ASSESSING DESIGN

Scott Klemmer
Brown’s newest teaching lab
How can we make grading ‘fairer’?
CS147: Introduction to Human-Computer Interaction Design - Fall 2010

Course Description
Through lectures and a project, learn the fundamentals of human-computer interaction & design thinking. Work together in teams of three on a quarter-long project. Each week, in small design studios, present and discuss work with peers. The setting for the course is mobile web applications. The constraints of this small form factor make this an exciting challenge. At the end of the course, present to a jury of IT and design leaders. CS147L, an optional 1-unit lab teaches web programming. Projects should address one of the following three briefs.

Design Briefs
CHANGE: Transform behavior
TIME: Redesign the representation
GLANCE: just a few essential bits

More Information
Submit Work
Attendance
Grading
Self-assessment
Prerequisites
FAQs
Contacting Us

Syllabus & Readings
Each lecture has a reading associated with it – you must log in to CourseWare to access them. Please skim the readings before lectures, and use them as a study guide when preparing for the quizzes in Week 3, 6, and 9. The readings should also be helpful as reference materials for the main project, and beyond this class.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Wednesday</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 September 20</td>
<td>September 22</td>
<td>Design exercise</td>
</tr>
<tr>
<td>Introduction</td>
<td>Discovery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Need-Finding Handout</td>
<td></td>
</tr>
<tr>
<td>2 September 27</td>
<td>September 29</td>
<td>Discovery</td>
</tr>
<tr>
<td>User-Centered Design</td>
<td>Prototyping</td>
<td>Groups form in this studio</td>
</tr>
<tr>
<td>Gardin, Analyzing User Research</td>
<td>Snyder, Making a Paper Prototype</td>
<td></td>
</tr>
<tr>
<td>3 October 4</td>
<td>October 6</td>
<td>Prototyping</td>
</tr>
<tr>
<td>Input</td>
<td>Heuristic Evaluation</td>
<td></td>
</tr>
<tr>
<td>Guest Lecturer: Stu Card</td>
<td>Nielsen, Ten Heuristics for Evaluation</td>
<td></td>
</tr>
<tr>
<td>Jef Raskin, Fitt's and Hick's law</td>
<td>Quiz 1</td>
<td></td>
</tr>
</tbody>
</table>

Upcoming Assignments
There are no upcoming assignments

Upcoming Office Hours
There are no upcoming office hours

Upcoming Lectures
There are no upcoming lectures
PROBLEM-FINDING

as well as

PROBLEM SOLVING
Bring your laptop to studio, you will need it to submit your self-assessment.

**Evaluation criteria & Grading rubric**  
Grade value 100 points

<table>
<thead>
<tr>
<th>Guiding questions</th>
<th>Bare minimum</th>
<th>Satisfactory effort &amp; performance</th>
<th>Above &amp; Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point of view.</strong> Does your point of view relate to the design brief, clearly express a problem / opportunity, and clearly convey what a good solution needs to accomplish? (Max 20: 10 for the problem, 10 for the solution requirement)</td>
<td>0-7: The problem is unclear / missing, the solution requirement is unclear / missing, or the point of view is unrelated to the design brief.</td>
<td>8-15: The point of view relates to the brief and the problem and solution requirement are clearly stated, but the solution requirement is either too general (anything that solves the problem meets the requirement) or too specific (only one particular implementation meets the requirement).</td>
<td>16-20: The problem and solution requirement are clearly stated. The requirement provides focus without demanding one specific implementation.</td>
</tr>
<tr>
<td><strong>Storyboards.</strong> Do they both address your point of view? Do they diverge in the solutions? (Max 40: 20 per storyboard)</td>
<td>0-16: The storyboards are hard to follow or do not address the point of view.</td>
<td>17-33: The storyboards reasonably address the point of view, but either a reader may have lingering questions about the situations depicted or the solutions don't diverge much.</td>
<td>34-40: The storyboards are easy to follow and have diverging solutions. Someone else could come up with distinct prototypes just from looking at your storyboards.</td>
</tr>
<tr>
<td><strong>Paper prototypes.</strong> Did you explore two clearly different interfaces implementing the same idea? How was the quality of paper prototype? Does it feel dynamic, like a working application? Were you creative when implementing the interactions? (Max 40: 20 per prototype)</td>
<td>0-16: The prototypes are incomplete in significant ways. Many screens refer to screens that are not prototyped, and it's often unclear what a certain screen does.</td>
<td>17-33: The prototypes are mostly complete. The purpose of each screen is clear. But maybe the interfaces are not that distinct and share many similarities. Or maybe a user looking at the prototype may sometimes have a question about how to navigate between screens, how to use a form on a screen, or what some element on a screen is doing there.</td>
<td>34-40: The prototypes explore two different interfaces and are detailed enough so that (1) a user can get a good feel for how the application works and flows and (2) a programmer can use the prototypes to implement a skeleton Web application that has working forms and links.</td>
</tr>
</tbody>
</table>

