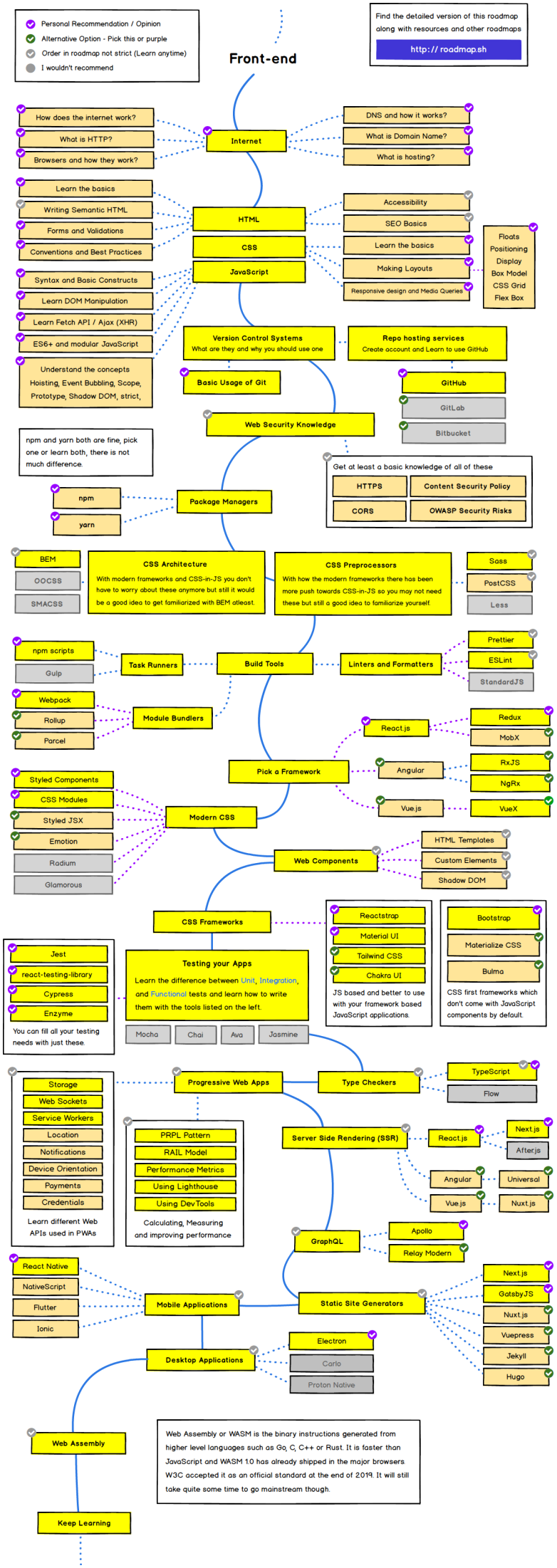
Personal Recommendation / Opinion
Alternative Option - Pick this or purple
Order in roadmap not strict (Learn anytime)
I wouldn't recommend
Front-end
Find the detailed version of this roadmap along with resources and other roadmaps
http:// roadmap.sh
Internet
How does the internet work?
What is HTTP?
Browsers and how they work?
DNS and how it works?
What is Domain Name?
What is hosting?
HTML
Learn the basics
Writing Semantic HTML
Forms and Validations
Conventions and Best Practices
CSS
Accessibility
SEO Basics
Learn the basics
Making Layouts
Responsive design and Media Queries
Floats
Positioning
Display
Box Model
CSS Grid
Flex Box
JavaScript
Syntax and Basic Constructs
Learn DOM Manipulation
Learn Fetch API / Ajax (XHR)
ES6+ and modular JavaScript
Understand the concepts Hoisting, Event Bubbling, Scope, Prototype, Shadow DOM, strict,
Version Control Systems
What are they and why you should use one
Repo hosting services
Create account and Learn to use GitHub
Basic Usage of Git
GitHub
GitLab
Bitbucket
Web Security Knowledge
Get at least a basic knowledge of all of these
HTTPS
Content Security Policy
CORS
OWASP Security Risks
npm and yarn both are fine, pick one or learn both, there is not much difference.
Package Managers
npm
yarn
BEM
OOCSS
SMACSS
CSS Architecture
With modern frameworks and CSS-in-JS you don't have to worry about these anymore but still it would be a good idea to get familiarized with BEM atleast.
CSS Preprocessors
With how the modern frameworks there has been more push towards CSS-in-JS so you may not need these but still a good idea to familiarize yourself.
Sass
PostCSS
Less
npm scripts
Gulp
Task Runners
Build Tools
Linters and Formatters
Prettier
ESLint
StandardJS
Webpack
Rollup
Parcel
Module Bundlers
Pick a Framework
React.js
Redux
MobX
Angular
RxJS
NgRx
Vue.js
VueX
Styled Components
CSS Modules
Styled JSX
Emotion
Radium
Glamorous
Modern CSS
Web Components
HTML Templates
Custom Elements
Shadow DOM
CSS Frameworks
Reactstrap
Material UI
Tailwind CSS
Chakra UI
JS based and better to use with your framework based JavaScript applications.
Bootstrap
Materialize CSS
Bulma
CSS first frameworks which don't come with JavaScript components by default.
Jest
react-testing-library
Cypress
Enzyme
You can fill all your testing needs with just these.
Testing your Apps
Learn the difference between Unit, Integration, and Functional tests and learn how to write them with the tools listed on the left.
Mocha
Chai
Ava
Jasmine
Storage
Web Sockets
Service Workers
Location
Notifications
Device Orientation
Payments
Credentials
Learn different Web APIs used in PWAs
Progressive Web Apps
PRPL Pattern
RAIL Model
Performance Metrics
Using Lighthouse
Using DevTools
Calculating, Measuring and improving performance
Type Checkers
TypeScript
Flow
Server Side Rendering (SSR)
React.js
Next.js
Afterjs
Angular
Universal
Vue.js
Nuxt.js
GraphQL
Apollo
Relay Modern
React Native
NativeScript
Flutter
Ionic
Mobile Applications
Static Site Generators
Next.js
GatsbyJS
Nuxt.js
Vuepress
Jekyll
Hugo
Desktop Applications
Electron
Carlo
Proton Native
Web Assembly
Web Assembly or WASM is the binary instructions generated from higher level languages such as Go, C, C++ or Rust. It is faster than JavaScript and WASM 1.0 has already shipped in the major browsers. W3C accepted it as an official standard at the end of 2019. It will still take quite some time to go mainstream though.
Keep Learning