

SAP UI5 & Fiori Training Course

Module 1: Introduction & Basics

- Overview of SAP Fiori & SAP UI5
- Difference between SAP UI5, OpenUI5, and Fiori
- Fiori Design Principles (Role-based, Responsive, Simple, Coherent, Delightful)
- Fiori Architecture – Frontend, Backend, Gateway, Launchpad
- SAP NetWeaver vs. S/4 HANA for Fiori
- Tools & Setup (VS Code, BAS, SAP Web IDE, SAP GUI, Gateway System)

Module 2: Core Web Foundations

- Refresher: HTML5, CSS3, JavaScript (ES6 basics)
- JSON & XML basics
- REST & OData introduction

Module 3. SAP UI5 Framework Basics

- MVC Architecture (Model, View, Controller)
- Bootstrapping UI5 Application
- Views: XML, JSON, JS, HTML views
- Controllers – Event Handling
- Models – JSONModel, ResourceModel, ODataModel
- Data Binding (Property, Element, Aggregation, Expression)
- Formatters & Resource Bundles (i18n)

Module 4: UI5 Controls & Layouts

- Common Controls: Input, Button, Text, Label, DatePicker
- Advanced Controls: Table, List, ComboBox, Dialog, MessageBox
- Layouts: VBox, HBox, Grid, FlexBox, Panel, Page, SplitApp, NavContainer
- Fragments & Reuse of UI Components
- Custom CSS & Theming (SAP Theme Designer)

Module 5. Fiori UX & SAPUI5 Advanced Concepts

- SAP Fiori Launchpad – Tiles, Groups, Catalogs, Roles
- Routing & Navigation in UI5 Apps
- Component.js & Manifest.json configuration
- Reuse Libraries & Custom Controls
- Responsive UI Design (Desktop, Tablet, Mobile)
- Message Handling & Error Handling
- Accessibility & Internationalization

Module 6. OData Services & Backend Integration

- What is OData? Versions & Principles
- Creating OData Services in SAP (SEGW / CDS Views in S/4HANA)
- Consuming OData Services in UI5 App
- CRUD Operations (Read, Create, Update, Delete)
- Batch Operations & Deferred Groups
- Error Handling with OData

Module 7: Deployment & Transport

- SAP Fiori Launchpad Designer
- Deploying UI5 App to SAP Gateway / ABAP Repository
- Transport Mechanism in SAP
- Version Management & Best Practices

Module 8: Security & Performance

- Fiori App Authorization Concepts (PFCG Roles)
- Frontend & Backend Security
- Performance Optimization in UI5
- Caching, Minification, and Preload

Module 9: Testing & Debugging

- Chrome DevTools for UI5 Apps
- SAPUI5 Diagnostics Tool
- QUnit Testing for UI5
- OPA5 for Integration Testing

Module 10: Mini Projects (Hands-On)

- **Beginner Project** – Employee Directory App (List + Detail + Search)
- **Intermediate Project** – Customer Management App (CRUD with OData)
- **Advanced Project** – Sales Order Tracking App (Routing + Charts + FLP Tile)
- Deployment of Project into SAP Fiori Launchpad

Module 11: Extras (Advanced / Future Topics)

- SAP Fiori Elements & Smart Controls
- Analytical Apps & KPI Tiles
- Fiori for S/4HANA – CDS Views, Annotations
- Mobile Packaging – Cordova/Kapsel SDK
- Real-Time Scenarios & Best Practices