

# Javascript, major improvement for the Web 2.0

Hands-on course of 4 days - 28h

Ref.: JPG - Price 2025: 2 540 (excl. taxes)

## THE PROGRAMME

last updated: 03/2024

### 1) XML parser

- DOM methods. XML structure.
- Elements such as Text, Node, Attribute.
- Dynamic creation of HTML objects
- DTD and XSD reminders

*Exercise : Run through a XML structure from an Ajax feed*

### 2) DOM 2 – DOM 3 events

- Event manager
- Capture, capturing, bubble event phases
- Description of Event type objects
- Mouse and Keyboard events
- Dynamic management of events
- Event creating and dissemination
- Impact of prevent Default and stop Propagation on the personalization of your IHM
- Differences between browsers

*Exercise : Keyboard management, create your own event manager*

### 3) Object orientated programming & Regular expressions

- Reminder on the object. Properties. Methods. Heritage.
- Scope of private and public data. Mapping and serialization
- Mechanisms of Regular expressions
- Beginning and end (^ \$) Occurrences (? + \* {} ). Common Characters ( . \d \D \w \W \s \S ). Groups ([ ]). Negation (^). Pa

*Exercise : Create a mini-framework. Date control, email.*

### 4) Data exchange, interactions

- Cookies
- Embedded data in the Sqlite navigator
- Remote data via Ajax and HttpRequest
- Interfacing with a Flash application.
- NodeJS Javascript server. Set up.

*Exercise : Communication with a Web application. Call Web services. Create a Cookie. Use of embedded database , exchange with remote data.*

### 5) Debugging environment

- Introduction, solutions designed for browsers .
- Error messages. Performance test. Stop points. Multi browser testing .
- Test bench storage

*Exercise : Create debugging tools*

### 6) Javascript programming under HTML5

- New events.

#### 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.

#### 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 to review your request and its feasibility.

- Client/server communication modes.
- Multimedia management.

*Exercise : Create Ajax under HTML5. Video management. Persistent data management*

#### 7) Google API : Maps, Search and Charts

- Creating a Map. Coordinate systems. Geocode for the address search.
- Creating markers. Event Management GEvent.
- GRoute to identify paths.
- KML card registration.
- Integrating Google Search in pages.
- Generation of graphics with Google Charts.

*Exercise : Put in place main Google Map API functions. Create statistical graphs*

#### 8) JQuery Framework

- How JQuery works. Event management.
- Install jQuery for Ajax exchanges.

## DATES

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#### REMOTE CLASS

2025 : 09 sept., 09 déc.