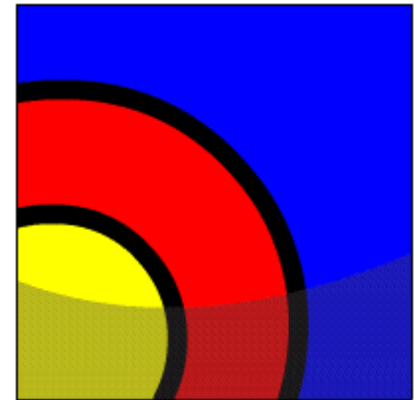


Understanding CRUD Requirements

What Will I Learn?

In this lesson, you will learn to:

- Create ER models that reflect all business rules gathered during the interview process
- Identify the create, retrieve, update, and delete (CRUD) requirements of the business
- Validate your ER model by performing a CRUD analysis





Why Learn It?

The ERD is the conversation tool between the consultant and the client. It is the guideline for the DBA who will eventually build the database.

You need a way to check that you haven't missed any entities or relationships in your data model. You also want to make sure that you haven't modeled anything that the business does not require. CRUD analysis will help you do this.





Tell Me / Show Me

CRUD Analysis

A good way to validate an ERD is to do a CRUD analysis on it. CRUD is an acronym for create, retrieve, update, delete. These are the four basic operations that a database allows. Part of checking a data model for completeness and accuracy is making sure that all the CRUD functions specified by the business scenario and the business rules are represented in the ERD.

Tell Me / Show Me

Create Operation

Keywords to look for in the client interviews, business scenarios, and so on are INPUT, ENTER, LOAD, IMPORT, RECORD, and CREATE. These all indicate that a record is created in the database at this time. Review the requirements for these keywords. Does your data model account for all these functions?

Tell Me / Show Me

Retrieve Operation

Keywords to look for are VIEW, REPORT, BRING UP, PRINT, FIND, READ and LOOK UP. These all point to retrieving information from the database. Review the requirements for these keywords. Does your data model account for all these functions?



Tell Me / Show Me

Update Operation

Keywords to look for are CHANGE, MODIFY, ALTER and UPDATE. These all point to updating information that is already in the database. Review the requirements for these keywords. Does your data model account for all these functions?



Tell Me / Show Me

Delete Operation

Keywords to look for are DISCARD, REMOVE, TRASH, PURGE, and DELETE. These all point to deleting information that is already in the database. Review the requirements for these keywords. Does your data model account for all these functions?



Tell Me / Show Me

Performing a CRUD analysis on your data model helps you check for scope and completeness:

If you have a business function that has no entity to CRUD against, then your data model may be incomplete. Similarly, if you have entities in your ERD that are not touched by any CRUD (there is no business function that creates, retrieves, updates, or deletes from it), then you may not need that entity in your model.



Tell Me / Show Me

Terminology

Key terms used in this lesson include:

Consultant

Functions

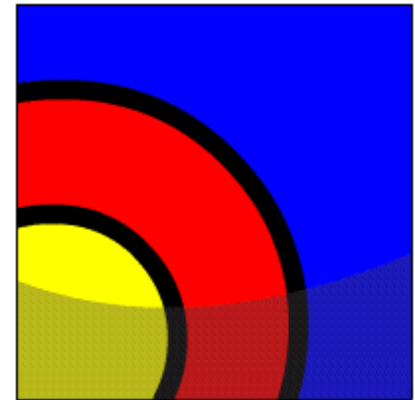
CRUD analysis



Summary

In this lesson, you have learned how to:

- Create ER models that reflect all business rules gathered during the interview process
- Identify the create, retrieve, update, and delete (CRUD) requirements of the business
- Validate your ER model by performing a CRUD analysis



Summary

Practice Guide

The link for the lesson practice guide can be found in the course outline.

