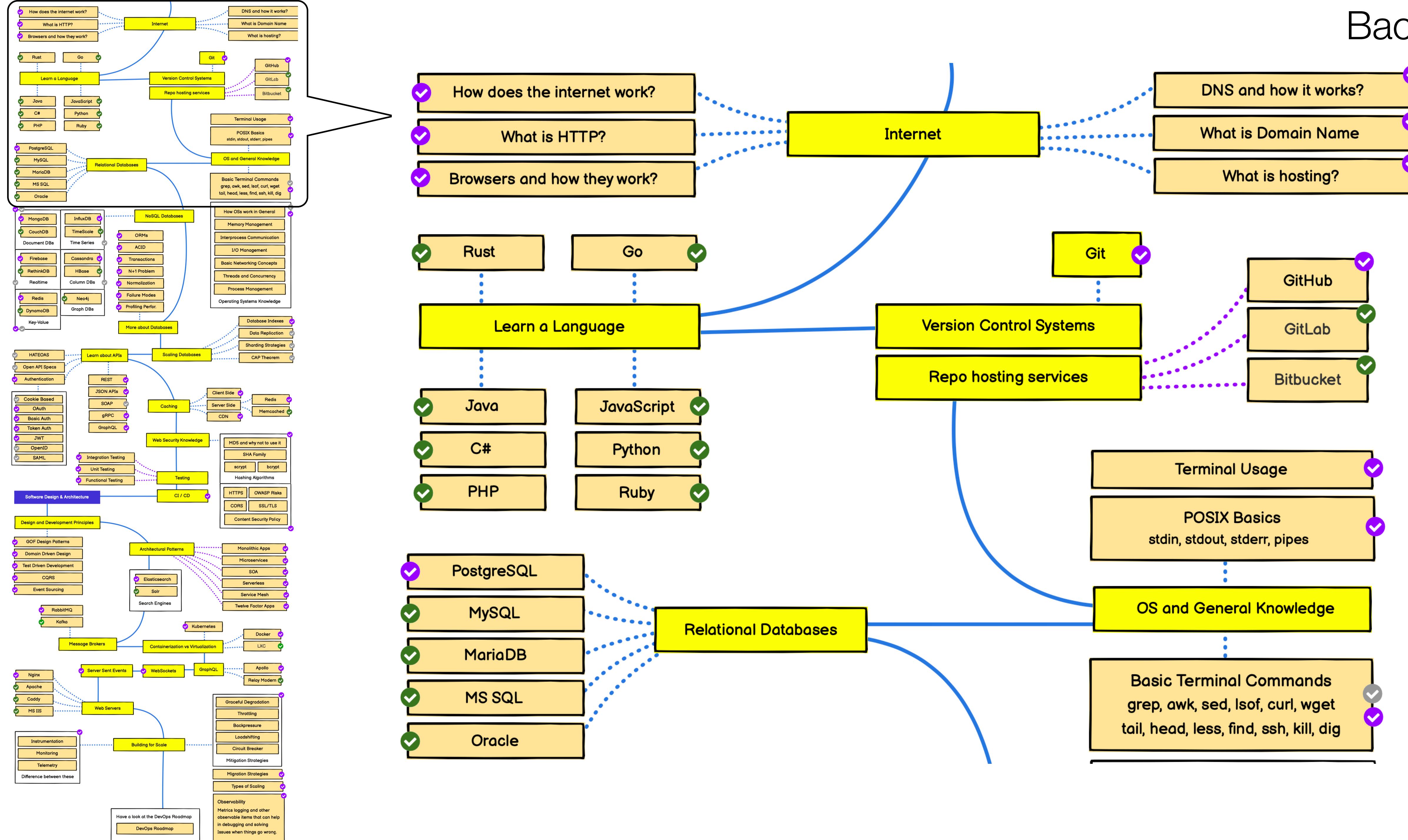
Browser API, Performance & Site Generation

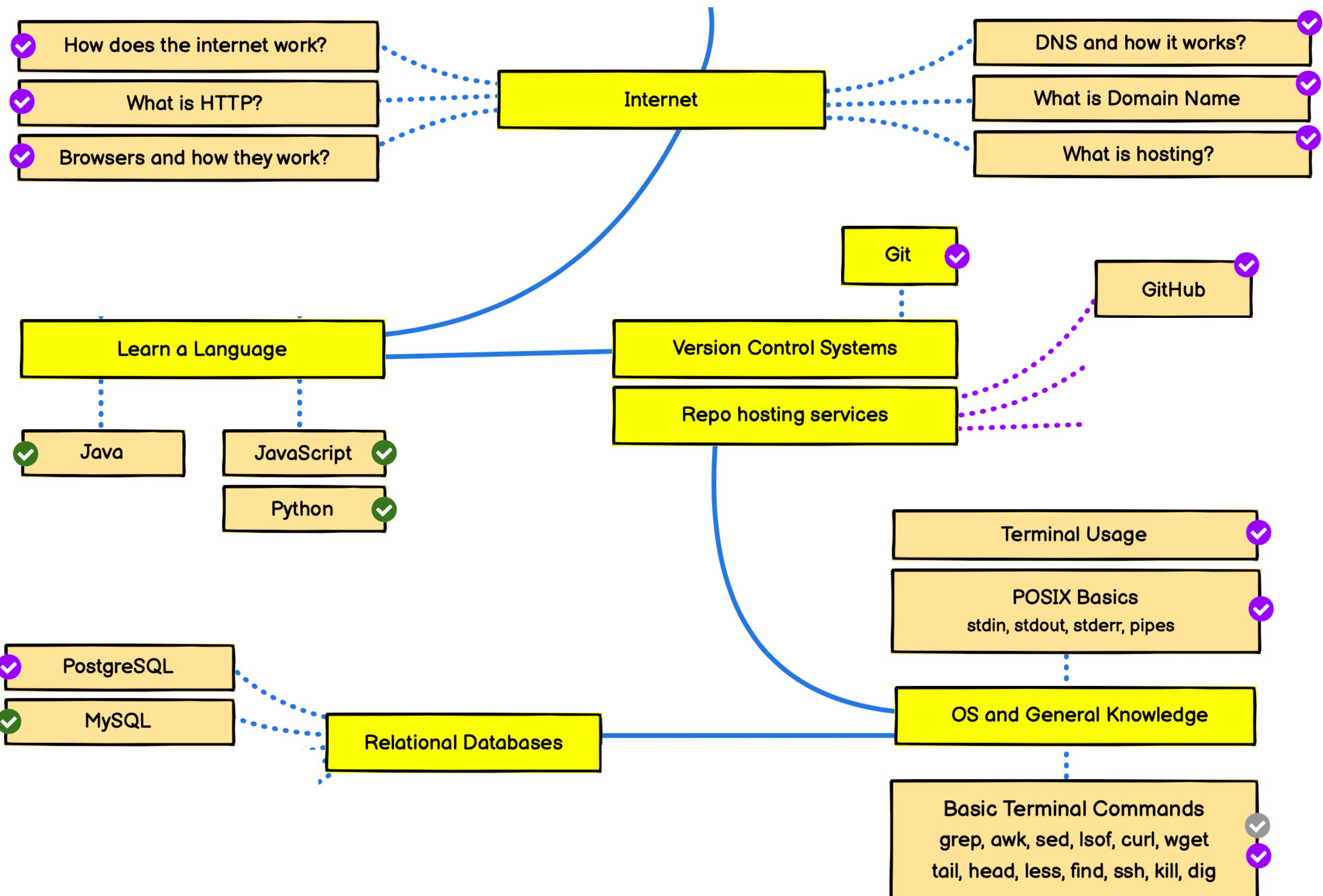
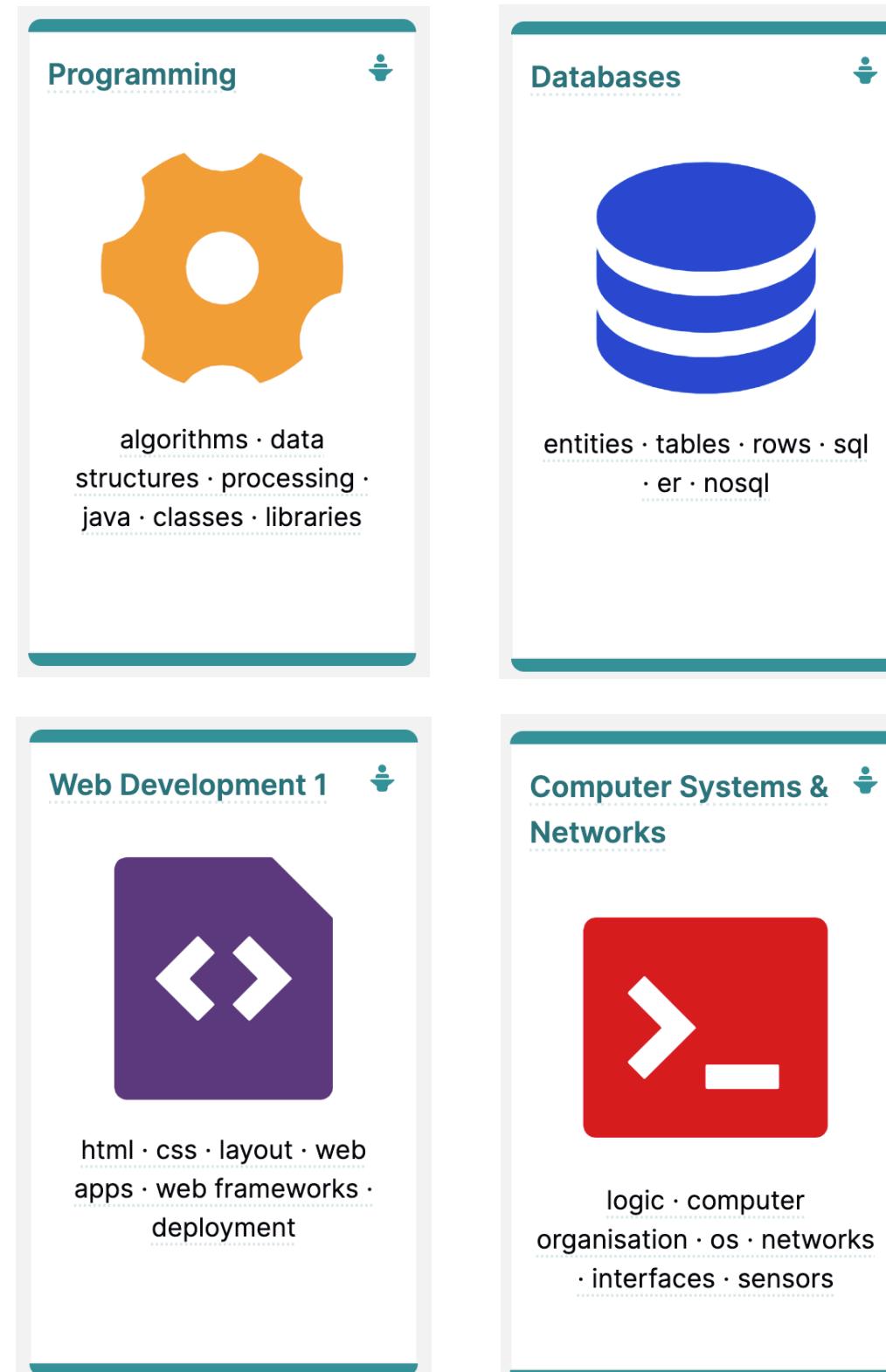
