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Introduction

The iUser Group (iUG) is a team of undergraduate and graduate students at Southern Polytechnic State University (SPSU) currently evaluating the Engineering for Change (E4C) website. Through systematic usability testing, iUG will make recommendations for the website to improve user experience. The usability test process includes:

- Researching the E4C site and typical users through information provided by the project sponsors and independent site inspection.
- Completing a heuristic evaluation of the site.
- Developing a usability test plan including participant recruitment goals and specific tasks and scenarios.
- Conducting a formal usability test with representative users as participants.
- Making recommendations based on the results of the testing.

Following the E4C website launch in January 2011, traffic has increased steadily. No usability testing has been performed either before or since the launch.

Sponsor Meetings

E4C stakeholders are interested in learning more about the site’s user experience for both existing and prospective members. The iUG team met via GoToMeeting on August 23 and 30, 2011 with the two E4C sponsors, Candace Beach and Kasmore Rhedrick.

During our first meeting with the E4C sponsors, we received background information on the site and organization as well as specific usability goals from the sponsors:

- Do users understand the purpose of the website as a content-based and community site?
- Can users find information that is of interest to them?
- Is the basic navigation of the website intuitive?
- Does the website use unfamiliar terminology?
- Are users willing and able to successfully become E4C members?
- Are users interested in following projects using social media resources?

To understand existing site visits and membership, we examined available data on the website’s traffic. According to the Google Analytics provided by the sponsors, from January 4, 2011 to August 19, 2011, the majority of visitors reached E4C from referring websites. Most traffic came from users in the United States, followed by India.

During the second sponsor meeting, we learned the News section received the most page views. We also learned more about how E4C uses targeted marketing through conferences and meetings, ads in magazines, and ads on websites to attract domestic users. There is a local liaison in India, which accounts for a high volume of Indian users.

The sponsors are most interested in new visitors first viewing the Registration and About Us pages. After traffic increases and membership grows steadier, they want users directed to the Area of Interest, Workspaces, and Members pages to have opportunities to research and collaborate.
The information gathered in these two meetings formed the basis of our two user personas as well as direction for our heuristic evaluation.

**Test Plan Overview**

This document describes the plan for usability testing to be performed on the E4C. In addition to the background information provided above, we will describe the:

- Problem Statement and Test Objectives
- User Profile
- Methodology
- Team Roles and Responsibilities
- Test Schedules
- Test Procedure
- Project Deliverables
- Project Timeline
- Questionnaires and other materials used to direct and complete testing
  - Appendix A: Participant Screening
  - Appendix B: Pre-test Questionnaire
  - Appendix C: Video Consent Form
  - Appendix D: Moderator Script
  - Appendix E: Post-test Questionnaire
  - Appendix F: Persona for this study
  - Appendix G: Task Flowchart

All testing will be performed between November 1, 2011 and November 18, 2011.
Problem Statement and Test Objectives

The purpose of the E4C usability test is to collect feedback about the site’s user experience and provide suggestions for improvements based on the goals outlined in the sponsor meetings.

The E4C usability testing will assess user experience of the E4C website and suggest improvements for ease of navigation, research, and project collaboration.

We will address the following goals and questions through usability testing:

- **How do users navigate the site?** We will ask participants to give us their overall impression of the homepage including what they think they can do on the site. They will also be directed towards areas of the site related to research.

- **What collaboration tools are used? Are they successful?** Participants will be asked to explore social media outlets and set up workspaces.

- **How do members communicate with one another?** This will also be addressed through each participant’s experience with the E4C social media outlets and experience on the workspace. Initial reactions on what users can do on the site should also provide some insight.

- **How likely are users to become members of the site? What do they think about the registration process?** Users will be asked to become members of the site and fill out profiles. We will ask their thoughts about the process and observe their engagement with the process.

This list was created based on information gathered from the sponsors and findings from the heuristic evaluation conducted by the iUG team.
User Profile

From our persona research, we selected a user profile of a typical undergraduate engineering student which will provide a large pool of potential candidates at Southern Polytechnic.

