

Group 5

Blake Cotton  
Megan Hawn  
Anni Simpson

ITIS 3130 – Fall 2010

Group Assignment #3: Interactive Prototype and Evaluation Plan  
November 16, 2010

**Table of Contents**

Summary of Design.....	3
Interactive Prototype.....	4
General Description of Evaluation.....	5
Usability Requirements.....	6
Supporting Materials	
<i>User Script</i> .....	7
<i>Questionnaires</i> .....	8
<i>Interview</i> .....	9

## **SUMMARY**

Our project is based on an interactive website that allows users to register for expeditions through the White Water Center of Charlotte. This system is intended to be a “greener” alternative to a paper-based system that they currently use. We intended to provide for both the consumer and business ends, allowing for online registration as well as registration retrieval.

The prototype takes you through the process of registering for an event, confirms the event for you, and allows you to play around with the rest of the information of the website. Our prototype also shows the business end for pulling up information.

We combined these efforts by creating a homepage that allows users to go to a single homepage and choose to start the process of creating a trip or logging in as a staff member.

We utilized Microsoft Powerpoint to make the process interaction.

The database doesn't exist, because we don't have user information for that database. We don't have the ability to enter in real user information yet, either. We also don't have a credit card processor.

Neither of those *need* to exist for the user to experience the basic process, anyway.

We have everything else we need. We have the base for everything else. There's no fancy, fancy hardware we don't need.

**INTERACTIVE PROTOTYPE**

The Interactive Prototype is saved as a PowerPoint Show, once you open the file you should be able to navigate through by pressing your desired buttons on the screen.

See PowerPoint file.

## GENERAL DESCRIPTION OF EVALUATION

Our group would like to use questionnaires periodically at the end of particular slides during the system, have them think aloud during the session to gauge their thought process at the moment, and interview them at the end of the session.

For the questionnaire, we would have them rank . It would give us hard data that we could average and compare against other data points, even though their opinion of how easy or efficient it was is still potentially subjective. The questions would include how easy the process felt to the users, how quickly they were able to go through their information, how pleasant the experience was. This is to just gauge how the user feels about it at the time of the process. Although an interview would capture similar information, it would be worthwhile to compare how the user felt at the same against how they felt afterwards. These questions would be pre-written and given to the user in hard-copy format after they mentioned they hit a certain slide while talking aloud. They would only be a few questions long in order not to interrupt the user for too long. There will be three of them per section: the consumer end and the business end. *See page 8.*

For the interview, we would ask more detailed questions but similar to that of the questionnaire. However, we would do it in an only semi-structured way. We want to give ourselves room to ask users to elaborate on their answers or ask for more information based on the answers they've provided already. We would ask them about the process, how they felt about it, but in these questions, we would ask for the why and context behind those answers. We would be more interested in why they felt the way they did and possibly examples to illustrate their feelings, if possible. *See page 9.*

For the think aloud, we would ask users to describe their actions and what they *thought* about their actions as they performed it. We would also have them mention when they moved onto the next slide and the title of the slide for the sake of giving them a short questionnaire about the actions they just took. This would be recorded for the sake of going back. For the sake of their *comfort*, prior to setting them down and testing the interface, we would ask them if they were more comfortable with someone (silently) sitting behind them to have someone “listen” as they talked. We would note this and separate the data initially, in the event that actually changed their process. The observer would *not* be allowed to interact with them, however; they are not there to answer questions or to help them along.

Any errors they run into should be spoken aloud and what they did to encounter them. They should be allowed to feel around for the solution on their own, stating the solution. *See page 10.*

---

The audience that we're going to get to review it will include both employees who use the system – the part Joe Schmoe doesn't care about and shouldn't see – to make sure that pulling up the registry is efficient and understood well.

We will test also Joe Schmoe to register with the application. Joe Schmoe will be taken to the application, asked to register a visit, and taken through the pages where he chooses a time, enters in party details, asked to confirm the correctness of the aforementioned details (error prevention!) enters in his contact information, billing information, billing address, and asked to confirm *those* details (error prevention!).

