# **UX400**

## **OpenUI5 Development Foundations**

#### **COURSE OUTLINE**

Course Version: 02

Course Duration: 5 Day(s)

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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	1
Hint	
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:



## **Foundation of HTML**

## **Lesson 1: Describing Web Development**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Describe and write HTML5 and CSS code

### **Lesson 2: Working with Development Tools**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Work with Development Tools

### **Lesson 3: Working with Basic HTML-Elements**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Basic HTML-Elements

## **Lesson 4: Working with Semantic Markups**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Work with Semantic Markups

## **Lesson 5: Implementing User Friendly Web Forms**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement User Friendly Web Forms

## **Lesson 6: Working with HTML5-Custom Attributes**



• Work with HTML5-Custom Attributes

## **Foundation of CSS**

## **Lesson 1: Describing CSS-Essentials**

### **Lesson Objectives**

After completing this lesson, you will be able to:

• Describe CSS-Essentials

## **Lesson 2: Working with Pseudoclasses**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Work with Pseudoclasses

## Foundations of JavaScript

### **Lesson 1: Exploring JavaScript Language Basics**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore JavaScript Language Basics

### **Lesson 2: Working with Primitive Data Types**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Primitive Data Types

### **Lesson 3: Working with Reference Types**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Work with Reference Types

## **Lesson 4: Working with Operators**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Work with Operators

## **Lesson 5: Implementing Statements in JavaScript**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Implement Statements in JavaScript

## Lesson 6: Understanding JavaScript-Scopes and Context Execution



Understand JavaScript-Scopes and Context Execution

### Lesson 7: Understanding Errorhandling in JavaScript

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Understand Errorhandling in JavaScript

### Lesson 8: Exploring DOM Manipulation Concepts of JavaScript

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Explore DOM Manipulation Concepts of JavaScript

### **Lesson 9: Working with Events**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Events

## Lesson 10: Understanding Object Oriented (OO) Programming with JavaScript

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Understand Object Oriented (OO) Programming with JavaScript

## **Lesson 11: Using http Requests and AJAX**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Use http-Requests and AJAX

## **Lesson 12: Working with Promises**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Promises

## Foundations of jQuery

### **Lesson 1: Understanding jQuery-Foundation**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Understand jQuery-Foundation

### **Lesson 2: Working with Selectors**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Selectors

### **Lesson 3: Understanding jQuery Eventing**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Understand jQuery Eventing

## **Lesson 4: Using Styling and Animation**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Use Styling and Animation

## **Lesson 5: Manipulating the DOM**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Manipulate the DOM

## Lesson 6: Using AJAX with jQuery



• Use AJAX with jQuery



## **OpenUI5 Overview**

### Lesson 1: Explaining SAP User Experience Strategy

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explain SAP User Experience Strategy

### **Lesson 2: Exploring Key Enablement Tools for SAP User Experience**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore Key Enablement Tools for SAP User Experience

## Lesson 3: Describe SAP Fiori in Relation to User Experience

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Describe SAP Fiori in Relation to User Experience

## **Lesson 4: Understanding OpenUI5 Architecture**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Understand OpenUI5 Architecture

## Lesson 5: Exploring the Relationship Between OpenUI5 and SAP Fiori

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore the Relationship Between OpenUI5 and SAP Fiori

## Lesson 6: Exploring the Differences Between OpenUI5 and SAPUI5



• Explore the Differences Between OpenUI5 and SAPUI5

## **OpenUI5 Development Options**

### **Lesson 1: Working with OpenUI5 in Eclipse**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Install the OpenUI5 Eclipse Plugin

## **Lesson 2: Setting up a HANA Cloud Platform Account**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Set up a HANA Cloud Platform Account

### **Lesson 3: Exploring the Basics of SAP WEB IDE**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore the Basics of SAP WEB IDE

## **OpenUI5 Project Basics**

## Lesson 1: Using the Model View Controller (MVC) Design Pattern

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Develop using the Model View Controller (MVC) Design Pattern

## **Lesson 2: Creating a WEB IDE Project**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Set up a Project

### **Lesson 3: Applying OpenUI5 Programming Basics**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Configure and Use Core Elements of OpenUI5



## **OpenUI5 Controls**

## **Lesson 1: Describing OpenUI5 UI Controls**

## **Lesson Objectives**

After completing this lesson, you will be able to:

• Describe UI Controls

## **OpenUI5 Application Debugging**

## **Lesson 1: Using Browser-Based Debugging Tools**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use Browser-based Debugging Tools

## **Lesson 2: Exploring Available OpenUI5 Documentation**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore available OpenUI5 Documentation

### **Lesson 3: Exploring SAP Web IDE Code Assist**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore SAP Web IDE Code Assist

## **Layouts and Custom Controls**

## **Lesson 1: Using Layouts**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Use Layouts

## **Lesson 2: Using UI Areas**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Use UI Areas

### **Lesson 3: Revising Core Functions**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Revise Core Functions

## **Lesson 4: Creating Custom Controls**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Create Custom Controls



## **Data Handling**

## **Lesson 1: Exploring Model Types**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Explore the model types JSON, XML and Odata

### **Lesson 2: Performing Binding Operations**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Perform Data Binding

### **Lesson 3: Performing Property Binding Operations**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Perform Property Binding

## **Lesson 4: Performing Advanced Binding Techniques**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Perform Advanced Binding Techniques

## Lesson 5: Performing Advanced Binding Techniques: Master-Detail

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Perform Advanced Binding Techniques: Master-Detail

## **Lesson 6: Performing OData Query Options**



• Perform OData Query Options

## **Lesson 7: Performing Common Data Operations: Format**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Perform Common Data Operations: Format

## **Lesson 8: Performing Common Data Operations: Sort and Filter**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Perform Common Data Operations: Sort and Filter

## **Lesson 9: Performing Common Data Operations: Calculated Fields and Data Validation**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Perform Common Data Operations: Calculated Fields and Data Validation

# UNIT 12 Additional OpenUI5 Development Features

#### **Lesson 1: Working with Resources**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Work with Resources

#### **Lesson 2: Building Apps Using Modularization**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

· Build Apps Using Modularization

### **Lesson 3: Performing Application Localization**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Perform Application Localization

## **Lesson 4: Working with Components**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Work with Components

## **Lesson 5: Using Third-party Libraries**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

Use Third-party Libraries

## **Lesson 6: Optimizing OpenUI5 Apps**

• Optimize OpenUI5 Apps

## **OpenUI5 Branding**

## **Lesson 1: Using Themes in OpenUI5**

### **Lesson Objectives**

After completing this lesson, you will be able to:

• Use Themes in OpenUI5

## **Lesson 2: Adding Styles to an Application**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

• Add Styles to an Application