Module 5: Scenarios- Use Cases

Required Reading	**For Module 5.1** - Chapter 6 in the "designing from both sides of the screen" textbook **For Module 5.2** - Broadbent article under Resources/Module 5 folder. [Broadbent.pdf] **For Module 5.4** - http://saulcarliner.home.att.net/id/wizardsarticle.htm - http://coe.sdsu.edu/eet/articles/wizards/index.htm - Process Support document: under Resources/Module 5 folder. [Process Support.pdf] - http://www.wfmc.org/
Audio Files	- PSS-mod5.1.mp3 - PSS-mod5.2.mp3
Assignment Due Dates	- Complete Module 5.1 by **Thursday, April 3rd** - Complete Module 5.2 by **Thursday, April 3rd and Saturday, April 5th at noon** - Complete Module 5.3 by **Tuesday, April 8th and Thursday, April 10th at noon** - Complete Module 5.4 by **Saturday, April 12th at noon**

I. Introduction

In module 4 you were asked to follow chapter 5 and build a task list and functional requirements list for your target system. I like the guidance given in the chapters from "designing from both sides of the screen" and feel that they give very solid and practical guidance for doing design, but it is limited in how it supports gaining knowledge about users and does not provide support for designing for PSS.

So in module 5 we will be trying to integrate more user perspectives into the process of developing task and requirement lists, and also start to look at the concept of workflow as an aid to PSS design. This phase of a design usually requires iterations….

Write objective
Get info from users

Develop task list
Build use scenarios
Revise objective
Get more info from users
Revisit use scenarios
Redevelop task list
……
Develop Functional Requirements
Develop interface specifications

Carrying out this process is usually fairly "messy" in that it is hard to know when you are finished with one step and ready for the next. Each design challenge seems to require doing this process in a slightly different way. The process of becoming an expert designer and professional is to carry this process out over and over again. You may never simply repeat the process, but you will gain expertise in how to carry it out and expertise in making judgments for each individual step. As you become more experienced and proficient you should be able to do this process quickly but with great intensity of intellectual effort…..you have to think hard about what you are doing and how well you are designing a complete and consistent solution to a real need.

Although you have already created a "tentative" requirements list…..in Module 5 we will think more about the user and insuring that we have his and her perspective accounted for in our design work. Think of module 5 as a second iteration on the design process for this project.

In modules 5 you will work in the following teams:

Team A1	**Team A2**	**Team A3**
Howey, Tracy Marmolejo, Gina Van Tassel, Jane	Boedenauer, Catherine Durboraw, John Hicks, Stephanie	Clauser, Terry Goeders, Michelle Appleton, Lucy Necibi, Semi
Team B1	**Team B2**	**Team B3**
Sample, Angela Pepin, Colleen Vanithbuncha, Piyanun	Martin, Kelley Vo, Ngoc Huang, Yanyan James, Josiah	Nieuwenhuizen, Lisa Schodowski, Patricia Howard, Genevieve

Those of you who are listed in **Team A 1, 2, 3** will continue to work on a PSS for completing the program of study for the LSDD project.

Those of you who are listed in **Team B 1, 2, 3** will continue to work on a PSS for completing the portfolio for the LSDD project.

In module 4 you worked individually and then had a buddy provide feedback. **In module 5 you will work as teams and submit team products** that should be based on collaboration and a consensus among the team members. Also, **Team A and B are partner teams who should give feedback to each other.** (i.e. Team A1 and B1; Team A2 and B2; Team A3 and B3 are partner teams)

Only the reflection statement at the end of the module is meant to be an individual work effort, all other work products are team products.

We will create a db thread for each team to use for discussion of the work of the module and for coming to consensus on team products as well as for some review by partners in later activities of mod 5.

This activity has four tasks to complete over the next two weeks (Week 11& 12) of the course. Some tasks should start before the prior one is completely finished so read all the tasks first and plan your work.

II. Module 5.1

Here are the learning tasks for Module 5.1:

1. Listen to the audio component to Mod 5

2. Begin reading chapter 6 in the “designing from both sides of the screen” textbook

3. Join the first weekly discussion on the Mod 5 discussion board. We will post a question in Module 5 discussion forum: **Mod 5.1 Weekly Topic Discussion I** to get our conversation started. Please respond to it, but also start to add your own ideas and questions from the readings. Feel free to also use the discussion board to ask questions or clear up issues about the course. For our discussion we’ll use the discussion forums under **Module 5 Discussion** section.

Your need to begin your participation in the Weekly Topic Discussion no later than Thursday, April 3rd at noon.

III. Module 5.2

1. Read the Broadbent article on developing user requirements. The article is in the Resources folder for Module 5: [Broadbent.pdf].
2. **Find 2 interview subjects**: Each team needs to find and interview 2 subjects who have completed or are far along in the task for which you are designing a system. Group A should have no problem…. Almost all of your course-mates in this class and others have or will need to complete a program of study. For group B it may be more difficult but you can also interview doctoral students who have completed their portfolio while in our masters program or who have completed it for their doctoral program. If you have trouble finding subjects we can help….but try not to wait until the last minute. Its also OK to interview folks currently in the middle of doing their portfolio.

