Angular Certification Course

Course Duration : 60 Days

Topics & Details

Introduction to Angular:

★ **Introduction to Angular**
- Overview of Angular
- What is Angular?
- Key features and benefits
- Angular vs. AngularJS (Angular 1.x)

★ **Setting Up Angular Development Environment**
- Installing Node.js and npm
- Installing Angular CLI (Command Line Interface)
- Creating a new Angular project

★ **TypeScript Basics**
- Introduction to TypeScript
- Basics of TypeScript syntax
- TypeScript data types
- Functions and classes in TypeScript

★ **Angular Architecture**
- Components and Modules
- Anatomy of an Angular component
- Creating and using Angular modules (NgModule)
- Component interaction using @Input and @Output decorators

★ **Data Binding and Directives**
- Interpolation, property binding, event binding
- Two-way data binding with ngModel
-Directives
- Built-in directives: ngIf, ngFor, ngSwitch
- Creating custom directives

★ **Services and Dependency Injection**
- Creating services
- Dependency Injection (DI) in Angular
- Injecting services into components

★ **Routing and Navigation**
- Configuring routes
- Router outlets and navigation
- Passing parameters to routes

★ **Forms in Angular**
- Creating and validating forms
- Handling form submission
- Reactive Forms
- Using FormBuilder and FormControl

★ **HTTP Client and Observable Data**
- Making HTTP requests in Angular
- Handling responses with Observables
- Observables
- Basics of Observables and RxJS
- Using operators (map, filter, etc.) with Observables

★ **Error Handling and Services**
- Handling errors in Angular applications
- Global error handling with ErrorHandler
- Angular Services
- Best practices for organizing services
- Service lifecycle and provider scope

★ **Angular Best Practices**
- Coding Conventions
- Angular style guide
- Naming conventions for components, services, etc.
- Performance Optimization
- Change detection strategies
- Lazy loading modules

★ **Deployment**
- Building for Production
- Optimizing Angular applications for deployment
- Using Angular CLI to build for production
- Deploying to Hosting Platforms
- Deploying Angular applications to platforms like Firebase, Netlify, etc

★ **Testing Angular Applications**
- Unit Testing with Jasmine
- Writing and running unit tests for Angular components

- End-to-End Testing with Protractor
- Writing and running end-to-end tests for Angular applications

★ **Introduction to Angular Universal (Optional)**
- Server-Side Rendering (SSR) with Angular Universal
- Benefits of SSR
- Setting up Angular Universal for server-side rendering

★ **Real-World Applications and Case Studies**
- Building Real-World Angular Applications
- Case studies of successful Angular projects
- Challenges and solutions implemented in real-world scenarios

★ **Capstone Project**
- Capstone Project
- Design and implement a complete Angular application
- Presentation and evaluation of the project