
VoiceXML

Understanding it.

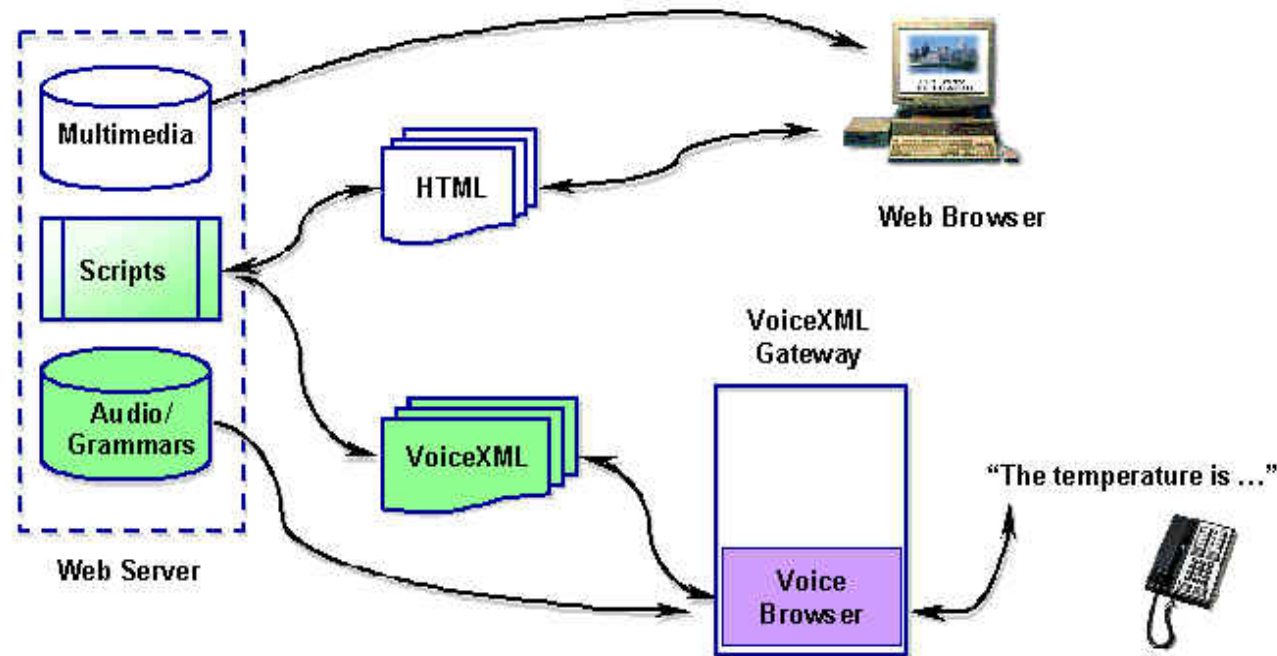
Exploring it.

Exploiting it !!!

Raghavendra K S

VoiceXML

- Telephonic Environment
- Speech Recognition + XML = VoiceXML !!!
- Programming Language
- Specification (voice browser)



VoiceXML Browser

- Speech Recognition Engine
- Text to Speech Converter (TTS)
- Play audio files
- Understand DTMF
- Telephony features
 - Transfer
 - Disconnect

VoiceXML Patrons !

- Finance/Banking
- Brokerages
- E-care portals (shopping cart)
- Navigation software (search / instructions)
- Unified messaging
 - e-mails ↔ phone; phone ↔ pager
- Information Retrieval Name
 - Sports, News, Weather, Traffic, Trains

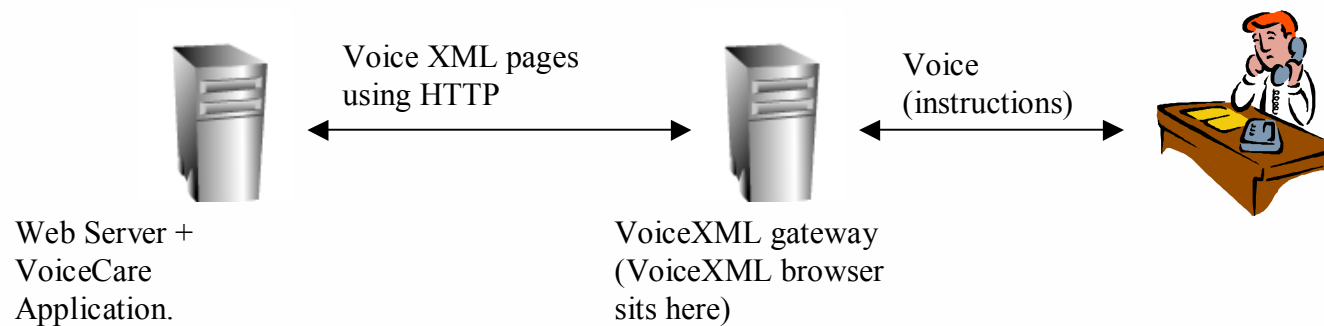
VoiceXML Future !

