Vet Med Curricular Dashboard

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- Assist in developing the visualizations (web application development)
- Assist in implementing a research plan to assess usability of the dashboard
  - Optimality of visualizations to ease cognitive load
  - Optimality of design to assist in decision making
- Assist in ensuring data integrity within the system (database administration, exploratory data analysis)

WEEK 10 My Final Address!!!!

Posted on August 3, 2011 by Sharrod

It's pretty much all over we do our run through tomorrow and then Fri we present I am ready to just get this done with. This has been a fun 10 weeks but I am just happy that I finished strong and that my group has accomplished a lot since the beginning! This has been a great experience for me one i wont forget thanks a lot everyone that is in charge of the program for having me here at ISU!!!

I want to leave everyone with one last nice sight from before they leave...I also have learned a lot about modeling since I have been here which is another great thing especially want to thank Ted!!! This image was constructed by me... 😊
Chapter 7b & 8 review

7b: There were a few things in this chapter that relate to our project. First, when recruiting, we should not say too much about the test. Keep it vague. It discusses a lot of ways to find participants. Some suggestions they had for recruiting at colleges was using job boards and websites, bulletin boards, or the college newspaper. It mentions that after you set a time for the participants to come, you should confirm with them about this.

8: This had several topics that will be useful for putting together our project. First, it goes over guidelines for observing. It talks about parts of and how to write an ‘orientation script’. It discusses what we want to include in the background questionnaire. It talks about data collection, and how you should know what to look for. It then goes into pretest things and how to make up and give your task scenarios. It also talks about what to include in your post-test questionnaire. All of these things will be very useful for us when we are creating these documents and getting ready to go through the usability testing.

Usability Testing Chapters 1, 7, & 8 – Kerstyn

I decided to just group all of my chapter reviews into one post since they will all be pretty short.

Chapter 1: This covered a lot of the same material that Andrea has been covering in HCI class recently, which was interesting. I think that this chapter covered a lot of important, basic points that we all need to keep in mind while we develop the prototype as well as the testing used to determine its usability. I think we have the idea of designing for the user (not just the system) down but we still need to make sure that we keep specific aspects of usability in mind as we test.

Chapter 7: This was a long chapter, but it was made a little easier to read by keeping in mind that some of the points, like how to look for candidates and determine their background, is not very relevant to our study. We already know who our target users are and where they are, so we are spared a little bit of that ordeal. We still need to remember to extensively consider the different backgrounds and experiences of each of the testers, though.

Chapter 8: I felt that this was the most immediately useful chapter since we’re so far into the project already. One of the next things we need to do is start planning our methods, and this chapter was great for going over the basics and necessities of a test script, guidelines, and so on.

Chapter 7a review

Chapter 7 is “Find and Select Participants”. It starts by talking about making a profile for the type of user you are designing for. You want to gather information about your participants. You also want to define things such as ‘novice’ or ‘expert’, but you need to provide an operational definition for these. For our project, we might want to know our user’s level of experience using computers. We could make criteria for novice or expert and have them rate themselves as one or the other. You also want to classify your users. We have a smaller number of participants, but we will also have two groups. One will be the faculty from the college of Veterinary Medicine, and one will be a group of students from ISU. We want as many faculty as possible, so we don’t need to set up any specific criteria for them to participate, since they will be using the dashboard. We could set up some criteria for the students’ participation if we wanted to.
Craft of Research - VetMed

1. Post one example of a question your potential audience might have regarding the team’s problem area or solution. Describe your plan for refuting it.
2. Identify an example of how your research contradicts current publications. How will you address this?

1. One question that has already been raised by Andrea is the issue of whether or not an electronic organization is really most effective for people who are of (presumably) a baby-boomer generation age range, who may be used to paper or verbal reports and decision making. We plan to refute this with the results of our study as well as remaining confident in these administrators as being adaptable and able to learn about new methods of doing things. We also plan to incorporate this concern when we design and test the dashboard.

2. In our research thus far, we have found only supportive publications - those who have tested software similar to ours and found increases in decision making efficiency and accuracy. As far as we know we do not contradict any previous research.

