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Group Assignment 4 Evaluation Summary

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PROJECT OVERVIEW

Our project was an iPad application that allowed visitors to a rafting/outdoors activity business to reserve time slots online, as well as allow employees to access reservation data remotely. We wanted to improve how small companies take reservations and how employees can access that data.

HEURISTIC EVALUATIONS AND COGNITIVE WALKTHROUGH

How the Evaluations Were Conducted

The *cognitive walkthrough* required the second group to answer yes/no to four different questions every time they made a click:

- 1. Will users be trying to produce whatever effect action has?
- 2. Will users be able to notice that the correct action is available?
- 3. Once found, will they know it's the right one for desired effect?
- 4. Will users understand feedback after action?

The *heuristic evaluation* was done through silent observation. The purpose was to have our classmates "test through entire prototype and write down all problems" and assign a severity rating to each of these problems in order to modify the design.

Evaluation Data

Our cognitive walkthrough responses included:

- 1. Need to have error messages when information is left out...
- 2. Needs more buttons, too constrained by just next, back, and home buttons...
- 3. System should remember information entered by person after they exit the program and then reenter the program...
- 4. Change registration date on prototype...
- 5. Should change in the employee section:
- 6. Customer number should be changed to number of visits
- 7. Also include join date
- 8. Change registration button

Our heuristic evaluation had "yes" for every response for every question. We didn't really benefit from that.

Implications of In-Class Activity

The implications of the activity echoed some of the problems we found in our individual observations, including the possible ineffectiveness of our error-prevention methods, the lack of buttons aside from back/forth, the lack of a real distinction between employee and customer (rather, our lack of focus on employees at all, despite Blake's best efforts), and the ability to remember past customer data.

SUMMARY OF RESULTS Problem Chart

| Problem | Severity Rating | Possible Fix |
|--|-----------------|---|
| reservation button doesn't stand out | 8 | change color and/or location of button |
| a way for past customers to log in and personal information to be remembered | 4 | create a login page that would pull data from the connected database |
| better directions when an error occurs | 7 | |
| error-prevention not incorporated in prototype | 7 | ensuring that users can go back and fix errors without losing information or forward |
| length of time it takes to get through the application | 5 | take some of the end error prevention (once instead of twice?) out and possibly just work it into the system to stall the application process if something goes wrong |
| data not saving if one goes back | 3 | It's annoying, but it's not the end of the world. Just code it so that it stores a cookie? I don't know how web-based apps work. |
| no good way to go back at all | 4 | incorporate something at the bottom of the application that allows users to go back to different screens if they need to; I understand the button to go back is there, but it was still mentioned |
| flow | 2 | more buttons/links/something to go back and forth between screens so it's not as rigidly linear, maybe |

SUMMARY OF RESULTS

The Negative!: Repeated Problems Among Users

A few, major problems were repeated among the test base that included:

- 1. The system didn't "flow" well. It was very linear, and it the steps and their place in the process were obvious. However, there was little in the way of moving back and forth. Users in both Blake's and Anni's tests asked for a way to move around within the system that was more indepth than a simple back/forth/home set of buttons. However, we weren't quite sure how to implement it, since moving fluidly through forms isn't something that's typically done in reservation systems.
- 2. The reservation button didn't stand out. This was a major deal, because that is the *entire* point of the application. If the button isn't seen and the user can't reserve their data as a result of that, the entire interface failed.
- 3. We didn't have a way for users to have their information remembered. This is problematic for returning users of any kind. It was something we didn't even consider when designing our interface.

The Positive: Successes in Our Goals

- 1. We succeeded in ours goals to design a simplistic interface that allowed users to reserve data/access existing data for an expedition through The Outdoorsy Company.
- 2. We also succeeded in our goals to design an easily understood, easy to learn system.
- 3. We succeeded in our goal to provide a clear, definitive way for users to confirm the data they have input.

USABILITY GOALS

Our usability goals were:

| Goal | Level of Accomplishment |
|---|---|
| for employees to access past, present, and future data made in the reservation system through the iPad application | Blake accomplished this (individual assignment 2 and 3, group assignment 2) by implementing an option for logging in for employees from the main menu. Employees were to enter their username and password before being able to access reservation data. |
| for customers to make reservations through the iPad application | We accomplished this by providing a calendar from which to choose a time/date slot, as well as a form to enter in personal and party information in our design. |
| for the application to be as "simple" of an interface as possible | We accomplished this with the "bare bones" design. We wanted to avoid extraneous information and material, since the point of the system is to access data and enter in new data, not to attract new customers or interest them in the business. The only aims were to give users a way to access and enter data, and we did that in our design. |
| efficiency | This was not accomplished. We put in too many checks and balances to ensure error prevention, making the system sluggish and slow. Test users consistently saw the process as too cumbersome and that it took a little too long. |
| understandability | There wasn't a lot of ambiguity in our system. |
| feeling satisfied with the system | There were enough checks and balances in the system to give users a clear, definitive "end" point. |

FUTURE WORK

Our repeated and severe problems included:

- 1. unapparent reservation button
- 2. too clunky, inefficient of a system
- 3. time consuming
- 4. lack of flow

The way we decided to combat each of these problems was to:

- 1. Change the appearance of the reservation button for the sake of the button standing out. We had a definite color scheme and design, which we used throughout each slide for the sake of having a streamlined, cohesive interface.
- 2. Remove some of the error-prevention or consolidate some of the screens for the sake of having less steps in the process, which should take care of the associated inefficiency and time sink problems.

Although it didn't come up in the testing process, we also decided:

1. We should have a more in-depth interview for both employee and customers so that we can better gauge problems for those two user groups. They have very specific but very different needs from one another, and if we stick to a general interview that's supposed to vaguely encompass both sets of needs, we're bound to miss something in both groups or ignore one group for the sake of the other (which we kind of did with the employee group; only Blake focused consistently on that group).