Sedan-Bouillon: A Plastic Web Site

Lionel Balme   Alexandre Demeure   Gaëlle Calvary   Joëlle Coutaz

University of Grenoble
CLIPS-IMAG
BP 53, 38041 Grenoble Cedex 9, France
+33 476514854

{Lionel.Balme, Alexandre.Demeure, Gaelle.Calvary, Joelle.Coutaz}@imag.fr

ABSTRACT

This paper presents Sedan-Bouillon, a plastic web site that can be distributed across a cluster under the user's control. The granularity for distribution is at the workspace level: the end user specifies the platform screens on which he/she would appreciate to get the workspaces that compose the web site.

Keywords

Plasticity of User Interfaces, Distribution, Meta-UI.

1. DESCRIPTION OF Sedan-Bouillon WEB SITE

"Sedan-Bouillon" is a web site that aims at promoting tourism in the regions of Sedan and Bouillon in France and Belgium (http://www.bouillon-sedan.com/). It has been designed by IS3 in 2003. It targets tourists whose vernacular language is French, German, and Dutch. It provides tourists with four kinds of information or services:

– General information about the region,

– Guiding information for visiting the region (a pre-selection of specific monuments of interest),

– Logistic information for sojourning in the region (a pre-selection of hotels, camping, bred and breakfast, restaurants),

– Access to a set of relevant documentation.

Initially, the web site has been designed for PC screens only. A plastic light weight version (called LSB for Light Sedan-Bouillon) has been developed in the European CAMELEON project [1] for exploring the distribution of a web site across a PC screen and a PDA (see the CAMELEON deliverable D3.5 for further explanations). LSB is limited to French speaking users and covers the hotel browsing task only. But LSB is plastic. It promotes a user-controlled distribution of the UI among the web browsers with which the user is connected to the web site.

Let us consider Lionel and Alice who are planning a trip to Sedan. Lionel turns on his PC, and connects to the LSB web site. He logs in (Fig. 1) for accessing to the web site. LSB is composed of three workspaces (Fig. 2): a title, a navigation menu and informational content. The navigation menu is augmented with a "meta-UI" link that allows Lionel to control the distribution of the user interface across the resources of the interactive space: for each workspace, he can specify the platform screen on which it can be displayed.
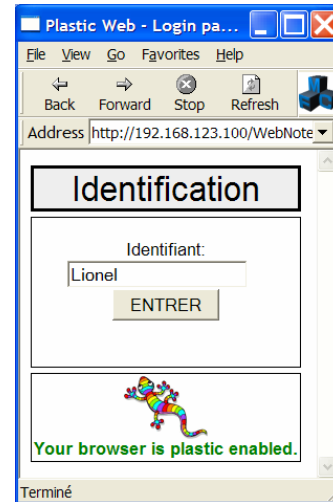

Figure 11: The PC login page.

Figure 2: The UI of Sedan Bouillon.

To comfortably browse the site from the sofa, Lionel turns on his PDA and connects to the web site with the same identifier (Lionel). A meta UI appears that informs Lionel that he is currently using two browsers (log_Lionel_0 and log_Lionel_1, see Figure 3), and that he can redistribute the user interface across the resources of the interactive space: the three workspaces are mentioned and the two browsers are identified. Lionel can specify which workspace will run on which platform. Lionel asks for the title (titre) and content (contenu) to be displayed on the PC (log_lionel_0), and the title (titre) and the navigation menu (navigation) to be rendered on the PDA (log_lionel_1) (Figure 3). The PC and the PDA screens are updated accordingly (Figures 4 and 5).
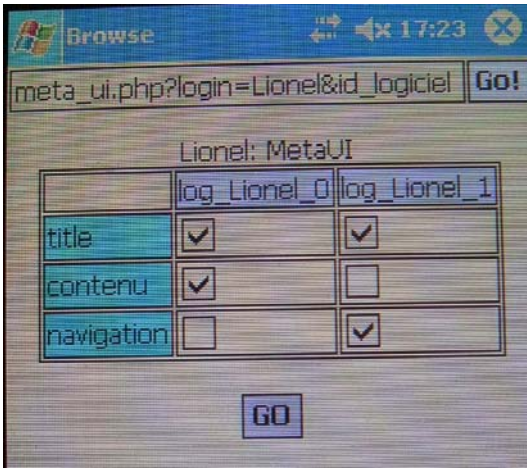

Figure 3: The meta-UI on the PDA.

