

# Javascript, Dynamic HTML

Hands-on course of 4 days - 28h

Ref.: DHL - Price 2024: €2 490 (excl. taxes)

JavaScript has become an indispensable language in developing Web sites, both for its strong relationship with the graphics interface and for client/server processing. Through this course, you will learn all about interfacing the language with Web page graphics elements and thus how to create pull-down menus, animations, dynamically change format styles or react to the user's actions... It will also teach you how to issue requests to the server (AJAX) and how to manipulate XML data.

## HANDS-ON WORK

JavaScript programming, working with DOM, interactivity management.

## THE PROGRAMME

last updated: 01/2018

### 1) Review of Web technologies

- HTTP, HTTPS protocols.
- Types of browsers and their impact on portability.
- Web components: HTML, XHTML, CSS, JavaScript, Flash, Java, etc.
- JavaScript's impact on accessibility.
- XHTML's importance in the dynamic use of JavaScript.
- The Web 2.0;
- Method of JavaScript development in teams.
- Development tools.
- Positioning and illustration of DHTML technologies.

### 2) The JavaScript language

- Object programming concepts.
- Variables, sharing libraries, logical and arithmetical operators, object programming (object classes), tables, storage m
- Error and exception handling.
- Accessing the browser's resources: plug-ins, resolution, version, etc.
- Extension of pre-defined objects.

*Hands-on work* : Utilising various JavaScript functions through a number of hands-on exercises.

### 3) Handling HTML forms

- Manipulating the content of forms.
- Accessing and dynamically changing form components: input area, check boxes, option boxes, manipulating combobox, textar
- Form validation functions.
- Events linked to form elements: loading, initialising, click, etc.

*Hands-on work* : Creating customised functions controlling the user's activities.

### 4) Interacting with cascading style sheets

- Review of cascading style sheets (CSS-1, CSS-2). Tools for manipulating them.
- Multiple CSSs, multiple inheritances, priority rules.
- Selector classes, global selectors.

## PARTICIPANTS

This hands-on course is aimed at all Web site designers and IT staff who wish to use JavaScript and dynamic HTML technologies in their projects.

## PREREQUISITES

Good Knowledge in HTML. A base knowledge in programming.

## 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.

- Text blocks, layers, colours, formatting paragraphs, DIV, etc.
  - Accessing and changing styles.
- Hands-on work : Creating simple pages in order to become familiar with using styles sheets and manipulating them through JavaScript.*

## 5) Parsers and DOM

- Review of XML parsers.
- Overview of the XML language (attribute elements), its definition files DTD and XML-schema.
- Document Object Models: variations between browsers, maintenance problems.
- Manipulating XML data (reading, adding, deleting, changing nodes).
- XML applications on the page's DOM structure.
- JavaScript event-based processing: keyboard and mouse management, form-related events, Rollover, dynamic menus, http red

*Hands-on work : Familiarisation with building an access path to a DOM element.*

## 6) Ajax

- Overview of Asynchronous JavaScript And Xml.
- The issues, solutions and alternatives.
- The libraries on the market. The RICO framework.
- HTTP and Ajax: HTTP exchanges and the object XMLHttpRequest.
- Synchronous/asynchronous dynamic communications with the remote server.
- Checking the validity of an XML document.
- XSLT. Review. Utilising the XSLT transformer.

*Hands-on work : Retrieving XML data and displaying data. Interrogating a database. Creating a connection form.*

# DATES

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## REMOTE CLASS

2025 : 28 Jan, 13 May, 02 Sep,  
25 Nov