

Interdisciplinary & Cross-cultural Research of Internet Communication



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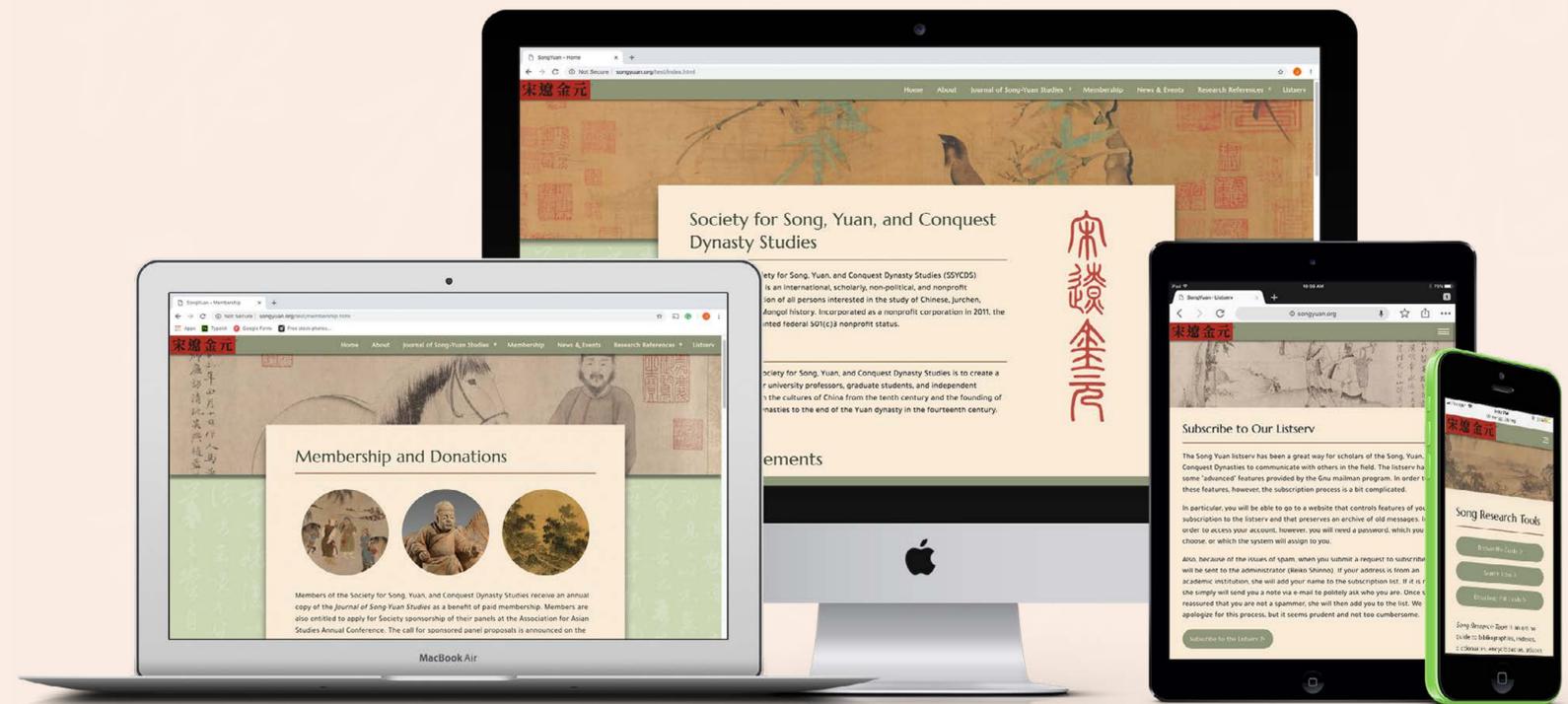
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Abstract

This research focused on the faculty and students interdisciplinary research associated with the professional fields of graphic design, computer science, and cross-cultural study of Chinese history (960 A.D. – 1368 A.D.). This research enabled the graphic design and computer science students to cohesively collaborate as a team. The experience also enhanced the students' analytical and critical thinking as well as their creativity in internet visual communication. The knowledge and skills significantly benefited the students' future professional path. The objective was to explore and develop an advanced website that employs principles of UX friendly design, aesthetic and effective visual communication of a cross-cultural subject, representing the "Society for Song, Yuan, and Conquest Dynasty Study."*

