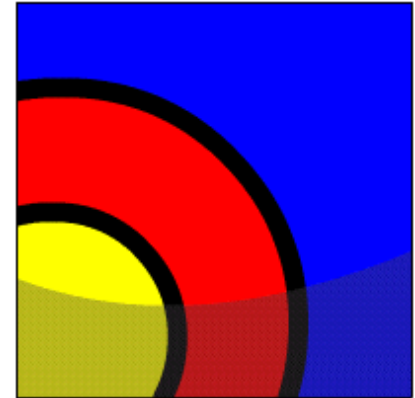


System Development Life Cycle

What Will I Learn?

In this lesson, you will learn to:

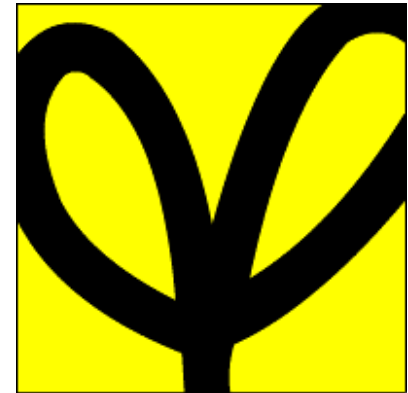
- List and describe the different stages of the system-development life cycle
- Identify the role of data modeling in the system-development life cycle
- Relate the project tasks to the different stages of the system-development life cycle





Why Learn It?

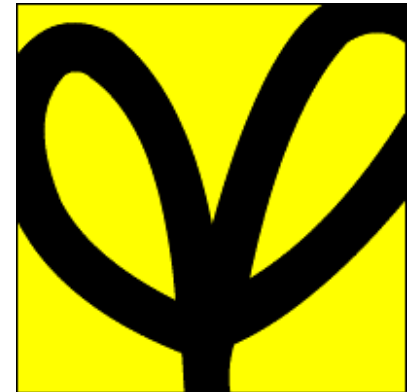
When you build a house, you draw up the plans before you start construction. During construction, you lay the foundation before you start putting up walls. You finish all the major construction before you start decorating. The architect, the builder, and the decorator work accordingly so that they do their jobs at the appropriate time.





Why Learn It?

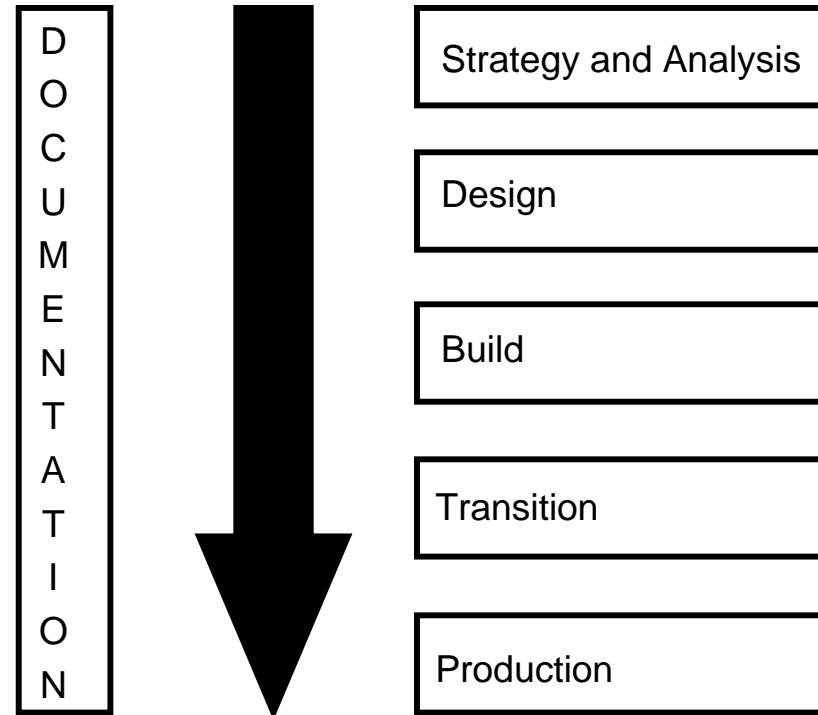
A knowledge of the tasks associated with each stage of the system-development life cycle will help you plan a project better and be a productive member of the team.



