

Section 9 Design

MODELING CHANGE: TIME

How do you know when to use the different types of time in your design?

It depends on the functional needs of the system

It is desirable to have an entity called DAY with a holiday attribute when you want to track special holidays in a payroll system. True or False?

True

Which of the following would be a logical constraint when modeling time for a country entity?

Countries may need an end date in your system, because they can change fundamentally over time, e.g. Yugoslavia.

Modeling historical data produces efficient ways for a business to operate such as:

Providing valuable information via reports to management.

When you add the concept of time to your data model, you are:

Adding complexity to your model.

What is the benefit to the users of a system that includes "time," e.g. Start Date and End Date for Employees?

Increased usability and flexibility of a system; we can trace e.g. the different managers an employee had over time.

If you are tracking employment dates for an employee, do you need to have an "End Date" attribute?

Yes, if the company wants to track employee information, like multiple start and end dates

MODELING CHANGE: PRICE

You are doing a data model for a computer sales company, where the price goes down on a regular basis. If you want to allow them to modify the price and keep track of the changes, what is the best way to model this?

E. Both A and C

Why would you want to model a time component when designing a system that lets people buy bars of gold?

The price of gold fluctuates and for determining price, you need to know the time of purchase

What is the function of logging or journaling in conceptual data models?

Allows you to track the history of attribute values, relationships and/or entire entities

Which of the following is a logical constraint that could result from considering how time impacts an example of data storage?

An ASSIGNMENT may only refer to a COUNTRY that is valid at the Start Date of the ASSIGNMENT.