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COURSE NOTES

3

**INTRODUCTION TO
HYPERTEXT AND
HYPERMEDIA**

Chair

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Lecturers

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ABSTRACT

This course gives attendees an introduction to the concepts of hypertext (non-sequential writing) and hypermedia (multimedia hypertext), the background for evaluating hypertext applications, and the ability to structure and design hypertext document systems with good human factors characteristics. Lecturers cover: the definition of hypertext and hypermedia, a survey of applications, an existing hypertext system with demonstration, user interface issues and problems, empirical testing, navigating large information spaces, automatic transformation of linear text files, and future developments.

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About the lecturers:

Jakob Nielsen (course chair) is Assistant Professor of user interface design at the Technical University of Denmark. He is responsible for the human factors/user interface program at this university, manager of the user interface subproject of the European Community DELTA SAFE project, and a user interface consultant for several Danish and international companies in the computer, telecommunications, and financial industries. His research interests include usability engineering and hypertext. Dr. Nielsen's earlier affiliations include the IBM User Interface Institute in Yorktown Heights, NY and Aarhus University, Denmark. He is the author of the book *Hypertext and Hypermedia* (Academic Press 1990, Japanese translation 1991), the European Editor for the *ACM SIGCHI Bulletin*, and on the editorial boards of the *Hypermedia* journal, *Behaviour and Information Technology*, *Interacting with Computers*, and the *International Journal of Human-Computer Interaction*.

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John Leggett is an Assistant Professor in the Computer Science Department at Texas A&M University. His research interests include hypertext/hypermedia systems, computer-supported collaborative systems, human-computer interface, and distributed and object-oriented computation. As Director of the Hypertext Research Laboratory, Dr. Leggett is directing research on next generation hypermedia systems, collaborative information systems and the use of hypertext in education and traditional scholarship. He teaches a graduate course on hypertext and is the principle investigator on a funded, multi-year hypertext research effort. As co-organizer of the Dexter Group, Dr. Leggett is working with other professionals to help define this new field through the generation of the Dexter Hypertext Reference Model. Dr. Leggett is a member of the following Honor Societies: Alpha Chi, Phi Kappa Phi, Upsilon Pi Epsilon. He is also a member of ACM, IEEE, and ICCP Professional Societies.

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Course overview

- Definition of hypertext and hypermedia
- The history of hypertext
- Applications of hypertext
- Survey of some hypertext systems
 - NoteCards
 - KMS (Leggett)
 - Hyperties
 - Guide
 - HyperCard
- Architecture of Hypertext (Leggett)
- Hardware user interface issues
- User Interface issues: Links
- Navigating large information spaces without getting lost
- Information Retrieval
- Writing issues
- Automatically generating hypertext structures
- Implementation issues (Leggett)
- Market diffusion of hypertext (Kain)

Note: References in square brackets [] point to the bibliography in J. Nielsen (1990): *Hypertext and Hypermedia*, Academic Press, San Diego, CA (ISBN 0-12-518410-7).