

Database Design

Introduction to the Oracle Academy

Objectives

This lesson covers the following objectives:

- Give examples of jobs, salaries, and opportunities that are possible by participating in the Academy
- Explain how your participation in the Academy can help you take advantage of these opportunities

Purpose

A passage from a book may get you interested in reading the whole text. A movie trailer or preview may make you curious enough to see the film. A food sampled at the supermarket may result in a product purchase.

The Oracle Academy hopes to open your eyes to the opportunities that are possible and help you develop the skills to make you successful in the professional workplace.

Questions to Consider

What kind of career in business or in the technology industry do you want to have? What types of jobs are you interested in? What options are you preparing yourself for?

Considerations

Labor statistics report a steady increase in employment opportunities for database and Internet-trained personnel in many fields, including:

- Publishing
- Trade
- Business Services
- Membership Organizations

As their Web presence grows in importance, businesses are creating a greater demand for skilled professionals to develop and support Web applications.

Statistics

Survey Jobs and Salaries in the IT Field*		
Group	Average Starting	Average Base Salary
Business programmers	\$54,351	\$67,382
Communications	\$44,967	\$52,945
Computer staff	\$26,105	\$29,986
Database professionals	\$46,327	\$53,456
Management	\$63,470	\$75,317
Support professionals	\$32,926	\$39,828

* Sample from the state of California

Required Education for IT Positions

Today, most IT jobs require an associate's degree or higher to start. In addition to the degree, many require industry-recognized certifications. With the internet, employers can hire employees to work from remote locations which broadens the pool of candidates. Your educational goals are important in helping you get into a career that you enjoy.

The Oracle Academy

Teacher-led/project-driven
+ I.T. industry-recognized certification
+ Higher-Education options
= 21st-century economic viability

Oracle Academy Preparation for a Career

Possible Career Path 1

Title: Entry-Level Database Engineer

Maintain data integrity; run database queries

Requirements: 0 - 2 yrs. + bachelor's degree

Salary: \$25,000 - \$50,000 USD

Title: Database Administrator (DBA)

Conduct extensive database analysis and problem solving; maintain database configuration and ensure data accuracy

Requirements: 2 - 5 yrs. + bachelor's degree

Salary: \$65,000 - \$90,000 USD

Oracle Academy Preparation for a Career (cont.)

Title: Senior Database Administrator

Develop, implement, enhance, support, and maintain database

Requirements: 5+ yrs. + bachelor's degree

Salary: \$100,000+ USD

Oracle Academy Preparation for a Career (cont.)

Possible Career Path 2

Title: Junior Consultant

Install and troubleshoot client systems

Requirements: 0 - 3 yrs. + bachelor's degree

Salary: \$35,000 - \$45,000 USD

Title: Sales Consultant

Assist sales representatives with system presentations and client needs assessments

Requirements: 2 - 3 yrs. + bachelor's degree

Salary: \$50,000 - \$90,000 USD

Oracle Academy Preparation for a Career (cont.)

Title: Project Manager

Manage system design, engineering, implementation, and integration; initiate and maintain partner relationships

Requirements: 4+ yrs. + bachelor's degree

Salary: \$90,000+ USD

The Oracle Academy Database Design and Programming with SQL Course

This Oracle Academy course is the first of two courses available to you. This course begins with topics covering:

- Entity relationship modeling: database design, development, and normalization
- History of the database, evolution of computing
- Business skills: presentations, case studies

The Oracle Academy Database Design and Programming with SQL Course (cont.)

Additional topics covered include:

- SQL (structured query language) “The language of the database”
- Accessing data with SQL
- Data definition, manipulation, and control languages
- Transaction control
- Building applications
 - Business skills: interviewing, creating a career portfolio

The Oracle Academy Database Programming with PL/SQL Course

This Oracle Academy course is the second of two courses available to you. Topics covered in this course include:

- PL/SQL, a procedural language extension to SQL
- Procedural programming structures such as variables, constants, and parameters
- Conditional control statements including IF and CASE
- Iterative control statements including LOOP, WHILE, and FOR
- Handling exceptions
- Creating procedures, functions, packages, and triggers

Oracle Certifications

The Oracle Academy can prepare you for two certifications.

- Oracle Database SQL Certified Expert
 - 1Z0-047: Oracle Database SQL Expert
- Oracle PL/SQL Developer Certified Associate
(Completion of one SQL and one PLSQL Exam)

Oracle Certifications (cont.)

SQL

- 1Z0-051 Oracle Database 11g: SQL Fundamentals I
- 1Z0-007 Introduction to Oracle9iSQL
- 1Z0-047 Oracle Database SQL Expert

PL/SQL

- 1Z0-147: Programming with PL/SQL
- 1Z0-144: Oracle Database 11g Program with PL/SQL

Summary

In this lesson, you should have learned how to:

- Give examples of jobs, salaries, and opportunities that are possible by participating in the Academy
- Explain how your participation in the Academy can help you take advantage of these opportunities