Databases I Project

Milestone 1 Relational Schema

Match (match_ID, starting_time, ending_time, allowed_number_of_attendees, SMA_ID, stadium_ID,

host_ID, guest_ID)

Match.SMA_ID references Sports_Association_Manager

Match.stadium_ID references Stadium

host_ID references Club.club_ID

guest_ID references Club.club_ID

Club (club_ID, name, location)

Representative (representative ID, name, club ID)

Representative.club ID references Club

Stadium (stadium ID, name, capacity, location, status)

Manager (name, manager ID, stadium ID)

Manager. stadium ID references Stadium

Ask (manager ID, representative ID, approve)

Ask.manager_ID references Manager

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Ask.representative_ ID references Representative
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Ticket (<u>Ticket_ID</u>, <u>match_ID</u>, <u>stadium_ID</u>, status, <u>user_name</u>)

Ticket.stadium ID references Stadium

Ticket.match ID references Match

Ticket.user_name references Fan

User (<u>user name</u>, password)

Fan (<u>user_name</u>, name, national_ID_number, birth_date, address, phone_number)

Fan.user_name references User

System_Admin (<u>user_name</u>)

System_Admin.user_name references User

Block_user (<u>fan_user_name</u>, <u>admin_user_name</u>, time)

Block_user.admin_user_name references System_Admin.user_name

Block_user.fan_user_name references Fan.user_name

edit_user (fan_user_name, admin_user_name, action)

edit_user.admin_user_name references System_Admin.user_name

edit_user.fan_user_name references Fan.user_name

edit_club (club_ID, admin_user_name, action)

edit_club.admin_user_name references System_Admin.user_name

edit_club.club_ID references Club

edit_stadium (<u>stadium_ID</u>, <u>admin_user_name</u>, action)
edit_stadium.admin user name references System_Admin
edit_stadium.stadium_ID references Stadium

Sports_Association_Manager (<u>SMA ID</u>, <u>user_name</u>, name)
Sports_Association_Manager.user_name references User

Milestone 1 EERD report (TEAM 63)

- 1. To clarify that Matches will be played by exactly two Clubs, we established two relationships.
 - a. Host to relate the hosting club to match.
 - b. Guest to relate the away (visiting) club to match.
- 2. To clarify that a club representative will be responsible for asking for the permission to host the matches from the stadium manager, we established the "ask" relationship between club representative and stadium manager and added the attribute "approve" as the response of the manager.
- 3. Since the ticket entity depends on the match being accepted by the stadium manager it is a weak entity depending on the match and stadium using the relationships "has".
- 4. The relations "edit" between system admin and club, stadium and fan for adding and deleting them so we added an attribute to the relation ("action") which implies add and delete.
- 5. Since the Sports Association Manager creates, edits and deletes clubs from the system then he is a user, so he inherits from the user as System Admin and Fans, also he has two primary keys SMA ID and user name.
- 6. While the representative and the stadium manager entities are not users since they do not use the system while asking and approving, they do not inherit from the user entity, also because they are weak entities depending on the club and the stadium.