Questions?

• Handouts
• Homework #1 out today
• Project #1 out today
Vision of the future (II)

Connected products (IDEO vision in ‘00)
The design process

- “The universal traveler” (Koberg & Bagnall)
- A seven steps process:
Cycle in the project lifespan

Design Process

Acceptance (1)
Analysis (2)
Definition (3)
Ideation (4)
Idea selection (5)
Implementation (6)
Evaluation (7)

Number of Ideas under consideration

Final product
Project timeline
“Deep Dive” video

- IDEO designing the shopping cart of the future
Acceptance

• Getting started!
  – Because of a deadline
  – Because of possible reward
  – Because you are forced to

• Commitment
  – Time
  – Resources
  – Responsibility

• Key point to set motivation right
Analysis: gathering users knowledge

• Find and interview users
  – Task expert/novice
  – Real person with real constraints
  – People who will buy the system

• Tools
  – Notepad
  – Camera
  – Tape recorder
  – Video
Analysis: which question to ask?

• Typical questions
  – What is the problem at hand?
  – How is it addressed now?
  – What are the limitation of the current practice?
  – Who will use the system?
  – What will they do with it?
  – When will they use the system?
  – Where will they use the system?
  – Why will they use the system?
  – Could you show me?

• Listen to users!
  – Do not comment on what is possible or not!
Definition

• Using data collected in the analysis phase
  – Identify and name key persona
    • *A fictitious user representing a class of users*
      – Represent a key set of behavior and goals
    • *Examples:*
      – Bob, 30+ clerks, just wants ambiance music…
      – Alice, 40+ senior executive, is an audiophile…
  – Identify and name key goals
    • *What do users wish to accomplish?*
    • *How different goals articulate with each others?*

• Goals are not Tasks!
  – Tasks are technology dependent
  – Goals are not
Goals vs Tasks
(example from About Face 2.0 by Cooper)

• Traveling from St Louis to San Francisco
  – Goals?
  – Personas
    • In 1850?
    • In 2003?
  – Tasks
    • In 1850?
    • In 1930?
    • In 2003?
Ideation

“The best way to get a good idea is to get a lot of ideas”

• Seed the brainstorm
• Get physical
• Follow the rules (IDEO)
  – One conversation at a time
  – Stay focus
  – Encourage wild ideas
  – Defer judgment
  – Build upon idea from others
Idea selection

• Define each idea importance
  – User preference and target user population
  – Available hardware
  – Available software
  – Cost
  – Window to market
  – …

• Rank ideas according the your criteria

• Pick the tops 1-5
  – Depend on resources and stage of the project
Implementation

• Depending on the phase of the project
  – Rapid low-fi implementation
  – Rapid prototyping
    • Director, Flash
  – Toolkit based implementation
  – Full implementation
Evaluation

• Depending of the phase of the project
  – Walk-throughs
  – Wizard of Oz using paper based interface
  – Small group of users using a simulation of the interface
  – Small group of users using the real interface
  – Large group of users
  – Product is shipping
    • Monitor the support line