## **USABILITY REQUIREMENTS**

While we've talked in the past about how mobility, flexibility, and simplicity are important, non-functional requirements for us in our design, our main two functional requirements are:

1. having consumers be able to register for a trip through the iPad application
2. having employees retrieve customer information through the iPad application

To test this, we're going to have test subjects run through the PowerPoint presentation (based on which user group they are). They will be presented with two options on the home screen:

1. "start your adventure"
2. "employee login"

From that moment, they will either be asked to retrieve customer data from the system from an employee perspective or asked to register for a trip through each screen using pre-loaded text in registration fields.

We will gauge their responses to:

1. how well they understood the form
2. how quickly they were able to go through the form
3. how fast they perceived going through the form
4. whether or not they actually completed the process
5. any errors they encountered along the way, including incorrect screens, incorrect processing of data, and the inability overall to complete the task at hand

As previously stated, we will do this through a combination of recorded think aloud, questionnaire, and interviews.

## **USER SCRIPT**

“Hello. Welcome to the usability study of the iPad application we've developed for a company that will make reservations and pull customer data online. The purpose of the test is to have you move through the slides in a typical scenario starting from the “home screen” in the application. We will present you with the screen, and you are to move from there to register a visit/retrieve customer data based on what you think is the natural progression of that process.

While you're testing the application, please speak aloud your thoughts about the application, the process, any errors you encounter, and your responses to anything you interact with. We will be recording this process. If you would like someone to sit with you during the test, we will be happy to provide a person to listen. However, they cannot help you with the application or any errors you encounter. That must be something you do on your own.

Intermittently, we will provide you with a brief questionnaire about your progress so far. The instructions will be provided to you.

At the end of the test, we will conduct a brief interview with you to help us understand our application better.

Thank you so much for your time. We greatly appreciate it.”

**QUESTIONNAIRE**

Background Information

Please answer each of the questions so we can understand you a little better.

Gender:	Male	
	Female	
Age:	13-17	53-57
	18-22	58-62
	23-27	63-67
	28-32	68-72
	33-37	73-77
	38-42	78-82
	43-47	83-87
	48-52	88+

Rate your comfort with computers on a scale of 1-10, with 10 being extremely computer savvy and 1 being uncomfortable:

	1	2	3	4	5	6	7	8	9	10
Where did you test the application?			Home			office				on the road

Application Questionnaires

Each of the following questions will ask you to rate your answer on a scale of 1 to 7.

- How easy was it to understand the screens in the application? 1 is the easiest to understand, and 7 is the hardest.  
1    2    3    4    5    6    7
- How easy was it to understand the application itself? 1 is the easiest to understand, and 7 is the hardest.  
1    2    3    4    5    6    7
- How was the flow between the slides in the application? 1 is the most flow, and 7 is the least.  
1    2    3    4    5    6    7
- How well did the instructions make sense? 1 is the most sense, and 7 is the least.  
1    2    3    4    5    6    7
- How confident do you feel that you completed everything correctly and error-free? 1 is the most error-free, and 7 is the most errors.  
1    2    3    4    5    6    7
- How quickly did you perceive the application process taking? 1 is the swiftest, and 7 is the most time consuming.  
1    2    3    4    5    6    7
- How much detail did you feel there was in the reporting section? 1 is the least detailed, and 7 is the most detailed. (This is for the employee section only.)  
1    2    3    4    5    6    7



**INTERVIEW**

1. Have you ever used a reservation application before?
2. What is your opinion of the flow of the application and why?
3. Did the directions in the application make sense to you, and why?
4. What errors, if any, do you feel you made during the process?
5. Did the confirmation prompts let you know things were working correctly?
6. When you made an error, did you get enough information on how to fix it?
  1. What did you do when you made the error?
  2. How did you know you made an error?
7. What else you would add?
8. How much information is given in the reports? (employee testers only)
  1. What else would you like to see in the reports?
  2. What information would you like to do without?