The characteristics of the undergraduate persona are (see Appendix F):

- Engineering or engineering technology major
- Likes to travel
- Technically savvy
- Uses social networking – Twitter, Facebook, LinkedIn
- Interested in working on collaborative projects, potentially with a humanitarian focus

Participant Incentive

IEEE has provided $25 Amazon gift cards as incentives for users participating in our study. Incentive cards will be distributed following collection of the Pre-test Questionnaire and signed Video Consent form.
Methodology

This section describes the methodology for conducting usability testing on the E4C website, including:

- Participant information
- Equipment in the usability lab
- Task and scenario overview
- Test configuration

Usability Testing Participants

The iUG team will conduct six sessions with undergraduate engineering students, while recruiting a total of eight to allow for backup participants. These participants will be recruited from all engineering and engineering technology departments at Southern Polytechnic State University. We will use a participant screener to select students matching our user profile (see Appendix A). Qualified participants will complete a pre-test questionnaire on affiliations with engineering or humanitarian organizations and their interest in applying engineering skills to humanitarian efforts.

The first participant will take part in a pilot test where we evaluate our testing process in addition to scenarios outlined above.

Length of Sessions

Each session will be one hour, with the following segments:

- Welcome and pre-test: 5 minutes
- Task scenarios: 50 minutes
- Post-test questionnaire: 5 minutes

Tasks & Scenarios

The tasks created for each scenario are based on a combination of our heuristic evaluation findings and feedback from project sponsor Kasmore Rhedrick.

According to Kasmore, primary areas of concern are:

- The site’s content
- Collaboration methods
- Sense of community

The heuristic evaluation considered each of these concerns along with typical goals and tasks for an engineering student user profile.

We created five scenarios based on different parts of the website:

1. E4C homepage
2. Research areas
3. Registration
4. Workspaces
5. Social networking sites
Within each scenario, participants will attempt tasks related to the highest areas of concern identified through heuristic evaluation and sponsor feedback.

**Lab and Testing Equipment**

The usability testing will be conducted in the two-room student lab at Southern Polytechnic State University, which consists of a participant room and a control room. A one-way mirror separates the rooms.

**Participant Room**

Participants will sit at a standard desktop computer workstation with internet access. The participant room contains the following computing and monitoring equipment:

- 20" Viewsonic VG2030WM Dell Monitor
- Desktop Computer by Sun Microsystems
  - Windows XP Professional
  - Internet Explorer 8
- Digital desktop camera recording a backup to the computer
- Three wall-mounted cameras for different views
- Trackerpod camera
- User phone

**Control Room**

The test team will observe and record user sessions from the control room. Control room equipment consists of:

- Logger Station computer and 20” monitor
- Morae logging software to record sessions
- DVD/HDD recorder with video selector
- Two 20” preview screen monitors
- Video Mixer Board
- Remote desktop camera controller
- Observer 1 TV – Video Editor
- Observer 2 TV – Help Desk
- Help Desk Phone
- Audio Mixer
- Scanner/Photo Copier/Printer

**EyeGuide**

Grinbath’s EyeGuide is an eye-tracking device provided for iUG to use during testing. The EyeGuide is a lightweight, wireless device designed to fit around a user’s head.

The EyeGuide will be used in the later scenarios to provide additional data for analysis.

**Conducting the Test**

Participants will be guided through each session by a moderator who will begin with an overview and briefing of the test environment. The moderator will then introduce each scenario.
The moderator will sit with the participants for the initial scenarios to ensure user understanding and comfort level, and will return to the room between scenarios to explain the next steps. The moderator will let participants complete each task independently without direction, and will only prompt and probe with appropriate questions as needed.

All of the participant’s actions will be recorded through Morae logging software and video. The participants will be encouraged to think aloud throughout the session. Each session will conclude with a post-test questionnaire and a standardized 10-question questionnaire known as the System Usability Scale (SUS), which is conducted through Morae.
Team Roles and Responsibilities

The iUG team designated the following roles for the usability testing team.

Moderator

The moderator is responsible for direct interaction with the participants during the usability testing sessions. The moderator will use a script to explain the testing process to each participant and answer any initial questions. Additionally, the moderator will provide and collect the pre-test questionnaire, video consent form, and post-test questionnaire.

The moderator will prompt users when necessary and respond as needed to comments or concerns.

John Weaver and Lydia Peavey will alternate as the moderator. Each will moderate three sessions.

Help Desk Support

A help desk line is available in case participants get stuck on a task or encounter technical difficulty. The help desk support person will provide the least amount of instruction to assist the participant and learn more about the problem from the user. This person will also support the technician and moderator by ensuring equipment is functioning properly.

John Weaver and Lydia Peavey will alternate as the Help Desk Support person.

Logger

The logger will use Morae to log observations during the testing. These observations will include direct quotes from participants, descriptions of their actions, comments from the team, and nonverbal observations such as sighs and body language. A logging system will be established to ensure consistency in coding observations.

