# UX400

## **UI Development with SAPUI5**

#### **COURSE OUTLINE**

Course Version: 23 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	<b>-</b>
Demonstration	-
Procedure	2 3
Warning or Caution	A
Hint	<b>Q</b>
Related or Additional Information	<b>&gt;&gt;</b>
Facilitated Discussion	,
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:

- Development Consultant
- Business Process Owner/Team Lead/Power User
- Developer
- Solution Architect



## **Loading and Initializing SAPUI5**

#### **Lesson 1: Getting Started with SAPUI5 Development**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Set up SAP Business Application Studio

#### **Lesson 2: Bootstrapping SAPUI5**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Load and initialize the SAPUI5 library to use SAPUI5 features



## **UNIT 2** Modularizing SAPUI5 **Applications**

### **Lesson 1: Defining and Using Modules**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Modularize SAPUI5 applications



## **UNIT 3** Working with Views and **Controllers**

#### **Lesson 1: Working with XML Views**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Create and use XML views

#### **Lesson 2: Working with View Controllers**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use view controllers

# Structuring Applications via Components

#### **Lesson 1: Configuring and Instantiating Components**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement and use components

#### **Lesson 2: Using the Declarative API**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Embed components declaratively in HTML pages

## **Implementing the UI**

#### **Lesson 1: Structuring the UI with Controls**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create UIs using the Shell, App, Page, Panel and SimpleForm controls

#### **Lesson 2: Using Densities for Controls**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use content densities to adapt applications to different device types

# **Dealing with Fragments as Reusable UI Parts**

### **Lesson 1: Implementing and Instantiating XML Fragments**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Work with dialogs defined as XML fragment





## **UNIT 7** Models and Data Binding

#### **Lesson 1: Working with Models**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Add a JSON model to an application and use it via property binding

#### **Lesson 2: Implementing Aggregation Binding**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Implement aggregation binding

#### **Lesson 3: Implementing Element Binding**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement element binding

#### **Lesson 4: Using Data Types**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Use data types to format and validate data

#### **Lesson 5: Implementing and Using Formatter Functions**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement and use formatter functions to convert model data into an external format

#### **Lesson 6: Sorting and Filtering**

#### **Lesson Objectives**



After completing this lesson, you will be able to:

• Use the capabilities offered by SAPUI5 to sort and filter model data

#### **Lesson 7: Using Expression Binding**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use expression binding to format the output on a view

#### **Lesson 8: Adapting Applications to Different Device Types**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use a device model to adapt applications to different device types

## **UNIT 8** Localization

### **Lesson 1: Working with a Resource Model**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Internationalize an application by using translatable texts

## **UNIT 9 OData Model**

#### **Lesson 1: Reading Data through an OData Model**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Read data from an OData service via an SAPUI5 OData model

#### **Lesson 2: Creating New Entities through an OData Model**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create new entities for an OData service via an SAPUI5 OData model

## **Routing and Navigation**

#### **Lesson 1: Enabling the Routing**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create an initial routing configuration in the application descriptor

#### **Lesson 2: Navigating to Routes with Hard-Coded Patterns**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Navigate to a route that has a hard-coded pattern

#### **Lesson 3: Routing Back**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement navigation back to an initial page

#### **Lesson 4: Catching Invalid Hashes**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Display a notification view if a hash is entered for which there is no matching route

#### **Lesson 5: Navigating to Routes with Mandatory Parameters**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Navigate to a route that has a mandatory parameter

