

Course : B.Tech.

Branch : CSE Year/Semester : IV/II

Academic Year : 2018-19

Subject : Human Computer Interaction

QUESTION BANK

Unit-I: Introduction to HCI Managing Design Processes

- 1) a) Describe five main issues that may affect the design, implementation or marketing (5 M)
b) Explain the pillars of design (5 M)
- 2) a) What is Usability in User Interface design? Why Usability is so important? (5 M)
b) Explain in detail about the usability measures. (5 M)
- 3) a) Explain about some important measures that determine the effectiveness of the product in regard to Usability. (5 M)
b) Discuss the important guidelines in the Ethnographic observation process. (5 M)
- 4) a) Explain Social impact statement for early design review. (5 M)
b) Discuss the usability goals for requirement analysis (5 M)
- 5) a) Compare and contrast between three and Four pillars of design. (3 M)
b) Discuss the organizational design to support usability(7 M)

Unit-II: Menu Selection, Form Fill-In and Dialog Boxes

- 1) a) Discuss the techniques available to accelerate the fast movement through menus. (6 M)
b) Explain how the content organization issues in menus can be reviewed through design guidelines. (4 M)
 - 2) a) Discuss about the menus for long lists with examples. (5 M)
b) Explain the various guidelines for designing dialog boxes. (5 M)
 - 3) a) Explain the various strategies for combining multiple Menus. (5 M)
b) Discuss the issues and challenges involved in designing menus for small display units. (5 M)
 - 4) a) Discuss the classification of Menus (6 M)
b) Explain the importance of Menu selection and dialog boxes in User interface design. (4 M)
 - 5) a) Differentiate between Direct and Indirect manipulation of Screen objects with suitable examples. (5 M)
b) Why direct manipulation of all screen objects and actions may not be feasible? (5 M)
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Unit -III: Command and Natural Languages Interaction Devices

- 1) a) Discuss various Motion-tracking pointing devices and their accessibility.(6M)
b) What is a Computer Keyboard? Explain about various Keyboards and Keypads available for Small devices. (4 M)
- 2) a) Write about Novel pointing devices. (6 M)
b) Explain briefly about the features of various Keyboard Layouts. (4 M)
- 3) a) Write short note on command organization functionality. (6 M)
b) Write about Direct and Indirect input devices with suitable examples for each. (4 M)
- 4) a) Describe about discrete word recognition and continuous speech recognition in detail. (5 M)
b) Discuss the challenges and issues in adopting Speech Recognition . (5 M)
- 5) a) What are the various abbreviation strategies and also discuss on abbreviation guidelines (6 M)
b) Explain in detail the goals of Language design. (4 M)

Unit -IV: Quality of Service Balancing Function and Fashion

- 1) a) What is coordination? Discuss the important coordinations supported by interface developers for window design. (6 M)
b) Explain about readability guidelines for messages. (4 M)
- 2) a) Write short notes on user-centered phrasing (5 M)
b) Write the primary factors that influence users' expectations and attitudes regarding system response time. (5 M)
- 3) a) Discuss the role of User Productivity in determining system response time. (5 M)
b) Describe choosing colors for statistical graphical screens. (5 M)
- 4) a) Explain about users' tasks and needs which are important in user interface design. (5 M)
b) Illustrate the variability in system response time. (5 M)
- 5) a) What are the guidelines for alphanumeric displays, spreadsheets and Graphs (5 M)
b) List few common mistakes of web-based display of information (5 M)

Unit-V: User Documentation and Online Help

- 1) a) Describe the taxonomy of user manuals and tutorials (4 M)
- b) Discuss the advantages and disadvantages of reading on paper and reading on computer display (6 M)
- 2) a) Mention the potential disadvantages of reading from displays. (5 M)
- b) What is Transition diagram? Explain its advantages and disadvantages with examples. (5 M)
- 3) a) Explain in detail about context-sensitive help. (5 M)
- b) Give a brief note on animated demonstrations. (5 M)
- 4) a) What are the advantages and disadvantages of online manuals? (5 M)
- b) Discuss the use of OAI model to design manuals with suitable diagrams. (5 M)
- 5) a) Write about the best practices for shaping a good documentation. (5 M)
- b) Write a brief note on Animated Demonstrations for exploratory learners. (5 M)

Unit-VI: Information Search Information Visualization

- 1) a) Describe the five-phase framework to clarify user interfaces for textual search. (6 M)
- b) What is the reference model for visualizations? (4 M)
- 2) a) What is a Search Engine Query? List out the most popular Search Engines in the world. (5 M)
- b) How is querying done in searching for textual documents? (5 M)
- 3) a) Differentiate between Search and Query (5 M)
- b) What are the challenges that information visualization researchers need to face to create successful tools? Explain. (5 M)
- 4) a) Explain about Multimedia document searches. (5 M)
- b) Discuss the basic tasks that need to be supported for information visualization. (5 M)
- 5) a) Explain about the few alternatives to form-fill-in query interface. (6 M)
- b) Write about Dynamic queries (4 M)

Signature of the Faculty