README –

Our additional convention(change from the normal convention):

1. The attribute which is underlined and also coloured blue is a partial key

2. The entity types connected with a half-ellipse labelled 'SubClass' is a Superclass-Subclass pair
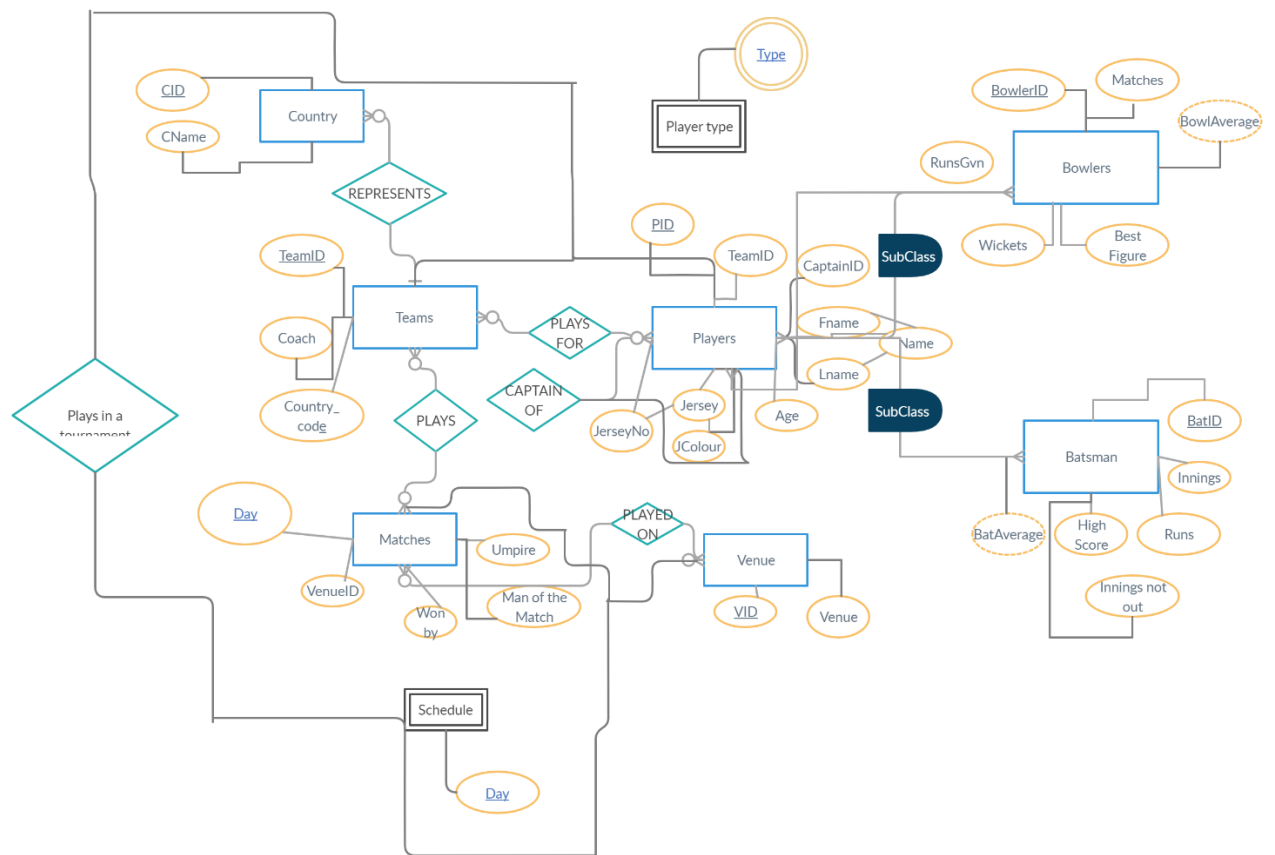
Discrepancies in the Original Document:

1. The relationship between weak entities and strong entities isn't explicitly defined, even though they are indicative in nature

2. Country code should clearly be a foreign key for defining the relationship between 'Teams' and 'Country' entity types, but is given as attribute of Teams

3. In matches, both TID1 and TID2 are given as foreign keys, but they are also foreign keys in schedule, the weak entity type related to matches, which is wrong as for a relationship you need to connect a primary key of one entity to foreign key of another. Also matches doesn't have any primary key, but just a partial key 'Day' , which also doesn't make sense to be defined as a partial key,

considering that 'Day' is also partial key of the entity type schedule, which is related to matches.

Changes Made in the ER diagram:

1. Connected the weak entity types to the strong ones, using new relation types and named them:

1.1. type_of for relationship between player type and players

1.2. match_sched for relationship between schedule and matches

2. Country code is treated as a foreign key for teams and not included as its attribute

3. TID1, TID2 are treated as partial keys for matches which form a composite primary key called MID(match ID), and for schedule, the foreign key is redefined to MID, instead of TID! and TID2.

In matches, 'Day' is relegated to being a normal attribute rather than a partial key

Original

Entity-Relationship Diagram (Cricket Database)

- **Country** (entity): CID, CName
- **Teams** (entity): TeamID, Coach, Country_code
- **Players** (entity): PID, TeamID, CaptainID, Fname, Lname, Name, Age, Jersey, JerseyNo, JColour
- **Player type** (weak/associative entity): Type
- **Bowlers** (subclass): BowlerID, Matches, BowlAverage, RunsGvn, Wickets, Best Figure
- **Batsman** (subclass): BatID, Innings, BatAverage, High Score, Runs, Innings not out
- **Matches** (entity): Day, Umpire, VenueID, Won by, Man of the Match
- **Venue** (entity): VID, Venue
- **Schedule** (weak entity): Day

Relationships:
- REPRESENTS (Country – Teams)
- PLAYS FOR (Teams – Players)
- CAPTAIN OF (Players – Teams)
- PLAYS (Teams – Matches)
- PLAYED ON (Matches – Venue)
- Plays in a tournament
- SubClass (Players – Bowlers / Batsman)

Modified