RDBMS PROJECT

Course Management System

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# A Course Management System manages all the students who are currently taking a course and also the associated teachers, books and so on. In this system we work with five tables namely Student , Teacher, Courses, Books and Department. The relationship between these tables are shown below.

# 

As we see here each teacher is associated with only a single department and the rest of the entities reside in a one to many relationship between each other. A department can have multiple students and a Course can have multiple books.

# Functions Implemented

For each table we have a function for entering and removing items with an appropriate trigger which prompts a message of an item either being added or removed when done so. For each function we have the proper fields entered into the function as a parameter

The function is later called with the parameters initialized with the correct data types and then put into as parameters. As an example in the insert\_teacher function we just put in the query inside the function and then set the fields such as ID, name, DeptID and Designation as parameters which we initialize later as a procedural programming segment. As for the delete functions it is a similar story we put in the query inside the function and then put the appropriate fields in as parameters. In the update function for each function it is not much different. For the delete and update functions we use the delete from and update/set queries respectively.

There is a final implementation of cursors to view books and courses. The cursors will display the books and courses entities in the following formats:

COURSES



BOOKS



It is worth noting that the BOOK field in the courses part is directly linked to the book segment. In this cursor we give the option to view whatever is pertinent to the user as a parameter. The options only provided in this case is just books and courses. When either ‘books’ or ‘courses’ is entered the cursor enters into a loop and fetches it from the table and finally presents it in the predefined format. When something else is entered the message ‘You must choose between courses and books’.