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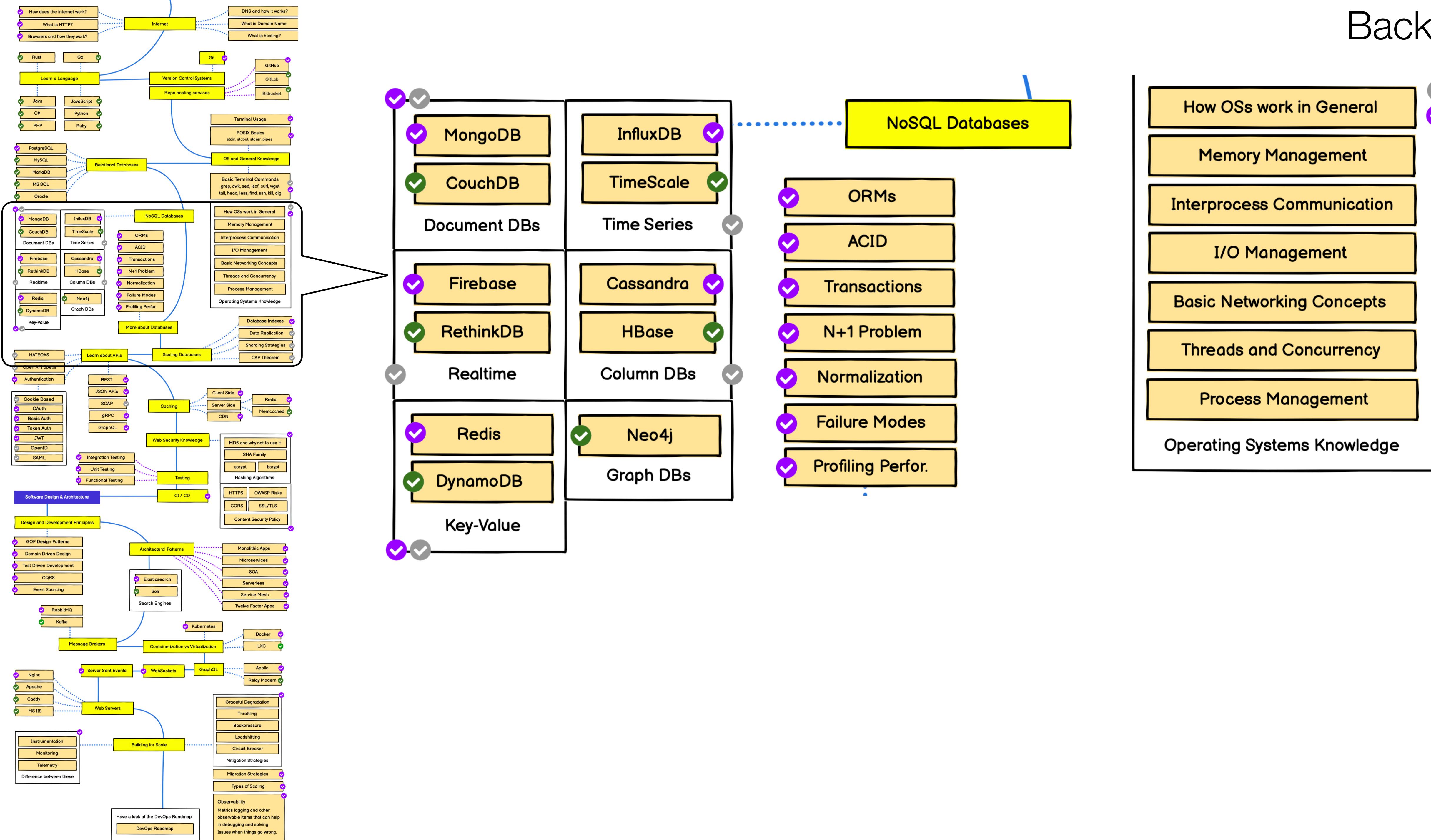
- Programming Fundamentals
- Relational Database NoSQL Databases
- Operating Systems Fundamentals
