## MSBD 6000L: Database Systems

## **Fanclub Management System**

## **Assignment 2: Relation Schemas**

The following relation schemas should be used for Assignment 2. The primary key of each relation schema is underlined and shown in red color. A foreign key is shown in italic font *and* in bright blue color if not part of a primary key.

```
Clubmember(username char (10), birthdate date, occupation varchar (25), educationLevel char (13))
Employee(employeeld smallint, employeeName varchar (30), post varchar (20), username char (10))
Event(eventId smallint, eventName varchar (50), eventDate date, eventTime char (4), venue varchar (50),
      memberFee number (7,2), nonmemberFee number (7,2), quota smallint, status char (11), eventType char (9),
      employeeld smallint)
Fanclub(clubid smallint, clubName varchar (50), description varchar (150), establishedDate date)
Hosts (clubid smallint, eventid smallint)
MemberOf(clubid smallint, username char (10), joinDate date, howInformed char (15))
RegistersFor(eventId smallint, username char (10), paidFee char (1), attended char (1))
RegisteredUser(username char (10), firstName varchar (15), lastName varchar (20), gender char (1), phoneNo char (8),
             email varchar (30))
Remark(remarkId smallint, Subject varchar (50), text varchar (150), submissionDate date, status char (10),
       actionTaken varchar (50), remarkType char (5), clubOReventId smallint, username char (10),
       employeeld smallint)
```

## **Constraints**

In addition to any constraints that either are described in the application description, are derivable from an example E-R schema for Assignment 1 or can be inferred from common sense and/or real-world knowledge, the Assignment 2 relation schemas also should constrain the values of the attributes listed below to only the indicated values. Only constraints that can be expressed on a single table should be specified.

<u>Attribute</u>	Allowed and default values
attended	Y, N (initially null)
educationLevel	none, primary, secondary, tertiary, post tertiary
Event.status	available, cancelled, ended, full, unavailable (the default value is unavailable)
eventTime	24-hour clock (0000 to 2359)
eventType	member, nonmember (the default value is nonmember)
gender	M, F
howInformed	friend, print ad, social media, web ad, other
memberFee	zero or a positive number (the default value is 0)
nonmemberFee	zero or a positive number (the default value is 0)
paidFee	Y, N (the default value is N)
phoneNo	exactly 8 digits
quota	a positive integer greater than 0
Remark.status	read, processing, done (initially null)
remarkType	club, event
username	between 6 and 10 lowercase letters