

HCI

Unit 3-Understanding the interaction

1. Describe WIMP Interface in detail
2. Explain WIMP interface elements. State advantages and disadvantages of WIMP interface.
3. Explain following WIMP interface elements with respect to any text editor. a. Icon b. Menus c. Toolbars d. Dialog boxes
4. Explain different Interaction styles. Specify Advantages and disadvantages of each interaction style.
5. Explain Models of interaction.
6. Explain the execution and evaluation cycle.
7. Explain theory of User experience by Honeycomb Model.
8. What is Context of interaction? Explain with example
9. Describe Paradigms of Interactions.
10. What is Ergonomics? List and explain the various disciplines of Ergonomics?
11. Elaborate Ergonomics in understanding the interaction
12. How does making a call differs when using i. cell phone ii. Smart phone? Consider the kinds of user, type of activity, and context of use.

Unit 4-HCI design process

1. What is a prototype? Explain different types of prototyping techniques in detail.

- 2.** List out five main design frameworks in HCI.Explain Wire framing and MVC framework in detail.
- 3.** Explain UI layer and its execution framework.
- 4.** What are different types of scenarios? Write scenarios for purchasing an airline ticket.
- 5.** Explain the constraints of the software design process framework in HCI.
- 6.** What is Prototype? Explain Prototyping with hill climbing approach.
- 7.** Explain hill climbing approach with prototyping.
- 8.** Explain UI layer and its execution framework.
- 9.** What are different types of scenarios? Write scenario for music player design.
- 10.** What is interaction design? Explain screen design process.
- 11.** Elaborate Model-View-Controller(MVC) Framework
- 12.** Explain Prototyping techniques.
- 13.** Describe Navigation Design
- 14.** What is interaction design? Explain software design process.
- 15.** Explain the UI Layer and Its Execution Framework.
- 16.** Explain different types of rapid prototyping techniques.
- 17.** What is need of MVC pattern? Draw figure and explain.
- 18.** Write a short note on ‘Golden rule of Design’

Unit 5-HCI design rules, guidelines and evaluation techniques

- 1.** Elaborate User interface management system (UIMS) in detail.

- 2.** Write short note on - Golden rules and heuristics
- 3.** Explain the design standards and design Guidelines in HCI.
- 4.** Explain evaluation through user participation.
- 5.** Explain evaluation through expert analysis.
- 6.** Write a note on - Evaluation Criteria
- 7.** Discuss Shneiderman's 8 golden rules of interface design with an example.
- 8.** What are the goals of evaluation? Explain Evaluation through Expert Analysis.
- 9.** What is Usability? Explain the principles that support usability.
- 10.** Explain User Interface Management System(UIMS) conceptual architecture.
- 11.** What is Usability? Explain the principles that support Usability.
- 12.** Explain Nielsen's ten heuristics.
- 13.** What is evaluation? What are the goals of evaluation?
- 14.** Explain cognitive walkthrough with an example.
- 15.** Write classification of evaluation techniques.
- 16.** Write use of toolkit in design with an interface.

Unit 6-HCI Models and theories

- 1.** Describe a linguistic model in detail.
- 2.** A Hierarchical Task Analysis (HTA) provides an understanding of the tasks users need to perform to achieve a certain goal. Perform HTA of the task to cook food(rice). Illustrate using diagram.
- 3.** Explain Cognitive architectures
- 4.** Explain three state model

- 5.** Explain Keystroke-Level-Model(KLM).
- 6.** Write a note on Ubiquitous Computing
- 7.** How to find things on the web Future of HCI?
- 8.** Elaborate Hierarchical task analysis (HTA).
- 9.** Describe a linguistic model in detail.
- 10.** Discuss applications meant for computer-mediated communication.
- 11.** Describe Physical and device models with examples
- 12.** Explain Keystroke-Level-Model(KLM).
- 13.** Write a short note on – i. BNF(Backus-Naur-Form) ii. GOMS
(GOAL, OPERATORS, METHODS AND SELECTION)
- 14.** List out Diagrammatic Dialog Design notations. Explain any two with example.
- 15.** What is task action grammar?