- APIs & Software Security
- Testing
- Software Architecture & Devops

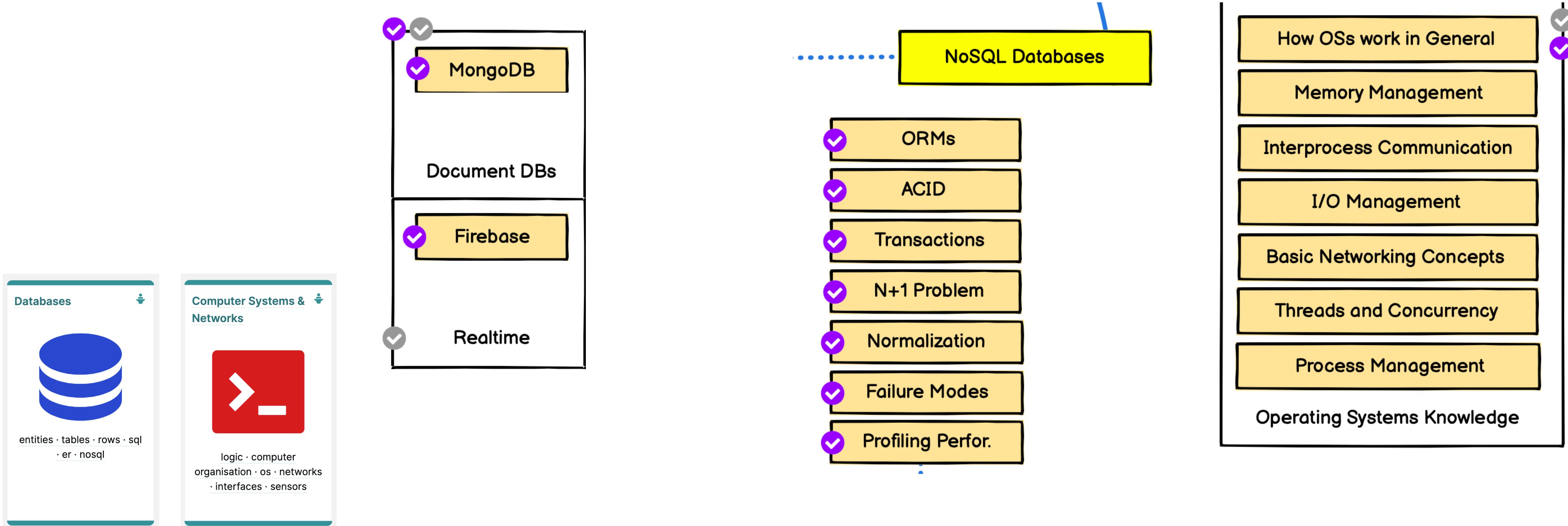
Backend





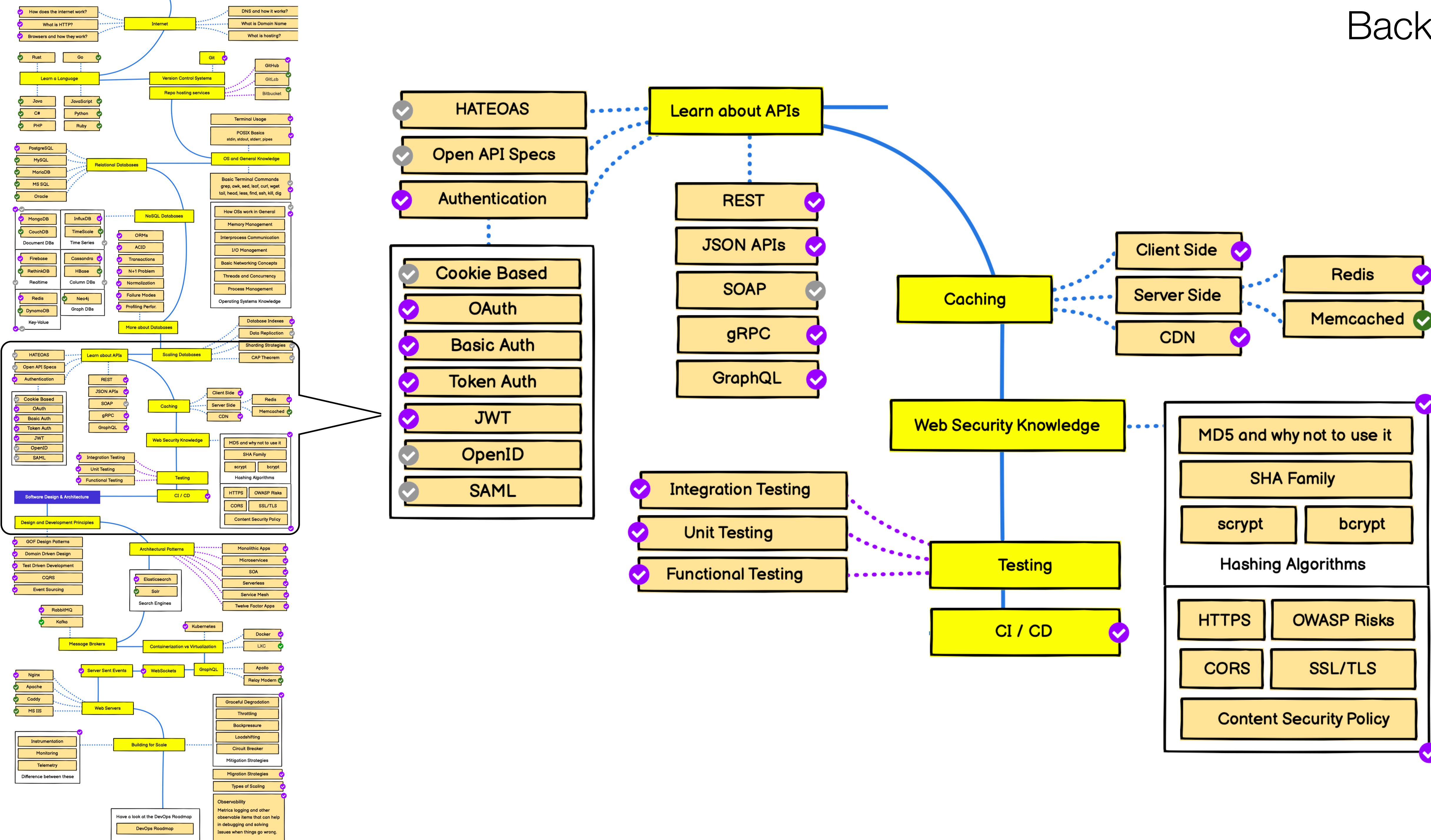
