King Fahd University of Petroleum and Minerals
College of Computer Science and Engineering
Information and Computer Science Department
Spring Semester 072
SWE 312 – User Interface Design

Instructor: Yahya Garout
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Catalog Course Description:
Study of both theoretical and practical issues in human-computer interfaces. Interface design process. Usability engineering. Development, programming, and evaluating interface designs. Design of windows, and menus. Commands and natural languages I/O. Visual prototyping. User manuals, online help and tutorials.

Prerequisite(s):
ICS202, SWE214

Course Objectives:
1. To understand the basic ideas underlying the design and implementation of human-computer interaction. **[PO#1,2,3]**
2. Evaluate software user interfaces using heuristic evaluation and user observation techniques **[PO#1,2,3]**
3. Apply user centered design and usability engineering principles as they design a wide variety of software user interfaces **[PO#1,2,3]**
4. To learn how to work in teams. **[PO#4]**

Course Learning Outcomes:
Upon completion of this course, students will have the ability to:
1. Follow usability engineering principles while designing user interfaces. [OC #4] [EM 1,3,4,5]
2. Evaluate user interfaces for usability. [OC #1] [EM 1,4,5]
3. Create user interface designs using the components of different interaction styles. [OC #4] [EM 3]
4. Work as a team leader and a member of a team. [OC #2] [EM 3]
5. Use a software tool for visual prototyping [OC #12] [EM 3]
6. Demonstrate a prototype of a project. [OC #8] [EM 2,3]
7. Create different types of manuals such as: User Manuals, Online Help and Tutorials [OC #8] [EM 2, 3]

Textbook:
Designing the User Interface, 4th Edition, 2005, by Ben Shneiderman & Catherine Plaisant, Addison Wesley, ISBN 0-321-26978-0

Grade Distribution:

Activity	Weight
Attendance & Participation	10%
Quizzes (4)	10%
Mid Term Exam (**Saturday, April 5, 2008**)	20%
Final Exam (**Monday, June 9, 2008 at 7:00PM**)	20%
Projects	40%

Course Outline (Tentative)

Topic	Chapter	# Of Lectures
1. Usability of Interactive Systems	[1]	6
2. Guidelines, Principles, and Theories	[2]	3
3. Managing Design Processes	[3]	3
4. Evaluating Interface Designs	[4]	3
5. Software Tools & Visual Prototyping	[5]	4
6. Direct Manipulation and Virtual Environment	[6]	3
7. Menu Selection, Form Fill in, and Dialog Boxes	[7]	3
8. Command and Natural Languages	[8]	3
9. Quality of Service	[11]	2
10. Balancing Function and Fashion	[12]	3
11. User Manuals, Online Help and Tutorials	[13]	3

Important Notes:

1. Attendance is taken at the beginning of the class.

2. **Two** late attendances are considered as **one** absence.

3. Missing nine classes will result in a **DN** grade in the course.

4. Official excuse for any absence of a class must be presented not later than one week after that class.

5. Assignments must be submitted on the due date. **No** late submission

6. No make up for exams or any other class work will be made.

7. Plagiarism, copying and other anti-intellectual behavior are prohibited by the university regulations. Violators may have to face serious consequences.