Carol Njama and Allison Smith will alternate as logger with each logging three sessions.

Technician

The technician’s primary responsibilities include:

- Setting up and monitoring six cameras.
- Setting up, calibrating, and recalibrating EyeGuide as needed.
- Changing camera views of the participant/screen as needed.
- Recording each session via DVD.
- Checking proper functionality of the usability lab equipment before each session.

Carol Njama and Allison Smith will alternate as the Technician.
**Test Schedule**

Below is a tentative schedule for the usability testing sessions. These are subject to change based on participant availability and other external factors. The testing schedule is arranged so that:

- There is enough time to prepare the test area.
- We are able to accommodate enough participants.
- The team will be able to discuss findings after each day of testing.

November 1, 2011 Tuesday 6:00-8:45pm (Pilot Test)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 – 7:30</td>
<td>Team walks through procedures for initial test</td>
</tr>
<tr>
<td>7:30 – 8:30</td>
<td>Pilot Test Participant 1</td>
</tr>
<tr>
<td>8:30 – 8:45</td>
<td>Review participant data and conduct debrief</td>
</tr>
</tbody>
</table>

November 11, 2011 Friday 12:00-3:30pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 – 12:45</td>
<td>Team arrives and prepares test area</td>
</tr>
<tr>
<td>12:45 – 1:45</td>
<td>Test Participant 2</td>
</tr>
<tr>
<td>1:45 – 2:00</td>
<td>Reset test area for next session</td>
</tr>
<tr>
<td>2:00 – 3:00</td>
<td>Test Participant 3</td>
</tr>
<tr>
<td>3:00 – 3:30</td>
<td>Review participant data and conduct debrief</td>
</tr>
</tbody>
</table>

November 15, 2011 Tuesday 5:45-8:45pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:45 – 6:15</td>
<td>Team arrives and prepares test area</td>
</tr>
<tr>
<td>6:15 – 7:15</td>
<td>Test Participant 4</td>
</tr>
<tr>
<td>7:15 – 7:30</td>
<td>Reset test area for next session</td>
</tr>
<tr>
<td>7:30 – 8:30</td>
<td>Test Participant 5</td>
</tr>
<tr>
<td>8:30 – 8:45</td>
<td>Review participant data and conduct debrief</td>
</tr>
</tbody>
</table>
Usability Test Plan for E4C Website

November 18, 2011 Friday 12:00-3:30pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 – 12:45</td>
<td>Team arrives and prepares test area</td>
</tr>
<tr>
<td>12:45 – 1:45</td>
<td>Test Participant 6</td>
</tr>
<tr>
<td>1:45 – 2:00</td>
<td>Reset test area for next session</td>
</tr>
<tr>
<td>2:00 – 3:00</td>
<td>Test Participant (Backup)</td>
</tr>
<tr>
<td>3:00 – 3:30</td>
<td>Review participant data and conduct debrief</td>
</tr>
</tbody>
</table>
Usability Test Plan for E4C Website

Test Procedure

The iUG team will begin the test with an overview and briefing of the test environment, followed by an explanation of scenarios. Each session is concluded with the post-test questionnaire and thanks for participation.

Overview/Briefing (5 mins)

The moderator will work from a script to welcome the participant, present and collect the signed video consent form, and administer the pre-test questionnaire. Next, the moderator will explain the procedures and describe the process and importance of thinking through their thoughts and actions out loud.

Scenario 1: Overall Look and Feel (5 mins)

You’ve been given a project by your engineering professor to research an area of interest on the Engineering for Change (E4C) website. Your professor says, “We are going to be working with Engineering for Change this semester. Go learn about the organization and the types of research and projects you can get involved with through the website.”

Take a moment to look at the homepage of the E4C website without clicking on anything. Once you familiarize yourself with the homepage, tell us your first impressions of the website.

Consider these questions:
- What do you think this site is about?
- What do you think you can do here?
- How would you get started? Now click on the first link you would choose to get started, then stop and give us your impressions at this point. Is this what you expected to see? What would you want to do at this point?

Scenario 2: Research Project (10 mins)

You are focusing your project on water. Your professor wants you to find information on the use of water filtration systems in developing countries. How would you go about getting this information?

Scenario 3: Register (10 mins)

Now that you are more familiar with the website, you decide that you want to become a member of E4C. Go ahead and register, but be sure not to use any passwords that you would normally use for other accounts.