Figure 4: The title and content of LSB when displayed on the PC.
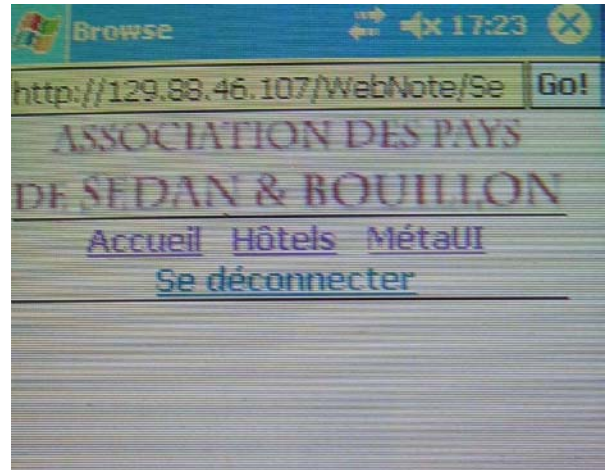

Figure 5: The title and menu on the PDA.

When clicking the hotels link on the PDA, the hotel page appears on the PC. Both pages contain the title (Fig. 6).
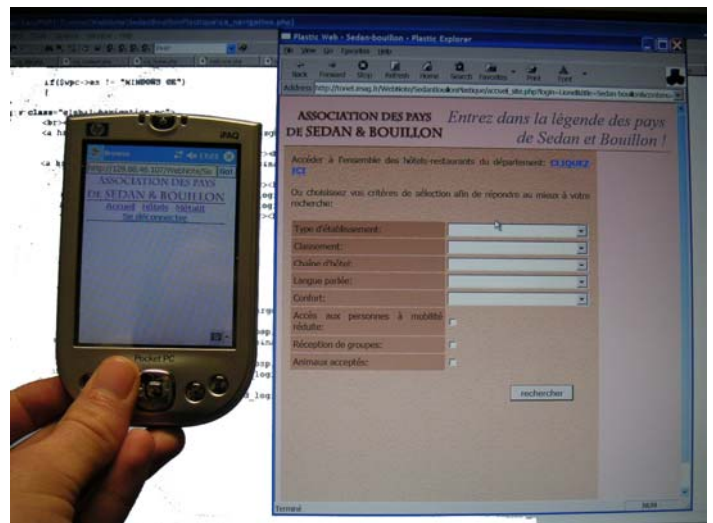

Figure 6: The PDA when used as a remote controller. Both pages contain the title.

When clicking the "MetaUI" link on the PDA (Figure 5), the meta-UI appears on the PDA. To get the meta-UI on the PC, the user has to ask for the navigation menu to appear on the PC. Lionel asks for the menu and the content to be displayed on both the PC and the PDA (Figure 8). The title is no more observable.
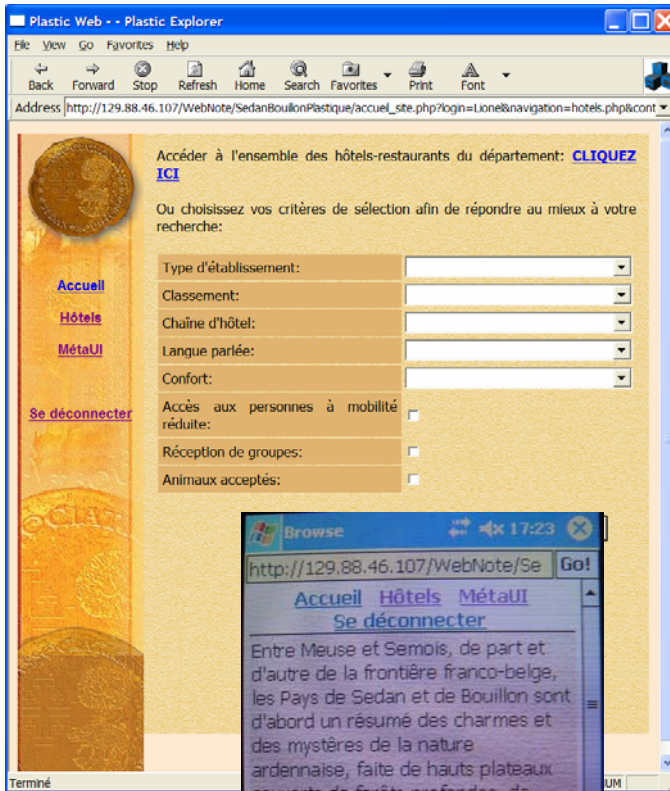
Figure 7: Menu and content on both the PC and the PDA.

