Learning Guide Unit 3

Overview

Unit 3: Relational Database Design

Topics:

- The problem of redundancy
- Functional Dependencies
- Normal Forms
    - First Normal Form (1NF)
    - Second Normal Form (2NF)
    - Third Normal Form (3NF)
    - Boyce-Codd Normal Form (BCNF)

Learning Objectives:

By the end of this Unit, you will be able to:

1. Explain issues related to data redundancy in databases.
2. Identify functional dependencies.
3. Analyze a relational schema to minimize redundancy.
4. Apply normalization techniques to transform a relation into first, second, third and Boyce-Codd normal forms.

Tasks:

- Read through the Learning Guide and the Reading Assignment.
- Complete the Discussion Assignment by posting in the Discussion Forum.
- Respond to two of your fellow classmates' posts in the Discussion Forum.
- Complete and submit the Programming Assignment.
- Take and submit the Self-Quiz.
- Take and submit the Graded Quiz.
- Review the information literacy content on the right-hand side block of this page.