



# VoiceXML: Engineering Speech Applications for the Web

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Length: Three days

Level: Intermediate - Advanced

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## DESCRIPTION

Voice is the bridge connecting the Internet and telephone network. VoiceXML is lowering the entry barrier to creating speech applications. This course takes a systematic approach towards building high-quality VoiceXML applications for the Web. It will illustrate the life cycle of a VoiceXML application using "best practices" that benefit both the engineer and the end-user. Special emphasis will be made towards usability, efficiency, and manageability of VoiceXML applications. Use of state-of-the-art VoiceXML processing software will be made at appropriate places.

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## OBJECTIVES

Upon completion of the course, participants will be able to:

- Demonstrate skills required to develop speech applications using VoiceXML.
  - Apply practical steps for developing user-friendly speech applications.
  - Author quality-oriented VoiceXML documents programmatically and otherwise.
  - Analyze basic issues and apply pragmatic solutions for developing speech applications.
  - Apply basic strategies for interacting with a computer by talking and listening, rather than typing and reading.
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## TOPICS

- Motivation for Building Voice Applications for the Web.
  - VoiceXML and Text-To-Speech (TTS).
  - VoiceXML as an XML Vocabulary.
  - Voice User Interface Design.
  - Similarities and Differences between Graphical User Interfaces and Voice User Interfaces.
  - Fundamental Elements of a VoiceXML Document.
  - VoiceXML Dialogs.
  - Speech Grammars.
  - Metadata in VoiceXML.
  - Authoring VoiceXML Documents.
  - VoiceXML Conformance.
  - Multi-Document Applications.
  - Building VoiceXML Applications using J2EE.
  - Serving VoiceXML Documents using Java Server Pages (JSP).
  - VoiceXML Events and ECMAScript.
  - Playing and Recording Audio for VoiceXML.
  - VoiceXML “Best Practices” and Patterns.
  - VoiceXML Performance.
  - VoiceXML in XHTML.
  - Testing Voice User Interfaces.
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## AUDIENCE

- Speech Application Specialists
  - Software Developers
  - Web Content Developers
  - Web Programmers
  - Web Managers
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## PREREQUISITES

- Good understanding of XML Fundamentals.
- Some familiarity with HTML and with a programming language such as Java will be useful, though not required.