

Database Design

Oracle Database Environment

Objectives

This lesson covers the following objectives:

- Explain the features and benefits that the Oracle 11g Database Environment provides for businesses
- Locate information about Oracle Corporation and its products and services
- Relate the steps in the system development life cycle (SDLC) to the development and design of the Oracle 11g Database product and the data-modeling process

Purpose

Have you ever wondered why product manufacturers design new models every year and consumers seek to buy them?

What have you purchased recently that is an improvement over a previous product you owned (a mobile phone, an mp3 player, a video game player).

Purpose (cont.)

Businesses like Oracle constantly seek to develop new products to improve information technology. As a member of the Oracle Academy, you have the opportunity to learn from one of the world's leaders in information technology.

Application

Follow along as the instructor reads the article "The Making of Oracle Database 10g" by Barbara Assidi.

Try to identify similarities between what the Oracle Corporation experienced in developing its database product and what you experienced in designing and developing a database in data modeling.

Article Highlights

Highlights you should have noted from the article:

- "The planning phase commenced about two years before coding began."
- "The biggest challenge isn't coming up with great ideas to build into the database -- it's narrowing them down."
- "Writing the code that comprises the Oracle database is a disciplined activity that begins with the creation of a Functional Specification Document -- a document that provides details about each new feature of the database, complete with architectural diagrams."

Article Highlights (cont.)

- "We had checkpoint meetings every six weeks to make sure the development managers were on top of the project and on schedule."
- "Things don't always go as planned and these meetings give us a chance to anticipate problems and respond quickly to events."
- "Early on, we developed a core document that distilled the myriad features of the release into a statement of the release's key messages."
- "We spent a lot of time on the language."

System Development Life Cycle

The System Development Life Cycle (SDLC) is a step-by-step process that database developers use to transform the information needs of a business into a working operational database.

System Development Life Cycle (cont.)

The steps in the SDLC include:

- Strategy and analysis: Study and analyze the business requirements; build the data models
- Design: Map the design to tables
- Build and document: Create the tables and the user documentation
- Transition: Test and refine the design; train users
- Production: Roll out the system for the users

Summary

In this lesson, you should have learned how to:

- Explain the features and benefits that the Oracle 11g Database Environment provides for businesses
- Locate information about Oracle Corporation and its products and services
- Relate the steps in the system development life cycle (SDLC) to the development and design of the Oracle 11g Database product and the data-modeling process