

# **MSBD 6000L: Database Systems**

## **Fanclub Management System**

### **Application Description**

Fanclub Management LLC (FM) wants to develop an information system to provide data management services for Hong Kong-based fanclubs. An employee of FM should be able to create and modify fanclubs. Fanclub information includes a unique club id, a club name, a description and the date the fanclub was established. **Employee** information includes a unique employee id, name, post and unique username.

To use the services of the Fanclub Management System, a person should first register which involves providing all of the following information: a unique username, first name, last name, gender, phone number and unique email. After registration, a registered user should be able to modify any of his/her information except for the username. For a registered user to become a member of any fanclub, he/she first should provide all of the following additional information: birthdate, occupation and education level. Once this additional information is provided, a registered user should be able to join any number of fanclubs. However, he/she should be able to join a given fanclub at most once. For each fanclub joined, the date of joining the fanclub and how the user was informed about the fanclub should be provided.

An FM employee should be able to create fanclub events by providing all of the following event information: a name, date, time, venue, fee (one for members and one for nonmembers), quota (i.e., the maximum number of attendees allowed) and the employee who is responsible for supervising the event. Not all employees will necessarily supervise some event and a given employee could supervise many events. However, every event should be supervised by exactly one employee. Each event should be assigned a unique event id. An event can be hosted by one or more fanclubs. An FM employee should be able to modify event information and cancel events. Members of the fanclubs that host an event should be notified about the event as well as any change in its status.

Registration for an event should be available either for any registered user or only for members of the fanclub(s) hosting the event. If registration for an event is available only to members of the fanclub(s) hosting the event, then only those fanclub members should be able to register for the event. When initially created, an event should not be available for registration. Once an event becomes available for registration, then only registered users (or fanclub members if the event is available only to members) should be able to register for the event. An FM employee should be able to record whether someone who has registered for an event has paid the fee, if any, and whether he/she has actually attended the event.

Members of a fanclub (and only members) should be able to provide remarks about the fanclub. Moreover, everyone who registered for an event, as well as all members of the fanclub(s) hosting the event, whether they registered for the event or not, should be able to provide remarks about the event. Both fanclub and event remarks consist of a subject, some text and the submission date. An FM employee should be able to be assigned to follow up a submitted remark. At most one employee should be assigned to follow up a remark. The assigned employee should be able to view the submitted remark to determine whether any action needs to be taken and should be able to record the status (read, processing or done) of the remark.