**Student Examples**

Here are some cool examples of paper prototypes students made last year. Keep in mind that the assignment was different last year, and so use these examples as inspiration rather than as a direct model.

http://cs147.stanford.edu
cs147: Weekly Ritual

• Assignments due each Friday 8am
• Participate in studio
• Reflect on & self-assess your work
1. Subject #1 is currently in a meeting with two of her residents, discussing ways they can get involved in service. As the meeting goes on, the subject's computer is open to GMail the entire time - two instant message windows pop up within a few minutes of each other. The subject can't resist a brief glance every few minutes or so, but can't really respond in the moment, as she must listen to her residents.
Providing “Bumpers”
a game-theoretic analysis
results
high performers
low performers
Other universities leveraging these materials

• Berkeley, CMU, U Mass, Harvard, Maryland, Michigan, MIT, UNC, Olin, Pitt, Utah, Virginia Tech, Yale, UMD, Hawaii

• American university of Beirut, FAST National University, Islamabad, Sydney, Tehran Polytechnic, NTU Singapore, National University of Singapore, American University in Cairo, Open University in the Netherlands
How can we scale design assessment?
The limitations of multiple choice
Calibrated Peer Assessment
Human-Computer Interaction
Scott Klemmer, Associate Professor

Helping you build human-centered design skills, so that you have the principles and methods to create excellent interfaces with any technology.
Topics Covered

• Needfinding & observation
• Rapid prototyping
• Interface principles
• Visual design
• Evaluating interfaces
Video Lectures

THE POWER OF PROTOTYPING

Scott Klemmer
www.hci-class.org
### Week 1 — 1. Introduction

- Lecture 1.1: Human Computer Interaction (4:18)
- Lecture 1.2: The Power of Prototyping (13:49)
- Lecture 1.3: Evaluating Designs (12:15)
- Lecture 1.4: The Birth of HCI (8:48)

### Week 1 — 2. Needfinding

- Lecture 2.1: Participant Observation (12:55)
- Lecture 2.2: Interviewing (11:37)
- Lecture 2.3: Additional Needfinding Strategies (11:54)

### Week 2 — 3. Rapid Prototyping

- Lecture 3.1: Paper Prototypes and Mockups (12:47)
- Lecture 3.2: Faking it – Wizard of Oz (14:30)
- Lecture 3.3: Faking it – Video Prototyping (11:48)
- Lecture 3.4: Creating and Comparing Alternatives (8:55)

### Week 2 — 4. Direct Manipulation

- Lecture 4.1: Direct Manipulation (16:53)
- Lecture 4.2: Mental Models (15:28)

### Week 3 — 5. Heuristic Evaluation

What are some general attributes of prototypes? Check all that apply.

- [ ] They can facilitate communication between stakeholders like clients, developers, and users
- [ ] They’re made out of paper
- [ ] They look just like the real thing
- [ ] They can be quickly modified or cast aside when necessary
Question 4

Imagine you’re designing the world’s first voice-guided navigation system for a car GPS. You want to find out if drivers can understand and respond to your voice directions while driving a car. Which prototype would you build for this purpose?

- Create a video of a person driving on a route, and then add your instructions as voiceover. Show participants this video, and pause the video after each instruction, and ask what participants would do.

- Have pre-determined turn-by-turn directions for a particular route written on a notepad. The experimenter reads out the right directions while the participant drives on the route.

- A paper prototype of the GPS display with multiple “screens” that each shows the map at a different part of a route. The participant evaluates the prototype in a lab. For each screen, the experimenter speaks out the turn directions, and asks the participant what she would do (e.g. “I’d take the next exit”).

