Salesforce Lightning Web Component⚡ Course

Content ☁

Upon completing this course, you should be able to:

● Create your own LWC components from scratch

● Setup Visual Studio Code for LWC Development

● Setup your own Local Development environment

● Understand how LWC is better than Aura

● Implement topics like Conditional Rendering, Loops

● Pass properties from HTML to JS and vice versa

● Implement custom logic in Lightning Web Component

● Communicate and pass data between related and unrelated components

● Make use of lifecycle hooks in LWC

● Make changes in DOM at runtime

● Understand shadow DOM

● Understand Navigation between components using NavigationMixin service ● Make use of different decorators in LWC

● Make reference to external code in LWC

● Retrive data from Salesforce database using LWC

● Integrate Salesforce with third party application from LWC

● Make REST Callouts from the components

● Write Test classes for the LWC Components

● Deploy the Component to higher enviroments

SALESFORCE LWC

Introduction to LWC:

Topics:

- Introduction
- Why LWC
- Advantages of Using LWC over Aura
- Difference between LWC and Aura

Setup Development Environment

Topics:

- Set   up   development
- environment Installing VS code
- Installing Salesforce CLI
- Setup your Org

Assignments ✍️

- LWC Quick Start Guide:

  https://trailhead.salesforce.com/en/content/learn/projects/quick-start-lightning-web-components?trail_id=build-lightning-web-components

Basics Of LWC

Topics:

● LWC Fundamentals

● Creating a basic Component

● Understanding the different files in the Component ●HTML template

Assignments/Hands-On✍️

● Build LWC Components:

https://trailhead.salesforce.com/en/content/learn/modules/lightning-web-components-basics?trail_id=build-lightning-web-components

Understanding JavaScript:

Topics:

● Introduction JavaScript

● Different Variable types

● Basics of JS

● Spread Operators

● Callback methods

● Arrow functions

● Javascript Properties

● Objects in JS

● DOM and Modifying the DOM using JS

● Applying CSS to components

Assignments ✍️

● Javascript 101:

https://trailhead.salesforce.com/content/learn/modules/javascript-essentials-salesforce-developers?trailmix_creator_id=tsalb&trailmix_slug=lwc-and-js-101

Understanding LWC's JavaScript:

Topics:

●Deploying the component and check the output

●Creating scratch org, enable Devhub

●Conditional Rendering

●Loops or iteration

●Private properties

●Public properties

●Passing data from HTML to JS

●Two way Data Binding

●LWC Local Development Server

●Decorators in LWC - @wire, @api, @track

● Project: Arithmetic Calculator 🧮 (which displays past operations too!) ●Getters and Setters

●Debugging the component

●Track and API Decorator Example

●Project 2 usage of Objects, API, Track, CSS, LDS

Assignments/Hands-On ✍️

- Create a project in LWC:

https://trailhead.salesforce.com/content/learn/projects/lwc-build-flexible-apps?trailmix_creator_id=itzmanishy7&trailmix_slug=lwc-and-js

- Implement more extra functionalities in the Project 2 and Project 1
- Debug LWC Components:

https://trailhead.salesforce.com/en/content/learn/modules/lwc-troubleshooting?trail_id=build-lightning-web-components&trailmix_creator_id=sakthivel&trailmix_slug=lightning-web-component-lwc

Interview Practice 🕐

- Differentiate between different different decorators in LWC
- Questions on Conditional rendering and looping
- Questions on Properties - Public and Private

Events and Hooks

Topcis:

- Lifecycle hooks
- Communicate with Events
- Create and dispatch events
- Handle events
- Configure event propagation
- Communicate between components
- Events Best Practices

Assignments/Hands-On✍️

- Events in LWC:

https://trailhead.salesforce.com/en/content/learn/modules/lightning-web-components-basics/handle-events-in-lightning-web-components

- Working with Events:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.events

- Event Propagation:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/events_propagation

Interview Practice⏱️

- Questions on Lifecycle Hooks

- Problems on Event Propagation

- Bubbling of events in LWC

- When to use Lightning Data service and Pub-Sub

- Additional Questions which can be asked in Developer Interviews - Hands-On

Access Salesforce Data

Topics:

- Access Salesforce Data

- Data Guidelines

- Lightning Data Service

- Call Apex method using Wire

● Call Apex Method Imperatively

● Security with Lightning Locker Service

Assignments/Hands-On ✍️

Wire Adapter:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.data_wire_service_about

Handle Errors:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.data_error

Call Apex Methods:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.apex

Imperative Calling:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.apex_call_imperative

LWC Data Module:

https://trailhead.salesforce.com/en/content/learn/modules/lightning-web-components-and-salesforce-data

Import Objects and Fields:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.apex_schema

Call APIs from Apex:

https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.data_api_calls_apex

⭐Superbadge⭐ - LWC Specialist

https://trailhead.salesforce.com/en/content/learn/superbadges/superbadge_lwc_specialist

Interview Practice 🔘

- When to use call Apex methods imperatively vs using Wire

- Caching in Apex

- Security Questions

- Guidelines and considerations when working with Data

Bonus⚡

Topics:

- Aura Coexistence

- Migrate Aura components

Test Clases and Deployment:

Topics:

- Test Classes and Cases

- Deploy Code to Production

Assignments/Hands-On ✍️

- Test LWC:

  https://trailhead.salesforce.com/en/content/learn/modules/test-lightning-web-components

- Write Test Cases for the Components built in the course

- Deploy the component to Different Orgs using Workbench or any other migration tools.

Assignments/Projects & Guidance on the way-ahead