Chapter 22

“Envisioning Design”

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Overview

• Definition of Envisioning Design

• Three types of Envisioning Design
  – Holistic Design
  – Sketching and Metaphor
  – Scenarios, Storyboards, and Snapshots
Envisioning Design

• This chapter discusses ways of conceptualizing the form of a design at a very early stage in terms that users can understand.

• **Envisioning Design** - bringing abstract ideas to life, as well as designing functionality.

Holistic Design

• **Holistic** approach views the design as a whole.
• Decisions about the way an interface should look are made in relation to how it will be physically communicated to users.
• Holistic design is different from structured design because
  – it is less structured and constrained
  – no precise ordering of stages and representations
  – helps focus attention on appearance and the presentation of the conceptual model
  – helps visualize the design problem and solution in terms of an overall system image
Star User Interface

- Is an example of Holistic Design
- Uses the following design principles
  - familiar user’s conceptual model
  - seeing and pointing versus remembering and typing
  - WYSIWYG
  - universal commands
  - consistency
  - simplicity
  - modeless interaction
  - user tailorability

Star User Interface (continued)

- Consistent representations on paper and screen (WYSIWYG)
- Utilizes universal commands such as
  - move, copy, delete, and show
- Keys for changing characters fast such as
  - bold and italic
- Modeless interaction
  - noun-verb commands for all actions
- Tailorability such as
  - the ability to change desktop icons
Holistic Design

• One approach - “Game Playing”
  – playing a design ‘game’ with the users
  – was used for redesign of a newspaper production system in 1991
  – the semantics and syntax of the game have to be situated
  – utilizes cards that represent the main functions, objects, and artifacts that are used to situate and guide the analysis
  – cards can be screen shots, sketching, and prototyping

Sketching and Metaphor

• Designing a conceptual model as an explicit interface metaphor like the desktop metaphor already discussed
• Visual brainstorming to explore alternative designs using
  – initial sketches
  – cardboard representations of designs
  – scenarios
  – software or video prototypes
  – learning to be creative
Examples of Metaphors

![Diagram of programming concepts](image)

**Scenario** - a personalized, fictional story with characters, events, products, and environments
- helps designer explore ideas and ramifications of design decisions in particular concrete situations

**Snapshots** - single visual images that capture significant possible interaction

**Storyboards** - sequences of snapshots that focus on the main actions in a possible situation

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**Scenarios, Storyboards, and Snapshots**

- **Scenario** - a personalized, fictional story with characters, events, products, and environments
  - helps designer explore ideas and ramifications of design decisions in particular concrete situations

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- **Storyboards** - sequences of snapshots that focus on the main actions in a possible situation