Tell Me / Show Me

System Development Life Cycle

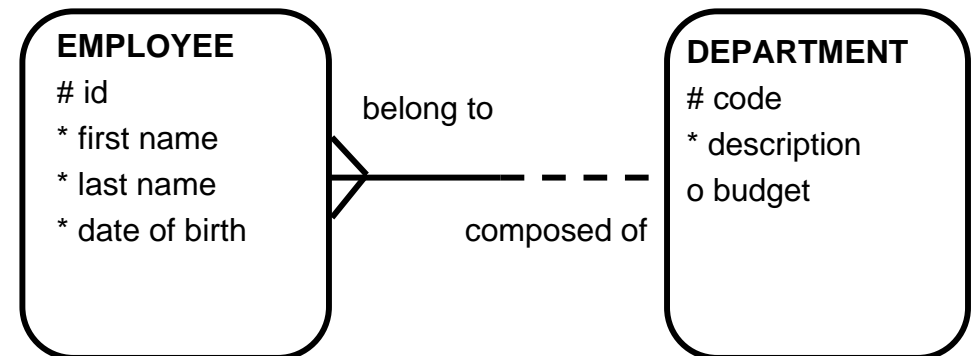
From concept to production, you can develop a database by using the system-development life cycle, which contains multiple stages of development. This top-down, systematic approach to database development transforms business-information requirements into an operational database.



Tell Me / Show Me

Strategy and Analysis

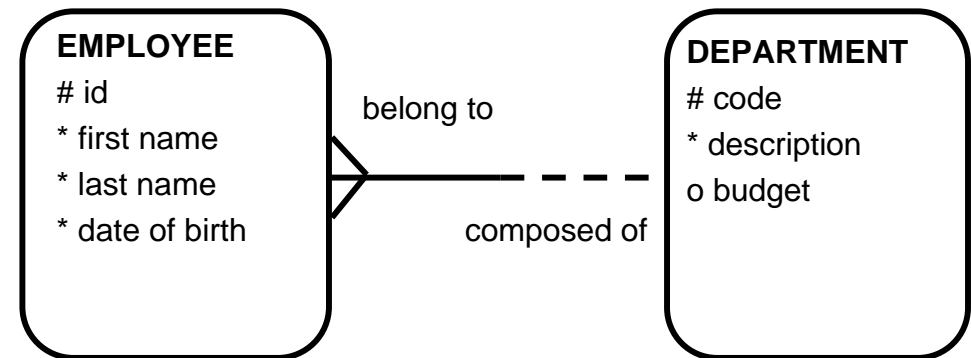
Study and analyze the business requirements. Interview users and managers to identify the information requirements. Incorporate the enterprise and application mission statements as well as any future system specifications.



Tell Me / Show Me

Strategy and Analysis

Build conceptual models of the system. Transfer the business narrative into a graphical representation of business-information needs and rules. Confirm and refine the model with the analysts and experts.



Tell Me / Show Me

Design

Transform the model developed in the strategy and analysis phase. Map entities to tables, attributes to columns, relationships to foreign keys, and business rules to constraints.

| EMPLOYEES (EPE) | | |
|-----------------|---|---------------|
| pk | * | id |
| | * | f_name |
| | * | l_name |
| | o | date_of_birth |
| fk | * | dpt_code |

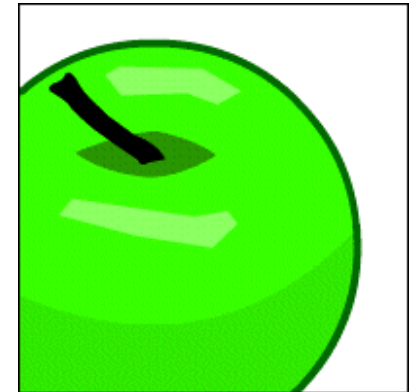
refers to

| DEPARTMENTS (DPT) | | |
|-------------------|---|-------------|
| pk | * | code |
| | * | description |

Tell Me / Show Me

Build

Write and execute the commands to create the tables and supporting objects for the database.



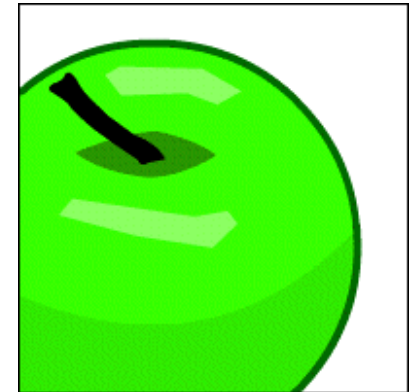
Populate the tables with data.

Develop user documentation, help text, and operations manuals to support the use and operation of the system.

Tell Me / Show Me

Transition

Move an application into production with after user- acceptance testing, conversion of existing data, and parallel operations. Make any modifications required.



Production

Roll out the system to the users. Operate the production system. Monitor its performance, and enhance and refine the system.

Tell Me / Show Me

Terminology

Key terms used in this lesson include:

Parallel operations

Populate

System development life style

User- acceptance testing



Summary

In this lesson, you have learned to:

- List and describe the different stages of the system-development life cycle
- Identify the role of data modeling in the system-development life cycle
- Relate the project tasks to the different stages of the system-development life cycle

Summary

Practice Guide

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