- Create a fully functional system (with a database of routes, directions and voice-clips etc.) on a laptop, and put the laptop in the car. The participant drives the car along the route, and hears the turn directions from the laptop.

Submit Answers  |  Save Answers
<table>
<thead>
<tr>
<th>Topic</th>
<th>User</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there anyone else from Costa Rica following this course?</td>
<td>Isaac Ortega-Alvarado (Student)</td>
<td>1 hour ago</td>
</tr>
<tr>
<td>Assignment 3. Implementation plan question.</td>
<td>Anonymous</td>
<td>2 hours ago</td>
</tr>
<tr>
<td>On retaking the course and what is involved...</td>
<td>Anonymous</td>
<td>2 hours ago</td>
</tr>
<tr>
<td>Need Design Advice: Checkboxes and/or Drop Down Lists</td>
<td>Anonymous</td>
<td>2 hours ago</td>
</tr>
<tr>
<td>Free parallel class from MIT Open CourseWare - UI design</td>
<td>Kathryn Robinson</td>
<td>4 hours ago</td>
</tr>
<tr>
<td>A good set of articles on UX and other stuff by Smashing Magazine</td>
<td>Angela Richmond-Fuller</td>
<td>4 hours ago</td>
</tr>
<tr>
<td>Assignment 2 heuristic evaluation results</td>
<td>Hardik V.</td>
<td>4 hours ago</td>
</tr>
</tbody>
</table>
Assignments

Here's the strategy for this assignment: create a high level point of view, flesh it out with storyboards, then pick a concrete direction and create a rapid electronic prototype. Like the Tour de France, it's fast and covers a lot of terrain. And finally, the peer evaluation will introduce you to the concept of Heuristic Evaluation.

Step 1: Point of View
Your first step is to choose a design brief and write down a point of view (that relates to the brief) in a sentence or two.

What's a point of view? It's your take on a high-level design strategy, before actually designing a solution.

- For example, if you wanted to improve the check-out experience at the grocery store, your point of view might be: "waiting in line is intrinsic, but the boredom is not". This would lead to design solutions like showing news or playing games while waiting in line.
- Alternatively your point of view might be "with a good scheduling interface, no one should have to wait in line." This might lead to better ways for employees to staff registers and consumers to pick them.
- Or, you might have a totally different point of view: let's make grocery stores more like farmers' markets, where payment is distributed across the stands that have the food.

All of these are valid points of view----they do suggest different possibilities and have different implications/entailments for what constitutes a good design.

What makes a good point of view? It should clearly express the problem/opportunity. And it should make clear what a good solution would accomplish. Write yours down.

Remember that you will work on this project for the rest of the quarter. Thus, coming up with a good point of view that you can successfully tackle in the remaining weeks is crucial. The needfinding researches in Week 2 are a great source of ideas and inspirations (since your fellow students spent a week coming up with them :)).
# Rubrics

<table>
<thead>
<tr>
<th>Guiding questions</th>
<th>Bare minimum</th>
<th>Satisfactory effort &amp; performance</th>
<th>Above &amp; Beyond</th>
</tr>
</thead>
</table>
| **Point of view.** Does your point of view relate to the design brief, clearly express a problem / opportunity, and clearly convey what a good solution needs to accomplish?  
(20% of grade) | 1: The problem is unclear / missing, the solution requirement is unclear / missing, or the point of view is unrelated to the design brief. | 3: The point of view relates to the brief and the problem and solution requirement are clearly stated, but the solution requirement is either too general (anything that solves the problem meets the requirement) or too specific (only one particular implementation meets the requirement). | 5: The problem and solution requirement are clearly stated. The requirement provides focus without demanding one specific implementation. |
| **Storyboards.** Do they both address your point of view? Do they diverge in the solutions?  
(40% of grade) | 1: The storyboards are hard to follow or do not address the point of view. | 3: The storyboards reasonably address the point of view, but either a reader may have lingering questions about the situations depicted or the solutions don’t diverge much. | 5: The storyboards are easy to follow and have diverging solutions. Someone else could come up with distinct prototypes just from looking at your storyboards. |
| **Rapid electronic prototypes.** Did you explore two clearly different interfaces implementing the same idea? How was the quality of prototype? Does it feel dynamic, like a working application? Were you creative when implementing the interactions?  
(40% of grade) | 1: The prototypes are incomplete in significant ways. Many screens refer to screens that are not prototyped, and it’s often unclear what a certain screen does. | 3: The prototypes are mostly complete. The purpose of each screen is clear. But maybe the interfaces are not that distinct and share many similarities. Or maybe a user looking at the prototype may sometimes have a question about how to navigate between screens, how to use a form on a screen, or what some element on a screen is doing there. | 5: The prototypes explore two different interfaces and are detailed enough so that (1) a user can get a good feel for how the application works and flows and (2) a programmer can use the prototypes to implement a simple skeleton application with a working interaction flow. |
Evaluation

