

Princess Sumaya University for Technology

KING HUSSEIN SCHOOL OF COMPUTING SCIENCES

Computer Science Department



DATABASE SYSTEMS PROJECT

Student Information System (SIS)

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REQUIREMENTS

After analyzing PSUT's registration website we concluded the following requirements for our database of the student Information System (SIS):

1. Every student has personal, academic, and secondary school information. The personal information include the following attributes: name (consisting of first, middle, and last name), nationality, gender, date of birth, country of birth, phone number, address, and email. Academic information are: unique ID, specialization, registration date, cumulative average (which is computed from his total marks of all courses), hours completed (also is computed from total passed courses), academic supervisor, and study plan. While secondary school information are: school stream, certification country, school, and average.
2. A student registers in one department, which is a part of one faculty at least. Every department and faculty have a unique name.
3. A department can have many study plans but with different years, so a study plan depends on its year and department.
4. A study plan consists of many courses and a total number of credit hours. A course can be in more than one study plan at the same time. Each course has the following: unique number, title, type, credit hours, and academic level.
5. Some courses have prerequisites, which are courses that must be taken before the desired course.
6. Each section is for a course at least. A section has its own number with the name of its course, meaning that a section is determined by its number and its course ID. Sections also have days of lecturing, time, capacity, semester, and academic year.
7. Each section is lectured in a room that has its unique ID and the number of chairs inside it. And is taught by a teacher with a unique name and a rank.
8. A teacher is a member of a department. And may be an academic supervisor of multiple students but every student has only one academic supervisor.
9. Students register in sections and we keep count of the total number of registered students, so it does not exceed the section's capacity. A student has a total mark for his section that is computed from his first, second, third, and final exam mark. After that a result for the student is computed determining whether he passed or failed.

REFERENCES

[1]	"https://www.lucidchart.com" .
[2]	"https://draw.io" .
[3]	Microsoft Access 2016.
[4]	Microsoft Visio 2010.
[5]	Fundamentals of Database Systems, R. Elmasri and S. Navathe, 7 th edition.
[6]	Class Slides.