eNotebooks Project Kickoff

January 24, 2005
Agenda

- Introductions (:15)
  - MEDRAD & CMU personal introductions
  - Intro to CMU HCII and project course

- Introduction to MEDRAD Innovations (:30)
  - Discuss current IP processes at MEDRAD
  - Review organization of Innovation team
  - Discuss scientists tasks in developing IP

- Focus setting (:45)
  - Group brainstorm on foci of the pending usability study
Introductions

MEDRAD
- Page Cedarholm, IP Legal Administrator
- Ned E. Uber III, MEDRAD Fellow
- Jim Rolfe, IT Program Manager

CMU HCII (Human-Computer Interaction Institute)
- Anastassia Drofa
- Peter Jones, Senior Web Engineer (MEDRAD)
- Benjamin Koh
- Rachel Springly Shipman
- Ray Su
- Bonnie John & Brad Myers (Faculty Advisors)
CMU Human-Computer Interaction Institute

- Interdisciplinary orientation, with faculty from Computer Science, Design, Psychology, Social and Decision Sciences, Robotics, and Business Administration
- 12-month, 12-course duration
- Substantial project component for external client, with a team orientation
- “The user is not like me!!!”
- http://www.hcii.cmu.edu/
The MHCI Project Course

- Capstone design course running two semesters
  - Spring semester: 12 hours / week per student
  - Summer semester: Students work full-time on project
- End-to-end design experience
- Real corporate customers
  - 2006: Emerson, Google, NASA, MEDRAD, Pittsburgh Voyager
  - Real clients
  - Real problems
  - Difficult deadlines
  - Working final prototypes and supporting documentation
- A chance to find out what kind of HCI practitioner students want to be
- A chance to show prospective employers what we can do
Client “Bill of Rights”

Clients are entitled to:

- Honest, constant communication
  - Plan of approach and schedule
  - Immediate notification of delays and problems
  - Reasonable turnaround and response
- See the project and its rationale as it develops
- Deliverables that work
  - Useable results of inquiry activities & tests
  - Prototype
HCI tools & methodologies to be employed

- Interviews, competitive analysis, process mapping, task analysis, user studies and many more
- Contextual Inquiry & Design
  - Similar to Ethnographic Research being employed currently at MEDRAD
  - Develop detailed models of the work studied: Flow, Sequence, Artifact, Cultural and Physical
- Iterative design and rapid prototyping
  - Lots of testing with real users
- Regular class critiques with students and faculty
- Project management
  - Initial project plan due Feb. 6-13
A high-level timeline for the project

- January – February
  - Understand client’s scope and identify foci for project
  - Perform contextual inquiry studies with employees
  - Develop analyses and discuss with team
- March – April
  - Develop ideas for solutions
  - Sketches, mock-ups, low-fidelity prototypes (and user testing)
  - Develop formal oral and written presentation
- May – July
  - Implement the agreed upon solution
  - More user testing…
- August
  - Refine, test and document the solution
  - Deliver working prototype and all supporting materials
Initial candidates for Contextual Inquiries or Interviews

- Innovations Scientists and Research Engineers
  - Dave Griffiths, Kevin Cowan, Marty Uram, John Kalafut, Fred Trombley, Ed Rhinehart
- Machine Shop
  - Dave Reilly, Dan Kazousky
- IP Legal
  - Dawn Dedola, Jim Stevenson, Greg Bradley
  - Luci Shields (Notebook custodian)
- MEDRAD SBUs
  - Fahad Alradady, Bill Bullis, Al Hajek, Drawing team members
- Schering eNotebook implementation
  - Mathias Gotwald and Charlie Sodano
- IT services and support teams
Weekly meeting with client sponsors

- Identify regular 1 hour meeting to discuss status of project
- Weekly agenda and meeting notes to be provided
- Conference call or in-person
Intro to MEDRAD Innovations

- Review the organization of the Innovations team
  - What kind of professionals make up your team?
  - What are your team’s goals & objectives?
  - What metrics do you use to measure performance?
  - How does Innovations interface with the MEDRAD business units (SBUs)?
  - How does Innovations interface with Schering?
  - Please describe the work atmosphere
Intro to MEDRAD Innovations (cont’d)

- Discuss current IP processes at MEDRAD
  - Please provide an overview of how intellectual property is managed at MEDRAD
  - Please describe the roles that support your current processes
  - Please note where tools or systems are used to support the current processes

- Discuss scientists tasks in developing IP
  - What are the responsibilities?
  - What are the challenges?
Focus Setting

Process for coming up with the focus for our Contextual Inquiry

7 steps to process:

1. Form a team of stakeholders
2. Brainstorm: questions, assumptions, design ideas
3. Record the items generated
4. Prune questions
5. Do an affinity diagram with sticky notes
6. Develop generalized focus statements
7. Review the focus with the team
Setting and using focus

**Focus setting meeting**

- **Brainstorm questions**
- **Organize in affinity diagram**
- **Select focus**
  - Who is the user
  - Functionality
  - Physical characteristics

**Practice for interview**

- Generate new open-ended questions
- Practice staying focused
- Don’t reuse old, closed questions
- Test your understanding of focus
The first exercise

- Brainstorm: questions, assumptions, design ideas
  - Each group member brainstorms individually
  - Group meets and brainstorms
  - Delay evaluation during brainstorming

- Record the items generated (using Post-It notes)
Next Steps

- Prune questions
  - Defer Qs that participants cannot answer
    - Conclusions about other peoples’ experiences
    - How large is the market?
    - Would you buy this product?
  - Separate "pet questions"
- Do an affinity diagram with sticky notes
  - Organizes ideas into a hierarchy
  - Built bottom-up
  - Put up notes from brainstorm, one by one. No need to justify why notes go together
  - When notes are collected together, give a name to represent the group (stating the work issue)
  - Are there higher-order groups?