DATABASE MANAGEMENT SYSTEM

PROJECT REPORT

FEBRUARY 2022 - SALIM HABIB UNIVERSITY

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DATABASE MANAGEMENT SYSTEM **UNIVERSITY DATABASE**

SUBMITTED TO:

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Project Introduction

This project is a model of University Database.

Our aim of this database system is to provide ease to the user and handle the data in an effective way.

In this project we create normalized tables and relationship among them.

Problem Statement

A database for university, in which there are teaching and non teaching staff and one can distinguish between them, also these staff should be working in the departments and should have designation. In this database their must be students who is registered in some department, done some sort of internship and these students also made some projects and worked on some technology. These students can also have sessions (Spring & Fall) and can be able to enroll in courses .

Provided Solution

This database solve all the mentioned statements in the previous problem statement with this database user can easily identify any teaching and non teaching faculty, user can easily check which employees is working in which department and likewise students can also be identified according to their respective departments as well as student can be categorized according to their projects and their internship.

User can also identify that which technology is used by which students and for which project.

Entity Relation Diagram

Step 1: Gather Data

Collection of data in University Management system

Step 2: Identify Entities

Designation

EmployessProfile

EmpType

Department

Students

Projects

Session

CourseProfile

Technology

Internship

Step 3: Identify the Attributes

Designation: (DesignationId,DesignationLabel)

EmployessProfile: (EmpId,EmpTypeId,DepId,Fname,LName,Email,ContactNumber,Age,DateOfBirth,DateOfJoining, DesignationId)

EmpType: (EmpTypeId,EmpType)

Departments: (DepId,DepName)

Students:(StuId,DepId,FName,LName,Email,Age,DateOfBirth,Semester,DateOfAdmission)

Projects: (ProjectId,ProjectName,StyId,TechId,SessionId,InstructorId,SupervisorId,CourseId)

Session: (SessionId,SessionName)

CourseProfile: (CourseId,CourseName)

Technology: (TechId,TechName)

Internship: (InternId,StuId,OrganizationName,DurationWeeks,InternDesignation)

Entity Relation Diagram

Step 4: Sort Entity Set
Designation (Strong)
EmployessProfile (Strong)
EmpType (Strong)
Department (Strong)
Students (Strong)
Projects (Strong)
Session (Strong)
CourseProfile (Strong)
Technology (Strong)
Internship (Strong)
Step 5: Identify the Attributes
Designation: (DesignationId-PK,DesignationLabel)
EmployessProfile: (EmpdD-PK,EmpTypeId,DepId,FName-Composite,LNameComposite,Email,ContactNumber-MultiValued,Age-Derived,DateofBirth,DateofJoining,Designationid)
EmpType: (EmpTypeId-PK,EmpType)
Departments: (DepId-PK,DepName)
Students: (StuId-PK,DepId,FName-Composite,LName-Composite,Email,Age-Derived,DateOfBirth,Semester,DateOfADmission)
Projects: (ProjectId-PK,ProjectName,StuId,TechId,SessionId,IntructorId,SupervisorId,CourseId)
Session: (SessionId-PK,SessionName)
CourseProfile: (CourseId-PK,CourseName)
Technology: (TechId-PK,TechName)
Internship: (InternId-PK,StuId,OrganizationName,DurationWeeks,INternDesignation)

Entity Relation Diagram

Step 6: Identify the Relation

EmployeeProfile Has a EmpType

EmployeeProfile Has a Designation

EmployeeProfile Works In Department

Department Has Students

Students Has Internships

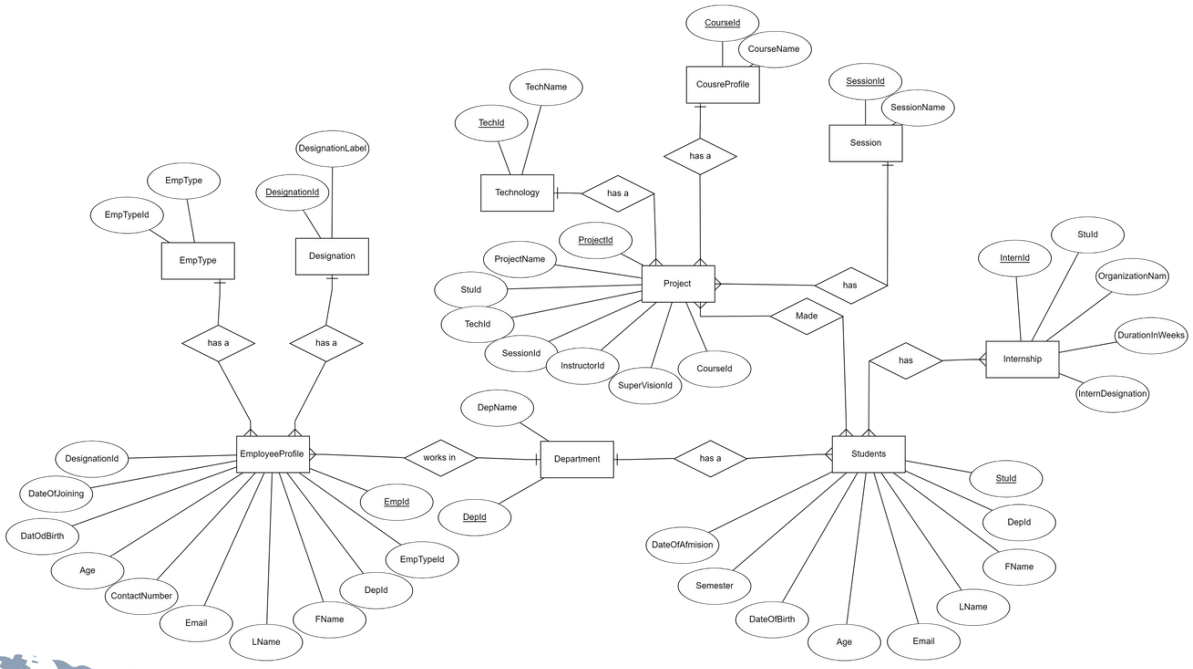
Student Made Project

Project Has Session

Project Has a Technology

Project Has a CourseProfile

Step 7: ERD



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