

Custom Training Institute

9085 Coyote Springs Road
Prescott Valley, AZ 86314
(928) 772-3811
FAX (928) 441-6444

Advanced VXML (CTI 233)

VoiceXML (VXML) allows developers to easily and quickly build voice-recognition and voice-response applications and integrate those applications with Web-based and other server-side content. This advanced course will build upon introductory VXML concepts to add sophistication, power and flexibility to VXML applications.

Prerequisites: Experience with HTML, XML, or other text-based markup language. "Introduction to VXML" (CTI 232) or equivalent.

Minimum software requirements: ASCII-based text editor of choice that comes with operating system. XML editor highly desirable. Access to VXML server software.

Minimum hardware requirements: PC / Macintosh with Internet access, 256 MB of RAM and 1 GB free hard disk space; Java-capable Internet browser (Internet Explorer; Safari).

Microsoft PowerPoint and Internet access on instructor's workstation for presentation purposes. Full MS Office is preferable.

Day One:

Module 1: VXML and Audio Files

Overview
Sound Formatting
Recording and Enclosing Sound Files in Applications
Universal Events (Navigation; Recognition; Trapping; Handling)
Exercise

Module 2: VXML and Outbound Dialing

Placing an Outbound Call
Outbound Calls and the VoiceXML Framework
Error Trapping / Handling
Exercise

Module 3: VXML and Client-Side Processing

Overview
Using JavaScript with Your VoiceXML Application
Integrating Existing JavaScript into Your VoiceXML Application
Exercise

Day Two:

Module 4: GSL Grammar Weighting

Overview
Using GSL to Increase Recognition
GSL and Probability Accuracy
Exercise

Module 5: VXML and Subgrammars

Overview
Subgrammars and Increased Recognition
Creating Multi-Level Grammars
Working with Subgrammars
Exercise

Module 6: VXML and Shadow Variables

Overview
Shadow Variables and User Input
Shadow Variables and Application Tuning
Exercise

Day Three:

Module 7: VXML and NBest Post-Processing

Overview
Using NBest Post-Processing to Increase Grammar Accuracy
Exercise

Module 8: VXML and Event Handling

Overview
Catching and Processing Error Events
Catching and Processing User-Defined Events
Additional Event Handling
Exercise

Module 9: VXML and Token-Initiated Applications

Overview
Using the Web to Initiate VXML Applications
HTTP and "Notifications"
Exercise

Advanced VXML (CTI 233) - continued

Day Four:

Module 10: Speech Recognition Grammar Specifications (SRGS)

- Overview
- SGRS as the Future of VXML Grammars
- SGRS and Portability
- Exercise*

Module 11: VXML and Server-side

Languages

- Overview
- Integrating Server-Side Code into Your Voice Application
- Exercise*

Day Five:

Module 12: VXML and Dynamic Grammars

- Overview
- Benefits and Features
- Generating a Grammar from a Database
- Using Dynamic Grammars
- Exercise*

Module 13: Screen Scraping

- Overview
- Using Cold Fusion or PHP to get Data from a Web Page
- Incorporating that Data into Your VXML Application
- Exercise*

Review and Summary