

# Course : HTML5, mastering JavaScript APIs

Practical course - 2d - 14h00 - Ref. HML

Price : 1610 CHF E.T.

You'll learn how to implement the various JavaScript APIs proposed by the new HTML5 specifications. You'll handle APIs for data storage, client/server communication, offline cache management and geolocation.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Managing data persistence
- ✓ Creating applications in offline mode
- ✓ Mastering Client/Server communication with Web sockets
- ✓ Design drag'n'drop mechanisms
- ✓ Use location APIs

## Intended audience

Web developers. Web project managers.

## Prerequisites

Good knowledge of HTML and JavaScript.

## Practical details

### Hands-on work

Using the various JavaScript APIs

## Course schedule

### 1 Introduction

- What's new in HTML5: new semantic elements, main tags, forms...
- New CSS selectors: search for elements by Class, by selector...

### Hands-on work

Search for items by positioning or Class.

### PARTICIPANTS

Web developers. Web project managers.

### PREREQUISITES

Good knowledge of HTML and JavaScript.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

## 2 Persistence management

- Overview of storage issues.
- Local storage (localStorage), session storage or database storage.
- Create databases and queries.
- SQLite administration tools.
- Available SQL operations.

### Hands-on work

Create a product table with queries.

## 3 Cache management

- Application creation in offline mode.
- Creation of Manifest file.
- Support for offline mode.
- Cache manager events: offline and online events.

### Hands-on work

Implementation of a disconnected mode.

## 4 Client/Server communication

- CrossDomain communication.
- Cross Document Messaging.
- PostMessage API.
- Communication types: polling, long-polling, streaming.
- Listener for messages sent by the server. EventSource API.
- XMLHttpRequest Level 2. Level 2 presentation. Progress events. Multi-document communication.
- Web sockets communication. API and protocol.

### Hands-on work

Implementation and comparison of different C/S protocols.

## 5 Drag & copy management

- Drag'n'Drop mechanisms.
- Drag-and-drop API.
- The draggable attribute.
- Behavioral properties.
- The events.
- Possibilities and limits.
- Drag-and-drop file and image transfer.

### Hands-on work

Drag-and-drop basket management.

## 6 Geolocation

- Geolocation overview.
- Private data.
- Location information sources.
- Using the localization API.
- Respect for privacy.

## Dates and locations

## TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

REMOTE CLASS

2026: 26 Mar.