

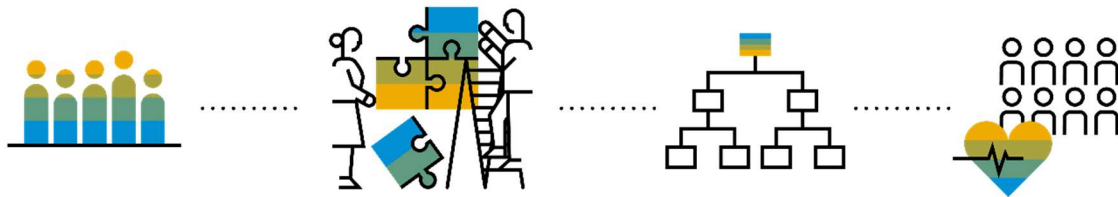
Duration: 40 Hours

ABAP ON CLOUD

RESTFUL APPLICATION

PROGRAMMING

EMBEDDED STEAMPUNK



Target Audience: Developers, Architects, ABAP Consultants, Solution Architects, Cloud Developers, BTP D

Pre-requisite: CDS views, ABAP on HANA

S/4HANA ABAP Consultant: You are working as an ABAP CDS View Developer in a company, your current expertise is into S/4HANA Application development with BOPF and CDS for custom apps. You want to learn the latest concepts related to tooling and best practices in New Restful Application Programming with latest features of draft, augment, custom entities, compositions, Behavior definition, Behavior implementation and Service binding. We will develop end-to-end Fiori Elements applications. You want to drive BTP Cloud adaption and build extensions using Embedded Steampunk, this training will help your overall.

Unit 1: SAP BTP Introduction

- Introduction of ABAP on Cloud
- How to setup Eclipse ADT tool
- Steps to install SAP GUI
- BTP Case-1 Building Full Stack App
- BTP Case-2 Side by side Extension.
- BTP Case-3 S/4 HANA Cloud Extension
- CDS-Core Data & Services Introduction
- JSON – Java Script Object Notation Introduction
- DB Design for creating simple tables in ABAP on cloud
- CDS Views (DQL)

Unit 2: Introduction to CDS (Recap of ABAP on HANA training)

- CDS Entities – how are they better than CDS views
- VDM – Virtual Data Modeling
- CDS View Annotation Documentation
- Introduction to AMDP
- SQL Scripting – How to perform code push down
- CDS Table function
- Challenges in ABAP development

- Evolution of ABAP Programming Model
- Restful ABAP Programming
- Components in RAP

Unit 3: Introduction to RAP

- Development Approach
- RAP – The Big picture
- What is a Business Object
- Types of Implementation
- BO runtime implementation types
- Flight Data Model
- Managed RAP implementation
- Business use case
- Understanding projection
- Business Object Definition

Unit 4: Core concepts of RAP with Reference Scenario

- Association v/s Composition
- Development Flow – Processor and Approver
- SAP Fiori elements boosts SAP Fiori development efficiency
- SAP Fiori elements prioritizes efficiency over flexibility

- Developer Persona – Fiori Elements
- Big Picture – Architecture
- Fiori Elements - List Report Application
- BDEF (Behavior Definition)
- Framework generated IDs

Unit 5: EML – Entity Manipulation Language

- Syntax for EML
- Class Pool
- Behavior Pool
- Implicit Response Parameters
- BO instance features
- Sequence of calls
- Data Actions in RAP
- Feature Control
- Determination
- Validations

Unit 6: RAP Managed Implementation

- Additional Save
- Side effects

- Authorization
- Draft
- Draft Runtime
- Solution for draft issue
- Prechecks
- Augment
- Virtual Elements
- Steps to implement the approver scenario

Unit 7: Fiori App Development using Business Application Studio

- Dev Space in BAS
- How to build and deploy fiori
- Reference Scenario
- Development Flow

Unit 8: Unmanaged RAP Development

- Working with unmanaged implementation
- Implementation APIs for classic functionality
- Integrate your code with RAP
- Implementation of Save sequences and Interaction phase

Unit 8: ABAP on Cloud Lifecycle of RAP Application

- Git and ABAP on git
- Pushing code to git from ABAP on Cloud
- Importing code to On-premises system in S/4HANA
- Register Service definition and service bindings in RAP

Unit 9: ABAP extensions in classic world and Clean core approach

- From classic ABAP extensions to ABAP Cloud development
- What is ABAP Cloud Development means
- What is Embedded Steampunk
- Finding RAP extension objects in ADT and HUB
- Steps to Activate Standard App

Unit 8: Embedded Steampunk and Extensibility

- Demo Scenario
- User Persona
- Development Flow of Scenario
- Embedded Steampunk – RAP Extensibility
- Abstract Entity
- Consume APIs from API HUB in cloud using Custom Entity