



North South University

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

PROJECT TASK

Identification of Relationships and Grouping All Relationships on

CRICKET CLUB MANAGEMENT SYSTEM

DATABASE MANAGEMENT SYSTEM LAB

CSE311L (Section 1)

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Group_id & Project_id 1

Member Name	Student ID
Saif Mohammed	2121913642
Humayra Rahman Nipa	2121128642

Course Faculty: Dr. Abu Sayed Mohammad Latiful Hoque

Lab Instructor: Sadia Afrin

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1. Identification of Relationships

One-to-Many Relationships

1. Players – Contracts
 - One player can have multiple contracts.
2. Players – Awards
 - One player can receive multiple awards.
3. Players – Teams
 - One Team can have Multiple players.
4. Coaches – Teams
 - One Team can have Multiple coaches.
5. Teams – Practice Sessions
 - One team can conduct multiple practice sessions.
6. Teams – Training Equipment
 - One team can have multiple pieces of training equipment.
7. Teams – Awards
 - One team can receive multiple awards.
8. Teams – Medical Staffs
 - One team can have multiple medical staff members.
9. Injuries – Medical Staffs
 - One injury may require attention from multiple medical staff members.
10. Committee Members – Selection Committee
 - One committee member can belong to multiple selection committees.
11. Matches – Grounds
 - One match can be played on a single ground.
12. Matches – Tournaments
 - One A tournament can have multiple matches.
13. Matches – Practice_Sessions
 - A match can have multiple practice sessions.
14. Merchandise – Matches
 - One merchandise item can be associated with multiple matches.
15. Merchandise – Teams
 - One merchandise item can be associated with multiple teams.
16. Ticketing – Matches
 - One ticketing instance can be associated with multiple matches.

Many-to-Many Relationships

1. Players – Matches
 - One player can participate in multiple matches, and one match can have multiple

players.

2. Players – Practice Sessions
 - Players can attend multiple practice sessions, and a practice session can involve multiple players.
3. Players – Scorers
 - Players can score in multiple matches, and one match can have multiple scorers.
4. Coaches – Matches
 - Coaches can participate in multiple matches, and one match can have multiple coaches.
5. Coaches – Practice_Sessions
 - Coaches can attend multiple practice sessions, and a practice session can involve multiple coaches.
6. Teams – Tournaments
 - Teams can participate in multiple tournaments, and one tournament can have multiple teams.
7. Teams – Sponsors
 - Teams can have multiple sponsors, and a sponsor can sponsor multiple teams.
8. Injuries – Players
 - Players can suffer multiple injuries, and an injury can affect multiple players.
9. Injuries – Matches
 - Injuries can occur in multiple matches, and one match can have multiple injuries.
10. Injuries – Practice Sessions
 - Injuries can occur during multiple practice sessions, and a practice session can have multiple injuries.
11. Matches – Umpires
 - A match can have multiple umpires, and an umpire can be involved in many matches.
12. Matches – Match_Officials
 - A match can have multiple match officials, and an official can be involved in many matches.
13. Matches – Scorers
 - A match can have multiple scorers, and a scorer can score in many matches.
14. Match_Coverage - Matches
 - A match can have multiple media coverage, and a media coverage can show multiple matches.
15. Selection_Committee – Players
 - The selection committee can select multiple players for matches and tournaments. A player can be selected multiple times for different matches and tournaments.
16. Training_Equipment – Practice_Sessions
 - A training equipment can be used in multiple practice sessions. A practice session

can use multiple training equipment.

17. Transportation – Matches
 - A type of transportation can be used in many matches. And a match can have many types of transportation.
18. Transportation – Tournaments
 - A type of transportation can be used in many tournaments. And a tournament can have many types of transportation
19. Community Outreach – Fan Clubs
 - Community outreach can involve multiple fan clubs, and a fan club can participate in multiple outreach programs.
20. Community Outreach – Volunteers
 - Community outreach can involve multiple volunteers, and a volunteer can participate in multiple outreach programs.
21. Community Outreach – Charity Drives
 - Community outreach can involve multiple charity drives, and a charity drive can be part of multiple outreach programs.
22. Charity Drives – Sponsors
 - Charity drives can have multiple sponsors, and a sponsor can sponsor multiple charity drives.
23. Charity Drives – Teams
 - Charity drives can involve multiple teams, and a team can participate in multiple charity drives.
24. Charity Drives – Players
 - Charity drives can involve multiple players, and a player can participate in multiple charity drives.
25. Fan Clubs – Players
 - Fan clubs can have multiple players, and a player can be associated with multiple fan clubs.

One-to-One Relationships

1. Players – Registration
 - Each player has a single registration.
2. Coaches – Contracts
 - Each coach has a single contract.
3. Matches – Teams
 - Each match is associated with two teams.
4. Matches – Media_Rights
 - Each match can have a single media right.
5. Fan Clubs – Teams
 - Each fan clubs support separate teams.