How was the quality of the first prototype? Does it feel dynamic, like a working application? Was the student creative when implementing the interactions?

- **0 points**: No answer or completely irrelevant answer.
- **1 point**: The prototype is incomplete in significant ways. Many screens refer to screens that are not prototyped, and it's often unclear what a certain screen does.
- **3 points**: The prototype is mostly complete. The purpose of each screen is clear but maybe a user looking at the prototype may sometimes have a question about how to navigate between screens, how to use a form on a screen, or what some element on a screen is doing there.
- **5 points**: The prototype is detailed enough so that (1) a user can get a good feel for how the application works and flows and (2) a programmer can use the prototype to implement a simple skeleton application with a working interaction flow.
From crowds helping others...
... to helping each other

• Fosters empathy and equality
• Scales naturally
• Requires serious community buy-in.

And that turned out to be a benefit.
Cheating?
<table>
<thead>
<tr>
<th><strong>HCI Online</strong></th>
<th><strong>CS 147</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 weeks.</td>
<td>10 weeks.</td>
</tr>
<tr>
<td>2 hours of online lectures per week, broken up into 8-12 minute segments.</td>
<td>2 hours of in-person lectures per week, broken up into 1-hour class periods.</td>
</tr>
<tr>
<td>Weekly, individual assignments.</td>
<td>Weekly, group assignments.</td>
</tr>
<tr>
<td>1 quiz per week with mini-quizzes embedded in lecture videos.</td>
<td>3 quizzes in total, taken in class.</td>
</tr>
<tr>
<td>Final project: complete design cycle to create a website.</td>
<td>Final project: complete design cycle to create mobile web app.</td>
</tr>
<tr>
<td>Peer- and self- assessments.</td>
<td>Staff- and self- assessments.</td>
</tr>
<tr>
<td>Statement of Accomplishment (“Apprentice” or “Studio”).</td>
<td>Stanford University Credit.</td>
</tr>
<tr>
<td>No prerequisites.</td>
<td>Enrollment at Stanford.</td>
</tr>
</tbody>
</table>
hci-online: Weekly Ritual

• Assignments due most tuesdays at 11pm PDT
• Chinmay/Robi graded 8-10 examples
• Calibrated Peer Assessment
  • Each student graded five assignments...
  • ...and then their own
  • Grade: median of the five
who enrolled?
Student numbers

• 29,105 students watched video(s)
• 6,853 submitted quiz(zes)
• 2,470 completed an assignment
  • and 791 completed all 5
• From the 10,114 who filled out the initial survey...
  • 124 countries
  • all ages
Employment

- K-12 Student
- Undergraduate
- Graduate Student
- Recent graduate
- Self-employed
- Working full-time
- Working part-time
- Unemployed
- Retired
- Other
10 self-organized meetup locations

- London, England
- Palo Alto, CA
- San Francisco, CA
- New York City, NY
- Buenos Aires, Argentina
- Bangladesh
- Portland, OR
- Mountain View, CA
- San Jose, CA
- Aachen, Germany
Students transcribed (some) lectures in 13 languages