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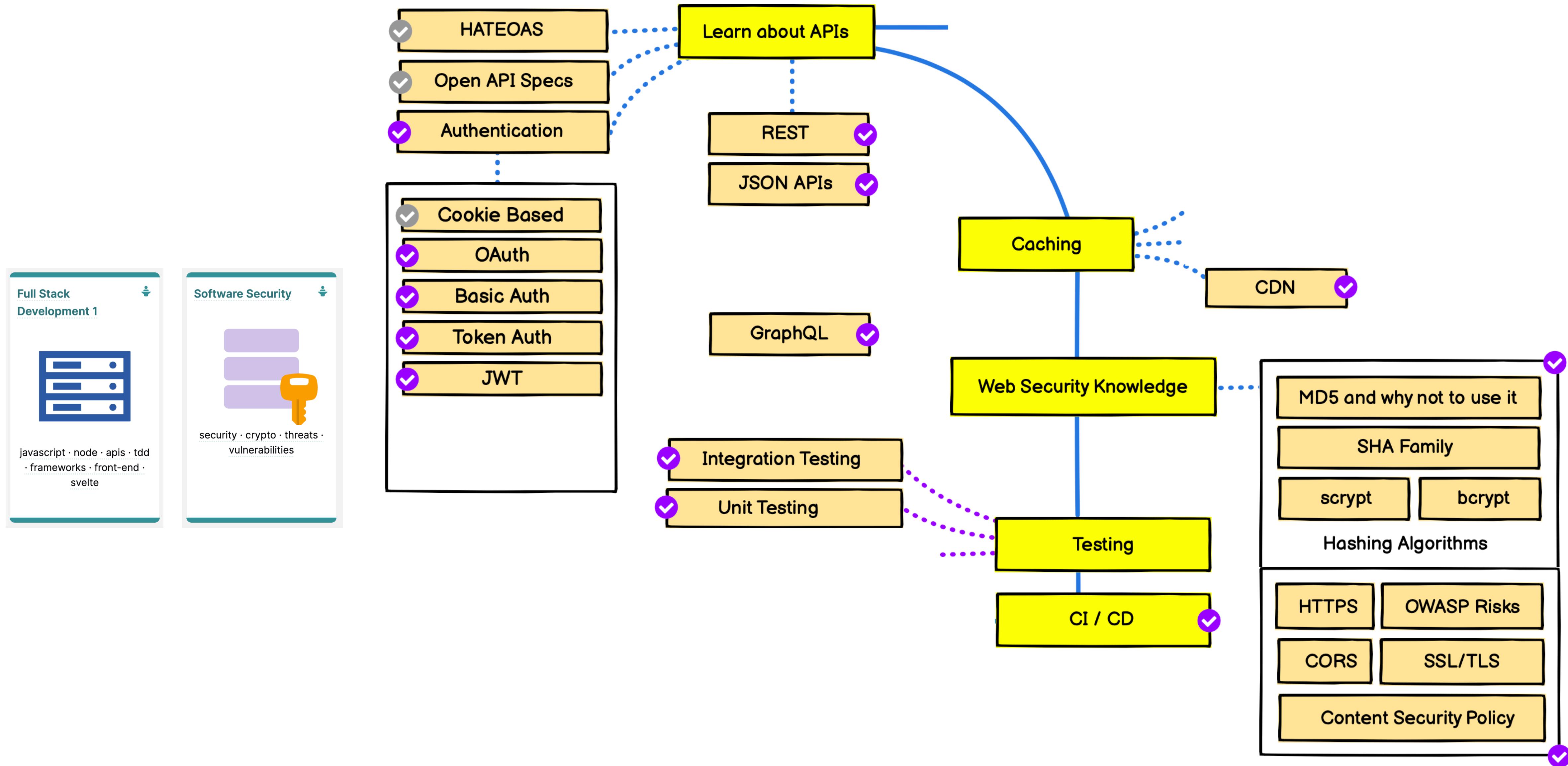




NoSQL Databases & Operating Systems

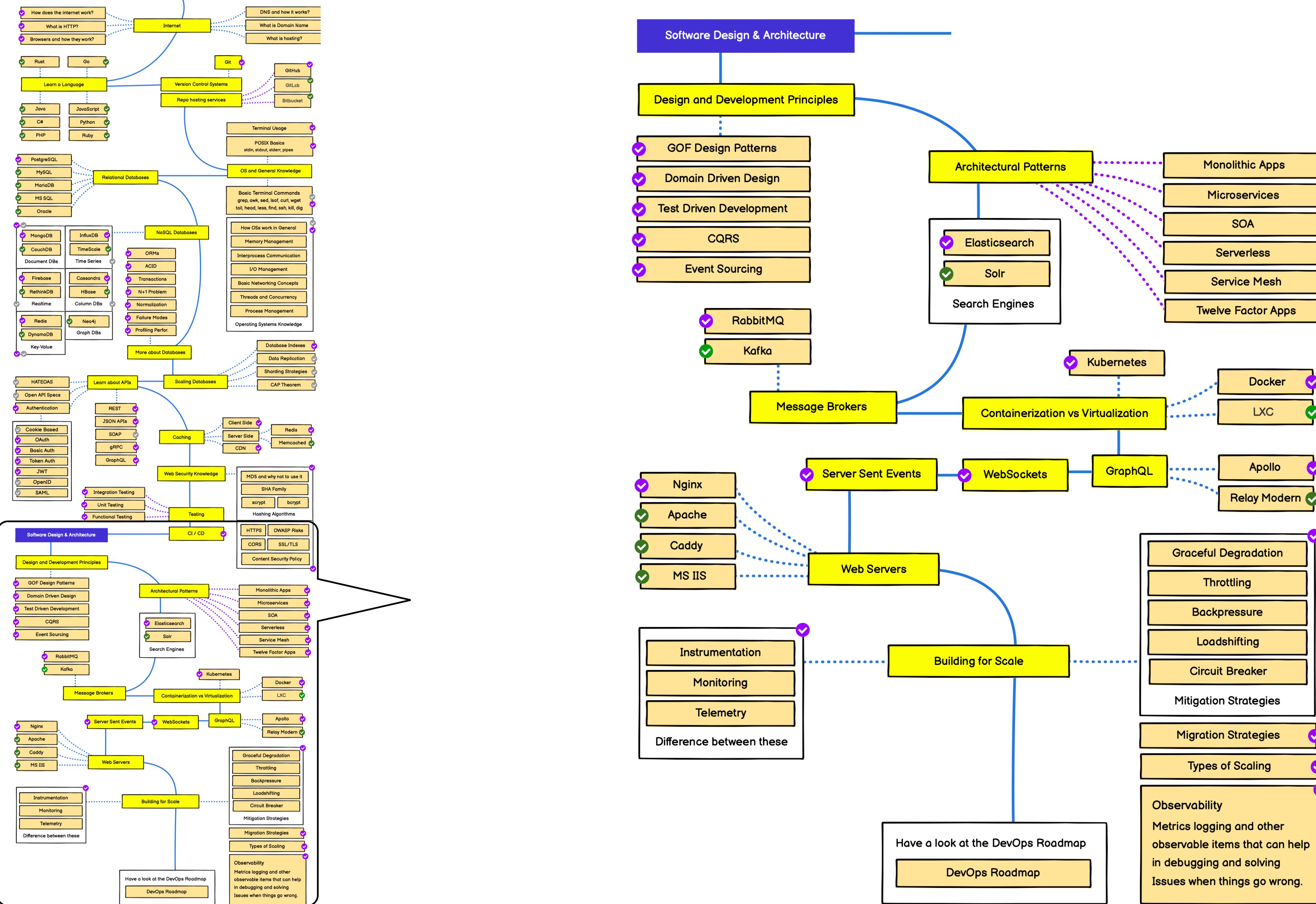