*The "Society for Song, Yuan, and Conquest Dynasty Studies" is an international society committed to the encouragement of the study of Chinese—as well as Jurchen, Khitan, Tangut, and Mongol—history, society, and culture from the founding of the Song dynasty to the end of the Yuan dynasty. The Society was incorporated as a non-profit corporation in 2011 in California and has been granted federal 501(c)3 non-profit status. The members of the society are Historians in many U.S. universities.



Research Narrative

Project Aim

The aim of this project was to research and explore advanced theories, concepts, visual solutions, and technology to achieve the goal of developing a UX friendly, aesthetic and effective website that represents the quality and prestige of a scholarship organization. The solution also aimed to be relatively easy for daily information updating and maintenance. The interdisciplinary research of computer science, graphic design, and Chinese history encouraged the students to explore advanced solutions to solve challenging interdisciplinary and cross-cultural communication problem.

Disciplinary Context & Significance

Website development essentially is an interdisciplinary collaboration, involving professional fields of graphic design, computer science, public communication, and a given subject of a website associated with a discipline. The significance of this interdisciplinary team collaboration enabled the students to integrate artistic creativity of graphic design with the knowledge and skills of computer science in depth and breadth for cohesive UX friendly website development.

Furthermore, the research subject was associated with a cross-cultural subject, focusing on scholarship research and publications of Chinese history from Song to Yuan Dynasty (960 A.D. – 1368 A.D.). The students obtained knowledge of the social and cultural context during that historical period, understanding different philosophies, aesthetic styles, meanings and connotations of imagery during Song and Yuan Dynasties which still influence certain aspects of contemporary Chinese culture. The research team gained insight to develop aesthetic and effective solutions that communicate the quality of the scholarship activities of the scholarship organization.

The knowledge, skills, research methodology, and experiences obtained during the research process significantly strengthened the team members' analytical and critical thinking capability, and empowered their ability in future professional development, especially for contemporary global interactivities.

BEFORE



AFTER



Methodology

Faculty and students studied, discussed, and explored UX design theories, conceptual approaches, artistic principles, World Wide Web Consortium programming guidelines, and methodology:

1. Principles of UX friendly design

The principles of UX design emphasize the mindset of the problem solvers. The theoretical approach focuses on thorough research, analytical and critical thinking, and comprehensive understanding of the users' needs and ease of accessibility. The theories and approach were the essential guideline of this research to first study and analyze the mission and characteristics of the organization "Society for Song, Yuan, and Conquest Dynasty Studies". The communication function to the members and audiences was defined and UX friendly information architecture, content structure, and visual navigation system were established.

2. Principles of aesthetic & effective visual design

The artistic and effective compositional principles were applied into the development of visual solution, including aspects of conceptual approach, hierarchy

and clarity of information structure, balance of spatial relationship, effective color scheme, grid system, quality of typography, artistic integration of images and texts, and overall stylistic approach. Various conceptual approaches and visual solutions were explored, and the compositions were evaluated for the effectiveness of public communication.

3. Guidelines & technology of W3C standards

W3C is the main international standards organization for the World Wide Web, publishing most updated website development technology and standards. The programming technology was employed to develop the user-friendly website.

Research Process:

- Studied the aims of the research
- Researched the subject & associated cultural context
- Defined hierarchy & clarity of the contents

- Developed information architecture chart & information structure
- Explored UX friendly design of website structure, visual design & programming technology
- Established visual navigation system
- Developed design conceptual approaches
- Pencil sketched options of visual solutions
- Created digital screen compositions of the website
- Constructed the interactive website with programming technology
- User-tested the website on different browsers & computer platforms.
- Each of the steps above involved team discussion & evaluation
- Got feedback from the organization during development process
- Revision & refinement based upon the feedback and user-testing
- Published on internet

References

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