Javascript, Dynamic HTML

Hands-on course of 4 days - 28h
Ref.: DHL - Price 2024: CHF2 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.

- 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

REMOTE CLASS
2024 : 10 Sep, 05 Nov