Chapter 1 Review

We have now moved on to reading the Handbook of Usability Testing. The first chapter was “What makes something usable?”. We can apply many things from this chapter to our project. There are several things we should consider when creating our prototype. The dashboard needs usefulness which means that the user needs to be able to complete their goals. It also needs efficiency, in which the user is able to complete tasks correctly in a certain amount of time. It also needs effectiveness, which means that the dashboard should work how the user thinks it will work, allowing them to complete tasks. There are also some things we need to keep in mind to prevent the dashboard from being hard to use. We need to focus on the user and the context as much as on the dashboard design itself. Basically, we should follow a User Centered Design, in which we will focus on the user while creating the dashboard. Surveys, walk-throughs, and usability testing are some techniques that will help with this.

Chapter 14 review

Chapter 14 was Working with Human Subjects. It talked about finding, recruiting, and the number of participants for your study. It also went a lot into protecting participants, discussing informed consent and the IRB. It finished by talking about online research, which we will not be using in our study. All of these ideas made sense to me, and it was good to review through these things.

Thursday, with chpt 10 review

We are nearing the end of the week. We were assigned the first part of our final project in modeling this morning. So today I am working on making a spaceship. Tomorrow our group will put the spaceships together into a complete scene. I have some done, but will probably spend a lot of the day working on making an awesome spaceship. We just had a luncheon lecture, which was very interesting. The virtual volcano group was there, and the volcano expert gave a presentation on volcanoes and the process of making a virtual volcano. I really enjoyed learning so much about volcanoes. Later today, everyone is going to The Spice for dinner. I am excited about this and know it will be fun. But now I will get back to my spaceship.

Chapter 10 covered usability testing. In our study, we will doing a user-based test, in which the users perform the tasks. Emphasis was placed on the fact that in usability testing, the interface is being tested, not the user. Usability testing should be done in the earlier stages of the product, and it would be ideal to do in all stages of development. I learned about the different types of testing. Formative testing is early testing which involves more communication. Summative testing is later on, and evaluates the design choices. Validation testing is done right before the product is released. This chapter also discussed the task list (tasks you will have the user complete). These should be tasks that will be commonly performed, important tasks, and the tasks should be easy to understand.
As computers and other digital technology become more prevalent in society, there has been a great push to abandon paper-based media in the home and office in favor of services such as online bill paying and electronic document filing. In addition, software is expected to make these and other tasks easier and less time- and work-intensive.

Those working at the Iowa State University College of Veterinary Medicine are routinely presented with complex decisions relating to the development and implementation of their curricula. An information visualization project is underway to assist in the organization of information that is crucial to making these decisions. However, it cannot be assumed that moving this information from paper reports to digital media will reduce the effort involved in decision-making simply by virtue of being a new technology. The usability of the program must be investigated before deciding whether or not it is a worthwhile change from paper records.

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**Wednesday, chapter 8 review**

**Posted on** June 15, 2011 **by** Kayla

Today has been good so far. The sun finally came out. 😊 We had another modeling class this morning, and learned how to make one simple shape into different things by extracting and stretching it. Our assignment today is to make some cacti. I'm really having fun with these assignments. After class, we went to craft of research, where we discussed more about good articles to use and how to write a research question. I now have to get to work looking for some good articles that our group can use. That's probably what I'll spend most of the day doing. Not much else is on the agenda for the day, so I'll get to work.

Chapter 8 was *Interviews and Focus Groups*. The chapter began by discussing interviews. I learned that interviews take more time, which means fewer subjects are used. They also take a lot of time to analyze. Exploratory interviews entail general questions about how something is used. They help the experimenter to understand the problem. There are different types of interviews. Fully structured are set up as a strict script. They are easier to analyze. Semi-structured interviews have a script written, but the interviewer can deviate slightly from this. Unstructured just focus on the topic that is important to the interviewee. Another choice is to conduct a focus group. This involves interviewing more than one person at a time, allowing for more participants in the study. This chapter discusses the types of questions that can be included. It also goes over the correct way to prepare for conducting the interview.