Questions?

• Homework #2 is out
• Homeworks #2 and #3 due date delayed one class
The IDEO Design Process

Understand

Observe

Visualize and Predict (Ideate)

Evaluate and Refine

Implementation

Design Process

David Kelley TED Talk
Lidwell’s “Development Cycle”

- Requirements
- Design
- Development
- Testing

Linear
(“waterfall”)

Iterative
Innovation – Hatton reading

• Answer the 5 questions on page 118.
  – Why are the strategies of discovery less easily codified than the rules of scientific proof?
• What are the differences between the discovery and the validation process? Are both equally methodical?
• What does Albert Szent Gyorgyi mean by: "Discovery consists of seeing what everybody has seen and thinking what nobody has thought"?
• What is the role of failure in the discovery process? Should a failure be seen as a negative or a positive part of the discovery process? Explain your answer.
• What does it mean to set the stage for discovery? How could you change your everyday routine to enhance your chance of making a discovery?
• What is the role of playfulness in the discovery process? How a playful mind might help seeing what others have not seen?
System Centered Design

- What can be built easily on this platform?
- What can I create from the available tools?
- What do I as a programmer find interesting to work on?
User Centered Design

• Design is based upon a user’s
  – Abilities and real needs
  – Context
  – Work
  – Tasks

Golden rule of interface design:

“Know The User”
User Centered Design

• ... is based on understanding the domain of work or play in which people are engaged and in which they interact with computers, and programming computers to facilitate human action. ...

• Three assumptions
  – The result of a good design is a satisfied customer
  – The process of design is a collaboration between designers and customers. The design evolves and adapts to their changing concerns, and the process produces a specification as an important byproduct
  – The customer and designer are in constant communication during the entire process
Designer Centered Design

- The experts know best
- Users can’t see past what they know
Brainstorming

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

• Seed the brainstorm
  – Topic statement

• Get physical

• Follow the rules (IDEO)
  – Stay focused
  – One conversation at a time
  – Encourage wild ideas
  – Defer judgment
  – Build upon idea from others

• Number your ideas

• Target:
  – 100 ideas per hour
Brainstorming

“How can we reduce the time users spend waiting for their computer?”