- English, Spanish, Brazilian Portuguese, Russian, Bulgarian, Japanese, Korean, Slovak, Vietnamese, Chinese Simplified, Chinese Traditional, Persian, and Catalan
<table>
<thead>
<tr>
<th>Study Group</th>
<th>Member Details</th>
<th>Posts</th>
<th>Followers</th>
<th>Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese/China Study Group</td>
<td>Yucca (Student)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungarian Study Group</td>
<td>Judit PONYA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan Study Group</td>
<td>Farhan Ahmad</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland / Northern Ireland study group</td>
<td>Dimitriy Kiretenkov</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Grupo de Estudio y Encuentro</td>
<td>Laura Rodriguez-Lecues Zarragoitia (Student)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukrainian study group</td>
<td>Maksym Lushpenko</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines Study Group</td>
<td>Claire Christine Arguelles</td>
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<tr>
<td>I.R. Iran study group</td>
<td>Shaahin Mohammadi</td>
<td></td>
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<tr>
<td>Lithuanian Study Group</td>
<td>Henrikas Kuryla</td>
<td></td>
<td></td>
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<tr>
<td>German-speaking study group</td>
<td>Katrin Siebler</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catalan study group</td>
<td>Marc Recasens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South African/African Study Group</td>
<td>Edeh Victor Obinna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish Study Group</td>
<td>Jairo Felipe Pinedo Vergara</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Dates are listed in the format '2 days ago', '5 days ago', '1 week ago', '6 days ago', '4 days ago', '2 weeks ago', '1 day ago', '3 days ago', '20 hours ago', '4 days ago'.*
Aki magyarul beszél az jöjjön!

Údv! Attila Budapestről. :) Kíváncsi vagyok mennyien leszünk!

Sziasztok! Laci Budapestről.
what happened?
good news, you've got amy cunningham!

Jane Manning

to Scott, Sébastien

https://class.coursera.org/hci/forum/thread?thread_id=13

This was the student who answered just about every question on Jennifer Widom's forums - she also got the #2 score in NLP (non-trivial - there were hard programming assignments that you couldn't really get a perfect score on).
Assignment 1 - Needfinding

Andrey, Microsoft certified specialist

The first interesting thing about the Andrey’s preparation process is that he creates a MS Word document with some tree structure of the exam topics (main topics and subtopics of the exam are the branches and the terms or small pieces of information are leaves).

The second thing is that he creates to-do list which contains names of topics (sometimes the name of book chapters). When he finished the topic, he highlights it using foreground color.

On the picture below Andrey is reading his document with the topics list.

Observations of subject preparing for IT certifications
Assignment 1 - Needfinding

Google Analytics

http://www.google.com/analytics/

Flexible way to explore data, who users can configure attending their needs. Different levels of complexity, you can stop in the first one or continue deepening in each one.

Ducksboard

http://ducksboard.com/


BBVA iphone app


Easy way to check your personal finances. The designer chooses the main data to display and the user can consult this information in every place. Use of graphical solutions to show the bank account state.

Design inspirations for personal finance displays
Assignment 2 - Prototyping

Prototype of IT certification website
Assignment 2 - Prototyping

Prototype of mobile banking app

Wednesday, July 25, 12
# Assignment 3 - Start Building

## Implementation plan for IT certification website

<table>
<thead>
<tr>
<th>Task</th>
<th>Deadline</th>
<th>Status</th>
<th>Estimated hours</th>
<th>Actual hours spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create static HTML of main container of the website (header, footer, main menu)</td>
<td>6/24/2012</td>
<td>Done</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Create HTML layout and CSS of content of Homepage</td>
<td>6/24/2012</td>
<td>Done</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of Login page</td>
<td>6/24/2012</td>
<td>Done</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of Register page</td>
<td>6/24/2012</td>
<td>Done</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of Choose certification Program Page</td>
<td>6/24/2012</td>
<td>Done</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Create tabs and scripts to activate them</td>
<td>6/24/2012</td>
<td>Done</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of Certification Program page, add some content</td>
<td>6/25/2012</td>
<td>Done</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of Exam page, add some content</td>
<td>6/25/2012</td>
<td>Done</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Create HTML layout and CSS of Find the Program page</td>
<td>6/25/2012</td>
<td>Done</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Create HTML layout and CSS of Search Results page</td>
<td>6/25/2012</td>
<td>Done</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of My Progress. My Certifications page</td>
<td>6/26/2012</td>
<td>Done</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Create common popup window and add js scripts for it</td>
<td>6/26/2012</td>
<td>Done</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Create basic HTML layout and CSS of My Progress, My Materials page, create add material popup</td>
<td>6/26/2012</td>
<td>Done</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>
# Assignment 3 - Start Building

