

# 2022 Frontend Development Interview Checklist & Roadmap

## HTML

- Elements + Attributes
- Forms + Input Types
- Imports + META Tags
- Lists & Anchor
- Tables
- Events
- Web storage
- Images & Multimedia
- iFrame
- Canvas & WebGL
- Workers
- Semantic HTML

## CSS

- Selectors (Basic, Complex)
- Psuedo Selectors
- Specificity & Inheritance
- Box Model
- Typography
- Positioning, Units, Display
- Layouts: Flex, Grid
- Shadows
- Colors + Gradients
- Transforms & Transitions
- Animations
- Media Queries
- CSS Variables
- BEM standards

## JavaScript

- Variables & Primitives
- Scopes & Hoisting
- Operators & type conversions
- Closures
- Objects + methods & Regex
- Arrays + methods
- Functions & arrow functions
- Timeout & Interval
- Destructuring & Spread
- "this" keyword
- callbacks + Promise
- Async await
- Set & Maps
- Modules
- Classes & Proxies
- ES6+ syntaxes
- Prototypes
- Iterators & Iterables

# Web Fundamentals

- HTTP & REST
- Headers & Methods
- Polling & Web Socket
- JSON
- Cookies & Sessions
- CSP, XSS, CORS
- Caching
- HTTP 2.0

## BOM & DOM

- Element Selectors
- DOM Manipulation
- Iterating Nodelist
- Attribute & Style Modification
- CRP + CSSOM
- AJAX & Fetch
- Event Bubbling & Delegation
- Event Loop
- Shadow DOM
- Browser APIs

## React /

- Components & JSX
- Props & State
- Hooks & Lifecycle
- Lists & Keys
- Forms + Event Handling
- Refs & Optimizations
- Component Composition
- React context API
- Advanced & Custom hooks
- HOC + Render props
- Portals + Error boundaries
- Internals & Reconciliation

## React Ecosystem

- Redux
- React Router
- Styled Components
- Material React
- React Hook Form / Formik
- Apollo Client + GraphQL
- Axios
- React Query
- React i18Next
- Framer Motion
- Jest + React Testing Library
- NextJS

# Recommended Tools

**Editor:** Visual Studio Code

**Browser:** Chrome & Developer Tools

**Language:** TypeScript

**Version Control:** Git

**Task Runner:** npm / yarn

**Linters:** ESLint

**Formatter:** Prettier

**Bundler:** Webpack / ViteJS

**Commit Hook:** Husky

## Frontend Concepts

- Responsive Web Design
- Progressive Web Apps
- Web Components
- SSR, SSG, ISR
- Design Patterns
- Reactive & Functional Programming
- Object Oriented Programming
- Micro Frontend
- Jam stack
- Test Driven Development
- Search Engine Optimization
- Web Performance
- Accessibility
- Web Security
- User Experience
- CI/CD

## Good to know

- SASS & PostCSS
- Storybook
- Cypress
- D3js
- Docker
- AWS
- Firebase
- Protocol Buffers / gRPC
- RxJS
- Gatsby
- TailWind / Bootstrap
- StencilJS / Lit
- Electron
- Threejs
- Babel
- Web Assembly
- NodeJS
- Web 3.0

# Recommended Roadmap

