



Oracle Data Modeling and Relational Database Design

This Oracle Data Modeling and Relational Database Design training covers the Data Modeling and Database Development process and the models that are used at each phase of the lifecycle. Learn from expert Oracle University instructors through interactive instruction and hands-on exercises.

Learn To:

- Identify the types of models.
- Develop a process model (Data Flow Diagram).
- Use advanced data modeling techniques.
- Create the Physical Model, add several Physical Model objects, and generate the DDL.
- Use several real life examples to document business requirements.
- Work with design rules that can be applied to check and enforce the integrity and consistency of your designs.
- Work in a collaborative environment using Subversion.

Benefits to You

By taking this course, you will develop an understanding of the data modeling and database development process, as well as the models used in each phase of the development lifecycle. You'll develop the skills to model and understand the database development lifecycle based on real life examples, while mapping the objects and engineer the logical model to a relational model.

Validate Data Models

You will also learn techniques to validate these data models. Once the Relational Design has been validated, you can create physical models to add all physical properties and finally generate a DDL to create the database objects for your database. You will also better understand how you can work as a team on developing a model using Subversion.

Audience

- Analyst

- Architect
- Database Administrator
- Developer
- Systems Administrator

Objectives

- Create an Entity Relationship Diagram by identifying entities, attributes, relationships and constraints from a set of requirements
- Normalize the Entity Relationship Diagram to third Normal form
- Enhance the Entity Relationship Diagram to utilize several data modeling techniques
- Create a Data Flow Diagram by identifying processes, external agents, information stores and information flows that show how the information flows and how it is being transformed
- Engineer the Entity Relationship Model into an initial relational database design
- Optimize the Relational Database Design
- Complete the Physical Model and generate the DDL
- Use Oracle SQL Developer Data Modeler to document all the concepts learned throughout the course

Topics

- Understanding What to Model
- Documenting the Business Background
- Building a Process Model (Data Flow Diagram)
- Using Oracle SQL Developer Data Modeler to Create Your Process Model (Data Flow Diagram)
- Validating Your Process Model (Data Flow Diagram)
- Identifying Entities and Attributes
- Identify Relationships
- Assign Unique Identifiers
- Using Oracle SQL Developer Data Modeler to Create the Entity Relationship Diagram
- Validating your Entity Relationship Diagram
- Normalizing your Data Model
- Validating Relationships
- Adding and Using Data Types
- Put It All Together
- Map Your Entity Relationship Diagram to a Relational Database Design
- Engineering Your Entity Relationship Diagram to a Relational Database Design in Oracle SQL Developer Data Modeler
- Defining Your Physical Model
- Generating Your Database
- Altering an Existing Design
- Working in a Collaborative Environment