Dynamic-HTML paper metaphors

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ABSTRACT

We demonstrate prototypes that sustain the paper metaphor in two new on-line scenarios: (1) reading annotated works of foreign literature, and (2) paperless medical reporting. See [Brelstaff & Chessa, "Sustaining the paper metaphor with Dynamic-HTML", submitted as a *short paper to HCI'98*] for further detail.

KEYWORDS

Paper metaphor, D-HTML, Open distance learning, CALL, Electronic patient record.

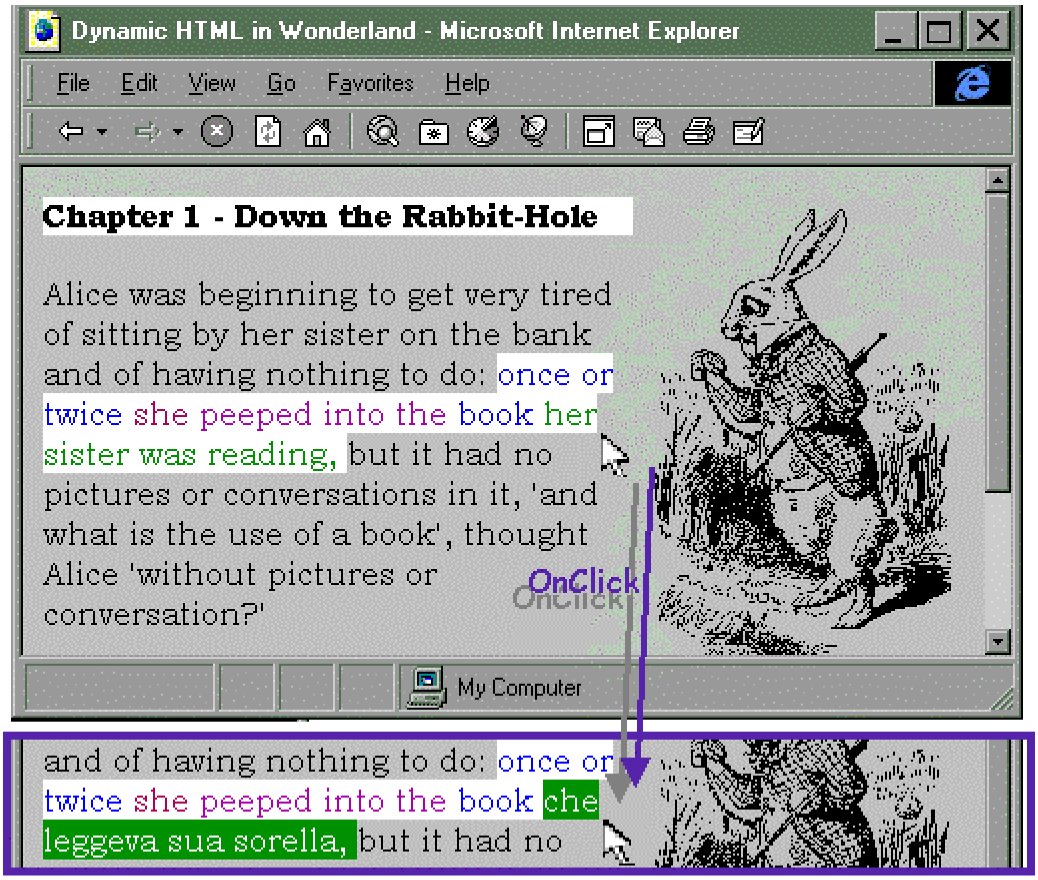

Figure 1: Reading annotated works of foreign literature. This prototype confronts foreign literature undergrad's with original texts from the word go: providing inline annotation designed by tutors to resolve predicted language difficulties, and to instill literary appreciation and interpretation. Coherent phrases are back-lit in white. Clicking on coloured text replaces it inline with annotation. First in more simple terms and then ultimately, as shown, as a translation. *Best viewed in colour.*

INTRODUCTION

The Internet not only provides new channels to exchange paperless documents, but its vast readership, re-motivates the quest to extend the paper metaphor whilst providing an enabling technology dynamic-HTML (D-HTML) to do so. The metaphor of the user interface (UI) endures today due, in part, to its universal familiarity. New users rapidly orient themselves -already knowing how pages should behave or respond. As long as their UI obeys key expected behaviours they often accept extension of functionality. Successful extensions minimise their invasion of the user's visual search capacities: action occurs at, or near where visual attention is already fixed - so normal reading patterns are not disrupted. Here we illustrate prototypes that leverage D-HTML to extend the paper metaphor in two on-line scenarios: (Fig. 1) reading annotated works of foreign literature, and (Fig. 2) paperless medical reporting.

