

Introduction to Database Systems

CMP Students Portfolio

ER Diagram Report

Team Number: 14

Team Members:	Sec	B.N
Yosry Muhammad Yosry	2	34
Khaled Galal Helmy	1	17
Yousif Gamal Abd El-Rahman	2	35

Contact Info:

yosrym93@gmail.com

10/17/2018

Project Definition

The project is a web application for tracking projects and assignments for department students. It will contain information such as the requirements (assignments and projects) of each course together with their descriptions, deadlines and regulations, what requirements are assigned to each student or team, etc. The deliverables will also be submitted by students or teams through the website, including any samples the TAs wish to add. The web app creates a portfolio for each student showing the projects they have worked on throughout their study and up till now, including the feedback they got from their TAs or instructors. It also presents a profile for each staff member (Professor or TA), showing what courses they are currently teaching, their office hours and their contact information.

Users and Their Privileges (Functionalities)

Student

- View all requirements (projects and assignments) of a course, whether ongoing or past ones.
- View the requirements that they are assigned.
- Form a team for group requirements.
- View public requirement deliverables or samples added by staff members.
- Submit requirement's deliverables (as students or teams).
- View their portfolio.
- View course staff contact info and office hours.
- Read feedbacks about their deliverables (and public ones).
- Edit their usernames, passwords and personal profile.
- Add project/assignment deliverables as a team.

Staff members (TAs & Instructors)

- Add course requirements (projects and assignments).
- Update requirements details and deadlines.
- Add additional materials to a requirement.
- View all deliverables for a requirement.
- Add feedback to a deliverable, or view existing ones.
- Edit their usernames, passwords and personal profile.

Administration (Secretaries)

- Create accounts for students and staff members.
- Assign staff members to courses.
- Enroll students to courses.
- Update students' information after a semester (courses, bench number, etc.)

Entities

- **User:** a union entity of Student and Staff Member entities holding their information as a user (username, password, email, etc).
- **Student:** a student in the department.
- **Staff Member:** a TA or professor that teaches specific courses.
- **Course:** a course that is being taught in the department.
- **Team:** a weak entity defined by the Requirement entity, defines a group of students working on a specific requirement.
- **Semester:** a semester in the department calendar.
- **Deliverable:** a weak entity defined by the Requirement entity, it represents the actual materials delivered by students to fulfill requirements.
- **Project:** a weak entity defined by the Course entity, represents the projects that the course have, which in turn consists of several requirements.
- **Requirement:** a weak entity defined by the Course entity, which can be either a standalone requirement (assignment) or a requirement belonging to a project (project phase).

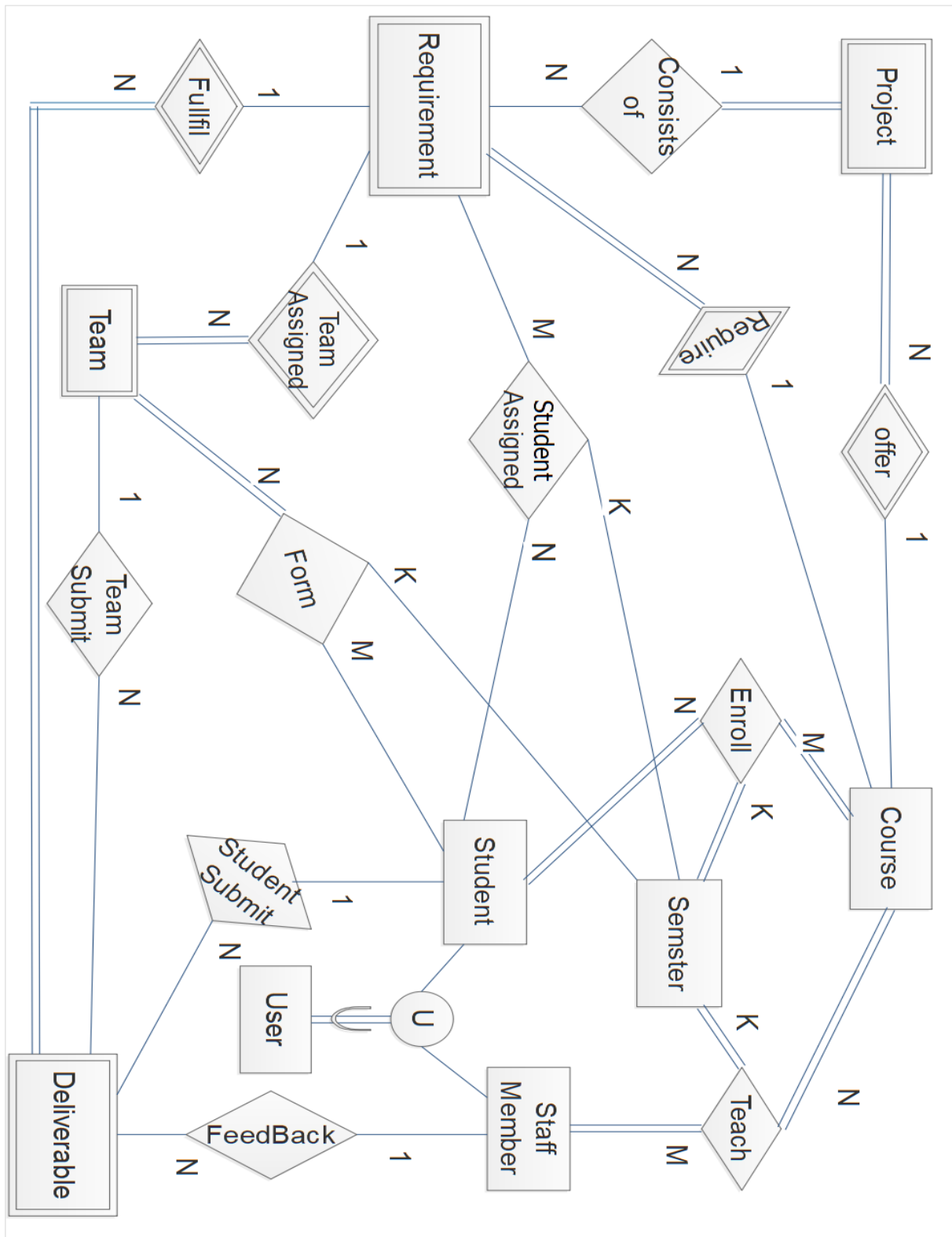
Relationships

Name	Type	Between	Description
Teach	Ternary	Staff Member - Course - Semester	Shows what courses each staff member teaches and in what semester.
Offer	Identifying Binary	Course - Project	Shows the projects of each course.
Consists of	Binary	Project - Requirement	Shows the phases of each project.
Require	Identifying Binary	Course - Requirement	Shows each course's requirements.
Enroll	Ternary	Course - Student - Semester	Shows the enrolled courses of each student in each semester.
Feedback	Binary	Staff Members - Deliverable	Shows a feedback given by a staff member to a specific deliverable.
Student Submit	Binary	Student - Deliverable	Connects between the delivered files and the students who submitted them.
Team Submit	Binary	Team - Deliverable	Connects between the submitted files and the teams which submitted them.
Student Assigned	Ternary	Student - Requirement - Semester	Shows the requirements assigned to each student in each semester.

Team Assigned	Identifying Binary	Requirement - Team	Shows the requirements assigned to each team.
Form	Ternary	Student - Semester - Team	Contains the teams formed by the student in each semester.
Fulfil	Identifying Binary	Requirement - Deliverable	Maps the delivered files to the requirement that it fulfills.

ER Diagram

(a)



(b)

