

What is VoiceXML?

Voice Extensible Markup Language (VoiceXML) is a markup language for creating voice user interfaces that use automatic speech recognition (ASR) and text-to-speech synthesis (TTS). AT&T, IBM, Lucent and Motorola founded the VoiceXML Forum, a global industry organization, in March, 1999 to promote and to accelerate the adoption of VoiceXML-based applications worldwide.

VoiceXML (VXML) is the W3C's standard XML format for specifying interactive voice dialogues between a human and a computer. It allows voice applications to be developed and deployed in an analogous way to HTML for visual applications. Just as HTML documents are interpreted by a visual web browser, VoiceXML documents are interpreted by a voice browser. A common architecture is to deploy banks of voice browsers attached to the public switched telephone network (PSTN) so that users can use a telephone to interact with voice applications.

Many commercial VoiceXML applications have been deployed, processing many millions of telephone calls per day. These applications include: order inquiry, package tracking, driving directions, emergency notification, wake-up, flight tracking, voice access to email, customer relationship management, prescription refilling, audio newsmagazines, voice dialing, real-estate information and national directory assistance applications.

Two closely related W3C standards used with VoiceXML are the Speech Synthesis Markup Language (SSML) and the Speech Recognition Grammar Specification (SRGS). SSML is used to decorate textual prompts with information on how best to render them in synthetic speech, for example which speech synthesizer voice to use, and when to speak louder. SRGS is used to tell the speech recognizer what sentence patterns it should expect to hear. While the Semantic Interpretation for Speech Recognition ([SISR]) is used in [SRGS] to return structured results.

The Call Control eXtensible Markup Language (CCXML) is a complementary W3C standard. A CCXML interpreter is used on some VoiceXML platforms to handle the initial call setup between the caller and the voice browser, and to provide telephony services like call transfer and disconnect for the voice browser. CCXML can also be used in non-VoiceXML contexts.

REF: www.vxml.co.za

For more information on VoiceXML Courses offered in the near future, or should you be interested in arranging a training session for your company, please contact us using the details below:

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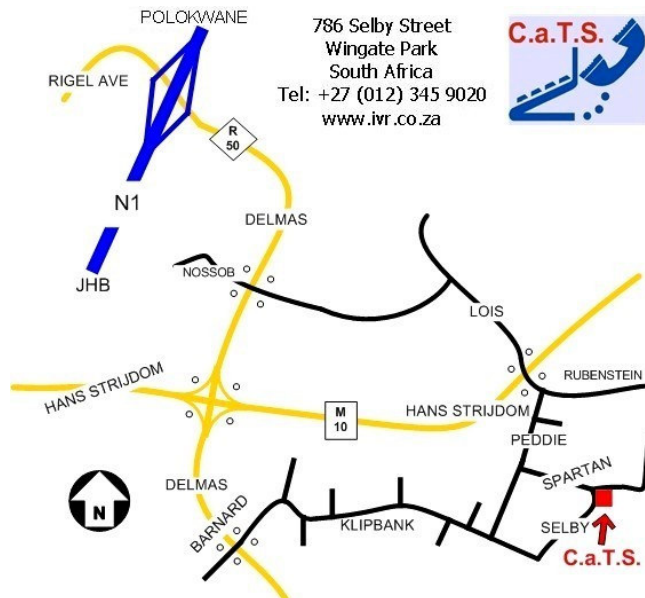
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VoiceXML

"Your gateway to IVR Development"

www.ivr.co.za

Introduction to VoiceXML Development Training

This is the first of a two part training course in VoiceXML Development presented by C.a.T.S. (Pty) Ltd. The course comprises five days of intensive training - two of which is dedicated to theory, including VXML, CCML, SSML and SRGS-XML. The remaining three days constitutes workshop-like practical sessions covering topics like DTMF key input, Speech Synthesis, Voice Recording, host interfacing, server side scripting, variable handing and sub-dialogs.

"We believe that this training will go a long way in demystifying voice, and IVR in particular..." - Johan Grobler, MD C.a.T.S. (Pty) Ltd.



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Introduction to VoiceXML Development Training

The contents of the course is basically outlined as follows:

>> Introduction and Overview

- > VoiceXML Overview
- > Training Development Environment
- > Demo VXML in class
- > Demo TTS in class
- > Demo ASR in class
- > Demo Application in Tecnomen

>> IVR Application Design Philosophy

- > Design Methodology
- > Analyzing your users ("Design Phase")
- > Analyzing user tasks ("Design Phase")
- > Developing the conceptual design ("Design Phase")
- > Making Application Decisions
- > Prototype Phase

>> IVR Application Test Procedures

- > Identifying recognition problems
- > Identifying any user interface break downs
- > Refinement Phase

>> VXML Architecture

- > Generic VXML Architecture
- > Browser / Application Server
- > Caching
- > TTS Principles
- > Application Profiles
- > Outbound Calls

>> Caller Interaction

- > Answer
- > Menu
- > Get DTMF
- > Get DTMF Strings
- > Prompts
- > ASR
- > TTS

>> Voice Messaging

- > Record Voice
- > Play Back
- > Voice Formats
- > Voice Blogs



>> System Interfaces and Architecture

- > JSP
- > PHP
- > Database

>> VXML Application Development Exercises

>> Reference Documentation



For more information on the contents of this course, please visit our website -

www.vxml.co.za

or contact us using the details featured on the back of this brochure.

