Intro to relat dbase mgt syst week1

Technology, Development

Relational Database Design for Local College Relational Database Design for Local College Rational Database Design enables entities in the database to be linked to each other through relationships. In this paper, this design principle in used to describe a database project for a local college using 3 key entities (Churcher, 2012). Attached to this paper is the database design drawn using Microsoft Visio. This paper aims to show that the diagram reflects the true nature of how the database will be implemented.

For an educational institution such as a college, we must first identify the key entities within the institution and translate them to tables. These include entities such as students, lecturers, courses, lecture halls, faculties and perhaps dormitories. For this project the key entities under consideration are the students, instructors, and courses. Therefore, it is logical that the first tables to be identified be Students, Instructors, and Courses tables. These are the tables in the 1st Normal Form. These key tables contain attributes that describe the entities they represent.

However, the design follows two more tables that do not represent any key attributes that are initially identified. Relative Database Design makes use of relationships that are implemented using foreign keys that originate from parent tables. This process; therefore, proves challenging to implement while still exercising referential integrity. The two extra tables make the design practical since separation of the key entities is paramount (Churcher, 2012). Modification of a key entity does not affect the other key entities. These two tables are Students Allocation table and Instructor Allocation tables. Their attributes contain foreign keys for Students and Instructor tables, and they represent the action of ' allocating', which becomes entities.

With these five tables the diagram; therefore becomes a practical database

design for a local college within the identified scenario.

Reference

Churcher, C. (2012). Beginning database design: From novice to

professional. New York: Apress.

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