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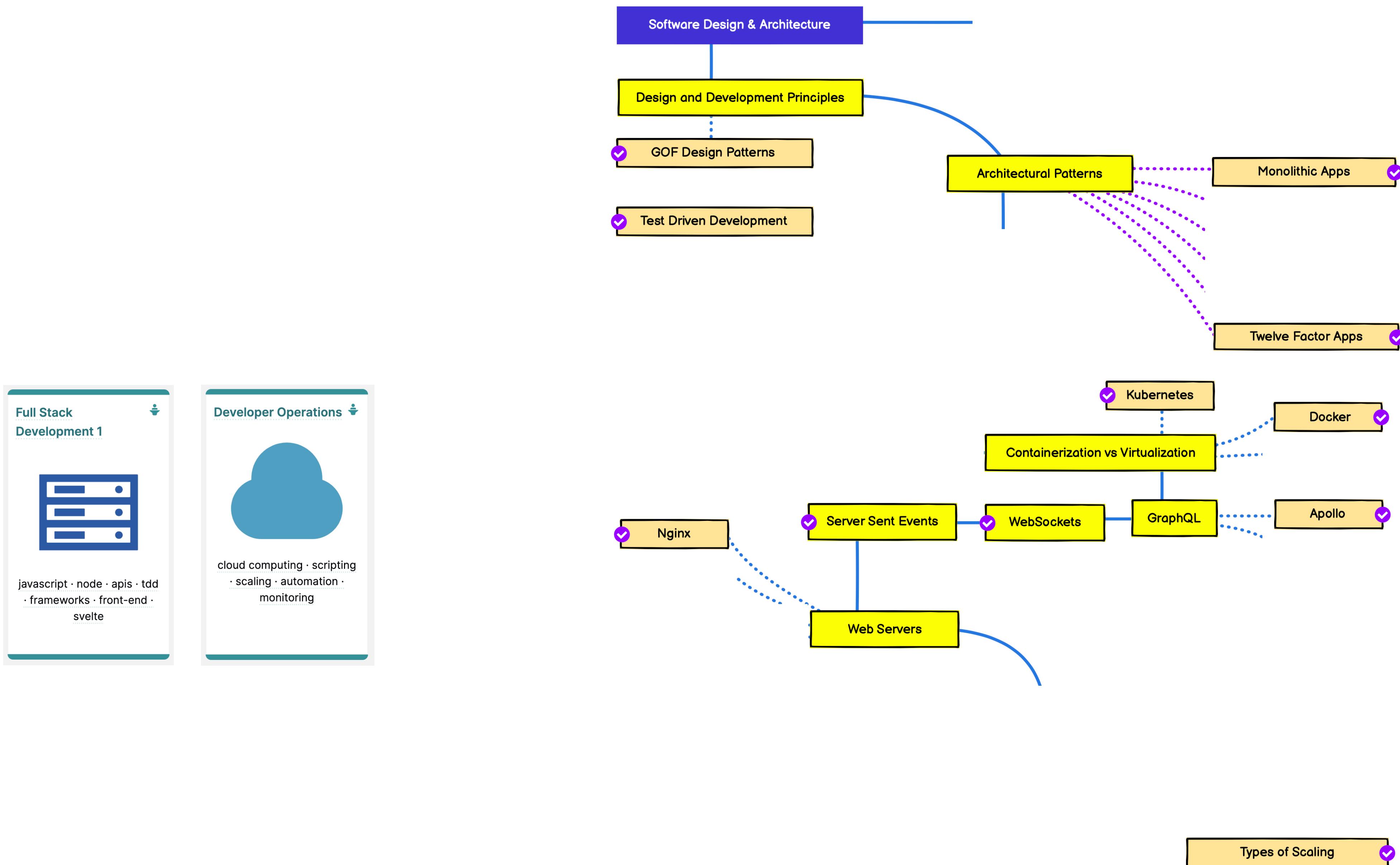




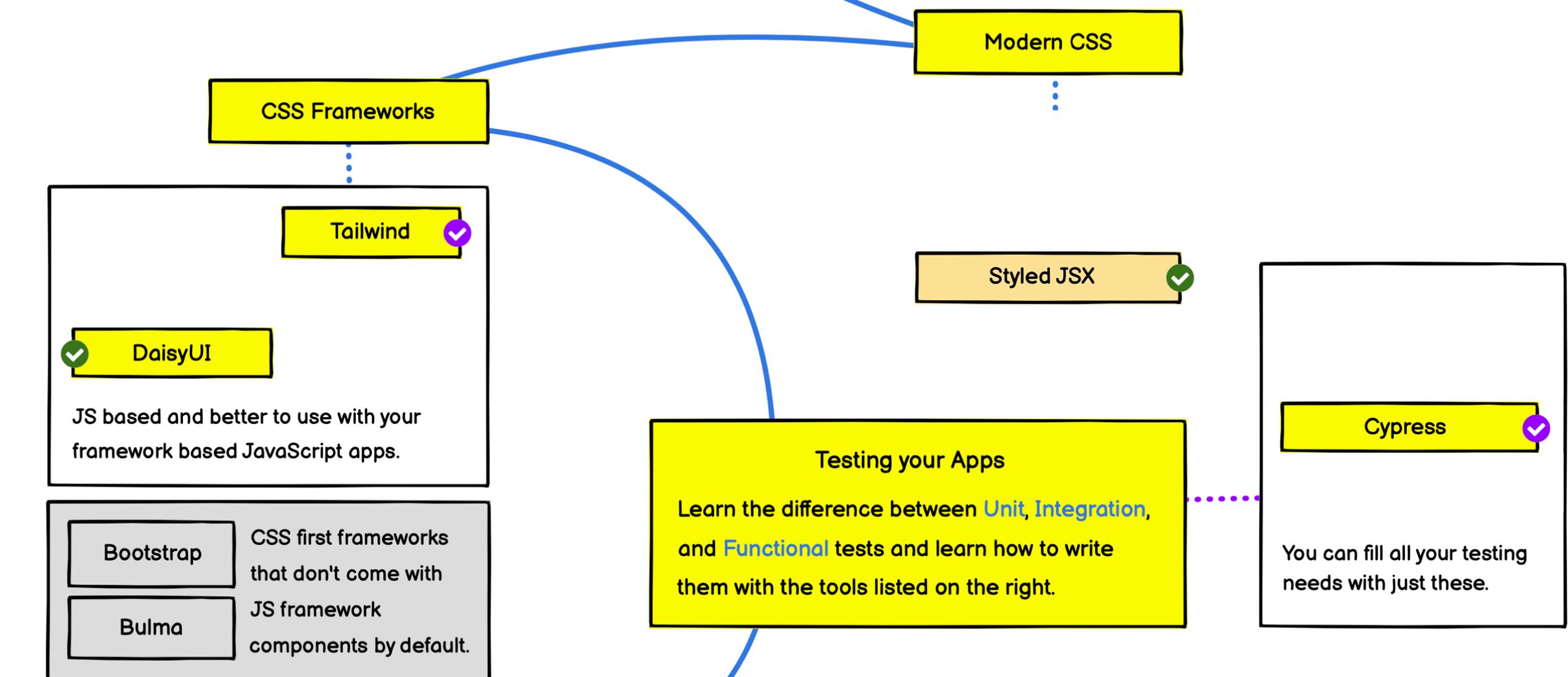
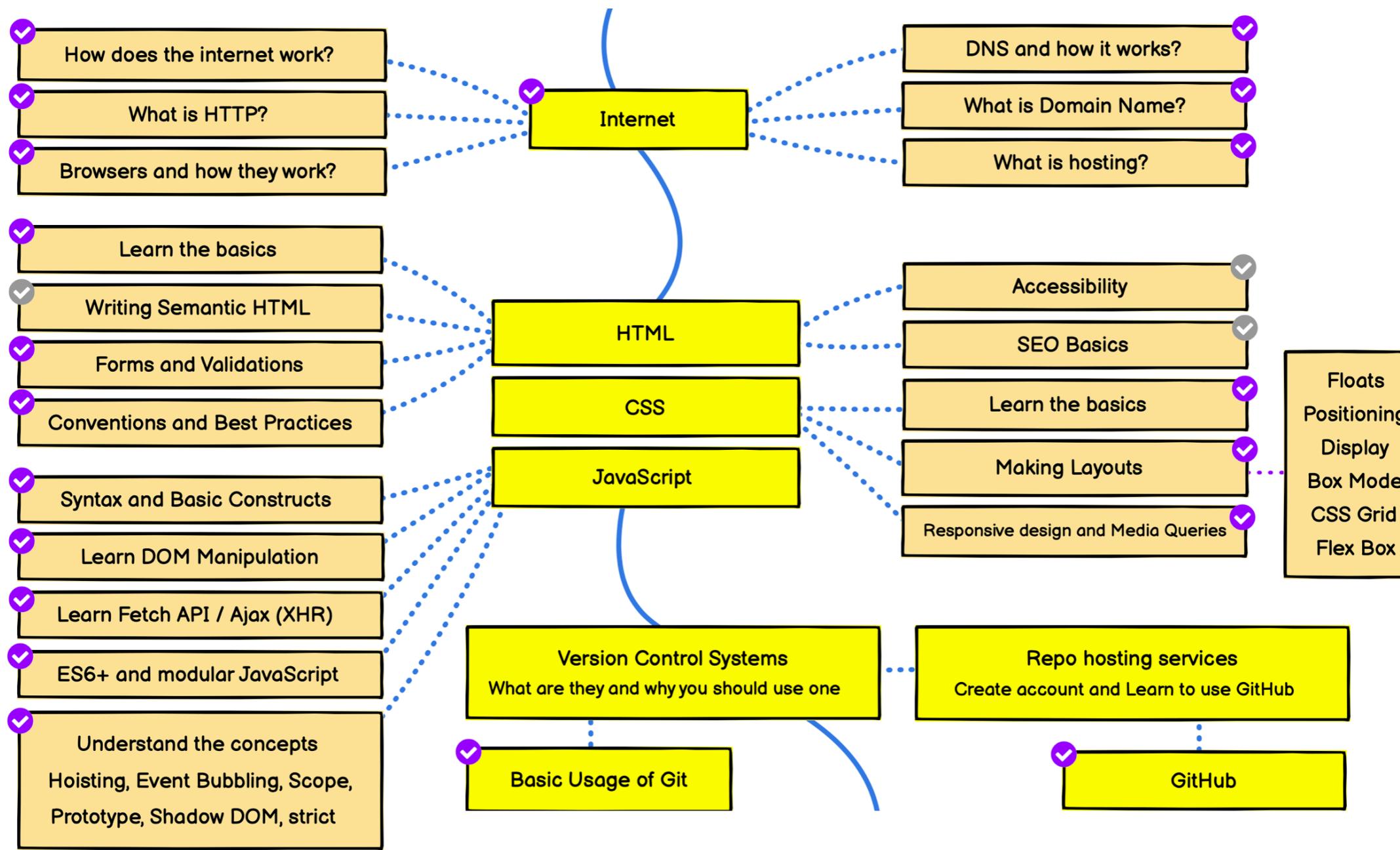
API, Software Security & Testing

