

**Building Side-by-Side Extensions** on SAP BTP

**COURSE OUTLINE** 

Course Version: 22 Course Duration:

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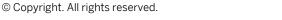
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# **Typographic Conventions**

American English is the standard used in this handbook. The following typographic conventions are also used.

This information is displayed in the instructor's presentation	-
Demonstration	*
Procedure	1 2 3
Warning or Caution	
Hint	
Related or Additional Information	>
Facilitated Discussion	<b></b>
User interface control	Example text
Window title	Example text

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# **Course Overview**

#### TARGET AUDIENCE

This course is intended for the following audiences:

- Application Consultant
- Development Consultant
- Super / Key / Power User
- Business Process Architect
- Business Process Owner/Team Lead/Power User
- Developer
- Enterprise Architect
- Solution Architect



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# UNIT 1 Discovering the SAP Cloud Application Programming Model (CAP)

# Lesson 1: Identifying the need for Side-By-Side Extensibility

#### Lesson Objectives

After completing this lesson, you will be able to:

• Identify the need for Side-By-Side Extensibility

### Lesson 2: Exploring the SAP Cloud Application Programming Model

#### Lesson Objectives

After completing this lesson, you will be able to:

Describe the SAP Cloud Application Programming Model



# UNIT 2 Setting up the CAP-Project

# Lesson 1: Introducing the OData protocol

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Describe the OData standard for web-based applications

### Lesson 2: Explaining JSON/YAML

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Describe JSON and YAML

### Lesson 3: Discovering the End-to-End Use Case

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Perform the setup necessary to build your extension project

# Lesson 4: Exercise: Creating a CAP-Based Service

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create a CAP-based service

# UNIT 3 Serving User Interfaces in CAP

# Lesson 1: Serving User Interfaces in CAP

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Identify different ways of serving UIs in CAP
- Discover the SAP Fiori Tools

### Lesson 2: Exercise: Generating a User interface

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Generate a User Interface (UI) using SAP Fiori Elements



# UNIT 4 Adding Custom Business Logic

# Lesson 1: Explaining Event Handling in CAP

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Evaluate when to use event handlers

### Lesson 2: Explaining the Need for Custom Business Logic

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explain the need for Custom Business Logic

### Lesson 3: Describing Error Handling

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explain error handling

# Lesson 4: Exercise: Adding Custom Business Logic

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Add custom business logic

# UNIT 5 Consuming External Services

# Lesson 1: Explaining Extensibility and Connectivity in CAP

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explain the extensibility and connectivity cappabilities in CAP

### Lesson 2: Exercise: Adding an External Service

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Add and consume an external service



# UNIT 6 Understanding Authorization and Trust Management

# Lesson 1: Describing Authorization and Trust Management (XSUAA)

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Describe the SAP Authorization and Trust Management service

# Lesson 2: Exercise: Defining CDS Restrictions and Roles

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Define CDS Restrictions and Roles



# UNIT 7 Deploying the Application

# Lesson 1: Identifying Deployment Options in CAP

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Identify the deployment options of a CAP application

### **Lesson 2: Explaining the Deployment Process**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe the Cloud Foundry deployment process of a CAP application
- Describe the basic concepts about the MTA development project and understand the information contained in the mta.yaml file

# Lesson 3: Using the Cloud Foundry CLI

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use the Cloud Foundry Command Line Interface (CF CLI)

### Lesson 4: Exercise: Preparing the Application for Deployment

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Prepare the application for deployment

### Lesson 5: Exercise: Performing a Manual Deployment

#### Lesson Objectives

After completing this lesson, you will be able to:

• Performing a manual deployment



# UNIT 8 Performing Automated Deployment (SAP Continuous Integration and Delivery)

# Lesson 1: Describing Continuous Integration and Delivery

#### Lesson Objectives

After completing this lesson, you will be able to:

• Describe the principles and benefits of continuous integration and delivery

### Lesson 2: Exercise: Creating and Connecting a Remote Git-Repository

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create and connect a GitHub repository

# Lesson 3: Exercise: Enabling SAP Continuous Integration and Delivery

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Enable SAP Continuous Integration and Delivery

# Lesson 4: Exercise: Configuring a SAP Continuous Integration and Delivery Job

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Configure a job in the SAP Continous Integration and Delivery service

# Lesson 5: Exercise: Verifying the Build Success

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Start monitoring a job in SAP Continuous Integration and Delivery

