

A multimodal E-commerce application coupling HTML and VoiceXML E-commerce -User interface and interactions -Web applications

José Rouillard

▶ To cite this version:

José Rouillard. A multimodal E-commerce application coupling HTML and VoiceXML E-commerce -User interface and interactions -Web applications. The Eleventh International World Wide Web Conference (WWW 2002), 2002, Honolulu, United States. 2002. hal-02441022

HAL Id: hal-02441022

https://hal.science/hal-02441022

Submitted on 20 Jan 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

A MULTIMODAL E-COMMERCE APPLICATION COUPLING HTML AND VOICEXML

José Rouillard - Trigone Laboratory
Sciences & Technology University - Lille - France

THE ELEVENTH INTERNATIONAL WORLD WIDE WEB CONFERENCE Honolulu, Hawaii, USA 7-11 May 2002

Abstract

Providing a multimodal E-commerce application through heterogeneous devices (Phone and Web Browser for example) is not easy because this kind of interactions are not supported by the same languages. HTML is useful for textual and graphic presentation. VoiceXML was created for non-graphic interactions: telephone-based applications. They are not supposed to be employed together.

Synchronization & Multimodality in input

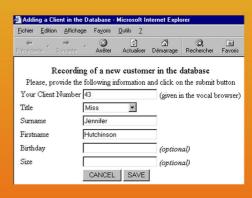
The oral dialog uses information coming from the textual Web Browser

Computer: Welcome on our Multimodal E-commerce site. Are you already one of our clients?

Human: no
Computer: We are going to create your client account. In order to register yourself, please give in the Web page the value 43 as client number. Did you correctly hear your client number?

Human: yes
Computer: Ok. I'm waiting while you are completing the page.
(...)
Computer: Your registration is correct Miss Jennifer Hutchinson.
Would you like to buy something now?
Human: yes
Computer: What do you want to buy Miss Jennifer Hutchinson?
Human: some dresses (...)





Personalization & Multimodality in output

The Web page gives automatically the results of an oral request



Computer: Glad to hear you again Miss Jennifer Hutchinson. What do you want to buy ?
Human: shorts
Computer: There are 3 shorts available. I suppose that you want to buy this article in the women's section.
Human: yes
Computer: You would like this article in the size 38, isn't it ? Miss Hutchinson.
Human: yes of course
Computer: There are 2 shorts, with the size 38. Please give me the desire color.
Human: Help me to choose
Computer: The available colors are: yellow and blue
Human: yellow



Multimodality is often studied on a same device. This work demonstrates that multimodality can be implemented through heterogeneous devices and languages. HTML and VoiceXML can be coupled, thanks to synchronization mechanisms.

This multimodal E-commerce application uses personalization processes to adapt the presented information to the needs of the users according to their profiles or based on observations. In the future, the user will click and talk at the same time.







