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Chapter I

I. Usability
    i. Successful Designers – go beyond what is expected. think of diversity. study evidence
    ii. great designers- committed to user experience, aware of emotional responses
a. ascertain the users needs
b. ensure reliability
c. standardization: pre-existing standards met
d. integration
e. consistency
f. portability
g. 5 human factors:
    i. time to learn
    ii. speed of performance
    iii. rate of errors
    iv. retention
    v. satisfaction
h. life-critical systems often poorly designed
i. Individual User Level – what do people use the internet for?
    i. routine processes
    ii. Decision support
    iii. education and training
    iv. leisure
    v. user generated content
    vi. internet-enabled devices/communication
j. goals for profession:
    i. reduce anxiety and fear of computer usage
    ii. graceful evolution
    iii. social media participation
    iv. input devices
    v. information exploration
    vi. provide tools, techniques, and knowledge
    vii. raise computer conscience in general public

Chapter 2

I. Universal Usability
a. GOAL: addressing needs of all users
b. anthropometry: the scientific study of the measurements and proportions of the human body.
c. concerns: work-surface and display-support, leg space, work space depth, adjustability of heights and angles, posture, available footrests, etc..
d. be aware of the way people learn and what could influence them to not

e. introvert/extrovert, sensing vs. intuition, etc. personalities are different
f. plan for disabled and old users
g. TECHNICAL CHALLENGES: producing satisfactory internet interaction connections, responsive design (phones too), easy maintenance to multiple languages

Chapter 3
Guidelines, Principles, and Theories

I. Guidelines: low-level advice about good practices
II. Principles: strategies
    a. need more clarification
    b. determine user's skill levels, identify tasks
    c. 5 primary interaction styles: direct manipulation, menu selection, form fill-in, command language, natural language
    d. 8 golden rules of interface design: consistency, universal usability, informative feedback, dialogs to yield closure, prevent errors, permit easy action reversal, users in control, reduce short-term memory load
III. Theories: frameworks to draw on during design and evaluation
IV. High Level Goals (smith and mosier) – consistency of data display, efficient info assimilation, minimal memory, compatibility of display with data entry, flexibility for user control
V. explanatory theories : observing behavior, describing activity, etc
VI. predictive theories: enable designers to compare proposed designs for execution time or error rates
VII. Foley and van Dam: conceptual (users mental model), semantic level (describes meaning conveyed), syntactic level, lexical level
VIII. Norman: forming goal, forming intention, specify action, execute intention, perceiving the system state, interpreting the system state, evaluating the outcome.
    a. gulf of execution: mismatch between users intentions and allowed actions
    b. gulf of evaluation: mismatch between systems rep and users expectations
IX. micro-hci theories: focus on measurable performance
X. macro-hci theories: focus on case studies
XI. taxonomy: explanatory theory

Other random:

I. models: waterfall (distinct phases of development), evolutionary (interleaved), and component-based (assembled from existing components)
II. process iteration: parts of processes reworked
    a. incremental delivery vs. spiral development
III. Software Process. specification, development, validation, evolution
IV. Principles, Methods and techniques, methodologies, tools
V. Key Principles: rigor and formality, separation of concerns, modularity, abstraction, anticipation of change, generality, incrementality, reuse