

Interface building tools are crucial for designing components of a system, such as command languages, data-entry sequences, and widgets. These tools facilitate collaboration among user-interface architects, designers, managers, users, and software engineers. Paper-based designs, like screen-transition diagrams, provide an overview, but detailed specifications often require specialized software tools.

1. Interface Mockup Tools:

- *Purpose:* Used for quick sketches during early design stages, fostering exploration of alternatives and effective communication within the design team or with clients.
- *Examples:* Paper and pencil, word processors, slide show presentation software (e.g., Microsoft PowerPoint or Apple Keynote), and multimedia construction tools like Dreamweaver for prototypes.

2. Software Engineering Tools:

- *Purpose:* While experienced programmers may use general-purpose languages like Java, C#, or C++, the trend is shifting towards specialized tools tailored for user-interface development and web access.
- *Complexity:* Choosing among these tools can be complex due to inconsistent terminology and diverse features.

3. Windowing System Layer:

- *Scenario:* Some platforms lack high-level building tools, requiring software engineers to work at a low level. Editing graphics resources like icons or images is possible, but interaction is limited.
- *Example:* Interfaces for certain new platforms or mobile devices may need to be developed at the windowing system level.

4. GUI Toolkit Layer:

- *Role:* Provides user interface program libraries (GUI toolkits) offering common

Describe interface building tools in detail.

widgets such as windows, scroll bars, menus, buttons, and dialog boxes.

- *Programming:* While familiar to experienced programmers, toolkits without interactive support can become complex. Learning environments like Microsoft Windows Forms or Apple Macintosh Toolkit may require months of proficiency.

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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.
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12. Explain web user interface.
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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 human characteristics in design :
27. Describe human consideration in design.
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29. Give the characteristics of discretionary user
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37. Determine the basic business functions.
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39. Describe the goals in screen design.
40. What is meant by screen and define its purpose.
41. How we can organize screen elements clearly and meaningfully ?
42. Describe ordering of screen data and content.
43. What do you mean screen navigation and flow ?
44. What do you understand by visually pleasing composition ?
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46. How to group screen elements using border ?
47. Discuss amount of information.
48. Discuss the following :
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50. Discuss about the term 'Distinctiveness'.
51. Discuss the techniques to provide emphasis.
52. How to convey depth of levels or a three-dimensional appearance ?
53. How information is presented simply and meaningfully ?
54. Discuss about typography.
55. Discuss about information entry and modification screens.
56. What are the types of statistical graphics ?
57. Discuss intranet and extranet design guidelines.
58. Write short note on statistical graphics
59. Explain the components of statistical graphics.
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61. Discuss windows and its characteristics.
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80. Discuss message box controls.
81. Discuss instructional message in detail.
82. What is icon ? Write down the characteristics of icons.
83. Explain design process for icons.
84. Describe icon animation and audition.
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86. What is color ?
87. What are the uses of color ?
88. What are the problems related to color ?
89. How to choose color ?
90. What is software tool ? What are the commonly usedtools in human computer
interface ?
91. Explain specification method.
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 ?

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- 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.