Contents

[Phase 1: SAP UI5 along with JS & Node JS(Anubhav to confirm duration) 1](#_Toc101297473)

[Phase 2: CDS and RAP based development (20hrs) 1](#_Toc101297474)

[Phase 3: Fiori Elements on top of RAP based development (8 hrs) 3](#_Toc101297475)

[Phase 5 – S4HANA embedded analytics (Anubhav to confirm duration) 4](#_Toc101297476)

**Note: Anubhav to take look below, especially address queries highlighted in yellow color. Moreover, training needs to be aligned to On-Premise system and tools as VScode mainly)**

# Phase 1 Node JS with VScode (Anubhav to confirm duration)

Duration: (Anubhav to confirm hours for Phase 1) – 8 Hours

* Introduction to the Development tools
* Business Application Studio (BAS)
* VS Code
* Introduction to NodeJS
* What is NPM?
* Creating a simple NodeJS project
* Understanding how to add external modules to our projects.
* Serving our app locally with the help of NodeJS

# Phase 2: CDS and RAP based development (20hrs)

Duration: 20 hrs

**Day 1**

* Introduction to SAP BTP
* Difference between n-premise and Cloud
* **(Below highlighted first 3 points need to be aligned with on-prem teachings. We don’t need cloud based teaching as of now): yes**
* What is Cloud Foundry
* Architecture of SAP Cloud Foundry
* Create your ABAP n Cloud Instance
* ~~Introduction to Data Dictionary~~
* Creating Structure
* Understand How to Build Tables (**Our team members know data dictionary and structures etc. If something is in relation with CDS/RAP as new concept, that can be covered. Else this above 3 points can be skipped**) – We will cover how to create table using CDS language
* Creating Database tables – Business Partner, product, Sales order, Sales order Items (**Anubhav** - **~~Can we add something related to Finance tables~~**?) - Not possible
* Creating Class for Lad Data in Table’s

**Day 2**

**(Below highlighted part needs to be aligned with on-prem teachings. We do not need cloud based teaching as of now.)-**

* ~~Limitations f ABAP n Cloud~~
* Introduction t CDS View/Entity
* Implementing CDS View’s
* Creating Service using CDS
* ~~History f ABAP n Cloud~~
* ~~motivation for ABAP n Cloud – Scenario~~
* Common Challenges in ABAP Development
* Evolution of ABAP Programming Model
* What is RAP (Restful Application Programming)
* Flow of Restful Application Programming
* Types of Scenarios
  + Managed Scenario
  + Unmanaged Scenario
* Explanation of Flight Data Model
* Defining Unmanaged Scenario
* Flow of Development (Unmanaged Scenario)
* Defining CDS Views

**Day 3**

* Creating Data Service (Business Service)
* Create Behavior implementation for Unmanaged Scenario
* Implementing Create, Update and Delete
* Make field read only
* Making field Mandatory
* Add validation to the code
* Implement Actins - set\_status\_booked
* Introduction to EML
* Understanding why we need EML
* Uses of EML
* Syntax for EML
* Implementing EML in Class

**Day 4**

* Defining Managed Scenario
* Use Case for Managed Scenario
* Describing Functionality of Scenario
* Creating Data Model
* Building Behavior Definition
* Implementing Processor CDS
* Building Service definition
* Creating Service Binding
* Implementing the Action createTravelByTemplate
* Implementing the Action approveTravel
* Implementing the Action rejectTravel
* Modeling Static and Dynamic Feature Control
* Implementing Validations
* Implementing the Determination

**Day 5**

* Defining Draft
* Enable Draft Handling
* Expose Draft handling to projection Layer
* Enable Early Numbering for Travel and Booking
* Understanding Augmentation
* Integrating augment in Managed Object
* Understand the persona for Approver
* Implementing Approver projection
* Annotations for Approver Scenario
* Behavior Definition for Approver
* Service Binding for Approver Scenario
* Fiori App for Approver
* Deploy Fiori App to SAP CF

# Phase 3: Fiori Elements on top of RAP based development (8 hrs)

Duration: 8 hrs

**Day 1**

* Introduction t FIORI Elements
* Free style v/s FIORI Elements App
* Developer persona – FIORI Elements
* Creating List Report object Page App Using BAS/**VSCode (we need VSCode related teachings as well) - Yes**
* Developing Read-only List Reporting Apps
* UI Annotation
* Adding Search Capabilities
* Adding Metadata Extension
* Introduction t Classes
* Local Types/Classes in ABAP with Global Classes
* Implementing Class Pl Concept
* Behavior Definition Introduction
* Create Behavior Definition

**Day 2**

* FIORI App with Launchpad in BTP
* Service Consumption Model
* Describing the Concept of Custom Entity
* Why we use Custom Entity
* Implement Custom Entity
* Create Class for Custom Entity
* Test Custom Entity
* What is ABAP Git
* Why we use ABAP Git
* ABAP Git Integrating
* Understand How to Use ABAP Git

# Phase 5 – S4HANA embedded analytics (Anubhav to confirm duration)

Duration – (Anubhav to confirm) – 4 Hours

* Creating Virtual Data Model (VDM)
* VDM : BASIC, COMPOSITE, CONSUMPTION Types
* KPI Tile Creation
* KPI Tile with Drill-down reports, Analytic List Pages
* Creating Custom Analytics Query
* Analysis Path Framework (APF) Modelling
* Creation of custom CDS on Fiori Launchpad
* Query Browser and Date Function
* Fiori Launchpad Shell embedded SAC with in an on premise scenario