Backend

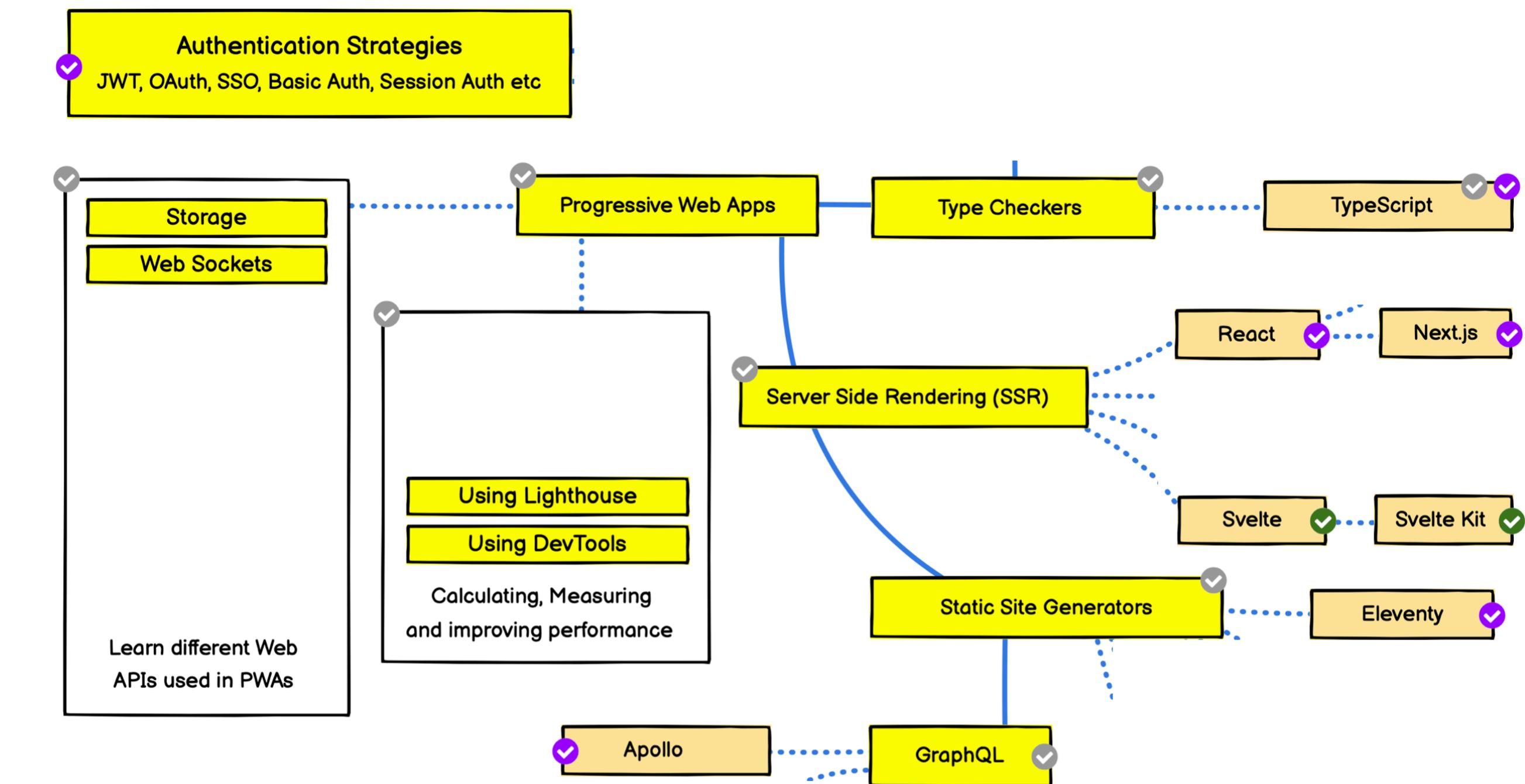
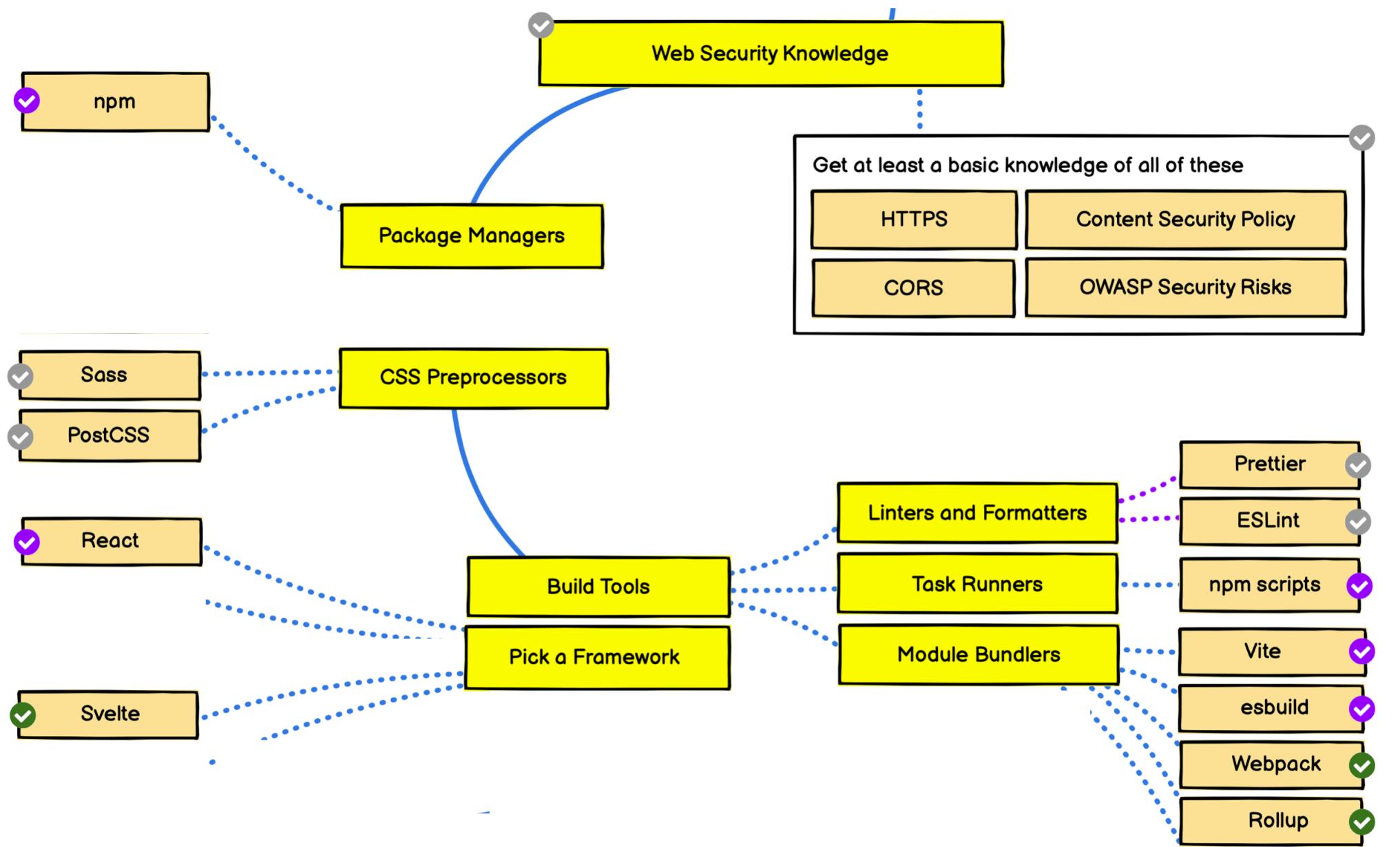


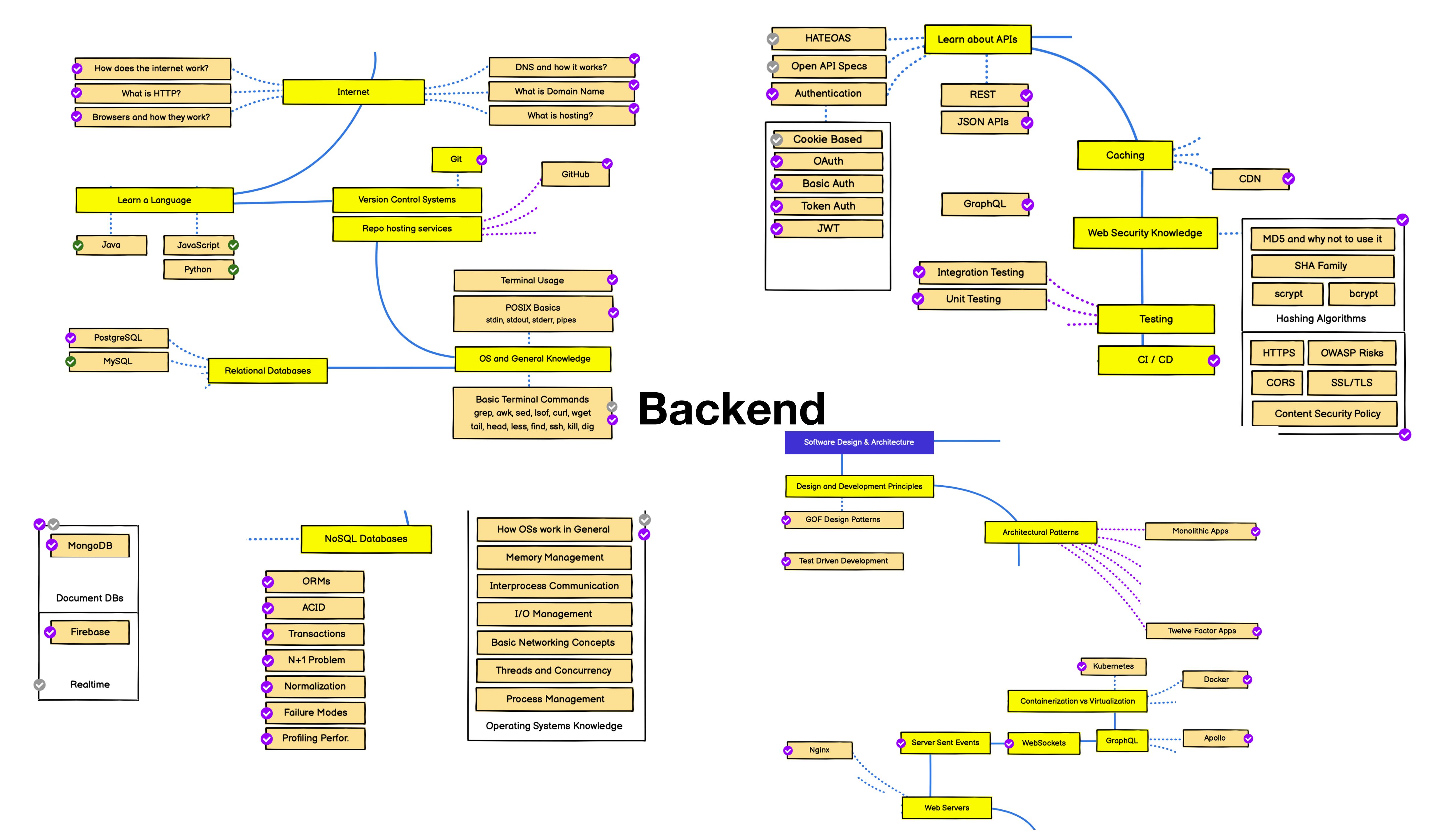


Software Architecture & Devops

