

- Translation of the ERD into the relational model as relational schemas. Listing of relations, their attributes, types, domain, and constraints, identification of the primary key and foreign keys.

#### Member

- PK: Student ID: Integer: (7-8 digit integer)
- Name: String: (Any String)
- email-address: String: (Any String)
- Phone Number: Integer
- Emergency contact: String: (Any String)
- Dues paid: Boolean: (Either yes or no)

#### Team

- FK:Student ID: Integer: (7-8 digit integer)
- PK: Position: Integer (Integers in the range from 1 to 15)

#### Membership Type

- Student ID: Integer: (7-8 digit integer)
- Regular Member: String: (Any String)
- Traveling Member: String: (Any String)

#### Finance

- Dues: Integer: (Any integer)
- Student ID: Integer: (7-8 digit integer)

#### Matches

- Team: String: (Any String)
- Date: String: (Any String)
- Venue: String: (Any String)
- Opponent: String: (Any String)

#### League

- League Name: String: (Any String)
- League location: String: (Any String)
- League fees: Integer: (Any number)

### Academic Performance

- FK: Student ID: Integer: (7-8 digit integer)
- GPA: Double: (0.00 to 4.0)
- Attendance: Double: (0-100%)

### Social Media

- Media Type: String: (Any String)
- Number of Clicks: Integer: (Any integer)
- Followers: Integer: (Any integer)

### Fundraising

- Type: String: (Any String)
- Funds received: Integer: (Any integer)
- Donors: String: (Any String)

### Game Records

- FK: Student ID: Integer: (7-8 digit integer)
- Batting average: Integer: (Any integer)
- Bowling average: Integer: (Any String)
- Fielding average: Integer: (Any String)

### **Identification of the Functional Dependencies that exist for each relation, based on the real-world domain of the database.**

Student ID → (Name, email-address, Phone Number, Emergency Contact, Dues, GPA, Attendance, Batting average, Bowling average, Fielding average, Type)

Media Type → (Num of Clicks, Followers)

Member type → (Funds received, Donors, Cost, Position)

League Name → (League Location, League Fees)

Date → (Venue, Opponent)

Dues → (Regular Member, Traveling Member)