<table>
<thead>
<tr>
<th>Task</th>
<th>Deadline</th>
<th>Status</th>
<th>Comment</th>
<th>Estimated hours</th>
<th>Actual hours spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create the project in Axure application</td>
<td>6/19/2012</td>
<td></td>
<td></td>
<td>30'</td>
<td>10'</td>
</tr>
<tr>
<td>Set up the project online (using dropbox) to access everyone</td>
<td>6/19/2012</td>
<td></td>
<td></td>
<td>10'</td>
<td>10'</td>
</tr>
<tr>
<td>Create a demo page in the project, with some links and upload it to check the online version is ok</td>
<td>6/20/2012</td>
<td></td>
<td>it cost me more time than expected to upload the first page</td>
<td>10'</td>
<td>30'</td>
</tr>
<tr>
<td>Test that the web can run in a mobile</td>
<td>6/20/2012</td>
<td></td>
<td>finally I’m not able to implement every functionality for mobile nav. I decide to implement a web simulation</td>
<td>30'</td>
<td>3</td>
</tr>
<tr>
<td>Create the navigational flow and main structure of the app in axure</td>
<td>6/21/2012</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Code up screen place holders for the app navigation and main functionalities (login, home, navigation between accounts, different views of an account, transfer functionality, retrieve pass)</td>
<td>6/22/2012</td>
<td></td>
<td></td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Upload and test</td>
<td>6/22/2012</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Developing static main screens of the app I: List of accounts and general evolution</td>
<td>6/22/2012</td>
<td></td>
<td>change name in settings and some interaction with the</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Implementation plan for mobile banking app
"[My] website will help to find a certification program which fits to a person, check[s] the progress of study and encourage[s] person to get certified."
Assignment 4 - Ready to Test

“Mynbank mobile users can check their bank account movements, evolution (balance changes on time) and stats (what are the main expenditures and incoming types in each account). As well as make money transfers from one account to another in a fast, easy way... everywhere.”
## Assessments

<table>
<thead>
<tr>
<th></th>
<th>HCI Online</th>
<th>CS 147</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation between self- and staff- assessments.</td>
<td>0.81</td>
<td>0.91</td>
</tr>
<tr>
<td>Correlation between self- and peer- assessments.</td>
<td>0.78</td>
<td>N/A</td>
</tr>
<tr>
<td>% of students who received their own grade.</td>
<td>52%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Wednesday, July 25, 12
• How much did you feel like you learned from assessing others' work?
• How much did you feel like you learned from assessing your own work?
I put sufficient effort into grading peers.

Peers put sufficient effort into grading me.
Patriotic Grading
Peer assessment

- Students made it work!
- Variation in effort, standards, interpretation
- Need for richer feedback...
  - to acknowledge hard work
  - to help students improve
Students praised

- Lectures
- Peer assessment
- Design without programming
Criticism

- Assignments: examples & more clarity
- More time between assignments
- Make all project work & deadlines clear at beginning
- Platform (and usability) bugs
- All the kinks of a first offering
- More qualitative feedback
The benefits and challenges of timeshifted lectures
The benefits and challenges of timeshifted lectures

Attila, I'm starting to think that Klemmer just recorded the videos, then has left the running of it to Chinmay, et al. He has changed another question in the current quiz. Has anyone been notified? Nope.

This course is a joke now. The people running it do not seem to know about usability. The forums are certainly not usable (try removing a down vote or up vote after it is made), their communication and notification is nonexistent. None of this would pass any sort of user testing.

I was doing this course to test the water and see if I wanted to enroll in a real degree at Stanford. After this debacle, I am not interested.
Faculty collaborations: an unexpected benefit
Students Took Ownership

• Sharing cool interfaces, resources, articles
• Collating reading lists, creating assignment aids
• Doing really creative work
• Helping other students
  • heuristic evaluation feedback
  • answering forum questions
  • extra peer assessment
Recommended Books of Coursera Stanford HCI Course

Lecture 1 - Introduction

- The Design of Everyday Things
  - by Donald A. Norman
  - $11.53

- Sketching User Experiences
  - by Bill Buxton
  - $29.48

- Sketching User Experiences: The Workbook
  - by Saul Greenberg
  - $17.38

- From Counterculture to Cyberculture: Stewardship
  - by Fred Turner
  - $10.01

- What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry
  - by John Markoff
  - $9.10
I would guess that right now most of our submissions haven't been evaluated by 5 other students. In a class of this size, there'll be plenty of people who submit an assignment and then don't do the following part, e.g. they decided to drop the class, didn't have any time in the last few days, didn't know about the evaluations, had a medical emergency, and lots of other reasons. So for us to all get around 4-5 evaluations of our work, many people will need to do more than 5 to make up the difference.

