Micro Frontend - 3 days

By Dr. Vishwanath Rao

Prerequisites

- An understanding of modern frameworks for frontend applications (Angular, Vue.js, React + Redux, or similar frameworks)
- Solid knowledge of automation (CI, CD, testing strategies, etc.)
- Experience working with cross-functional or functional teams

Lab Setup

Windows / Linux /MAC with minimum 8 gb RAM Visual Studio code Node JS latest Chrome or Edge browser

Day 1

Overview of micro-frontends and the problems they solve Available options Example implementations Sync and async services

How to use iframes to split frontend apps

Incremental upgrades Simple, decoupled codebases

ES6 Javascript for Microfrontends Universal Rendering Client Side Integration

Micro services Architecture Modern Web Application Development

Day 2

Monolithic Frontends Teams with Micro Frontends

Documents-to-Applications Continuum Progressive Web Apps

Advanced DOM for MicroFrontends Custom Elements Team Product and its development Page Composition

Page transition Prototypes Parent Child Communication DOM Modification DOM Events
Client Parent Communication Sibling Communication Server Side Rendering or Universal
Rendering Custom Elements with server side includes Data Fetching Loading the states
Navigating between Pages

Day 4

Isolated CSS Coherent User Interface Style Guides & Pattern Libraries Performance on initial load Performance while using the site Loading CSS Loading JS

Navigating between pages

soft vs. hard navigation

universal router Server-side template composition

Day 5

Autonomous teams

Build-time integration Run-time integration via Web Components
Run-time integration via JavaScript Run-time integration via iframes
Integration Testing