

11.5 Voice Interfaces for Web

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Voice + WWW

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Voice + WWW

Alternative Web Browsing
W3C Speech Interface Framework
VoiceXML
CSS: Audio Features in Style Sheets

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Speech enabled Web Browsing

Visually oriented medium → multi-modal medium

- ▶ **Browsers** specifically designed for people with [visual] disabilities.

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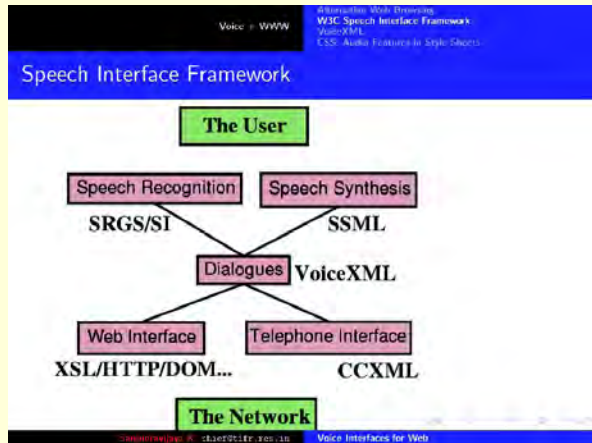
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- ▶ **Lists of above:**
<http://www.w3.org/WAI/References/Browsing>



An example ... (continued)

Offers a menu of three choices: sports, weather or news.

```
<?xml version="1.0"?>
<vxml version="2.0">
<menu>
  <prompt>
    Say one of: <enumerate/>
  </prompt>
  <choice next="http://www.sports.example/start.vxml">
    Sports
  </choice>
  <choice next="http://www.weather.example/intro.vxml">
    Weather
  </choice>
</menu>
</vxml>
```

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An example of a VoiceXML application

```
<choice next="http://www.news.example/news.vxml">
  News
</choice>
<noinput>Please say one of <enumerate/></noinput>
</menu>
</vxml>
```

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- ### Voice XML
- VoiceXML documents describe:
- ▶ spoken prompts (synthetic speech)
 - ▶ output of audio files and streams
 - ▶ recognition of spoken words and phrases
 - ▶ recognition of touch tone (DTMF) key presses
 - ▶ recording of spoken input
 - ▶ control of dialog flow
 - ▶ telephony control (call transfer and hangup)
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A typical dialog

Computer: Say one of: Sports; Weather; News.
Human: Astrology
Computer: I did not understand what you said.
 (a platform-specific default message.)
Computer: Say one of: Sports; Weather; News.
Human: Sports
Computer: (proceeds to http://www.sports.example/start.vxml)

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Dialog requirements for the voice markup language

- ▶ must have
- ▶ should have
- ▶ nice to have
- ▶ future revision

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Aural style sheets

- ▶ Controlling Volume
- ▶ Basic Speech
- ▶ Talking headers

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