   In the interview you want to ask the person about how they succeeded and what was difficult (as well as how they overcame the difficulties) for the process. Don't ask them about what the PSS should do, ask them to tell you their story.

   After they have told you their story, then you can ask them about preferences and concerns they might have for how a PSS might work.

   In a "real" design project for an organization we would want to be systematic about selecting and appropriate representation of our target audience and insuring that we had a good set of questions….probably doing a pilot interview and then refinement of our questions. But, in the interest of time….it is perfectly fine to do a short interview and learn from it what you can.

   The idea here is to "not" try to design the system yet, but rather to try to build your knowledge of the needs, opportunities and possibilities.

   At this point, if you haven't already done so, your team should integrate and probably modify the objectives and task lists the individual team members

have been working on….Try to include ideas and insights from what you have learned though the interview processes.

3. **Write a short report** about what your interviewees said and the lessons your team draws from the interviews (what did you learn?).
   Your post-interview report should include the following:
   Item 1 – a brief report of what you heard and **learned** from the interviews
   Item 2 – a statement of your objective for the application. (a statement of items 1 and 2 from the prospectus but now as a team statement)
   Item 3 – an update for a prioritized functional requirements list (this is a new list that represents the team view of the requirements).

   Your post-interview report should be uploaded to "Module 5.2 Submission" folder in Resources under "Module 5" folder by Thursday, April 3rd at noon.

4. **Review Partner Team's report:**
   Review team report of your partner team and give them feedback/comments. Your feedback/comments should include at least two aspects of their report that are well established and good insights and two points that are comparably weak and could be improved. This is also team work. Post your feedback to the Discussion board thread: **"Mod 5.2 Report Feedback for Partner Team" by Saturday, April 5th at noon**.

IV. Module 5.3

Here are the tasks for Mod 5.3:

1. **Join the second weekly discussion** on the Mod 5 discussion board. We will post a question or questions in Module 5 discussion forum: **Mod 5.2 Weekly Topic Discussion II** to get our conversation started. Please respond to it, but also start to add your own ideas and questions from your experiences in module 5.

   Your need to begin your participation in the Weekly Topic Discussion no later than Tuesday, April 8th at noon.

2. **Write two scenarios:** Based on what you learned from the interviews and what you developed as a functional requirements list, write two scenarios for

ways in which your application might work. For scenario 1 envision a person who is in a hurry and wanting to be as efficient as possible in their work effort. For scenario 2 envision a person who is concerned with getting the most out of the program and achieving at a high level. Of course we all are both those people but for purposes of the scenarios and our design work try to highlight these aspects of how people work.

A scenario is a way to represent the structure of tasks and work. Scenarios are narrative descriptions of activities…..they are stories of use. Here is an example of a scenario for getting up in the morning.

Example: Enter the kitchen and turn on NPR on FM radio. Prepare coffee if needed. Get coffee, measure coffee and water, and turn on coffee maker. Bring in paper from driveway. Get out bowl and spoon, then fill bowl with oatmeal and raisins from cupboard. Add water and stir, put in microwave (at high, 2 minutes). Read paper until coffee is ready. Grab a mug from shelf and pour coffee. Get milk from fridge and add to coffee. Fetch oatmeal from microwave , and add milk. Take stuff to table, and enjoy coffee and oatmeal while reading. (this scenario was taken from Constantine and Lockwood, p100)

A key aspect of writing scenarios is to understand the users intentions….what are they trying to accomplish, what steps do they take, what are physical, social, etc. constraints of the environment (you don't heat the oatmeal until after you have added water) and how do they use the resources they find in their environment.

Here are some questions for a self critique of your scenario:

A. Does it have enough detail for another designer to understand what the user is doing?

B. Could you act out the scenario? Is it realistic and helpful for seeing how users might use the application to achieve the objective?

3. **Post your scenario to Discussion Board** named: "**Mod 5.3 Scenarios**." To complete Mod 5.3 create a discussion board item titled "**team name + scenario + # (1 or 2)**" and copy your scenario into the message. Mod 5.3 should be completed by **Tuesday, April 8th at noon**.

4. **Review Partner Team's Scenarios:**
   Review scenarios of your partner team and give them feedback/comments.

Your feedback/comments should include at least one aspect of their scenarios that are well established and good insights and 1 aspect that is comparably weak and could be improved. This is also team work. Post your feedback to the Discussion board thread: **"Mod 5.3 Scenarios"** by replying to your partner team's message **by Thursday, April 10th at noon.**

V. Module 5.4

Here are the tasks for Mod 5.4:

1. Follow the guidance in chapter 6 to organize your functional requirements list by frequency and commonality. See page 127 as an example.
   After organizing the list, review it and code each task as **(1) core, (2) important, or (3) nice to have**. Anything not coded should probably be removed.
2. review the following websites on designing wizards:
   http://saulcarliner.home.att.net/id/wizardsarticle.htm
   http://coe.sdsu.edu/eet/articles/wizards/index.htm
   The SDSU site contains additional wizard articles at the end of the document.

