

## Trailblazing for the World-Wide Web

This year we designed, built and began testing trailblazing tools for the World-Wide Web. These tools allow users to create and maintain ordered sequences of web pages that others can follow. We began our project by designing multiple templates for displaying such a trail. Most test subjects found some features of the designs useful, while others were more particular about other features. For instance, one template displayed the trail in a frame-based format. Some test subjects found this easy to use and aesthetically pleasing, while other subjects preferred a way of displaying the trails without frames.

After this testing phase, we determined that allowing users to specify some preferences would be desirable, but in the constraints of the school year, we decided to implement a default in such a way that we could add in user preferences later. For example, in our current default trail representation, we have a header and footer which give the trail information. Some people did not like having both because they felt it cluttered the page. With the use of preferences, we could allow the user to specify whether they want both the header and the footer or not.

Once we had developed a way to display trails we worked on two tools for creating them. We chose to appeal to users with varying experiences by implementing both a faster tool that requires computer expertise, and a slower, but more user-friendly tool that uses a WWW interface.

Overall our research project was a valuable experience, and it has encouraged each of us to continue doing research in Computer Science. We were only able to begin testing of the tools we built this year. Next year we hope to explore usability issues further and design the preferences mentioned above. Since we have found this experience rewarding and we believe it encourages women starting out in the field to continue with Computer Science, we intend to recruit first and second year women to work with our team. This will give the more senior research team members a chance to be mentors, as well.

One observation we made was that it became difficult to coordinate the research project with course work, and at times we had to adjust our schedules to fit these needs. For example, we were expecting to be able to test out tools for creating trails before the end of the semester but due to spring break, we were not able to completely meet this goal.

We found that meeting once a week or more as a group with the faculty mentor was effective. We also communicated by e-mail frequently.