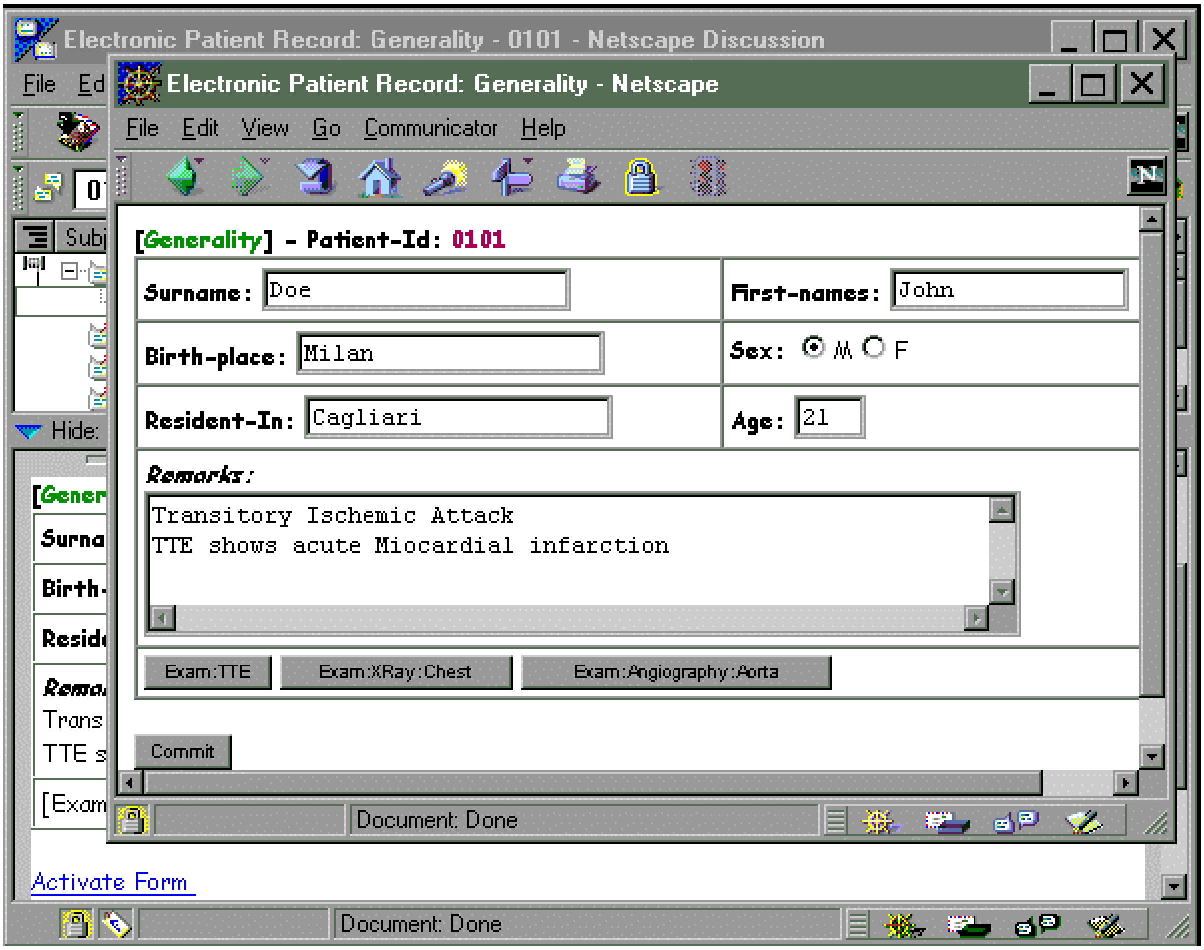

Figure 2: Paperless Medical Reporting. This prototype freezes medical report forms at the moment of their submission so as to create an HTML document with identical layout but with all data field fixed as permanent text. A medic can then digitally sign and email this document to a secure newsgroup thus maintaining a paper-like, electronic patient record. Pre-specified *threads* map onto distinct parts of the patient record (e.g. generality, etc). An "Activate Form" link is included in each frozen form that when clicked launches that form repopulated with the last submitted data fields – using client-side JavaScript to parse the search string of the URL. *Best viewed in colour.*