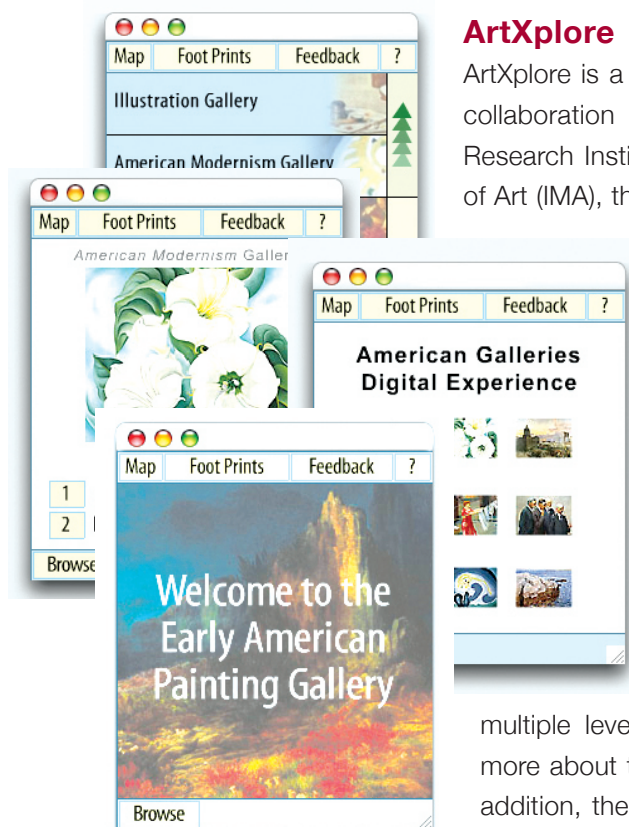## Susan Tennant

Clinical Assistant Professor, Indiana University School of Informatics
Director, CLIOH (Cultural Digital Library Indexing Our Heritage) Project
Principal Investigator

ArtXplore

ArtXplore is a pilot program developed through a collaboration of Indiana University's Informatics Research Institute (IRI), the Indianapolis Museum of Art (IMA), the Herron School of Art and Design, and Purdue's School of Science at IUPUI. Deployed on a PDA (hand-held device), ArtXplore enhances a patron's museum visit with visual- and audio-enriched, multimedia content. The user-friendly interface highlights information on 16 objects selected from the IMA's American Galleries. A wir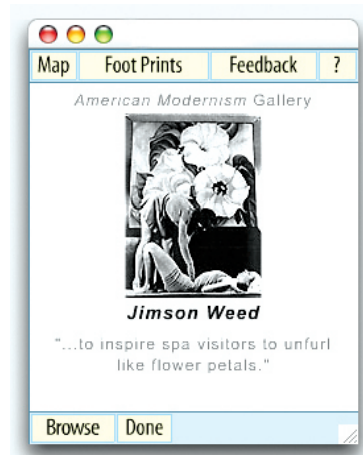eless delivery system provides the patron access to multiple levels of content from which to learn more about the featured art in this collection. In addition, the visitor will be able to review his or her experience and convey comments to the curator from the PDA. The IRI and the IMA will collect data about the visitor's choices with which to improve and enhance future museum exhibits.

Presently, both the Smithsonian Institution and Chicago's Field Museum are developing similar systems; however, ArtXplore is the first of its type in the United States. This is a milestone not only for promoting cultural heritage in Indiana, but also for the Informatics Research Institute at IUPUI in its efforts to foster collaborations with community partners and University departments.

Content and Technology

ArtXplore is unique in that it provides visitors with enhanced audio and visual (graphics, animations, video, panoramas) content tailored to the IMA's American Galleries. Sixteen art objects in twelve galleries are highlighted. Each art object has multiple layers of information to enhance the visitor's experience. The program design starts with a visitor logging into the system; this identifies the person with the PDA. After login, the visitor is given a unique session identification, noting the start

and end of a person's museum visit and associating the individual with the PDA he or she is carrying. The wireless tracking system not only provides information to the patron, but also collects data and generates reports for both the IMA and IRI to use. The reports contain data such as: how long a person spends looking at the art objects; what objects are the most popular; what time of day is most popular; gallery traffic patterns; gender differences in art interest, and other useful information.

ArtXplore Development Team

Content Providers

Harriet Warkel, Curator, IMA American Galleries, Linda Duke, IMA Director of Education, and IMA staffers, Lara Young and Daniel Incandela, worked with Dr. Jean Robertson, Professor of Art History, Herron School of Art and Design, to develop engaging, informative content about the featured art objects. In addition, students from the Herron School of Art and Design, the Indiana University School of Informatics at IUPUI, and the Purdue School of Science at IUPUI developed aspects of the program.

Program Developers

Researchers from the Informatics Research Institute designed the wireless system, developed multimedia content and interactive programming, and assisted in the content development.

Student Involvement

Students of both Professor Susan Tennant and Dr. Jean Robertson assisted in developing aspects of the program. Tennant's students researched and compared a variety of museums using similar technologies; Robertson's student, Joseph Christopher Rulli, researched content.

Principal Investigator: Susan Tennant
Co-Investigators: Dr. Mathew Palakal and Mary Pietrowicz
Project Managers: Barbara Hayes and Robert S. Comer
Content Developer: Dr. Jean Robertson
Flash Developer: Mohamed Hamdouchi
Interface Developers: Jolene Kernick and Devi Haripal
Database Coordinator: Xiao Qiu Bao
Audio Engineer: Ricardo Laranja
Narrators: Joy William and Jeffrey Hostetler
Interface Developer: Shielly Hartanto
System Designers: Stephen Senesac and Meagan Gleber
Technical Support: Scott Orr
Consultants: Dr. Jack Pincus, Kurt Waldhuetter, and Steve Spicklemire