Below are some potential questions to ask the user:
- What are your thoughts about the registration requirements?
- What do you think you can do now that you are a registered user?
Scenario 4: Workspace (15 mins)

You develop an idea for a water purification project and want to obtain input from other E4C members. Determine how you would go about this process.

Once you decide how you’d like to share your project, use the following starter information:

Focus: Water purification

Location: Guatemala

Description: Home water filters consisting of a porous clay pot placed in a five-gallon plastic bucket with a spigot.

Include any additional information you think would be helpful or necessary to solicit feedback and participation from site members.

Scenario 5: Social Networking (10 mins)

Your professor requires you to collaborate on your water project and find additional information through Engineering for Change’s social networking sites. What sites would you visit first and how would you share information about your project with others?

Below are potential questions to ask the participants:

- What did you think about the type of information on each site?
- How would you rate the usefulness of the information?

Post-test (5 mins)

The moderator will ask the participant to complete the post-test questionnaire (see Appendix E). Afterwards, the moderator will thank the participant and reiterate that information from the test will be used to make recommendations on how to continue to make improvements to the E4C website.
Project Deliverables

The iUG team will provide the E4C sponsors with:

- A final report highlighting the findings and recommendations.
- An oral presentation of the team’s findings in Microsoft PowerPoint.
- A 10-minute video highlights tape.

Project Timeline

This is the project timeline that the iUG team is following:

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/18/2011</td>
<td>Tuesday</td>
<td>Prepare for walkthrough [completed]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start recruiting process for 8 participants (including pilot participant and two backups)</td>
</tr>
<tr>
<td>10/25/2011</td>
<td>Tuesday</td>
<td>Conduct walkthrough</td>
</tr>
<tr>
<td>11/01/2011</td>
<td>Tuesday</td>
<td>Conduct pilot test</td>
</tr>
<tr>
<td>11/11/2011</td>
<td>Friday</td>
<td>Conduct first round of testing</td>
</tr>
<tr>
<td>11/15/2011</td>
<td>Tuesday</td>
<td>Conduct second round of testing</td>
</tr>
<tr>
<td>11/18/2011</td>
<td>Friday</td>
<td>Conduct third round of testing</td>
</tr>
<tr>
<td>12/06/2011</td>
<td>Tuesday</td>
<td>Submit final report and PowerPoint presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conduct oral presentation</td>
</tr>
</tbody>
</table>
Appendix A: Participant Screening

Introduction
Hello, my name is ___________. I'm a student at Southern Polytechnic State University. My class is currently recruiting participants for a website usability study. We are seeking current engineering and engineering technology students to take part in usability testing for a humanitarian engineering website.

Please be assured, we are not trying to sell you anything, and we are simply interested in your opinions. This survey should last no more than a few minutes. If you qualify for this study, we would like you to participate in a one-hour session at our facility. All participants who qualify and participate in the study will receive a $25 gift card as our thanks for their participation. Would you be interested in participating?

Yes No (disqualify)

If no, I appreciate your time, thank you and have a great day!

General Requirements
Thank you – I just have a few questions to begin:

*Are you currently an engineering or engineering technology student?*

Yes No (disqualify)

*What is your current year in school?*
Freshman Sophomore Junior Senior Graduate (disqualify)

*Are you aware of any humanitarian engineering websites or online communities? Which?*
None Any others E4C (disqualify)

*The study process involves videotaping the usability session. Are you willing to consent to videotaping?*

Yes No (disqualify)

*The sessions are approximately 1 hour, and are currently scheduled for Tuesday evenings 11/1 and 11/15, and Friday afternoons 11/11 and 11/18. Would you be available for one or more of these times?*

Yes No (disqualify)

For any disqualifications:

*I'm sorry; unfortunately, you do not qualify for our study. Thank you for your time!*
Participant Details

What is your major? Engineering or Engineering Technology?

Civil  Mechanical  Electrical  Industrial  Software  Other _________

Engineering  Engineering Technology

Are you a member of any student or professional organizations?

Yes  No

If yes, which? (Look for examples from the following, list any others provided)

Engineering – ASCE, ASME, GSPE, IEEE, IIE, ITE, NSBE, SHPE, SME, SWE
Philanthropy – Service fraternity, Key Club, etc
Diversity and inclusion – GSA, ISA, etc

Have you been involved in any volunteer projects or humanitarian organizations?

Yes  No

If yes, what type: domestic/international, area of interest

Examples: Habitat for Humanity, local beautification/clean up, animal rescue, meal serving

If international, where and why?

Do you have any interest in developing regions? Which area(s) and why?

How often do you travel?

