Final Project Proposal

John Fritch
Diane Ghorbani
Leticia Valdez

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Project Description

*Group Voice is intended for groups in which leadership solicits opinions from a distributed membership.*

It is generally the responsibility of leaders to make decisions on issues of interest to their group. This decision-making is not usually done in a vacuum, but rather involves obtaining the opinions of group members. When the group is unable to meet at a central location and time to discuss issues, it becomes challenging for the leaders to gather the members’ opinions. Many groups try to manage this process via email or electronic bulletin boards where various parties present their opinions in numerous discussion threads. These processes provide the opportunity for opinions to be overlooked in a myriad of responses, as well as leaving leaders with the time-consuming process of accumulating and summarizing the results. Furthermore, these processes are not well suited to centralizing the documentation used to arrive at a decision and maintaining a history of the decision-making process.

Group Voice addresses these issues via a centralized web application that enables an organization to:

- Present questions
- Collect the opinions
- Provide leaders with a summary of the group’s opinions
- Archive questions and opinions for future reference

Project Team

The project team consists of John Fritch, Diane Ghorbani and Leticia Valdez. We share an interest in understanding the areas of human computer interaction and the impact of information technology on organizations.

We have designated each member to be the lead on specific areas as follows:

- Database Management & Project Management – Diane Ghorbani
- Application Development – John Fritch
- User Interface Design – Leticia Valdez

Previous experience and subject matter interest were key in the division of responsibilities; however, each member is involved in all facets of development.
Development Partner

We are developing Group Voice in partnership with the Latino Issues Forum (LIF), a public policy and advocacy institute. LIF has three directors with decision-making responsibility and approximately 20 employees, who are located at three sites in California.

The directors like to get input from staff when making decisions; however it is difficult to get staff together at the same place and time. They have indicated that some of their best discussions occur during semi-annual retreats. During retreats, all members of the organization have a chance to provide opinions on issues of interest to LIF. However, these retreats require a lot of advance planning and only occur twice a year.

In between retreats, the leaders request input via email or one-on-one discussions with knowledgeable members. Neither method has proved to be as fruitful as the retreat discussions. LIF leadership would like to create a forum for discussion that is not dependent upon the group coming together.

Prior work

During the Fall 2002 semester, we developed an initial prototype of Group Voice as part of our work in Database Management (IS257) and Electronic Publishing (IS290-1).

Group Voice is a web based collaborative tool containing three views: participant, leader and administrator. The participant view lists the open questions (with related options and supporting documentation). The leader view allows quick review of participation levels and levels of support for the various proposed options. The administrator view lists the questions the administrator is managing.

For the first prototype, the database is Microsoft Access; the application server is ColdFusion; and the web server is Microsoft IIS. These components facilitated the rapid development of the prototype.

There are three types of tables within the database: participant tables, question tables and opinion tables. The participant tables include information such as email address, password and status (leader, participant, administrator). The question tables include information such as the options, supporting documentation and close date. The opinion tables incorporate information regarding the arguments and concurrences provided by participants.

The combination of ColdFusion and HTML has been used to create our Interface design. ColdFusion allows for dynamic creation of all pages within the application, based upon information maintained in the database.
**Proposed Deliverables**

Having addressed the majority of the technical design issues in the Fall, we now plan to address the following social and organizational issues which will determine the effectiveness of Group Voice:

- Determining what information leaders consider most valuable in assessing group member opinions on issues. Via *Directed Study (IS298)* with Peter Lyman and class work in *Group and Organizational Approaches to Information System Use (IS211)*.
- Develop means of summarizing/presenting/filtering information from membership for group leaders in a meaningful way. Via *Directed Study (IS298)* with Peter Lyman and class work in *Group and Organizational Approaches to Information System Use (IS211)*.
- Conduct Usability Testing with LIF to improve the application. Via prior and current participation in *User Interface Design and Development (IS213)* and *Needs and Usability Assessment (IS214)*.

In addition, we will migrate the database from Access to MySQL and refine the application’s ColdFusion code.

**Evaluation Criteria**

Our goal is to produce a working application that LIF can use to elevate the quality of ongoing opinion gathering to a level comparable to that achieved during their semi-annual retreats.

**Proposed Timetable**

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<tr>
<th>Date</th>
<th>Task</th>
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<tbody>
<tr>
<td>February 7, 2003</td>
<td>Submit Project Proposal</td>
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<tr>
<td>February 16, 2003</td>
<td>Complete Database Migration</td>
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<tr>
<td>February 28, 2003</td>
<td>Complete research on organizational decision making</td>
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<td>Complete interviews with LIF</td>
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<td>March 21, 2003</td>
<td>Submit Progress Report</td>
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<td>Complete First Round of User Testing with LIF</td>
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<td>May 1, 2003</td>
<td>Complete Pilot Usability Study</td>
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<td>May 13, 2003</td>
<td>Complete Application</td>
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<td>Submit Final Project Report</td>
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Project Rationale

Group Voice is an appropriate capstone project because it attempts to utilize IT to enhance an organization’s information management by improving their opinion gathering process. To be successful, we must bring together the following technical and social concepts that are fundamental for the SIMS program:

- Organization and representation of information (IS202)
- Social issues in information systems design and management (IS204)
- Technical side of distributed computing (IS206)
- Analysis of Information Organizations and Systems (IS208)
- Database Management (IS257)
- User interface design and human-computer interaction (IS213)
- Needs and usability assessment (IS214)
- Transmission and use of information within groups (IS211)