

# Scope®

Student's Project Performance  
Management Tool

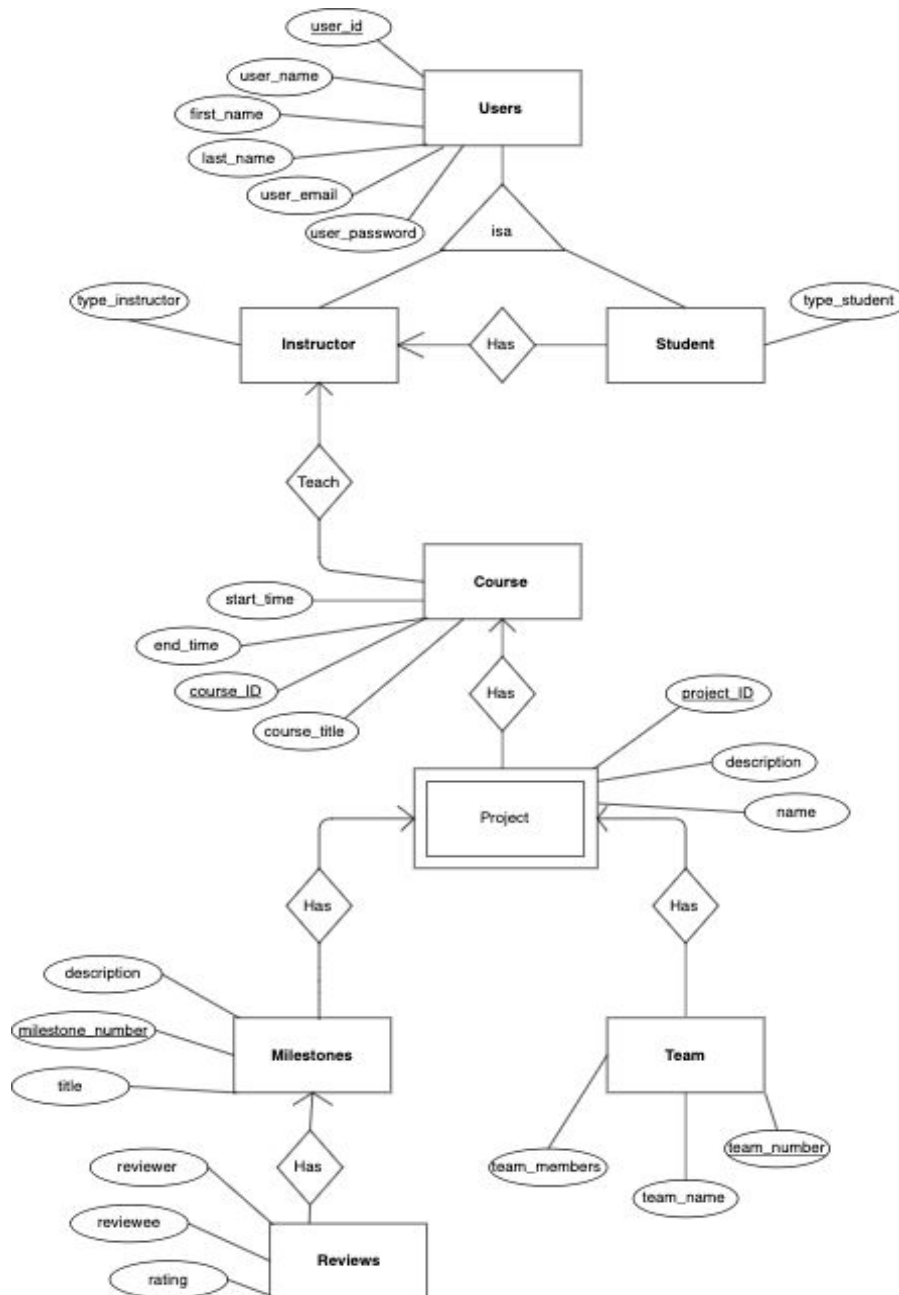
Team#10

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## E/R Diagram



## Description:

### User

The User is an entity that represents the user of Scope. A user must have user\_id, user\_name, first\_name, last\_name, user\_email, and user\_password. The user\_id is the primary key for the table Users.

### Instructor

The Instructor is a subclass of Users entity. The attribute type\_instructor has a boolean data type that indicates the identity of the user.

### Student

Student is a subclass of Users entity. The attribute type\_student has a boolean data type that indicates the identity of user.

### InstructorHasStudent

InstructorHasStudent is a relationship that indicates the instructor has many students, but students can only have exactly one instructor.

### InstructorTeachCourse

InstructorTeachCourse is a relationship that indicates the instructor teaches many courses, but each course can only have exactly one instructor.

### Course

The Course is an entity that represents the course taught by the instructor. A course must have start\_time, end\_time, course\_id, and course\_title. The course\_id is the primary key for the table Course.

### Project

The Project is an entity set that represents the project assigned by the instructor. A Project must have attributes of project\_id, description, and name. It also has a relation with the Course, Milestone and Team set of entities.

### CourseHasProject

CourseHasProject is an a relationship that connects the Course and Project entity sets. Each Project can only be in one Course.

## Milestone

The Milestone is an entity set that represents the milestones assigned by the Instructor to each Project entity set. A Milestone must have milestone\_number, title, description, reviewer, reviewee, and rating.

## ProjectHasMilestone

ProjectHasMilestone is a relationship that connects the Project and Milestone entity sets. A single project can have multiple Milestones. This Milestone is usually set by the Instructor entity set.

## Team

Team is an entity set that represents the Team. Team is usually created and assigned by the instructor. Each Team entity set should contain team\_number, team\_member, and team\_name of attributes.

## TeamHasProject

TeamHasProject is a relationship that connects Team and Project entity sets. Every Team can have one or more sets of projects.

## Reviews

Reviews is an entity set that represents the Review table. Every Review is also connected with Milestone entity set and every milestone at least have one review. Reviews entity set must have reviewer, reviewee, and rating set of attributes.

## MilestoneHasReview

MilestoneHasReviews is a set of relationships that connects Milestone and Review entity sets. Every Milestone have at least one Review from instructor and students.