

## Components of a statistical graphic :

### 1. Data Presentation:

- Emphasize Data: Make the data stand out.
- Minimize Non-Data Elements: Reduce unnecessary elements.
- Minimize Redundancy: Avoid repeating information.
- Show Data Variation: Focus on how data changes, not design.
- Provide Context: Help viewers understand the data.
- Restrict Dimensions: Only show as many dimensions as needed.
- Use Data Effectively: Present data in multiple ways.
- Maximize Data Density: Convey as much information as possible.

### 2. Axes:

- Values Increase Away from Origin: Follow a logical progression.
- Horizontal Axis (X): Typically for time or cause.
- Vertical Axis (Y): Represents the effect or outcome.

### 3. Scales and Scaling:

- Ticks on Outer Edge: Mark scales clearly.
- Linear Scale: Maintain a consistent scale.
- Standard Intervals: Mark scales in regular intervals.
- Start Numeric Scale at Zero: Begin from the baseline.
- Minimum Digits: Keep scale digits to a minimum.
- Single Scale per Axis: Avoid multiple scales.
- Consistent Scaling: Keep scaling consistent across related graphics.
- Clear Axis Labels: Label axes clearly.

### 4. Proportion:

- Accurate Representation: Ensure surfaces match data.
- Width Over Height: Make the graphic wider than it is tall.

5. Lines:

- Heaviest for Data Lines: Emphasize the main data.
- Medium Weight for Axes: Keep axis lines clear.
- Extend Lines Completely: Avoid partial lines.
- Thin or Absent Grid Lines: Grid lines should not overshadow data.

6. Labeling:

- Clear and Detailed: Ensure labels are easy to understand.
- Left-to-Right Orientation: Read labels from left to right.
- Integrated Labeling: Connect labels to data.
- Use a Single Typeface: Maintain consistency.
- No Separation Lines: Avoid lines between labels and data.
- Include Data Source: Provide information about data origin.
- Use Legend for Complex Graphs: Clarify complex elements.

7. Title:

- Short and Clear: Create a concise and clear title.
- Position Above or Centered: Place the title for easy visibility.
- Use Appropriate Font: Employ a readable font.

8. Aiding Interpretation of Numbers:

- Display Grid on Request: Allow users to see a grid if needed.
- Interactive Features: Enable clicking for actual values or zooming.
- Numeric Values Display: Automatically show values for each point.
- Adjustable Scale: Allow users to change scale values.
- Toggle Between Graphic and Table: Provide options for different views.

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 human characteristics in design :
27. Describe human consideration in design.

Explain the components of statistical graphics.

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. Determine the basic business functions.
38. What is screen design ? Define a well designed screen.
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 ?
45. Discuss the perceptual principles that can be used to aid screen functional groupings.
46. How to group screen elements using border ?
47. Discuss amount of information.
48. Discuss the following :
49. How to minimize the problems in scrolling ?
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 ?

Explain the components of statistical graphics.

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. 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.
68. What are website navigation problems ?
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.
75. What is text ? How we present and write text ?
76. Discuss text for web pages.
77. Write a short note on message.
78. What are the message box guidelines recommended by Microsoft ?

Explain the components of statistical graphics.

79. Discuss message box controls.
80. Discuss instructional message in detail.
81. What is icon ? Write down the characteristics of icons.
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 used tools in human computer interface ?
90. Explain specification method.
91. Describe interface building tools in detail.
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.