A University Registration Data Model and Database Creation

Design the university database which is one possible data model that describes the below set of requirements. 💬

The University Database Requirements:

Here is a statement of the data requirements for a product to support the registration of and provide help to students of a fictitious e-learning university. 💬

An e-learning university needs to keep details of its students and staff, the courses that it offers and the students who study its courses. The university is administered in four geographical regions (England, Scotland, Wales and Northern Ireland). 💬

Information about each student should be initially recorded at registration. This includes the student's identification number issued at the time, name, year of registration and the region in which the student is located. A student is not required to enroll in any courses at registration; enrollment in a course can happen at a later time. 💬

Information recorded for each member of the tutorial and counseling staff must include the staff number, name and region in which he or she is located. Each staff member may act as a counselor to one or more students, and may act as a tutor to one or more students on one or more courses. It may be the case that, at any particular point in time, a member of staff may not be allocated any students to tutor or counsel. 💬

Each student has one counselor, allocated at registration, who supports the student throughout his or her university career. A student is allocated a separate tutor for each course in which he or she is enrolled. A staff member may only counsel or tutor a student who is resident in the same region as that staff member. 💬

Each course that is available for study must have a course code, a title and a value in terms of credit points. A course is either a 15-point course or a 30-point course. A course

need not have any students enrolled in it (such as a course that has just been written and offered for study).

Students are constrained in the number of courses they can be enrolled in at any one time. They may not take courses simultaneously if their combined points total exceeds 180 points.

Instructions

The data file you will use in the project is in the Github repository. It is recommended that you use the inferences you make from the data together with the above information when creating your data model.

Design your University Registration Data Model according to the Crow's Food model by using Draw.io. The model has several parts, beginning with an ERD and followed by a written description of entity types, constraints, and assumptions.

Use the provided DraftFile_UniversityDB.sql file because it has additional tasks and directions.

Create database tables according to your data model. Create the necessary indexes in the tables. Build relationships between tables using the keys. Use data types for table fields. Create the appropriate constraints in the tables.

To create a normalized database, you must have created the data model correctly and transferred the data to the tables correctly.

While developing the project, you should take into account project definitions, constraints and instructions.