6. Social Media – Teams
 - Each team has a single social media account.
7. Social Media – Players
 - Each player has a single social media account.
8. Media_Rights - Matches
 - Each match has single media rights.

Roles

1. Teams – Captains
 - Captains hold a specific role within their teams.
2. Departments – Heads
 - Department heads have specific leadership roles.
3. Committee Members – Chair
 - Chairs have leadership roles within committees.

2. Grouping All Relationships

1. Player Profile

Entity Name	Relationship Name	Entity Name	Relationship
Players	Players-Registered	Registration	One-to-One
Players	Players-Contracts	Contracts	One-to-Many
Players	Players-Teams	Teams	Many-to-One
Players	Players-Coaches	Player-Coaches	Many-to-One
Players	Players-Matches	Matches	Many-to-Many
Players	Players-Practice_Sessions	Practice_Sessions	Many-to-Many
Players	Players-Scorers	Scorers	Many-to-Many
Players	Players-Awards	Awards	Many-to-One

2. Coach Support

Entity Name	Relationship Name	Entity Name	Relationship
Coaches	Coaches-Contracts	Contracts	One-to-One
Coaches	Coaches-Teams	Teams	One-to-Many
Coaches	Coaches-Matches	Matches	Many-to-Many
Coaches	Coaches-Practice_Sessions	Practice_Sessions	Many-to-many

3. Team Management

Entity Name	Relationship Name	Entity Name	Relationship
Teams	Teams-Practice	Practice_Sessions	One-to-Many
Teams	Teams-Training	Training_Equipment	One-to-Many
Teams	Captains	Teams	Role
Teams	Teams-Awards	Awards	Many-to-One
Teams	Teams-Tournaments	Tournaments	Many-to-Many
Teams	Teams-Medical_Staffs	Medical_Staffs	Many-to-One
Teams	Teams-Sponsors	Sponsors	Many-to-Many

4. Player Health and Recovery

Entity Name	Relationship Name	Entity Name	Relationship
Injuries	Injuries-Players	Player	Many-to-Many
Injuries	Injuries-Matches	Matches	Many-to-Many
Injuries	Injuries-Practice_Sessions	Practice_Sessions	Many-to-Many
Injuries	Injuries-Medical_Staffs	Medical_Staffs	One-to-Many

5. Committees

Entity Name	Relationship Name	Entity Name	Relationship
Committee_Members	Members-Selection	Selection_Committee	Many-to-One
Selection_Committee	Selected-Players	Players	Many-to-Many
Committee_Members	Chair	Committee_Members	Role

6. Match Logistics

Entity Name	Relationship Name	Entity Name	Relationship
Matches	Matches-Teams	Teams	One-to-One
Matches	Matches-Umpires	Umpires	Many-to-Many
Matches	Matches-Match_Officials	Match_Officials	Many-to-Many
Matches	Matches-Grounds	Grounds	Many-to-One
Matches	Matches-Scorers	Scorers	Many-to-Many
Matches	Matches-Practice_Sessions	Practice_Sessions	Many-to-One
Matches	Matches-Tournaments	Tournaments	Many-to-One

7. Logistics and Operations

Entity Name	Relationship Name	Entity Name	Relationship
Departments	Heads	Departments	Role
Training_Equipment	Training-Session	Practice_Session	Many-to-Many
Transportation	Transportation-Matches	Matches	Many-to-Many
Transportation	Transportation-Tournaments	Tournaments	Many-to-Many
Merchandise	Merchandise-Matches	Matches	Many-to-One
Merchandise	Merchandise-Teams	Teams	Many-to-One
Ticketing	Ticketing-Matches	Matches	Many-to-One

8. Media Promotion

Entity Name	Relationship Name	Entity Name	Relationship
Media_Coverage	Media_Coverage-Matches	Matches	Many-to-Many
Social_Media	Social_Media-Teams	Teams	One-to-One
Social_Media	Social_Media-Players	Players	One-to-One
Media_Rights	Media_Rights-Matches	Matches	One-to-One

9. Community Engagement

Entity Name	Relationship Name	Entity Name	Relationship
Community_Outreach	Outreach-Fan_Clubs	Fan_Clubs	Many-to-Many
Community_Outreach	Outreach_Volunteers	Volunteers	Many-to-Many
Community_Outreach	Outreach_Charity_Drives	Charity_Drives	Many-to-Many
Charity_Drives	Charity_Drives-Sponsors	Sponsors	Many-to-Many
Charity_Drives	Charity_Drives-Teams	Teams	Many-to-Many
Charity_Drives	Charity_Drives-Players	Players	Many-to-Many
Fan_Clubs	Fan_Clubs-Teams	Teams	One-to-One
Fan_Clubs	Fan_Clubs-Players	Players	Many-to-Many