When clicking the MetaUI link on the PC, the meta-UI appears on the PC. The user can ask for a full replication of all the workspaces on both the PC and the PDA (Figure 8).
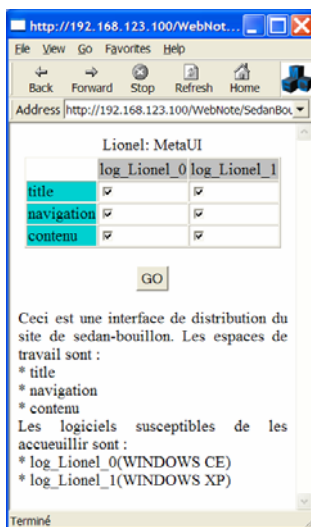

Figure 8: The meta-UI on the PC.

As shown, the user has a full control of the distribution of the workspaces across the resources of the interactive space. Figure 9 shows the PC screen when limited to the title and navigation.
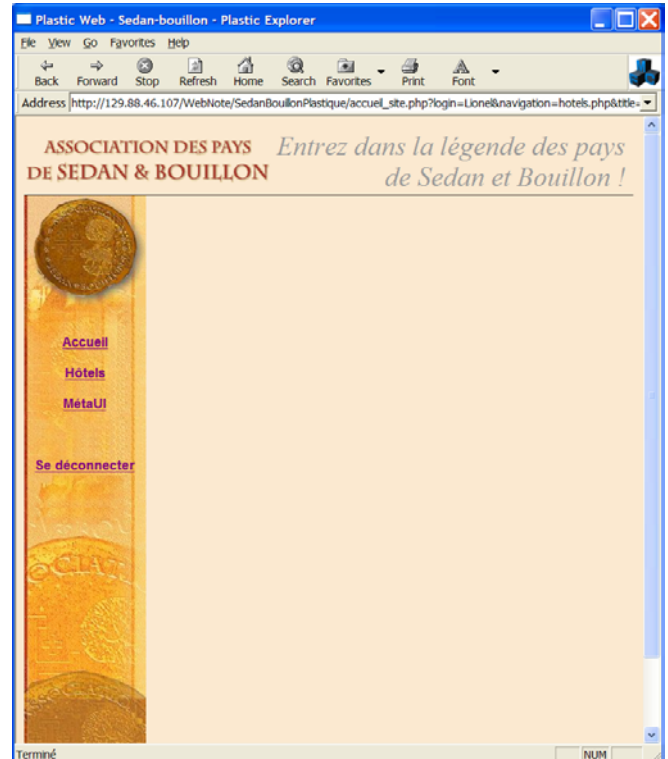

Figure 9: Title and navigation on PC.

2. ISSUES TO BE DISCUSSED

This demonstration raises many issues that could be discussed during the workshop. Among them:

- – The meta-UI for making observable the available resources,
- – The role of the interaction resources (e.g., display surface),
- – The granularity for distribution and capitalization,
- – The meta-description of reusable components,
- – The patterns for composing UIs,
- – The user's control of the adaptation (i.e., the notion of meta-UI),
- – The continuity of interaction (i.e., the notion of transition UI).

3. ACKNOWLEDGMENTS

4. REFERENCES

[1] http://giove.isti.cnr.it/cameleon.html.