2022 Frontend Development Interview Preparation & Roadmap

HTML

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

CSS

- Selectors [Basic, Complex]
- Psuedo Selectors
- Specificity & Inheritance
- Box Model
- Units, Display
- Positioning
- 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
- Destructing & Spread
- "this" keyword
- callbacks + Promise
- Async await
- Set & Maps
- Modules
- Classes
- ES6+ syntaxes
- Prototypes
- Iterators

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 Modification
- Style Modification

- 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 & Reconcilation

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
Linter: 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 Programming
- Functional Programming
- Micro Frontend

- Jam stack
- Test Driven Development
- Search Engine Optimization
- Web Perforamnce
- 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

HTML5 → CSS → JavaScript

Beginner
← build projects while learning

Web Fundamentals

Git Basics ← Redux ← React

BOM & DOM

Intermediate
build projects while learning →

TypeScript → Advanced CSS & JS → React In Depth

Intermediate
← build projects while learning

Web Performance & Accessibility

Never Ends... ← Design Patterns ← NextJS