- At least 8 commercial implementations of VoiceXML
- Higher penetration of phones/cellulars
 - **will it wipe out WAP ???**
- IBM, AT&T, Lucent and Motorola
- VoiceXML forum = consortium of over 350 companies
- W3C Voice Browser Group → spec 2.0
- Existing Portals
 - Tellme, Shoptalk, Indicast, BeVocal, conversa.com
- **Next Generation – NLP.**

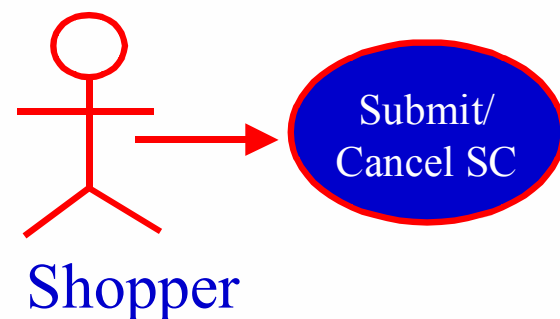
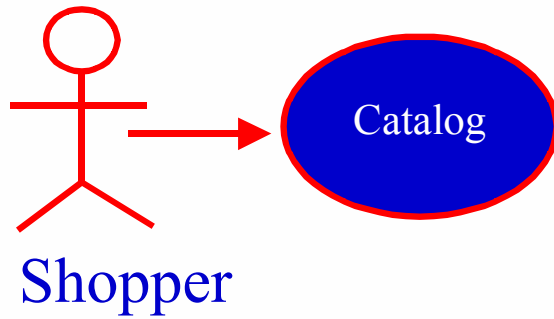
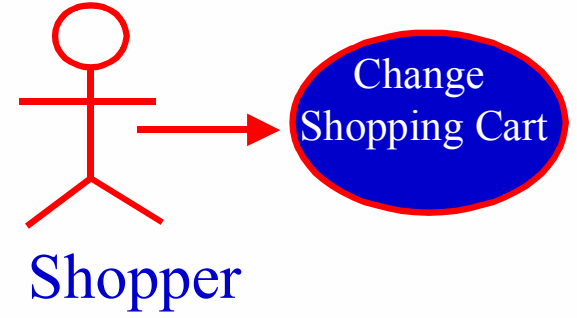
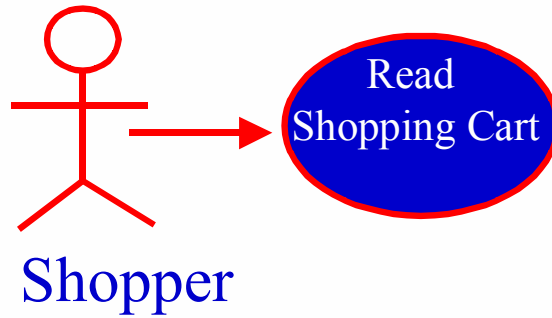
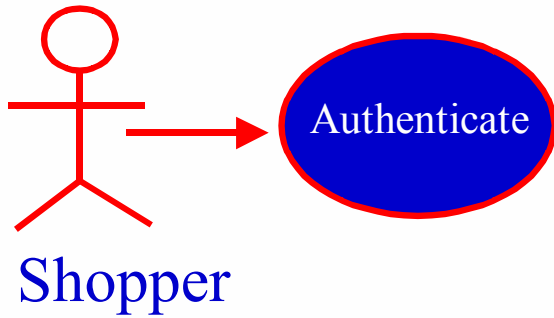
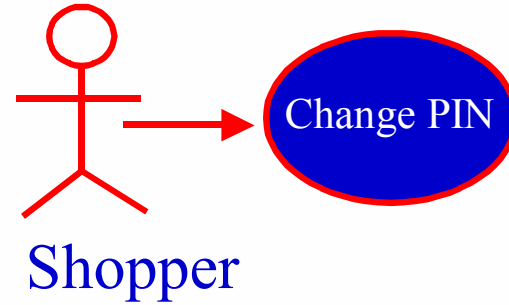
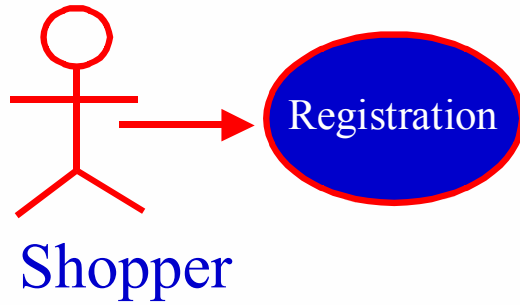
Let us Dirty Our Hands !

