Oracle Data Modeling and Relational Database Design Ed 2.1

This Oracle Data Modeling and Relational Database Design course covers the Data Modeling and Database Development process and the models that are used at each phase of the lifecycle.

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