It doesn't seem like this has been mentioned in the threads I've read so I don't know if anybody else has been doing extra evaluations to balance that out. Anybody want to do some extra evaluations in the next couple hours? Maybe we won't get 5 evaluations each, but I'd hope for at least 3 and maybe 4 each.

Posted by Amy Cunningham
on Fri 8 Jun 2012 8:44:50 PM PDT

Comments

yes, it would really help out. Thanks Amy
[ Delete ]  Posted by Huy (Staff)

This comment has been deleted. [ Undelete ]

Huy
0
Do you still need more evals from the students ?
[ Delete ]  Posted by Sivabalan Umapathy

@Sivabalan It would help but it's no longer critical. Thanks!
[ Delete ]  Posted by Huy (Staff)
The Medium is the Message
Chris Smith @quartzmo

Watching the video of prof. Scott Klemmer's reflections on the first @coursera #hciclass. I recommend the class, it was great.

Expand
Hello Scott,

This is Arun Martin, a usability analyst from Coimbatore, India. I have enrolled for your online HCI course last week and require your suggestions for the Design Brief on "Change."

I plan to share my thoughts for commuters who start early from their offices, park their two-wheelers at a parking stand, and then commute to their offices through cabs or other modes of transport. I'm looking at the following challenge: How can technology help commuters to ascertain whether there are available parking spaces during morning hours so they can spend few minutes at home/parking area to monitor their fitness levels and improve their health? Is this something that I can work on as a project?

Thanks,
Arun
Our Sincere thanks to Professor Scott Klemmer & Coursera. It’s amazing how he explains difficult concept in a way that we could easily grasp. I feel so lucky and proud to learn from him about HCI technology. No word is enough to thank Professor Scott Klemmer and COURSERA.

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Comments

- Fully agree with this post. Having been in traditional consumer marketing research for many years, the introduction alone hits on some very basic and common industry practices that are used to help bring everyday products and services to market. Professor Klemmer is clear and does a great job of speaking to the concepts simply. Beyond this, kudos to Coursera for bringing learning to the “masses”. I feel so fortunate to have the chance to learn for learning’s sake. We truly live in an amazing time. The best part? It is only going to get better. Thank you!

- Yucca, nice job..you are really trying really hard to "apple-polish" Mr.Klemmer. Is it going to get your grades up??;

- Yes, thank you all for the hard work in designing, preparing, delivering and administering the course. I can imagine it was a LOT of work on top of your other work! I've really had a great time learning so much from a start of understanding nothing on this topic. It’s been really tough juggling it with full time work, but I’ve found the material interesting and the assignments challenging. And
what’s next?
MOOC is a terrible name
Beta 2: Fall 2012
Integrating Guidelines Into the Coursera Forum

Nisha Masharani
New features:
A list of guidelines relevant to browsing the forum
A “Start New Thread” button
Clicking on “Start New Thread” brings the user to this page. Guidelines show up above the portion of the page to which it is relevant. To post in a forum, the user clicks the name of the forum (mandatory).
The user can hover over “example” to view an example of the rule in action.
Why Do These Rules

1. *Keep it short.* Shorter posts have ___ more responses than longer posts. [Need data from Coursera]

2. *Use the search function.* 35.2% of posts surveyed are duplicates.

3. *Draft your post before you choose a subforum.* 24.8% of posts are in the wrong subforum.

4. *Use tags wisely.* 50.5% of posts don’t have any tags.

5. *Give your post a good title.* 24.8% of posts have titles that don’t correspond to the actual post.

6. *Be civil.* 6.7% of posts are rude or inappropriate.

