

Module 6: Interface Specifications

Required Reading	<p>For Module 6.1,</p> <ul style="list-style-type: none"> - Chapter 7 in the “designing from both sides of the screen” textbook <p>For Module 6.2: Examples and discussion of design principles: http://www.asktog.com/basics/firstPrinciples.html</p> <p>For Module 6.3: Examples for Specifications: http://www.uidesigns.com/spec/index.html http://www.coe.missouri.edu/%7Eyoung/interface/guidelinec.htm http://tiger.coe.missouri.edu/~young/interface/</p> <p>For Module 6.4, & 6.5: Examples for UI http://www.pcd-innovations.com/infosite/ispi_art.htm http://dub.washington.edu/denim/</p>
Audio Files	<ul style="list-style-type: none"> - Mod6.1.mp3 - Mod6.2.mp3
Optional Reading	<ul style="list-style-type: none"> - Chapter 8 in the “designing from both sides of the screen” textbook
Assignment Due Dates	<ul style="list-style-type: none"> - Complete Module 6.1 & 6.2 by Thursday, April 17th at noon - Complete Module 6.4 by Thursday, April 24th at noon - Complete Module 6.5 by Saturday, April 26th at noon

I. Introduction

In this module, we will work with buddies as in module 4. We have 2 PSS's to design and **we will work in a buddy system for reviewing work.** Here are the assignments:

No.	Buddies		No.	Buddies	
	A Program of Study for LSDD	B Portfolio for LSDD		A Program of Study for LSDD	B Portfolio for LSDD
1	Appleton, Lucy	Schodowski, Patricia	6	Boedenauer, Catherine	Sample, Angela
2	Clauser, Terry	Van Tassel, Jane	7	Durboraw, John	Vanithbuncha, Piyanun
3	Goeders, Michelle	Pepin, Colleen	8	Hicks, Stephanie	Howard, Genevieve
4	Howey, Tracy	Nieuwenhuizen, Lisa	9.	Huang, Yanyan	Martin, Kelley James, Josiah
				(Yanyan review James, Kelley review Yanyan, and James review Kelley)	
5	Marmolejo, Gina;	Vo, Ngoc Necibi, Semi			
	(Gina review Ngoc, Ngoc review Semi, and Semi review Gina)				

Those of you who are listed in **column A** will design a PSS for completing the **program of study for the LSDD project**.

Those of you who are listed in **column B** will design a PSS for completing the **portfolio for the LSDD project**.

The buddies who are assigned in the same buddy group (i.e. 1,2,3...,9) will give feedback to the other member when the guide calls for providing feedback for your “buddy.”

This activity has **five tasks** to complete over the next **two weeks** 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 6.1

Here are the learning tasks for Module 6.1:

1. Listen to the audio component to Mod 6.
2. Begin reading chapter 7 (required) and chapter 8 (optional) in the “designing from both sides of the screen” textbook

3. Join the weekly discussion on the Mod 6 discussion board. We will post a question in Module 6 discussion forum: **Module 6 Weekly Topic Discussion** 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 6 Discussion** section.

Please complete Module 6.1 by Thursday, April 17th at noon.

III. Module 6.2

Starting from the task lists you developed in earlier modules, you next need to use basic design principles to create efficient and intuitive screens that avoid common pitfalls of interface design. Here are the tasks for Mod 6.2:

1. Please check the following link for some good examples and discussion of design principles: <http://www.asktog.com/basics/firstPrinciples.html>
2. **Post important Principles/Perspectives for your design work to DB:** We will use the DB to present and discuss issues on applying interface design principles to your design work. Find **at least one principle/perspective** that is important for your design from the ASKTOG site, from chapter 7 or from other work that you find or other members of the class post to the mod 6.1 DB. Present the principle, where you found it, and why you think it is important to your design.....try to be as specific as possible. Post your principle and explain why you feel it is important to Module 6.2 DB named: **"Mod 6.2 Important Principle/Perspectives."** Please respond by **Thursday, April 17th at noon.**

IV. Module 6.3

In this module we begin developing specifications for the user interface of our PSS. Starting from the task list and scenarios you created in previous modules, you will develop a user interface specification to show how the human-computer interaction will be guided in the system and how tasks are accomplished. We will start by looking at a few user interface specifications as examples. These examples are rather elaborately worked out and you are not expected to

complete anything nearly as complete nor detailed, but they serve as real-world examples of well articulated user specifications.

Review the user specs at:

Example 1: <http://www.uidesigns.com/spec/index.html>

This example from the designing from both sides of the screen book shows a detailed description of how hubbub works.

Example 2: <http://www.coe.missouri.edu/%7Eyoung/interface/guidelinec.htm>

This second example is taken from the design work we did when we created Shadow netWorkspace (SNS) (an online collaboration environment similar to the sakai system we are currently using). If you would like to see more information about the design work for SNS check out :

<http://tiger.coe.missouri.edu/~young/interface/>

These 2 examples illustrate the specification of how the interface will look and work. In each case there were many, many iterations of prototypes and specifications before the work shown in the examples was achieved. However, these examples do show the need for specification. If you just tell a developer that you want a button in the left corner for going home.....there is no telling what you may get and it is unlikely you will achieve the consistency throughout your application that we know is needed. The user interface specs are the designers way of specifying how he-she will achieve the design principles we examined and are discussing in module 6.2. In addition to simply specifying what is needed the examples show what is needed with visual representations. Can you imagine how much easier it is to discuss the design with a client, a developer or a tester when you can show them mock ups of the screens rather than just reading a list of specifications?

