Database Design

Preparing Visual Materials





Objectives

This lesson covers the following objectives:

- Construct entity relationship diagrams that demonstrate industry conventions
- Prepare tables and visuals that support their database documentation
- Demonstrate and provide examples of table formatting for database documentation
- Demonstrate and refine oral presentation skills during rehearsal and refinement



Purpose

Visual materials complete the presentation. They complement the written documentation and the oral presentation.

For nontechnical readers, graphs, tables, and visual presentation of data are key to understanding and clarifying the written documentation.



Purpose (cont.)

Sports teams hold regular practice sessions, theater companies have rehearsals before a show, and musicians practice regularly on their instruments. The stellar performances you see at the game, the show, or the concert would not be possible without practice.

Think about the first time you solved a math problem, played a video game, or learned to swim. Were you very good at it? What did you do to get better? Practice!



A Picture is Worth a Thousand Words

People take in a lot of information through their eyes, much more than through their ears. Well-drawn and clearly labeled visual materials add impact to the presentation as it is being delivered and support it afterward.



Guidelines for Preparing and Using Visual Elements

- 1. All diagrams, drawings, tables, or graphs should have a title that identifies what it depicts.
- 2. All diagrams, drawings, tables, or graphs should have a label that identifies it for reference from the written documentation. For example, label a diagram "Figure 1 ERD" and refer to it as "Figure 1 ERD" in the written documentation.



Guidelines for Preparing and Using Visual Elements (cont.)

- If different colors or different styles of lines are used in a drawing, be sure to make a key to explain their meaning.
- 4. Keep all diagrams, drawings, tables, and graphs simple and easy to understand. The reader doesn't need 85 rows of data output to understand your point.
- Size diagrams, drawings, tables, and graphs to fit in the flow of the documentation and within the page margins.



Guidelines for Preparing and Using Visual Elements (cont.)

- 6. Use tables for numerical data and to show database output.
- Label each table with a centered bold row heading and a column heading.
- 8. If several tables are part of a group, label them Table 1-1, Table 1-2, etc.



Guidelines for Preparing and Using Visual Elements (cont.)

- Use the same font size and style of all similar elements in each table.
- 10. Line up decimal points in columns.
- 11. Don't abbreviate without providing a key. If you use "mname," make sure you reference it. Your audience may not know if this is maiden name, middle name, or manager name.



Guidelines for Preparing and Using Visual Elements (cont.)

- 12. For charts and graphs, choose the style (pie chart, bar graph, line graph) that best fits the data being illustrated.
- 13. For visuals to be shown during a presentation, make sure the print size is large enough for someone to read from the last row of seats.



Guidelines for Preparing and Using Visual Elements (cont.)

- 14. Keep visual content simple. Your audience may not understand technical jargon or have time to read many lines of text.
- 15. Rehearse the presentation to make sure you understand how to explain all visual elements.



Practice Makes Perfect

Very few people get everything right the first time. The key is to practice and be willing to listen to constructive criticism.

You have an important role both as a presenter and as an audience member. When you offer feedback to your class members about their presentations, be constructive, helpful, and positive.



Classroom Activity: Presentation Rehearsal

Review your presentation with your group.

Present a "mini" version of your presentation to the class (make a brief introduction, show the ERD, make one statement about it and then conclude).

Refine your presentation, incorporating feedback from your classmates.



Summary

In this lesson, you should have learned how to:

- Construct entity relationship diagrams that demonstrate industry conventions
- Prepare tables and visuals that support their database documentation
- Demonstrate and provide examples of table formatting for database documentation
- Demonstrate and refine oral presentation skills during rehearsal and refinement