INTRODUCTION TO THE MINITRACK ON DIGITAL DOCUMENTS IN CONTEXT: ORGANIZATION AND CREATION

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The context for authoring, reading, and writing any document is highly complex. For digital documents, we are only beginning to fully comprehend this context. We lack the advantage of centuries of tradition and practice which characterize the environment that surrounds printed documents and our understanding and expectations about them. Nevertheless, it is only through an understanding of digital documents in the context of how they are written and read that we can understand the roles these documents can assume in business and scholarly environments and how those roles are likely to change in response to technological developments. This minitrack addresses this context of digital documents in terms of issues of both organization—applied to both the documents themselves and specific elements of content within those documents—and creation—the writing of new documents with an emphasis on the incorporation of multiple media and the incorporation of material from existing documents.

The ten papers in this minitrack have been organized into four sessions that reflect major themes concerned with the organization and creation of digital documents. These themes are authoring, collaboration and education, indexing, and retrieval. Each of these themes will now be briefly reviewed.

The authoring session begins with the presentation of the AESOP authoring system by Takeshi Shimizu and his colleagues. This system stresses the intimate relationship between organization and creation by providing the hypermedia author with a powerful outlining tool that accommodates organization of not only the content but also the presentation of that content. The remaining papers then focus on one of the most important issues in the creation of any hypertext document: the management of links. Andrea Caloini’s paper discusses authoring based on “schema-less” structural links, while the paper by Takehiro Shimada and Atsushi Futakata addresses how both the creation and maintenance of link structures may be suitably automated.

The session on collaboration and education takes another approach to the creation of digital documents, dealing with how they are prepared and employed for multiple-person use. Lia Adams and her colleagues discuss their recent experiences with the design and use of computer-based collaborative spaces and the digital documents that are implicitly associated with such engagements in cyberspace. Linda Dembo moves from cyberspace to the classroom and discusses the organizational roles that hypertext can play, even when those roles are not always explicitly supported by digital technology. Finally, Wayne Wolf discusses the creation of educational hypermedia documents in the form of scholarly material about films for publication on the World Wide Web.

In the session on indexing, Lynn Wilcox and John Boreczky discuss technologies for the segmentation and annotation of media content as a basis for the indexing of that content. Lisa Murphy discusses organization from the perspective of business documents. From that perspective she deals with metadata-based descriptors that facilitate indexing.

The final two papers approach the problems of retrieval from two different points of view. The OBI-WAN system of James Cooper and Roy Byrd concentrates on how the appropriate visual interface can facilitate the formulation and refinement of queries. Rui Marinheiro and Wendy Hall, on the other hand, discuss the use of hypertext as an infrastructure for information retrieval.

The overall theme of this minitrack is that the context of digital documents incorporates considerable breadth. Clearly, there is far more to this topic than could be captured in any such minitrack. Nevertheless, in preparing our program, we have tried to provide a representative sample of current approaches to the organization and creation of digital documents that should offer both a useful foothold for future researchers and a flavor of the excitement of the field that is necessary to encourage such future research.