

HA450

SAP HANA 2.0 SPS03 - Application Development for SAP HANA

COURSE OUTLINE

Course Version: 15

Course Duration:

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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	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	<i>Example text</i>
Window title	<i>Example text</i>

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Developer
- Development Consultant

Lesson 1: Describing SAP HANA Architecture

Lesson Objectives

After completing this lesson, you will be able to:

- Remind what SAP HANA is
- Explain the application and system architecture

Lesson 2: Introducing SAP HANA Express Edition

Lesson Objectives

After completing this lesson, you will be able to:

- Introduce SAP HANA express edition

Lesson 3: Information Sources for Developers

Lesson Objectives

After completing this lesson, you will be able to:

- Documentation, References and Information Sources

Lesson 1: Introducing Application Development Tools

Lesson Objectives

After completing this lesson, you will be able to:

- Explain application development tools for SAP HANA XS advanced

Lesson 1: The Multi-Target Application

Lesson Objectives

After completing this lesson, you will be able to:

- Explain what a multi-target application is

Lesson 2: Creating the development project

Lesson Objectives

After completing this lesson, you will be able to:

- Create a user with development authorizations
- Create the development project in SAP HANA XS advanced

Lesson 1: Introducing Core Data Services

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic concepts of core data services in SAP HANA XS advanced

Lesson 2: Using the CDS Entity

Lesson Objectives

After completing this lesson, you will be able to:

- Create a CDS Entity, that is a table in the database

Lesson 3: Using the CDS Context, Association, and View

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the use of Context, Association, and View in Core Data Services and SAP HANA XS advanced

Lesson 4: Accessing a remote SAP HANA schema

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how a MTA application can access to a remote SAP HANA schema

Lesson 1: Creating an OData Service

Lesson Objectives

After completing this lesson, you will be able to:

- Create OData services on SAP HANA XS advanced

Lesson 2: Using OData Key and Association

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the use of keys and associations in OData

Lesson 1: Introducing JavaScript

Lesson Objectives

After completing this lesson, you will be able to:

- Explain JavaScript basic concepts

Lesson 2: Introducing SAPUI5

Lesson Objectives

After completing this lesson, you will be able to:

- Explain HTML5 basic concepts
- Explain SAPUI5 basic concepts
- Explain the structure of an SAPUI5 application

Lesson 3: Creating the initial development project for SAPUI5

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the creation of an SAPUI5 development project in SAP HANA XS advanced

Lesson 4: Structuring the SAPUI5 Application

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the Model View Controller paradigm
- Explain how to build a SAPUI5 front-end and integrate it with the back-end service

Lesson 1: Introducing SQLScript

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic concepts of SQLScript

Lesson 2: Developing in SQLScript

Lesson Objectives

After completing this lesson, you will be able to:

- Develop using SQL Script

Lesson 3: Debugging SQLScript

Lesson Objectives

After completing this lesson, you will be able to:

- Use the SQLScript debugger

Lesson 4: Using Main SQLScript Language Features

Lesson Objectives

After completing this lesson, you will be able to:

- Explain main SQLScript language features

Lesson 5: Using SQLScript Functions

Lesson Objectives

After completing this lesson, you will be able to:

- Use functions in SQLScript

Lesson 1: Introduction to Server Side JavaScript

Lesson Objectives

After completing this lesson, you will be able to:

- Understand server-side JavaScript with Node.js

Lesson 2: Create a Node.js Module

Lesson Objectives

After completing this lesson, you will be able to:

- Create a Node.js module

Lesson 3: Accessing the Database

Lesson Objectives

After completing this lesson, you will be able to:

- Access the database

Lesson 4: Debugging a Node.js Module

Lesson Objectives

After completing this lesson, you will be able to:

- Debug a node.js module

Lesson 1: Understanding the Deployment Process

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the deployment process

Lesson 2: Deploying to XS Advanced

Lesson Objectives

After completing this lesson, you will be able to:

- Deploy to XS Advanced

Lesson 3: Deploying to SCP Cloud Foundry

Lesson Objectives

After completing this lesson, you will be able to:

- Deploy to SCP CloudFoundry

Lesson 1: Understanding Object Ownership in SAP HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Understand object ownership effects

Lesson 2: Describing Authorization in SAP HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the basic authorization entities in SAP HANA

Lesson 3: Describing Privileges

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the different types of privilege and their usage

Lesson 4: Managing Roles

Lesson Objectives

After completing this lesson, you will be able to:

- Define, create, and manage roles

Lesson 1: Developing for SAP HANA XS Classic Model

Lesson Objectives

After completing this lesson, you will be able to:

- Describe basic concepts of application development with XS Classic
- Explain SAP HANA Web-based Development Workbench

Lesson 2: Creating the Development Project for SAP HANA XS Classic

Lesson Objectives

After completing this lesson, you will be able to:

- Create an SAP HANA XS classic project

Lesson 3: Core Data Services (CDS) in SAP HANA XS Classic

Lesson Objectives

After completing this lesson, you will be able to:

- Explain core data services in SAP HANA XS classic

Lesson 4: Creating OData Services in SAP HANA XS Classic

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic concepts of OData in SAP HANA
- Move to XS Classic an application you developed in the WebIDE for SAP HANA