Frontend Developer Training Topics (Angular Focus)

HTML

- Go through full HTML tutorial on W3Schools and practice if required.

JavaScript

- Go through full JavaScript tutorial on W3Schools.

- JavaScript Datatypes

- Let, Const

- Function, Call Back Function, Arrow Function, Recursive Function

- Object

- Array, Array Methods

- Template Literals

- Loops

- Regular Expression

- Scope

- Strict Mode

- Classes

- Modules

- JSON

- Style Guide, Best Practices & Performance

- Spread, Nullish, Optional Chaining Operators

- Promise, Async & Await

- Web History

- Storage

- Cookie

- Fetch API

- map, filter, reduce, find, findIndex, some

- Event Loop

- Event Handling (bubbling, delegation, etc.)

- Memory Management Basics

- Error Handling: try/catch, throw

- DOM Manipulation & Traversal

Frontend Developer Training Topics (Angular Focus)

- Browser APIs

Git

- Cloning Project

- Create new Branch

- Stash, Add, Commit and Push

- Pull and Fetch Remote Branch

- Merge Branches

- Create Merge Request

- .gitignore and Git Hooks

- Interactive Rebase (Intro)

- Merge Conflict Resolution

TypeScript

- Introduction to TypeScript

- Compiler

- Types

- Array

- Any

- Unknown

- Null & Undefined

- Union Types

- Interface

- Enum

- Generic Types

- Optional Parameters

- Function Overloads

- Parameter Destructuring

- Classes, Inheriting, Member Visibility

- Static Members & Block

- Generic & Abstract Classes

- Utility Types: Awaited, Partial, Required, Readonly, Pick, Omit

Frontend Developer Training Topics (Angular Focus)

- Additional Utility Types: Record, Exclude, Extract, NonNullable, ReturnType

- Type Narrowing, Type Guards

- Decorators (Intro)

- Declaration Merging

Angular

- What is Angular

- Project Structure Overview

- Component & Lifecycle

- Selector, Injection, Data Sharing

- Ng-content, Elements, Standalone Component, Dynamic Component

- Template, Data Binding

- Interpolation, Property/Class/Style Binding

- Event & Two-way Binding

- Template Reference Variables

- Directives, Pipes

- Service & Dependency Injection

- NgModule

- Routing & Navigation

- Forms (Reactive vs Template Driven)

- HTTP Client

- Lazy & Eager Loading

- Angular CLI

- Complete Office Udemy Angular Course

- Change Detection Strategies

- TrackBy in ngFor

- Custom Pipes & Directives

- Route Guards: Resolver, CanActivate

- Environment Files

- Signals (if Angular 17+)

- Performance Optimization

- Testing (Jasmine/Karma or Jest)

Frontend Developer Training Topics (Angular Focus)

- Accessibility (a11y)

NgRx & RxJS

- Why RxJS, Observable, Observer, Subscription

- Observable Creation Functions

- Pipeable Operators: filter, map, tap, debounceTime, catchError, first, takeUntil, distinctUntilChanged, concatMap, switchMap, mergeMap

- Subject, BehaviorSubject

- Complete Office Udemy RxJS Course

Web & Browser Fundamentals

- How the Web Works (DNS, HTTP)

- Critical Rendering Path

- Security (XSS, CSRF, CORS)

- Responsive Design Basics

Tooling & Ecosystem

- Package Managers: npm vs yarn

- Bundlers: Webpack, Vite (Concepts)

- Linting & Formatting: ESLint, Prettier

- DevOps Basics: CI/CD, Build Commands