Overview

- Media-specific instructional strategies
- Control, Feedback, Guidance
- Feedback on Design Documents

Interaction Design

Skull Game • Division for Medical Informatics, NYU School of Medicine
Interaction Design Activity

Instructional Interaction Design Task

- Design interactions for a “matching” activity
- Use sketches or wireframes to communicate your design
- Visualize your choices for the user control, feedback, and guidance you will provide, and
- Provide explanations of your choices
- Be prepared to discuss your design with the class

Tasks description

- Design an activity where names of parts of the skull are matched to the correct location on the skull

Interaction Design

Control, Feedback, and Guidance

Interaction Design

Control defined

- Level of control user has over the flow of the instruction and navigation
Interaction Design

Control

- Activity control
  - Content Control (epistemic action)
  - static–predetermined/limited
  - flexible–predetermined/limited
  - flexible–unlimited
- Input type
  - Direct object manipulation
  - Menus, forms, dialog boxes, control buttons
  - Commands, natural language input
- Interaction devices

Interaction Design

Control

- Navigation control
  - Linear v. random access navigation
  - Level of Granularity of Navigation
  - Search functionality

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Feedback defined

- System messages in response to user actions or input
  - Content-related
  - Navigation-related
  - Semantic or Syntactic action-related
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- Feedback types for content
  - Corrective Feedback
  - Explanatory feedback
  - Motivational Feedback

Interaction Design

- Feedback mode and modality
  - Symbolic (on-screen text, unrelated sound, speech)
  - Iconic (on-screen graphic, related sound)

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- Guidance defined
  - Communications to user aimed at enhancing their interactions with the educational environment in order to facilitate construction of knowledge
Interaction Design

Guidance types
- Advance organizers
- Hooks (action, resource, strategical, motivational, metacognitive)
- Scaffolds
  - Attentional
  - Contextual
  - Metacognitive
  - Procedural...
- Checks for comprehension

Design Document Feedback
- Information Architecture
  - Link features to goals, learners
- Information Design
  - Link to theories of memory and cognition, references
- Interaction Design
  - Embed sketches, integrate them with narrative
  - Link interactions to goals, cognitive theory, references
  - Embed wire frames, integrate them with narrative