If you have questions or comments about the examples use the Module 6.3 DB named: **"Mod 6.3 Questions for Specifications"** to post them.

V. Module 6.4

The user interface specs we are asking you to develop for module 6 can be far less detailed and much more elementary than the two examples. After all these

are your first steps in interface specs not the last (if we were really producing the PSS application). We'll use another example for a PSS design process to help guide your interface specifications work. Please Check out:

http://www.pcd-innovations.com/infosite/ispi_art.htm

This site offers some useful guidance for designing a PSS in that they identify three basic components for their design work which may be similar to components you will need to design:

1. A navigational interface that allows a user to find a particular task or transaction (these may be thought of as steps in the process, but try to maintain flexibility).
2. An infobase (Gery, 1991, pp.35) that contains the information about tasks, transactions, procedures and the governing legislation.
3. The application programs used to perform the required tasks (these may be thought of as the work at each step....how you help the person succeed at each step)

Your design work for module 6 can generally focus on the **first and second component**, but should also include consideration for any social interactions that are part of the performance of POS or portfolio development.

In order to create the needed specifications you will need to use some tools. You are allowed to use any software (or even paper and pencil and then scanning) as long as you think it is efficient in helping with interface design. And can produce electronic copies for sharing with the class,

Before getting started though, we'd like to introduce you to denim as an option for some of the design specification work. Please go to <http://dub.washington.edu/denim/>, browse the website, get to know the software, and if you are interested, you can download Denim and try to use it to build your interface sketch.

For your product for module 6 we will follow the example in the PCD website. Here are the steps for you to follow:

1. Refer back to your task flow diagram created in module 5. And then, create a navigation interface, which is similar to the home page of a website or perhaps the mechanisms for advancing through a wizard.
2. Create interfaces for each of the main tasks. For example, you definitely need to include the interface for students to display their competence in the portfolio support system; also, you may want to include a program map (similar to site map of a website) to show the relationship of the various components of the navigation interface. This overview map of your system could help you and users establish a mental map of how things work in the system.
3. Elaborate on the InfoBase, which contains information about each task. This information may be presented in layers. Layering allows a user to drill down to find additional information about a task.

For instance, the first layer of the InfoBase may be contained in the navigation interface. For the ones who work on the portfolio system, the competency requirements may need to appear on the first layer. The second level of information can provide the user with more critical/helpful information about demonstrating their competency. There may be more layers of information based on the characteristics of the system. The designer needs to decide the amount of information that appears on these screens. As a performance support system, the designers also need to take the potential request of the users into account, for instance, users may want to print out some information.

Overall, you need to develop interface specifications for your system. Here are some expectations I have for your specifications:

The interfaces should display how the system works/functions, in terms of work process/work flow.

1. The interface should be a simplified model of the system, which means you only need to show the main functions.
2. The interface should show how you bridge the key tasks you identified in module 5 with support structures. Your specifications document should present the interface and use annotation to explain the features and functions of the system.

Create a folder in the **Resources/Module 6/Mod 6.4 Submission** folder with your last name and post a document representing your interface specifications by **Thursday, April 24th at noon**. In the past some students have used powerpoint to represent the UI specs, but you are free to use whatever format works for you and makes your work shareable with others in the class.

VI. Module 6.5

Review your buddy's interface specifications and then all the interface documents in your buddies target area (A or B). Create a short critique for your buddy that identifies weaknesses in the specifications as well as aspects that you find strong and well done. The goal is to give your buddy some helpful feedback to encourage moving forward with good ideas and doing further work in areas that need it.

Your response should include **at least one positive comment and at least one suggestion** for improvement. Post your comments to DB named: **"Mod 6.5 Feedback for Interface Specifications"** by **Saturday, April 26th at noon**. Title your posting as **"buddies last name + your last name"**.

VII. Reflection

When you have completed all of the work of Module 6 answer the following questions and submit your answers via the **Assignments** tool (Module 6 Reflection). You may type or paste your answers in the textbox and submit it by **Saturday, April 26th 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 I assign points for the module, but I do require completion of these reflection statements as part of your module work effort.

For the RATING QUESTIOND 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 I would love to hear it. I'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 module. 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 class?** Explain if you felt the digests helped or hindered classmates to know each other and work with each other in the module.

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

VIII. Assessment

Your Module 6 assignments will be graded based on the following criteria:

Assignments	Points
Module 6.1: Participate in Module 6 Weekly Topic Discussion	1
Module 6.2: Post at least one important Principles/Perspectives for your design work to DB named: “ Mod 6.2 Important Principle/Perspectives ”	1
Module 6.4: Complete and submit the interface specifications for your system	10
Module 6.5: Post feedback for your buddies interface specifications (at least 1positive +1negative comments) to DB: “ Mod 6.5 Feedback for Interface Specifications ”	2
Reflection (submit via Assignments tool)	1
Total Points	15

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