CS160 User Interface Design, Prototyping and Evaluation

Spring ’03 Course Information

Classes: MW 2:30-4pm in 405 Soda
Discussion Sections: 11-12 and 12-1 in 320 Soda
Course Home Page: www.cs.berkeley.edu/~jfc/cs160/SP03

Instructor: John Canny, 529 Soda Hall, 642-9955 jfc@cs.berkeley.edu
Office Hours: Tues 11-12, Weds 1:30-2:30

TA: Matthew Kam, 417 Soda Hall, 642-8149, mattkam@cs.berkeley.edu
Office Hours: Monday 4:30-5:30, Thurs 10-11

Assistant TA: Hesham Kamel, 525 Soda Hall, 643-7354, hesham@eecs.berkeley.edu
Office Hours: TBA

Course Admin Assistant: Kate Simpson, 719 Soda, 643-4816, kates@cs.berkeley.edu

Course Information:
CS 160 is an introduction to Human Computer Interaction (HCI). You will learn to prototype, evaluate, and design a user interface. You will be expected to work with a group of three other students in this project-based course, and you will be asked to choose exactly what application to build based on interviews with users who you select. Throughout the course of this project, you will work closely with that user group.

For the first week:
- There are no sections in the first week. They will begin as scheduled next week.
- If you are not yet in the course, please fill out a petition and hand it in to 719 Soda (Kate) by 5pm Thursday. I will post a list of admits by Monday morning.
- The first assignment (individual project proposal) is due in class next Weds 1/29. This is used for matchmaking groups, and you will not be required to do that project.
- A class ombudsman will be appointed next week. They will be responsible for passing on student concerns to the staff. Please contact them with any problems.

Background
CS160 is concerned with the design, evaluation, and use of IT applications. In contrast, most of the other classes in Berkeley CS focus on particular techniques or technologies. You will make use of technology to develop your applications, and you will acquire some expertise in the development environment you choose. But the focus of the course is not on technical skills, but on design and evaluation principles which are broadly applicable. These principles are likely to be even more useful after you leave school and enter the workplace.

CS160 is an upper division course, and one of few where you will work extensively on one, independently chosen project. To participate fully in this course, you are required to
have taken CS 61B. Additionally, you must be majoring in cognitive science or computer science. CogSci C100/Psych C120B is required for cognitive scientists. Statistics or Psych 101 are optional, but relevant classes, as are a variety of upper division computer science classes including 169, 182, 184, 186, 188, or 195.

You will be expected to actively participate in lectures, complete readings ahead of time, and, most importantly, participate equally and fully in your group project. The teaching staff will promptly return graded homework to you, and will be available to provide feedback and help with problems.

In the future, you will often have to design interfaces for people who work and live in significantly different environments from the one you are accustomed to. In order to create a realistic difference between you and your users, you will be required to work on an application for a specific group of people, none of whom are students. You will hear more about the target user group next week.

Assessment
CS160 includes both group and individual assignments. Much of the grading in this class is qualitative, including assessments of the end user experience of the system and the quality of your designs, evaluations, and prototypes. Grading will be done by the instructor, TA, and assistant TA.

- You will be expected to read papers regularly, and to come to class with prepared answers to discussion questions.
- You will be expected to turn in written documentation at each stage of your group project. You will also turn in working code twice. Each group member will help to give an oral presentation about your project.
- There will be two in-class exams (a midterm and a final).
- Individual assignments will be handed in on paper at the start of the lecture during which they are due, and emailed to the head TA (mattkam@cs.berkeley.edu). The group assignments will be via web site or swiki (more about this later).
- Group assignments may not be turned in late. Individual assignments will lose one 20% per day they are late.
- Each group is responsible for making sure that all members are participating. As part of the project reports, you be required to describe the effort put in by each member, both on specific tasks and as a fraction of the group’s effort. Make sure you discuss this regularly, to make sure your group is in agreement about the work breakdown.
- If a group member is not participating, the entire group must meet with the teaching staff. If, after another week, things have not improved, the group may vote him or her out. Similarly, a group member may choose to leave a group if, after meeting with the entire group, and waiting a week, the situation has not improved. Members who leave for either reason will be responsible for finding a new group to join.
- If you have a question about a grade, you should meet with the TA. You may come to the professor if the issue cannot be resolved with the TA's help.
- Cheating will not be tolerated, and will get you an F in the class.
Grading:
Grading will not be on a curve. Your grade will be a combination of:
• midterm (15%)
• final (20%)
• individual assignments (20%)
• group project (40%):
  • demos/presentation (group component)
  • project write-ups and exercises
  • ratings given by other team members & class
• in class participation (5%)

Textbook and other expenses
All of the readings used in this course will be provided free of charge. Although there is no textbook, we have put supplementary material that may be of interest to you on reserve in the engineering library. Details are provided in the list of readings. You may wish to offer your users incentives to participate in your evaluations, such as food or a gift certificate. This expense is your choice and your responsibility.

Laptops and target devices
You will be developing software on laptops, and every student will need one. You can use your own laptop if you wish, but you will be responsible for installing all the needed software. We will provide instructional laptops to those who want them – even if you have your own you may want the convenience and security of an insured instructional machine. The instructional laptops cost $50 per laptop for insurance. In addition, there is a $250 deductible for damage.
In addition, many groups will be developing for PDA or smart phone platforms. Those will be provided at one per group later in the semester.

Syllabus
A preliminary syllabus is online in the class homepage. This will change slightly as we progress through the semester.

Additional Information
We expect to include 40-50 students in this class, from both CS and Cognitive Science backgrounds. Although these differing backgrounds present a challenge, we believe the benefits are worth it. Over the years, students in CS160 have completed amazing projects. Graduates who took this course have told us that it helped them to get and to succeed in their jobs. We are looking forward to working with you on your projects, and seeing what you accomplish!