



ORACLE

JavaScript and HTML5: Develop Web Applications

Titulo: JavaScript and HTML5: Develop Web Applications Ed 1

Clave: D84844GC10

Duración 0 días

Temario

Introduction

- Knowing the objectives of the course
- Setting up the Environment

Web Application Essentials

- Creating HTML5 Applications in NetBeans
- Running HTML pages and analyzing them by using the browser's development tools
- Separating CSS and JavaScript content from HTML pages Running HTML5 Applications in NetBeans
- Practice: Creating HTML5 Web Applications with NetBeans 8
- Practice: Separating JavaScript and CSS Resources

JavaScript Fundamentals

- Writing JavaScript code to declare variables, objects, functions and arrays
- Writing JavaScript Arrays to store data
- Defining JavaScript Objects as a key-value store
- Accessing the properties of an object
- Practice: Writing JavaScript code to pass tests in Jasmine

Combining HTML5 and JavaScript in Web Applications

- Creating HTML5 Documents
- Creating HTML5 Forms to request information and process it
- Validating HTML5 form input
- Writing JavaScript functions for HTML5 events
- Manipulating HTML5 elements through DOM
- Practice: Writing JavaScript code to modify document elements

The JavaScript API

- Validating user input with JavaScript and Regular
- Expressions Handling multiple values with JavaScript
- Collections Manipulating Dates with the JavaScript Date API
- Practice: Creating a meal-divider application

Practice: Calculating the total based on the age

Web Application Data

Converting Objects to JSON Strings

Parsing JSON Strings into JavaScript Objects

Storing Objects by using the JSON API, Cookies, and Local Storage

Practice: Saving user input using JSON and Local Storage

Practice: Restoring saved data when page loads

Style Applications using CSS3 and JavaScript

Applying CSS styles to HTML documents

Using CSS3 features to add dynamic styles to elements with events

Using Media Queries and media data to adapt to different screens

Using JavaScript to add and remove styles from elements

Practice: Writing CSS rules to style elements in the document

Advanced JavaScript

Defining Functions

Creating Closures and explaining Variable Scope

Writing JavaScript functions as modules

Creating Prototypes

Creating Drag-and-Drop interactions with JavaScript

Creating JavaScript Timers and Delays to create

animations in HTML Using the HTML5 Canvas

Object to draw in pages

Practices: Creating a Canvas, intervals, Drag and Drop, and implementing Mouse Gestures

AJAX and WebSocket

Using AJAX with JavaScript to request data from an

Application Server Using AJAX to consume RESTful

Web Services

Using AJAX calls to create "Server

Push" interactions Identifying

alternatives to AJAX used in legacy

code Understanding AJAX Security

Using WebSocket to create Real-time Client/Server interactions

Identifying the required Back-End technologies for REST and WebSocket

with Java EE7 Practices: Creating a Single-Page Application using

REST and a Tic-Tac-Toe Game Client with WebSocket

Developing Applications with jQuery

- Adding jQuery and jQuery UI libraries to your projects
- Using Selectors and DOM manipulators to handle documents
- Handling Events with jQuery
- Animating elements and Applying effects in the document
- Handling AJAX server responses

