THE PROCESS OF
USER INTERACTION DEVELOPMENT

• Connections of user interaction development to software engineering

• Distinction between software design and implementation

Software design

Spec’ns

Software implementation

Constraints and problems
THE PROCESS OF USER INTERACTION DEVELOPMENT

• Adding systems analysis, testing, and problem domain
THE PROCESS OF USER INTERACTION DEVELOPMENT

- Analogous activities for user interface development
THE PROCESS OF USER INTERACTION DEVELOPMENT

• Connecting the processes together and adding rapid prototyping
ITERATIVE, EVALUATION-CENTERED LIFE CYCLE FOR USER INTERACTION DEVELOPMENT

• A *star life cycle* [Hartson & Hix, 1989] for user interaction development
USABILITY MANAGEMENT

• The control mechanism for the star life cycle

• Control involves:
  * Establishing usability specifications
  * Evaluating against usability specifications
  * Performing impact and cost/benefit analyses
  * Deciding on changes to make to interaction design
  * Deciding when to stop iterating
USER INTERFACE DEVELOPMENT TEAM

• Roles on user interface development team

  * User interaction designer (or usability engineer or usability specialist)

  * Evaluator

  * User (and/or user representative)

  * Software engineer (or developer or analyst)

  * Technical writer

  * Graphic designer

  * Application domain expert