7. *Use votes to bring attention to good posts.* [Need data from Coursera]
Instructor role in re-runs?
Encouraging Richer Feedback

• How could this student best improve his/her user evaluation? From among the following, copy one or more pieces of advice that would help the student. Paste your advice in the feedback box below.
  • Test with more users
  • Test in a different location/environment
  • Test with a more functional prototype
  • Create a more thorough script/plan
  • Reflect on findings and find underlying reasons
  • Test with a different alternate prototype
  • Other

• Example:
  • Test with more users: since a lot of the feedback about look and feel wasn't consistent across all users, testing with more might help.
  • Test with a more functional prototype: especially for the part about looking inside an item, where functionality is not implemented
peer grading should allow us to leave more detailed comments for peers

Sam Joseph posted on Sat 9 Jun 2012 3:32:51 PM PDT

I'm really excited about this peer grading, but I think we should be allowed to leave more detailed comments for our peers.

In particular some of the numeric scales seem a bit odd - the inspiration diversity has like

- **2 points**: Either the inspirations were obvious (that is, you could have come up with these without actually doing any observation) or the explanations were vague (that is, they might confuse someone who had to read the inspirations and implement a solution based on them).
- **3 points**: Offered a diverse set of inspirations with insightful explanations. An HCI guru can spend an hour on the Internet and still not come up with anything better.

Basically the options here are like "dude your inspirations were obvious" and "dude, you are like an HCI god!". At the very minimum there should be several points in between.

I don't know that I would have had time to leave longer detailed comments, given that I had to complete reviews of 5 other students work, however I felt badly constrained by the bumpy numeric system, and I would at least have liked the option of a text box to leave clarifying comments.

I get the sense the peer grading will be anonymous, but why couldn't it be the start of an interesting dialogue between peers - I'd like to follow the five students I graded as they continue through the course. Will I get another randomized set of five in the next assignment - that's interesting too, but I would much more highly value starting dialogues with my peers rather than getting sets of anonymous numbers from them ...

Anyhow, this is a great experiment and very much appreciate Prof. Klemmer and team's hard work. I think there's lots of room for improvement too :-) Of course that will likely have to wait till a second round of the course, but that's just fine - I'm along for the ride!
Different peer assessment approaches

• Multiple languages?
• Homogenous v. Heterogeneous
• One large circle or many small ones
• Tournaments
• Norm-setting, tight/loose cultures
Hard deadlines?
Hard deadlines?

Why have deadlines?

I like the idea of deadlines because it gives you a firm priority for getting things done. However I think it would be useful for users to sign up to go through the course as a group. that is staggered by 2 weeks. Every two weeks if there are at least 5 students they can take the course together and help each other in the discussion forums. Students who are further in the class might be able to help with any complicated material, but there would still be a feeling of a class.

I've participated in three online courses with no credit previously. I tried watching MIT's Intro to computer Science lecture videos but the homework killed me so I quickly gave up. I also have participated in Code Academy, but when it got to Object Oriented programming it became too hard and I ended up giving up. Every two weeks I got an email from Codecademy encouraging me to come back. When the offered HTML courses I did more lessons, but I've not been following along with the Code Year like I was previously. Lastly I signed up to take an online course through a community college Intro to Java on ed2go. The "lectures" were very simple and all text based. The course was really easy and I was able to learn alot and complete the homework, but at the end when I wanted to find a way to share the programs I'd made I was told to pay for the second level of the class and I might learn how to share what I'd created in that course. It left a bad taste in my mouth and I didn't take the next level.

What I'm saying is that I the Intro to Java class I took on ed2go had rolling starts (http://www.ed2go.com/CourseDetails.aspx?query=intro+to+java+programing&course=jab&tab=detail) it started about once a month, which allowed for both flexibility and deadlines.

With courses like this you need to have some way to keep yourself accountable to doing the homework and setting aside time to focus. Many people are excited about the course, and know its not the right time to take it, but Fear of Loosing Out they might over extend themselves trying to make this course fit into an already busy schedule.
Recording: production values & pedagogical style
Back to bricks:
(How to) flip the class?
Evaluators->
Coaches
What is the ‘studio’ in the 21st century?
Let’s build practical theory
“Nothing is as practical as a good theory”

“The best way to understand something is to try and change it”

—Kurt Lewin
Thanks to...

• Stanford: Jane, Robi, Alex, Chinmay, Kathryn...
• Coursera: Huy, Daniel, Pang Wei, Ngiam, Daphne, Andrew...
• Colleagues who let me show their work
• Students going above and beyond: Amy...