## Developing with XML

### Description

This three-day workshop will present an overview of XML—the World-Wide Web Consortium's *eXtensible Markup Language*. XML is viewed as a key technology that is pushing the Internet 'forward' and enhancing its capacity to support e-commerce and foster a viable on-line marketplace. XML is not just about the Internet however, it has many applications in the wider business arena—it is being touted as the standard infrastructure underlying next-generation middleware systems—and is finding its way into many products and portions of the enterprise. For example, Microsoft has incorporated support for XML into Internet Explorer and its Office 2000 product suites. XML is also strongly supported by organizations such as IBM, Oracle, Sun, Netscape, Hewlett-Packard and Adobe.

# **Course Objectives**

Participants will examine the concepts behind XML, the standardization activity occurring in the XML community and also look at how to apply XML with particular reference to deploying XML on the World-Wide Web. The workshop will also examine a number of XML-related technologies. Participants will also gain an understanding of how XML can be used to resolve many common data-exchange problems. Through various exercises, they will also gain a handson working knowledge of that flavour of XML currently supported by Microsoft Internet Explorer 5.

#### **Audience**

This workshop is suitable for programmers working on Internet or Intranet applications, other developers who need to know how XML will affect their work and people interested in the exchange of data between disparate systems.

All modules have a strong practical component, which enables each participant to learn from hands-on experience and from others while working alone or in small teams. Participants will also receive a full copy of supporting notes, designed to complement the instruction and workshops. Participants should have some prior knowledge of programming and the older, but more widespread, HTML technology.

### **Outline of Contents**

### Day 1

- Introduction
- Markup languages
- Introducing XML
- Application areas for XML: information management; searching; database integration; messaging, etc.
- XML structure and syntax
- The Document Type Definition (DTD)
- XML as data: data types and namespaces

## Day 2

- Formatting XML: CSS and XSL
- Extensible Query Language (XSL) Patterns
- Linking with XML: Xlink and Xpointer

### Day 3

- XML Document Object Model (DOM)
- Simple API for XML (SAX)
- XML Gallery (SMIL/HTML+TIME, SVG/VML, MathML, WML, etc.)