Data Warehouse Report and Design

Student Course Enrolment

Our data warehouse covers student course enrolments by semester, the information that is include is their courses, campus, academic programme and what semester/trimester they enrolled in that course as well as their mark for the course.

Staff Semester Info

The data warehouse also covers the semester details of university staff. This includes which department they are in, as well as their campus, course they teach, which semester/trimester the information is valid. Other information is their salary, number of students they taught that time period, the amount of grant money they earned and how many research projects they completed.

Room Reservation

We record room reservation data which includes room, person who booked it, campus the room is at and the date and time of the booking. We also record how many hours the room is reserved for.

How Schema Satisfies Analysis Needs

This data warehouse satisfies analysis needs of university decision makers by allowing them to find information on student enrolments at all the campuses of University X. They can also find out how many students are enrolling courses and the marks they are receiving in those courses. They can see what staff are working on each time period and what courses they are teaching as well as financial data on them each semester. They can find out information on room reservations on the campus like time and how many times they are reserved. With the information provided by the data warehouse University X decision makers can make informed decisions about these important functions of the university.

Some queries that could be asked are:

Student course enrolment queries

What is the average grade of course x over the last 5 years?

Which course had the most students enrolled last year?

What is the most popular major/minor by academic programme?

Staff semester info queries

Average staff tenure by campus

Average staff tenure by department of campus

Which staff member has completed the most research projects over the last 10 years?

Which staff member has earned the most grant money by department at campus x?

What is the average salary of staff by department at campus x?

Room reservation queries

What was the most reserved room last month?

Which department reserves rooms most frequently?

What is the most common time for rooms at campus x to be reserved?