5+ times a year  3-4 times a year  1-2 times a year  Less than once a year

Why do you usually travel?

Pleasure  Family  Work

Where do you usually travel?

Domestic  International

Do you use any of the following social networking sites? How often? What do you use them for?

Facebook  Once a day or more  Several times a week  Once a week or less

Twitter  Once a day or more  Several times a week  Once a week or less

LinkedIn  Once a day or more  Several times a week  Once a week or less
Do you ever use online communities for school research, job seeking, networking, or other engineering-related information sharing tasks?

Yes  No

Please explain.

(None of these questions are automatic disqualifiers. Preferred/ideal answers are bold where applicable. Assess qualities across all areas. For strong candidates, continue directly to scheduling if they are available. For all other candidates, thank them for their time and inform that you will review their information and contact to schedule if necessary.)

**Qualification**

Thank you for your time – you’ve qualified for our study! Let me get your contact information

Name: ______________________

Email: ______________________

Phone: _____________________

Alternate phone: ______________

Which test date(s) do you prefer? (Circle one or more)

Tuesday evening  11/1  11/15

Friday afternoon  11/11  11/18

We will be in touch to confirm whether you have been selected and, if so, what your test date and time are. Thank you again for your time and assistance!
Appendix B: Pre-test

The purpose of this questionnaire is to help us get a better understanding of potential users of the website we'll be working with.

Describe your motivations for choosing engineering or engineering technology as your field of study:

Describe any volunteer projects you’ve participated in – type, region, focus:

Describe any interest in philanthropic or humanitarian initiatives or associations:

Describe any interest with or connections to regions outside the US:

Describe any interest in humanitarian projects for developing regions:

Do you have any experience in applying your engineering knowledge or interest to humanitarian activities? How? If not, can you think of ways you might want to do this?

Please note that additional questions may be asked to better understand certain responses from the participant screener.
Appendix C: Video Release Form

I hereby give my permission to be videotaped as part of my participation in the Engineering for Change (E4C) usability test conducted on ___/___/___ (date) at the Usability Center at Southern Polytechnic. My first name only may be reported in association with the session results.

I understand and consent to the use and release of the video recording to the Usability Center and to the sponsor. I further understand that the video recording and any highlights extracted from the recording may be used for review by the sponsor and by the Usability Center. Representative video excerpts may also be used within presentations to the sponsor, at professional meetings, and as part of research.

I give up any rights to the video recording and understand that the recording may be used for the purposes described in this release form without further permission.

I understand that if for any reason I do not want to continue I can leave at any time during this recording session.

________________________________  ____________________________________
Printed Name      Date

________________________________
Signature

Thank you!

We appreciate your participation.
Appendix D: Moderator Script

Introduction

Hello, my name is [John Weaver, Lydia Peavey] and I will be walking you through our testing today. I am reading from a script to ensure that all participants receive the same information.

Thank you for agreeing to participate in this website evaluation. Today we are asking you to serve as an evaluator of this website and to complete a set of scenarios. Our goal is to see how easy or difficult you find the site to use. We are going to use the information we receive from you today to help make recommendations on how to make this website easier to use.

Videotaping Permission

We will be recording you today. The recording includes an exact view of the screens you will see and actions you complete on the website, as well as your reactions to the site. We will use the footage from the session to review the test and may include some clips in a presentation to the project sponsors.

By signing the video consent form, you give us permission to record your actions today [provide consent form, collect after signing – give participant gift card with thanks.]

Team Introduction

As test moderator, I’m here to describe the testing process and explain your role in the evaluation. During this session I will not be able to offer any suggestions or hints. There may be times, however, when I’ll ask you to explain something you said or did to give us a better understanding.

On the other side of this mirror are three other members of our usability team and possibly our advisor. They are recording and observing the session and your comments and reactions to gain insight from your experience. If you would like, the team would like the opportunity to meet you after the session and thank you for your participation today.

Introduction to the Room

Before we begin, I would like to give you a quick tour of the room. There are several cameras positioned throughout the room [point to cameras]. However, we are mainly focusing on the screen that you are using.

There is a microphone here to record your voice [point to microphone].

If for any reason you get stuck and feel like you need help, you can pick up this phone to call our helpdesk member, who is located on the next room. [Demonstrate/test how to do this].
Usability Test Plan for E4C Website

EyeGuide Eye Tracking

We will be using an eye tracking system to track where you are looking at on the screen. There is a headband with a camera attached that you will need to wear at a certain point in the session [show the eye tracking device].