   We are not building a wizard in the traditional sense of a full contained computer process, but thinking through the mechanisms and guidelines for building wizards is a good exercise in preparing a PSS.

   Another area to support our thinking is the idea of "**process support**" or "work flow design." To the extent that you envision PSS as a type of work you may want to do then I encourage you to learn more about these areas. There is not much available on the web as good resources in these areas, but here is one link and I have uploaded a pdf file called "**Process Support.pdf**" to the resources folder. If you find other resources, please let me and others in the class know by posting them to our mod 5 discussion board. Exploring these issues are a bit beyond the scope of our class and I consider reviewing the resources at this time an optional aspect of our design work…but hopefully you can at least browse these resources.
   http://www.wfmc.org/

3. Follow the guidance in chapter 6 to group your requirements list into screens. See page 137 (table 6.7) as an example. Think about the process of your assigned design objective and identify a flow through the work. Keep in mind the guidance to make (1) functions that are used frequently available with a minimum amount of clicks or actions and (2) functions that are used by many users should be as visible as possible.

   After grouping the requirements lists by screen, develop a task flow diagram (see page 141 and table 6.8).

4. **Upload 3 documents to your team folder under Resources:**
   A. functional requirements list by frequency and commonality
   B. The functional requirements organized by screens
   C. The task flow diagram

Mod 5.4 should be completed by Saturday, April 12th at noon.

VI. Reflection

When you have completed all of the work of Module 5 answer the following questions and submit your answers via the **Assignments** tool (Module 5 Reflection). You may type or paste your answers in the textbox and submit it by **Saturday, April 12th at noon**.

We are interested in trying to understand how students participate and contribute in a social learning setting and also in helping you reflect on how your actions add to or detract from your own learning and that of others.....so for this module we will ask you to respond to this same set of questions about your participation and also **reflect on how the email digests (emails with information about the activity level in class and groups) influences how you worked in your group**. We will not use your self rating to influence how we assign points for the module, but we do require completion of these reflection statements as part of your module work effort.
For the RATING QUESTION please rate yourself (1 to 7 with 7 being excellent and 1 being poor) and then rate your classmates by saying if you feel you are above or below the class average along these dimensions of social learning for this module. For example: Participation "5 above". Also if you have some insight

about how or why it worked out for you that way we would love to hear it. We'd also appreciate any thoughts you have about the extent to which these ratings are hard for you to make.

1. **Rate your Participation:** All students are engaged in that they read and produce what is necessary to complete the assignment, whereas participation means taking on the role of a speaker or knowledge producer within the class, not just accepting what is presented but trying to make it your own.
2. **Rate your Contribution:** Does the student contribute to the class discourse and project work in ways that build meaning and lead to mutual understanding. Not only building new knowledge for yourself as in participation, but contributing to the knowledge development of the class or group within the class.
3. **Describe your use of the email digest** (used the group digest everyday, used the class digest to see what to do next, never opened it, etc.). Then also explain whether you think the digests helped or hindered your participation and contribution in the group activity. It would be very helpful if you can provide an example of how you used it.
4. **Rate your Identity:** Does the student take a responsible role in the community such that he/she answers questions posed by others, identifies ways to improve practice, and/or assumes leadership when tasks/issues/problems arise? Does the student take on a role of self regulation and self control for their own learning (internal form of monitoring and regulation)?
5. **Did the email digests help you understand your classmates better and did it help you establish and play your role in the group?** Explain if you felt the digests helped or hindered members to know each other and develop their role on the team.
6. **Rate you groupmates:** Give each of your groupmates a rating on contribution to the group work (1 to 7 with 7 being excellent and 1 being poor). You do not need to give names…..but can simply say: member 1 = 3; member 2 = 7, etc.

Your answers do not need to be long, just thoughtful.

VII. Assessment

Your Module 5 assignments will be graded based on the following criteria:

*** **Group contribution will be considered when grading your work for this module.**

Assignments	Points
Module 5.1: **Participate in Module 5 First Weekly Topic Discussion**	1
Module 5.2: * Complete the group report about your interviewees and lesson learned. * Give feedback to the report of your partner team: 2 positive aspects and 2 weakness	 3 2
Module 5.3: * Participation in the Module 5 Second Weekly Topic Discussion * Complete and post 2 scenarios for your PSS * Give feedback to the scenarios of your partner team: 1 positive and 1 weakness	 1 2 1
Module 5.4: Complete and post… a. functional requirements list by frequency and commonality b. functional requirements organized by screens c. task flow diagram.	 2 1 1
Reflection (submit via Assignments tool)	1
Total Points	**15**

**Note. Points given will base on the quality of work.