VoiceCare

The Shopper's Paradise

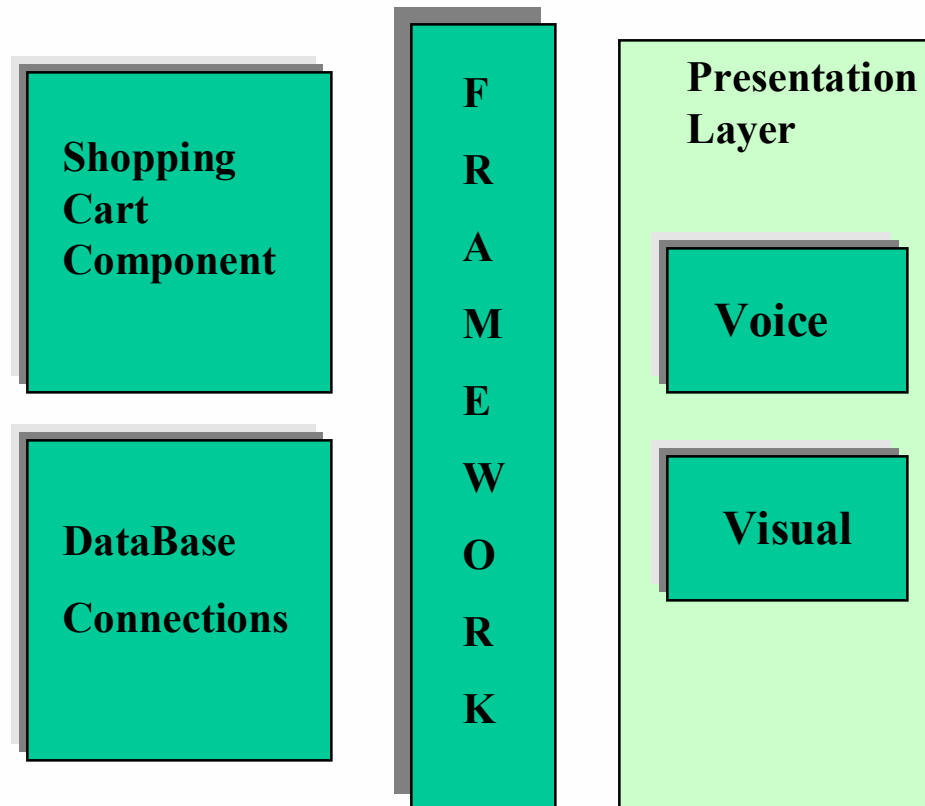


VoiceCare Use Cases



VoiceCare Design

- Clear separation between Presentation and Processing logic (a must !!!)



VoiceXML Concepts

- Dialogs and Sub Dialogs
 - Forms
 - Menus
- Sessions
- Applications
 - Application Root Document
- Grammars
- Events
- ECMA script

VoiceXML Elements

<assign> <audio> <block> <break> <catch>
<choice> <clear> <disconnect> <dtmf> <else>
<elseif> <emp> <enumerate> <error> <exit>
<field> <filled> <form> <goto> <grammar>
<help> <if> <initial> <link> <menu> <meta>
<noinput> <nomatch> <object> <option> <param>
<prompt> <property> <pros> <record> <reprompt>
<return> <sayas> <script> <subdialog> <submit>
<throw> <transfer> <value> <var> <vxml>

Sample program

VoiceXML

```
<?xml version="1.0" ?>
<vxml version="1.0">
<menu>
  <prompt>Welcome to Your Bank Online speech demo. Please choose</prompt>
  <choice next="http://www.bank.example/locations.vxml">BranchLocations </choice>
  <choice next="http://www.bank.example/interest.vxml">Interest Rates </choice>
  <choice next="#login">    Account Information</choice>
</menu>
<form id="login">
  <field name="account_number" type="number">
    <prompt>What is your account number?</prompt>
  </field>
  <field name="pin_code">
    <dtmf src="builtin:dtmf/digits" />
    <prompt>Enter your PIN code, followed by the # key.</prompt>
  </field>
  <filled> <submit next="/servlet/login" /> </filled>
</form>
</vxml>
```

Adios !



Thank for Your Patient Participation 😊

How to Reach Me?



YAHOO!

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