Part 1: The Product

INTRODUCTION TO COURSE

Chapter 1

TOPICS:

• Motivation
• Objectives of course
• Product and process
• Interaction design vs. software design

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THE NEED FOR GOOD USER INTERFACES

What is age of youngest effective user of computer?

• Costs of hardware & software vs. "personware"
• To users, the interface *is* the system
• Communication vs. computation
• The real issue: Metrics for ensuring usability
  * Ease of learning
  * Speed of user task performance
  * User error rate
  * Subjective user satisfaction
  * Retention over time

If your computer were a person, how long 'til punch in nose? Usability is quantifiable. Anyone can create a UI, but is it usable?
THE NEED FOR GOOD USER INTERFACES

- Usability "in the large": Ease of use, \textit{plus} usefulness

- Usability engineering

\texttt{Duck + 2 \rightarrow\rightarrow\rightarrow}
OBJECTIVES FOR THIS COURSE

Course is designed to help you develop more usable interaction designs for graphical user interfaces (GUIs) and Web applications by:

• Understanding and applying interaction design guidelines

• Using an iterative, evaluation-centered usability engineering life cycle

• Participating in systems analysis, including user, needs, task, and functional analyses

• Doing conceptual and detailed design

• Establishing usability specifications

• Building rapid prototypes

• Performing formative usability evaluation

• Iteratively refining the interaction design

• Knowing how to get started with these new ideas

Practical, hands-on approach : HAVE FUN!!! Think of all these various techniques as pieces of a puzzle; all pieces fall into place at the end.
People who develop UI don’t intentionally make them lousy!

• Evolution of a good GUI or Web design requires:

* **Product** — application or Web site: content, human factors of an interaction design
  
  = "what" = General GUI guidelines are largely applicable to Web design

* **Process** — usability engineering: techniques and tools for developing an interaction design

  = "how" = This is what ENSURES usability == > Same process for GUI and Web

• Significant cause of poor usability in *product* is lack of understanding of proper development *process*

1.5 Intro
INTERACTION DESIGN IS NOT SOFTWARE DESIGN

• Developing a GUI or Web user interface involves:

* Interaction component — how a user interface works, its "look and feel" and behavior in response to what a user hears, sees, and does

* Interface software component — code that instantiates the interaction component

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<th>User Interface Development</th>
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<td>Development of User Interaction</td>
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• Premise: Describing interaction from user’s view should result in more usable design than describing it from software or programmer view.

Inherent conflict of interest:

What is easiest for the programmer is rarely best for the user...

• "One head, two hats" — emphasizes different roles

Easy to use is easy to say, but not easy to do!

1.6 Intro