Angular & Web Development Interview Experience

During my recent Angular interview preparation, I explored a mix of JavaScript
fundamentals, Angular architecture, state management, and PWA optimization. Here's a
quick summary:

- ◆ JavaScript & Core Concepts

Hoisting, shallow vs deep copy, and lexical scope — clarified how nested objects behave in
shallow copies.
Array methods (slice, splice, flatMap) and type handling (typeof, any, unknown, never).

- ◆ Angular Architecture

NgModule, RouterState, ActivatedRoute, ActivatedRouteSnapshot.
Dependency Injection at root, module, and component levels.
Services: not just for API calls — used for state sharing, business logic, auth, and logging.
AOT Compilation for faster production builds.

- ◆ State Management

NgRx: Actions → Reducers → Effects → Store → Selectors.
BehaviorSubject and Observables to manage reactive shared state.

- ◆ API & Caching

Alternatives to HttpClient: fetch(), XMLHttpRequest, Axios.
Caching strategies: in-memory, LocalStorage, interceptor-based, and Service Worker (PWA)
for offline support.

- ◆ PWA & Service Worker

Cached app shell and API responses in Cache Storage.
Works offline, auto-updates on new deployments.
Best practice: cache only public/non-sensitive data.

- ◆ Key Takeaways

Angular is more than components — DI, services, RxJS, and NgRx are crucial for scalable
apps.

Understanding JS fundamentals is key for debugging and building robust apps.

Performance optimizations like AOT and caching can greatly improve UX