# **Day 1: Introduction to Lightning Web Components (LWC)**

### Overview of Lightning Web Components

- Introduction to LWC
- Benefits of using LWC
- Comparison with Aura Components

# • Setting Up Your Salesforce Developer Org

- o Creating a Salesforce developer org
- o Enabling LWC features in your org
- o Setting up Salesforce CLI and Visual Studio Code

### • Getting Started with LWC

- Understanding the LWC architecture
- o Creating your first Lightning Web Component
- Exploring the LWC folder structure and files

## **Day 2: Building Basic Lightning Web Components**

#### LWC Basics

- HTML templates in LWC
- JavaScript classes and ES6 features
- CSS and styling in LWC

# • Hands-On: Creating Basic Components

- o Building simple components
- o Handling events and data binding
- Using Lightning Design System (LDS) with LWC

#### Best Practices for Basic Components

- Component naming conventions
- Writing clean and maintainable code
- Debugging and testing components

### **Day 3: Advanced LWC Features**

#### Advanced JavaScript in LWC

- Using decorators (@api, @track, @wire)
- Reactive properties and methods
- Working with modules and imports

#### • Handling Data in LWC

- o Communicating with Salesforce data (Apex, LDS)
- Using wire adapters and functions
- Managing component state and lifecycle

#### Hands-On: Building Advanced Components

- o Creating components with dynamic data
- o Implementing component communication (parent-child, pub-sub)
- Debugging and testing advanced components

# **Day 4: Integrating LWC with Salesforce Ecosystem**

### • Integrating LWC with Salesforce

- o Embedding LWC in Lightning Pages and Apps
- o Using LWC with Lightning App Builder
- o Interacting with Salesforce data (CRUD operations)

### • Hands-On: Integrating LWC Components

- o Adding LWC to Lightning Pages
- Building interactive forms with LWC
- Using LWC in Salesforce Communities and Experience Cloud

# • Advanced Integration Techniques

- Leveraging third-party libraries
- o Implementing custom events and event bubbling
- Performance optimization techniques

# Day 5: Deployment, Security, and Best Practices

### • Deploying LWC to Production

- Packaging and deploying LWC
- Using Salesforce DX for version control
- o Continuous integration and deployment (CI/CD) for LWC

#### • Security Best Practices

- Ensuring data privacy and security in LWC
- o Implementing security measures (Locker Service, CSP)
- Handling sensitive data in LWC

#### • Review and Q&A

- Recap of key concepts
- o Open forum for addressing specific questions and scenarios
- Final assessment and feedback