CamNote: A Plastic Slides Viewer

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ABSTRACT

This paper presents CamNote, a Plastic Slides Viewer that is able to run on a PC and/or a Pocket PC. The demonstration will consist in migrating the remote controller from a PC to a Pocket PC while preserving the interaction state (i.e., the slide number). When the migration occurs, a remoulding of the remote controller is required to accommodate to various interaction, computation and communication resources. A transition UI is used to provide the feeling of a continuous interaction.

Keywords

Plasticity of User Interfaces, Partial migration, Remoulding, Continuity of interaction.

1. DESCRIPTION OF CamNote

CamNote (for CAMELEON Note) is a presentation software similar, in spirit, to Microsoft PowerPoint. It has been developed during the European CAMELEON project [1] (see deliverable D2.2 for further explanations). CamNote runs on a PC and/or a Pocket PC. It is composed of three components (Fig. 1) that can be distributed over a cluster:

- A slides viewer. On the PC, this viewer allows the insertion of translucent videos provided by cameras (also known as pixels mirrors [Morikawa 98] [Vernier 99]). This component is available for PC's only.
- A notes editor/viewer. Comments can be entered for each slide. This component exists for PC's only.
- A remote controller that allows navigation within the presentation. A remote controller component is available for PC's and for PocketPC's.

The user interface (UI) of CamNote can be rotated. In other words, windows do not need to be parallel to the borders of the display screens. This is used for creating the feeling of a continuous interaction when the remote controller migrates to the Pocket PC (Fig. 2): when the user is enlarging the size of the slides viewer window then the remote controller dynamically weaves itself into the slides viewer window until disappearing on PC (Fig. 3) and appearing on Pocket PC (Fig. 4). This movement is a kind of transition UI. Conversely, if the slides viewer window is shrinked, the UI automatically returns to the configuration shown in Fig. 1.

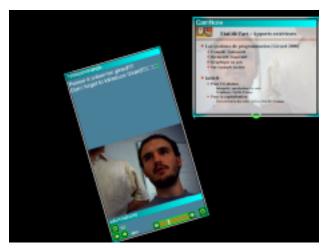


Figure 1. CamNote Centralised UI on a PC workstation. At the top right, the slides viewer window. The remote controller for navigating between the slides, the personal notes viewer, and the video image of the speaker, are presented in a distinct window that can be rotated.

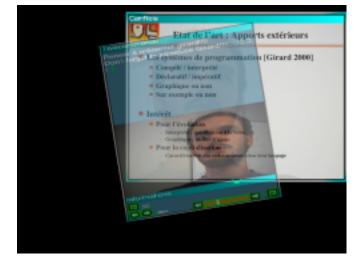


Figure 2. CamNote Centralised UI. The remote controller weaves itself into the slides viewer when the user is enlarging the slides window.

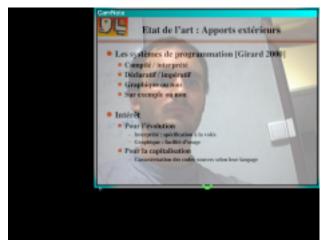


Figure 3. CamNote Centralised UI when the remote controller has disappeared on PC.

If a Pocket PC is available when the user is enlarging the window, then the remote controller migrates to the Pocket PC (Fig. 4). A remoulding of the UI is required to accommodate to various interaction, computation and communication resources. Typically in this configuration, the video is no more observable on the remote controller.



Figure 4. CamNote distributed UI.

2. ISSUES TO BE DISCUSSED

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

- 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),
- The allocation of the plastic services (i.e. sensing the context of use, computing and executing the reaction) in either the applicative components and/or an adaptation middleware,
- The meta-description and capitalization of applicative components.

3. ACKNOWLEDGMENTS

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4. REFERENCES

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