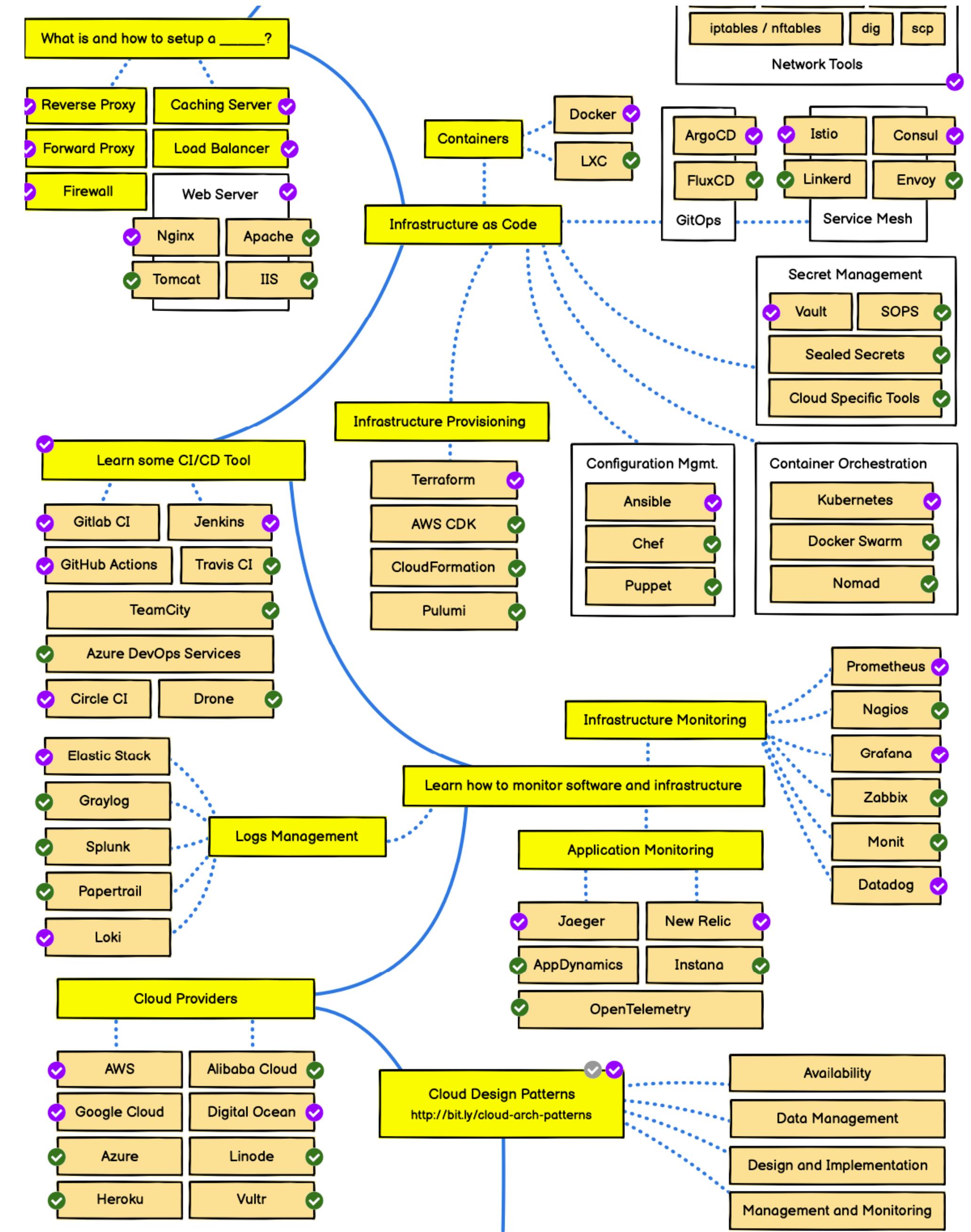
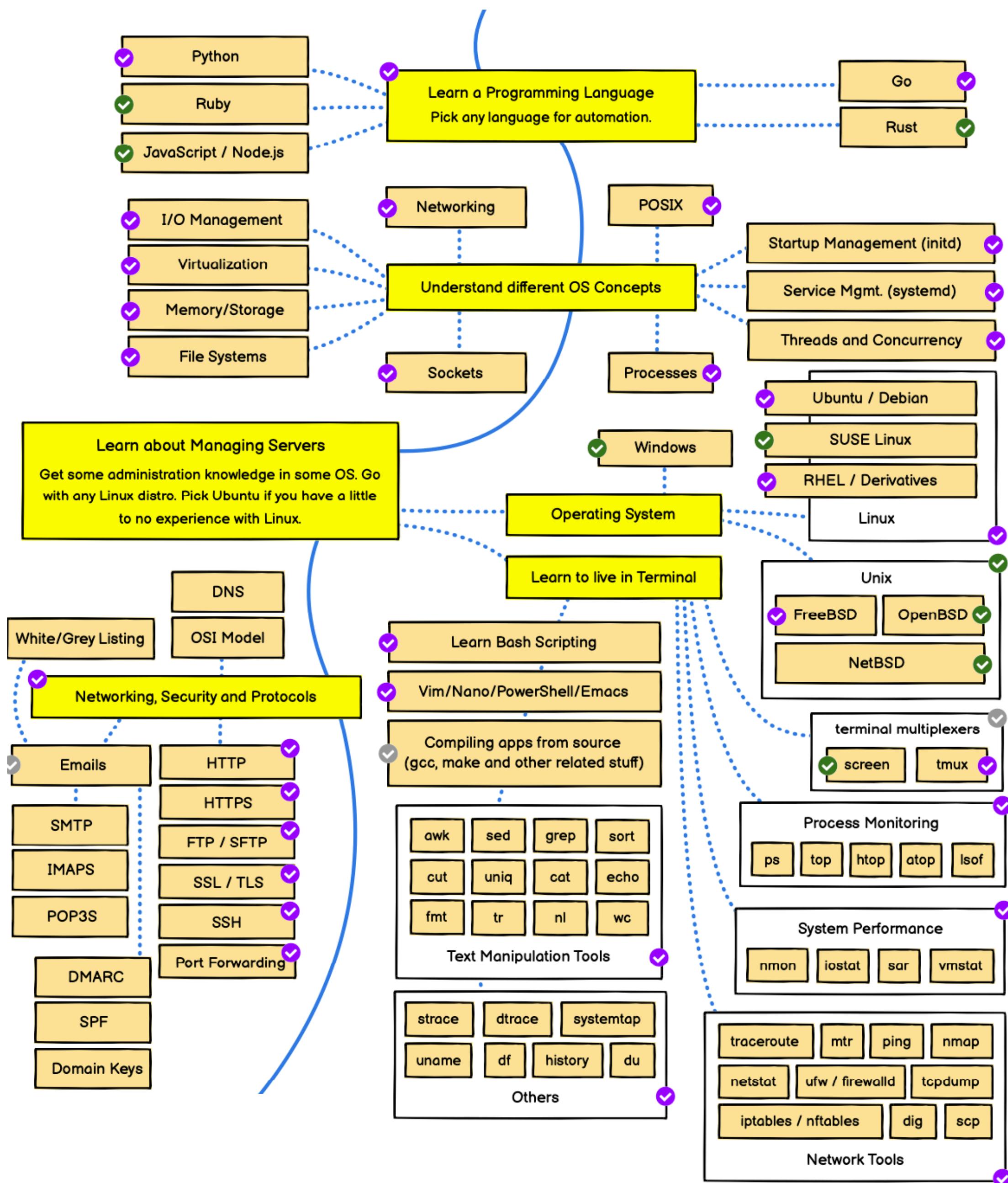


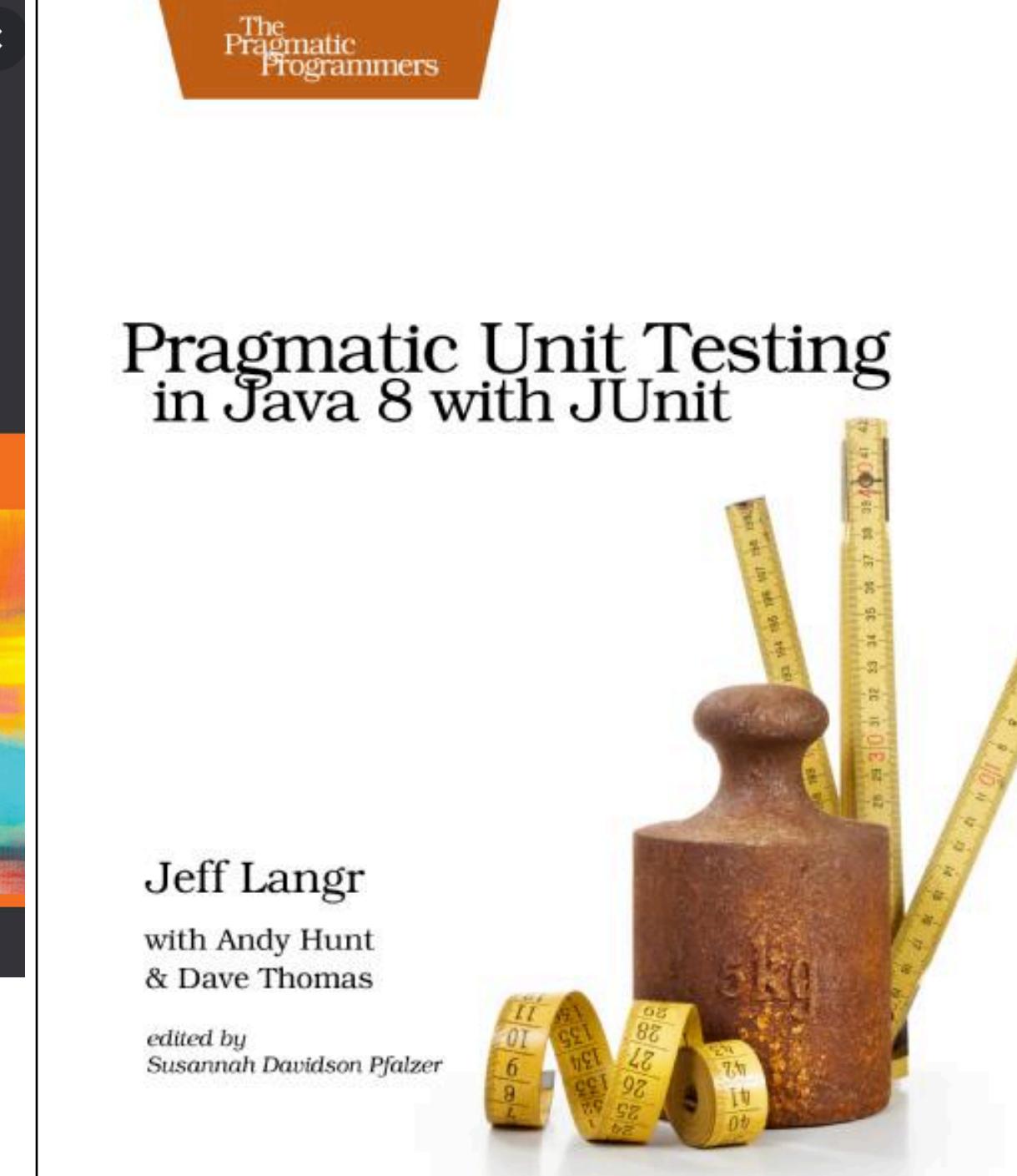
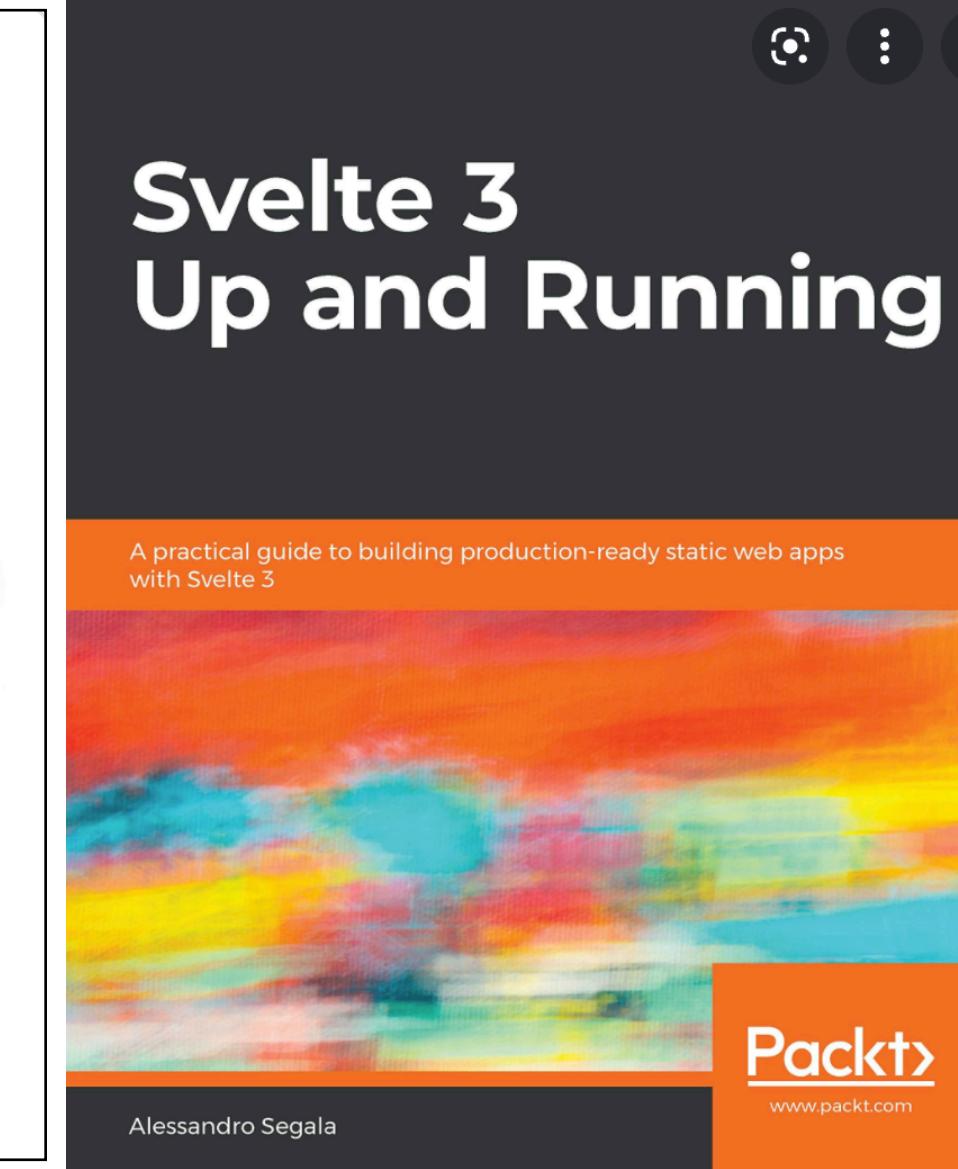
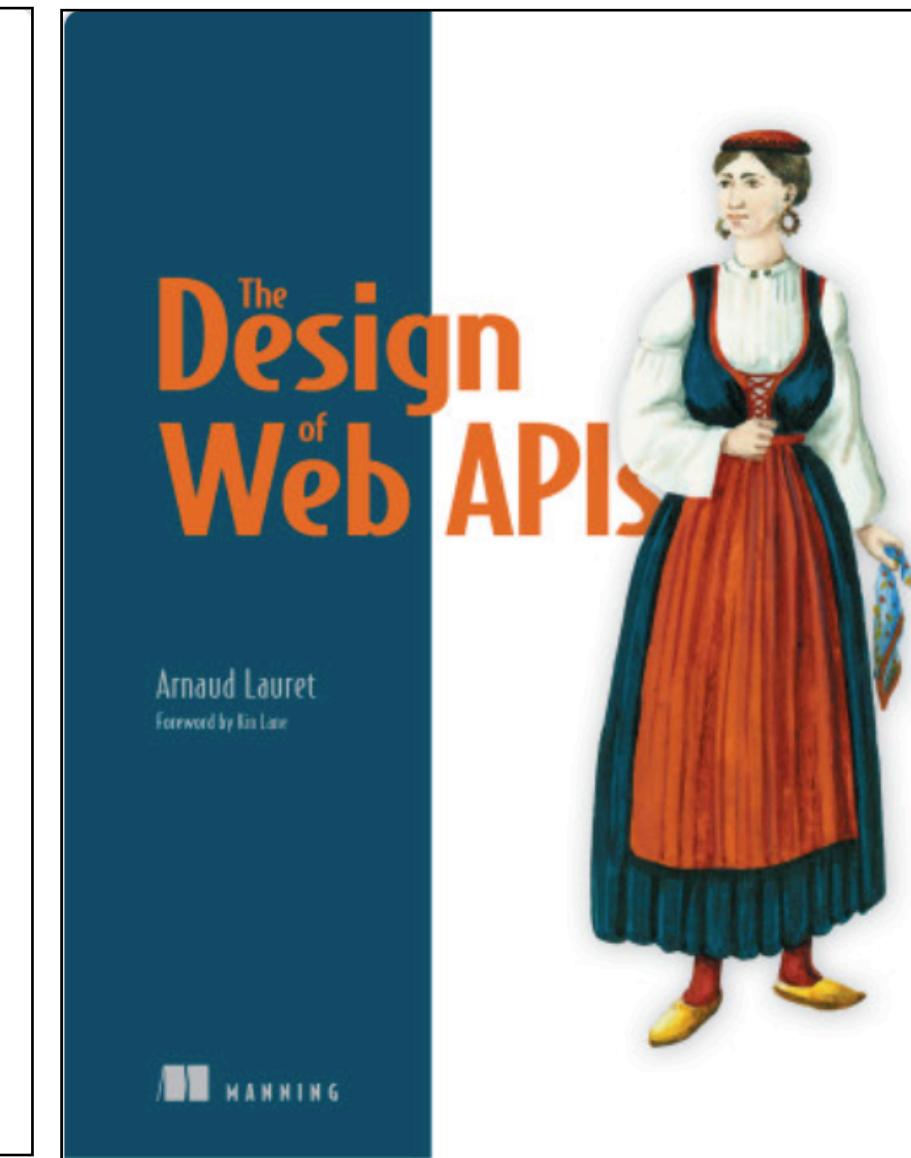