We will need to calibrate the device when we want you to use it. It is possible that we will need to recalibrate it after that. This will be done by our technician in between tasks.

Introduction to Test

Today we will be taking a look at a website called Engineering for Change. We want to emphasize that we are observing how easy or difficult the website is for you to use. There are no wrong answers and our goal is to provide feedback to the sponsor on how to improve the design of the site based on what works for you and what doesn’t.

As we go through the session, we would like you to think aloud. Speak your reactions to different parts of the site out loud. For example, “I like this because…,” “This was difficult for me to do because…,” “I expected what I was looking for to be over here…” This will help us understand what you are thinking.

This may feel unnatural; that is common and expected. We will do everything we can to make the process comfortable. We may ask you to clarify or elaborate on statements that you make.

Introduction to Scenarios

We have several different scenarios that we would like you to work through today. I am going to sit with you for the first few scenarios and then let you work on your own. Once you are done with each scenario, let me know and I will give you the next one to work on. We may have a few quick questions for you after each scenario.

Review

Here are a few reminders about your participation:

- This is not a test of you; you’re testing the site, so don’t worry about making mistakes.
- There is no right or wrong answer. We really just want to know if we designed the site well for you.
- Think out loud through your actions and impressions as you go though the scenarios.
- If you ever feel that you are lost or cannot complete a scenario with the information that you have been given, please let me know. If I’m not in the room with you at the time, just pick up the phone. I’ll ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.
- We will be video recording this session for further study if needed. Only your first name may be associated or reported with data or findings from this evaluation, and clips may be used in the client presentation

Do you have any questions before we begin?
Usability Test Plan for E4C Website

**Post-Test Questionnaire**

Note to moderator: Present SUS through Morae, explain rating system if needed. Also provide our custom questionnaire for my qualitative feedback.

Thank you for your participation. The last thing we would like you to do is to fill out this questionnaire. As you are filling out your answers, please explain why you chose the answers that you did. This will help us gain a better understanding of your experience.

**Conclusion**

We can’t thank you enough for your participation today. We learned a lot from your comments and will use this to help improve the website.
Appendix E: Post-Test Questionnaires

System Usability Scale
SUS delivered via Morae

Custom Questionnaire
What is the likelihood that you would return to this site? ____________________________

Please list your favorite and least favorite features of the site:

Favorite

Least Favorite

What was the most difficult scenario or task? ____________________________

Share any suggestions you may have for improving site usability ____________________________

Any additional comments or thoughts you would like to share with the site or team: ____________________________

Thank you for your time and your insights!
Appendix F: Persona

Michael Samford, Engineering Student

Male 22 years old.
Undergraduate engineering student

Occupation: Full-time student; works part-time to earn extra spending money.

Technical Profile: Uses his computer on a daily basis. Quickly learns new software, but prefers web-based applications.

Organizations: IEEE, ASCE, Tau Beta Pi

Hobbies: traveling, photography, exploring nature

Michael is a civil engineering student in his junior year at Swarthmore College in Pennsylvania. He is particularly interested in civil engineering. He grew up in an upper-middle class neighborhood of Connecticut.

Michael is single and lives in an apartment off campus. He works part-time at a nearby pizza restaurant. His hobbies include photography, going to outdoor music festivals, hiking, and camping. He loves to travel and see new places, especially outside of the United States.

As an engineering student, Michael is technically savvy and relies on technology. He owns a computer, laptop that he uses for school, and an iPad for personal use. He stays connected with friends and family through social networks including Twitter, Facebook, Google Plus, and StumbleUpon. He recently created a LinkedIn account because he is beginning to think about potential career paths.

Michael has always had an interest in helping the less fortunate. These values were instilled through his family and staying active with a youth group in Connecticut. After his freshman year of college, he spent a summer helping build canals to create sustainable water sources in a remote village of Guatemala.

Motivators

- Likes to use technology to collaborate with those with similar interest.
- Does not have money to be philanthropic, but likes to help others in other ways.

Frustrations

- Easily frustrated when he cannot find information quickly.
- Uses search, but generally cannot find results.
Appendix G: Task Flowchart

New User: Michael
About E4C

Area of Interest: Water Project

Register at E4C School Project/Group Project

Set up a Workspace for individual/group project for collaborating, invite friends, post ideas, and seek advice on a project or job

Use social media
Twitter, Facebook, Linkedin – (connect with friends and share water project info, job)

Scenario 1 – Red
Scenario 2 – Dark Blue
Scenario 3 – Purple