UX Design and Software Engineering
Interaction Design is not About Software

Interaction component: How a UI works, its “look and feel” and behavior

UI software component: Code that implements the interaction component
UX Design and the Software Process

Lightweight, rapid iteration
Two Distinct Roles

- Interaction **UX designer** and **UI software designer**
- Premise – **user focus** and **interactive design expertise** should result in a **better UX**
- Inherent **conflict** of interest: What’s best for the user is seldom easiest for the software developer!
- Note: sometimes the software engineer fills both roles!
UX and Software Design

- **Usability** is a quality attribute requirement
- **Usability scenarios drive software architecture design;** examples …
  - Cancel task
  - Undo/redo action
  - Task progression reporting
  - Error recovery
  - Internationalization
- **Design patterns** – e.g., MVC and others
UX Implementation

- UX platforms
  - Mobile
  - Web
  - Desktop
  - Embedded
- Design style guidelines and code libraries
SWEN 444 Vs SWEN 440

- What’s the same?
  - Discover requirements to a domain problem
  - Analyze requirements
  - Design a solution
  - Team design project

- What’s different?
  - 444
    - Design the HCI
    - Focus on users and their UX related interaction goals and requirements
  - 440
    - Design the software architecture for the system
    - Consider all stakeholders
    - System functional and non-functional requirements
    - Methods and techniques (limited overlap)