- 1. Understand the User's Mental Model:
  - Goal: Gain insight into how users think and understand the tasks they perform.
  - Approach: Conduct task analysis to break down user activities into individual tasks.
  - Result: Obtain a comprehensive view of user tasks, interactions, and workflows.

## 2. Perform Task Analysis:

- Goal: Understand why and how people currently perform tasks that will be automated.
- Approach: Break down user activities into tasks, focusing on goals and actions.
- Result: Get a detailed description of all user tasks, interactions, and conceptual frameworks.

## 3. Develop Conceptual Models:

- Goal: Create a conceptual model for the user interface based on the task analysis.
- Approach: Design a framework that reflects the user's mental model.
- Guidelines:
  - Reflect the user's mental model.
  - Use analogies, metaphors, and comply with user expectations.
  - Ensure consistency in design.
- Result: A conceptual model describing how the system's functions are presented.

## 4. Define Objects:

- Goal: Identify and describe all objects manipulated to accomplish tasks.
- Approach: Determine object behavior, relationships, actions, and attributes.
- Guidelines:
  - Make important objects obvious and easy to manipulate.
  - Preserve, display, or allow editing of relevant object information.

- Result: A clear understanding of the key objects and their roles in the workflow.
- 5. Develop Metaphors:
  - Goal: Use metaphors to enhance user understanding of the system.
  - Approach: Choose real-world analogies that work best for each object and action.
  - Guidelines:
    - Use simple, common, and major metaphors.
    - Test selected metaphors for user comprehension.
  - Result: Improved user comprehension through relatable metaphors.

## Related posts:

- 1. What do you mean by user interface? Define user interface design. Why user interface is important?
- 2. Describe the importance of good design.
- 3. What are the benefits of good design?
- 4. Write a short note on history of screen design.
- 5. What do you mean by graphical user interface?
- 6. What is popularity of graphics?
- 7. Describe the concept of direct manipulation
- 8. What is graphical system? Write down its advantages and disadvantages.
- 9. Describe the characteristics of graphical system.
- 10. Describe the characteristics of intranet versus the internet.
- 11. What are the usability problems in graphical system?
- 12. Explain web user interface.
- 13. Discuss the popularity of web interface.
- 14. What are the characteristics of web user interface?

- 15. Describe the principles of user interface.
- 16. Describe the principles established the foundation for graphical interfaces.
- 17. Describe the design goals in creating user interface.
- 18. Why web user interface design difficult?
- 19. Explain the five commandments for designing user interface
- 20. Discuss human computer interaction.
- 21. How a person interact with computer.
- 22. What are the factors that make system difficult to use?
- 23. What are the psychological responses to poor design?
- 24. What are the physical reactions to poor design?
- 25. Explain the important human characteristics.
- 26. Describe the following term with respect to humancharacteristics in design:
- 27. Describe human consideration in design.
- 28. What are the characteristics of mandatory use in user's task for design?
- 29. Give the characteristics of discretionary user
- 30. Explain human interaction speed.
- 31. What are the methods for gaining an understanding of users?
- 32. Discuss business and requirement analysis.
- 33. Designing a website, what kinds of interview questions are appropriate for asking users ?
- 34. Explain focus group. What are steps in setting up a focus group?
- 35. Explain card sorting for websites.
- 36. Describe the steps for creating electronic survey.
- 37. What is screen design? Define a well designed screen.
- 38. Describe the goals in screen design.
- 39. What is meant by screen and define it purpose.
- 40. How we can organize screen elements clearly and meaningfully?

- 41. Describe ordering of screen data and content.
- 42. What do you mean screen navigation and flow?
- 43. What do you understand by visually pleasing composition?
- 44. Discuss the perceptual principles that can be used toaid screen functional groupings.
- 45. How to group screen elements using border?
- 46. Discuss amount of information.
- 47. Discuss the following:
- 48. How to minimize the problems in scrolling?
- 49. Discuss about the term 'Distinctiveness'.
- 50. Discuss the techniques to provide emphasis.
- 51. How to convey depth of levels or a three-dimensional appearance?
- 52. How information is presented simply and meaningfully?
- 53. Discuss about typography.
- 54. Discuss about information entry and modification screens.
- 55. What are the types of statistical graphics?
- 56. Discuss intranet and extranet design guidelines.
- 57. Write short note on statistical graphics
- 58. Explain the components of statistical graphics.
- 59. Discuss technical consideration in interface design for : i. Graphical system ii. Web system iii. Other web consideration
- 60. Discuss windows and its characteristics.
- 61. What are the components of window?
- 62. Describe the window presentation style.
- 63. What are the advantages of tiled window and overlapping window?
- 64. What are the different types of windows?
- 65. Explain different window management schemes.
- 66. Describe the structure of menus.

- 67. Discuss the functions of menus.
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- 69. What are the various task performed by device-based controls.
- 70. Discuss various device based controls.
- 71. What are the advantages and disadvantages of :i. Trackball ii. Joystickiii. Graphic tablet iv. Touch screen
- 72. Discuss the guidelines for selecting proper device-based controls.
- 73. What are selection controls?
- 74. Describe the various operable controls.
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- 76. Discuss text for web pages.
- 77. Write a short note on message.
- 78. What are the message box guidelines recommended by Microsoft?
- 79. Discuss message box controls.
- 80. Discuss instructional message in detail.
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- 82. Explain design process for icons.
- 83. Describe icon animation and audition.
- 84. Describe multimedia in detail.
- 85. What is color?
- 86. What are the uses of color?
- 87. What are the problems related to color?
- 88. How to choose color?
- 89. What is software tool ? What are the commonly usedtools in human computer interface ?
- 90. Explain specification method.
- 91. Describe interface building tools in detail.

Determine the basic business functions.

- 92. What are the features of interface building tools?
- 93. Explain interaction devices.
- 94. Describe keyboard and function keys.
- 95. Describe pointing devices and types of interaction tasks useful for pointing devices.
- 96. What are the types of pointing devices?
- 97. Explain speech recognitions.
- 98. Discuss speech digitization and generation.
- 99. Describe image and video displays.
- 100. What are the characteristics of video display devices?
- 101. Write a short note on drivers.