# **CS 166: Project Phase 2 Requirements**

Due: Feb. 22, 2022

### 1 Introduction

In this phase you are given an ER-Diagram (a possible solution for phase 1) and you are asked to convert it into the ANSI compliant relational model. From now on you will use the given ER model (instead of the one you produced in Phase 1).

The ANSI Relational Model is described in Chapter 3 of your textbook. Please consider any required integrity constraints over relations. In this phase you are <u>not allowed</u> to make any assumptions since you are asked to make a precise translation of the ER model into the relational model. This means you should specify necessary constraint keywords like NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY REFERENCES, etc. If needed, you can create attributes that take values from a generated sequence (ex: monotonically increasing integer); see added example in the lab.

For the third phase you can add features to this schema by enhancing this structure to suit your needs.

#### 2 Submission Instruction

The due date for this phase is 11:59pm on Sunday, February 22, 2022.

Please submit your relational model as a single re-creatable SQL script file containing CREATE TABLE statements with the required constraints. Also mention the name, student id of both the team members and the group id as comments on the top of the SQL file.

## 3 ER-Diagram

The ER-Diagram for the Professional Network application is showed in Figure 1.

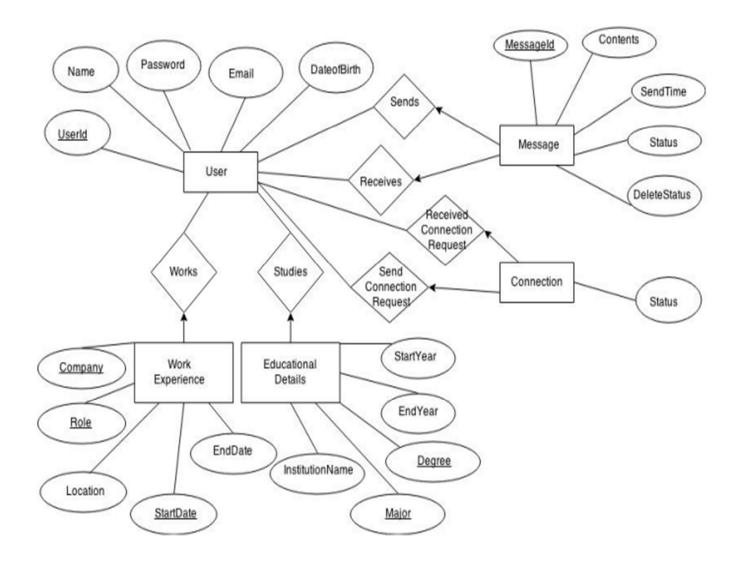


Figure 1: ER-diagram for the Professional Network application

## **4 Attributes List**

The following table lists table-specific attributes of all entities; they are listed under each entity. Primary keys are shown in bold. Note that tables could have additional attributes due to foreign key constraints. The third column shows attribute-specific constraints, however this is not an exhaustive list. Additional constraints might be applied due to relationships between tables.

Attribute name	Attribute domain	Additional constraints
User		
userid	char(10)	unique,not null
password	char(10)	not null
email	char(50)	not null
name	char(50)	
dateofbirth	date	
Work Experience		
userid	char(10)	not null
company	char(50)	not null
role	char(50)	not null
location	char(50)	
startdate	date	not null
enddate	date	
Educational Details		
userid	char(10)	not null
instituitionname	char(50)	not null
major	char(50)	not null
degree	char(50)	not null
startdate	date	
enddate	date	
Message		
messageid	int	unique, not null
senderid	char(10)	not null
receiverid	char(10)	not null
contents	text	not null
sendtime	timestamp	not null
deletestatus	int	
status	char(30)	not null
Connection		
userid	char(10)	not null
connectionid	char(10)	not null
status	char(30)	not null