```
■■■ Components
■ Class Components
   ■■■ Function Components
   ■■■ Pure Components
  ■■■ Higher-order Components
  ■■■ Render Props
■■■ Hooks
   ■ ■■■ useState
  ■ ■■■ useEffect
  ■ ■■■ useContext
   ■ useRef
   useReducer
■■■ useMemo
   ■ useCallback
   ■ useLayoutEffect
   ■■■ Custom Hooks
■■■ Virtual DOM
JSX
■■■ State & Props
■ State Management
■ ■■■ Lifting State Up
■ Context API
■ ■■■ Prop Drilling
   ■■■ Default & Destructured Props
■■■ Lifecycle Methods (Class Components)
  ■■■ Mounting
   ■ ■■ constructor
   ■ ■■ getDerivedStateFromProps
   ■ ■ render
   ■ componentDidMount
   ■■■ Updating
■ getDerivedStateFromProps
   ■ shouldComponentUpdate
   ■ ■■ render
■ getSnapshotBeforeUpdate
   ■ ■■ componentDidUpdate
   ■■■ Unmounting
   ■ componentWillUnmount
   ■■■ Error Handling
      ■■■ getDerivedStateFromError
      ■■■ componentDidCatch
■■■ Event Handling
■■■ Forms and Input Handling
■■■ Conditional Rendering
■■■ Lists and Keys
■■■ Styling and CSS
■ Inline Styles
  ■■■ CSS Modules
■ ■■ Styled Components
■ Tailwind CSS
  ■■■ Material-UI / ShadCN
```

■■■ Bootstrap

```
■■■ Routing
■ ■■■ React Router
■ ■■ Dynamic Routing
■ ■■ Nested Routes
■ ■■■ useNavigate & useParams
  ■■■ Protected Routes
■■■ State Management
■ ■■ Redux
  ■ ■■■ Store
■ ■■■ Reducers
■ ■■■ Actions
■ ■■ Middleware
  ■ ■■■ Redux Toolkit
■ ■■■ RTK Query
■ ■■■ Zustand
  ■■■ Jotai
■ ■■■ Recoil
■ ■■■ React Query
  ■■■ Apollo Client (GraphQL)
■■■ Data Fetching & Side Effects
■ ■■■ Fetch API
Axios
■ ■■ GraphQL (Apollo Client)
■■■ SWR
■ ■■ React Query
   ■■■ useEffect for Side Effects
■■■ Performance Optimization
■ ■ React.memo
  useMemo
■ useCallback
■ Lazy Loading & Code Splitting
  ■ ■■■ React.lazy()
  ■ ■■ Suspense
■ ■■■ Dynamic Imports
■ ■■■ Virtual DOM Diffing
  ■■■ Concurrent Mode
  ■■■ React Fiber
■■■ Testing
■ Jest
■ ■■ React Testing Library
■ Cypress (E2E Testing)
■ ■■■ Unit Testing
  ■■■ Integration Testing
   ■■■ Snapshot Testing
■■■ Deployment & Build Tools
■ ■■ Vite / Webpack
■■■ Babel
  ■■■ CI/CD Pipelines
  ■■■ Hosting (Vercel, Netlify, Firebase)
■ ■■ Docker for React Apps
Server-Side Rendering (SSR) & Static Site Generation (SSG)
■ ■■ Next.js
```

Gatsby
Remix

■■■ React Native

■■■ Components

■■■ Styling

■■■ Navigation

■■■ Native Modules

■■■ APIs

■■■ Expo

■■■ Performance Optimization