

MODULE - 2:

1. Common Pitfalls:-

- No early ~~error~~ analysis and understanding of user's needs and expectation
- A focus on design containing features and components that are "neat" and "glitzy"
- Little or no creation of design element prototypes
- No usability testing
- No common designer team goals of user interface design goals
- Poor communication between the members of development teams

2. Direct method:-

1. Individual Face-to-face interview
2. Telephone interview and survey
3. Traditional Focus groups
4. Facilitated Team Workshop
5. Observation field study
6. Requirement prototyping
7. User-Interface prototyping
8. Usability laboratory testing
9. Card sorting for web sites

3. Five commandments for designing for people:-
1. Gain a complete understanding of users and their tasks.
 2. Solicit early and ongoing user involvement.
 3. Perform rapid prototyping and testing.
 4. Modify and iterate design as much as necessary.
 5. Integrate the design of all the system components.

4. Human characteristics

1. Perception
 1. Proximity
 2. Similarity.
 3. Unity.
 4. Balance.
2. Memory.
3. Sensory storage
4. Visual Acuity
5. Foveal and peripheral vision
6. Information processing
7. Mental model
8. Movement control
9. Learning
10. Skill
11. Individual difference.

5. Common usability problems:-

1. Ambiguous menus and icons.
2. Language that permit only single-direction movement through a system.
3. Input and direct manipulation limits.
4. Highlightings and selection limitations.
5. Unclear step sequences.
6. More steps to manage the interface than to perform tasks.
7. Complex linkage between and within applications.
8. Inadequate feedback and confirmation.
9. Lack of system anticipation and intelligence.
10. Inadequate error messages.

6. Indirect methods:

1. MIS Intermediary
2. Paper survey ^{or} Questionnaire
3. Electronic Survey or questionnaire
4. Electronic Focus group similar
5. Marketing Sales ^{or} support line
7. E-mail, Bulletin boards or Guest book
8. User group
9. Competitor Analysis
10. Tradeshow
11. Other media analysis
12. System testing

7. Objective criteria for measuring usability.
1. How effective is the interface? Can required range of tasks be accomplished?
 2. How learnable is the interface? Can the interface be learned?
 3. How flexible is interface?
 4. What are the attitudes of the user?

8. Human interaction speed.

1. Reading
2. Listening
3. Speaking
4. Keying
5. Hand printing.

9. Conceptual Model Guidelines:-

1. Reflect the user's mental model, not the designers.
2. Draw physical analogies or present metaphors
3. Comply with expectancies, habits, routines, and stereotypes
4. Provide action-response compatibility
5. Make invisible parts of the system visible
6. Provide proper and correct feedback.
7. Avoid the unnecessary or irrelevant
8. Provide design consistency.

9. Provide documentation and help system that will reinforce the conceptual model.
 10. Promote development of both novice and expert mental models
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10. Models determining basic business function.
 1. understanding User's mental model • Perform task analysis
 2. Developing Conceptual model