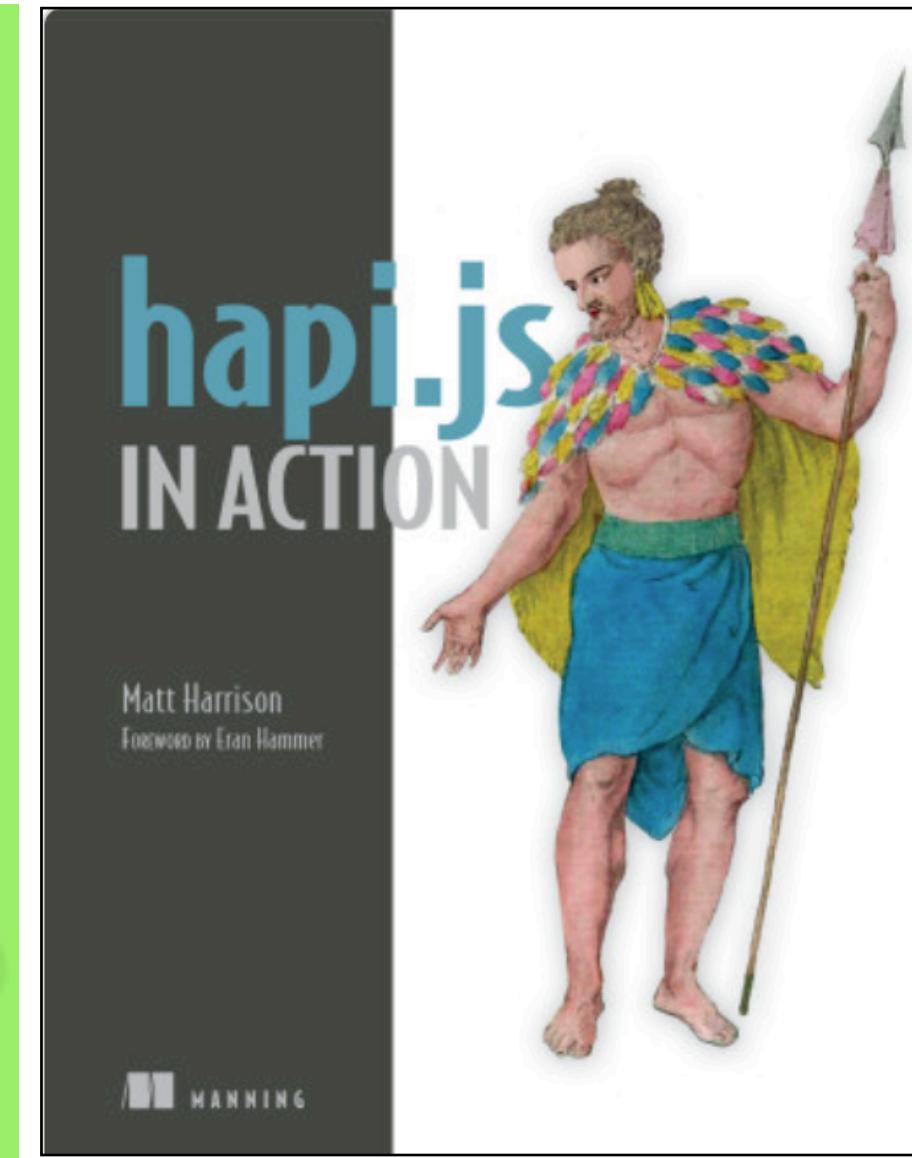
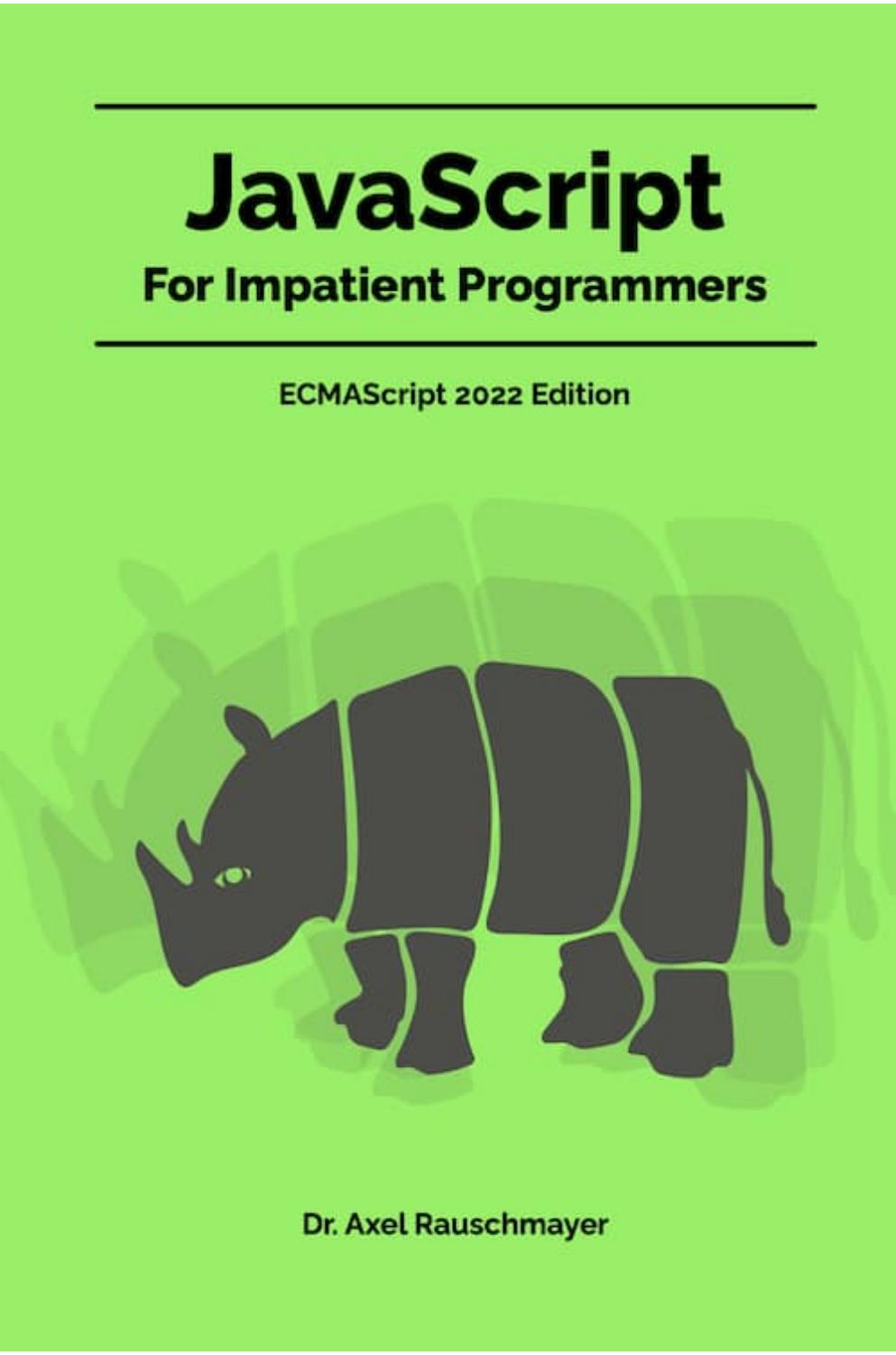
Frontend





Devops





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