BASKETBALL TEAM ATTENDANCE DATABASE MANAGEMENT SYSTEM

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Current Process (Manual System)

- The UPDF Tomahawks Basketball Club has been taking attendance manually.

- Players and coaches physically sign attendance sheets for every training session.

- Payments (allowances) are calculated manually based on the number of attended sessions.

- This leads to:
  - Errors in records
  - Difficulty tracking attendance
  - Delays in allowance payments
  - Loss or misplacement of attendance sheets

FUNCTIONALITY OF THE DATABASE MANAGEMENT SYSTEM

- **Player Registration and Management** : To maintain accurate and updated player profiles within the club system.

- **Attendance Management** : To monitor player commitment and ensure consistent participation

- **Allowance and Payment Tracking**: To improve financial accountability and simplify payment management.

Business Process for the Improved System (Automated DBMS)

Players	❑ Attend training sessions; each player may have one or more coaches guiding them.
Coaches	❑ Take attendance for their assigned players. Each coach takes attendance for only one player.
Attendance	❑ Records every session with date, time in/out, and venue. Used to determine how many sessions a player attended.
Payments	❑ Automatically generated based on attendance — the more sessions attended, the higher the allowance.

ENTITIES AND ATTRIBUTES

Our entities are four;

1. Players
2. Coaches
3. Attendance
4. payments/allowance
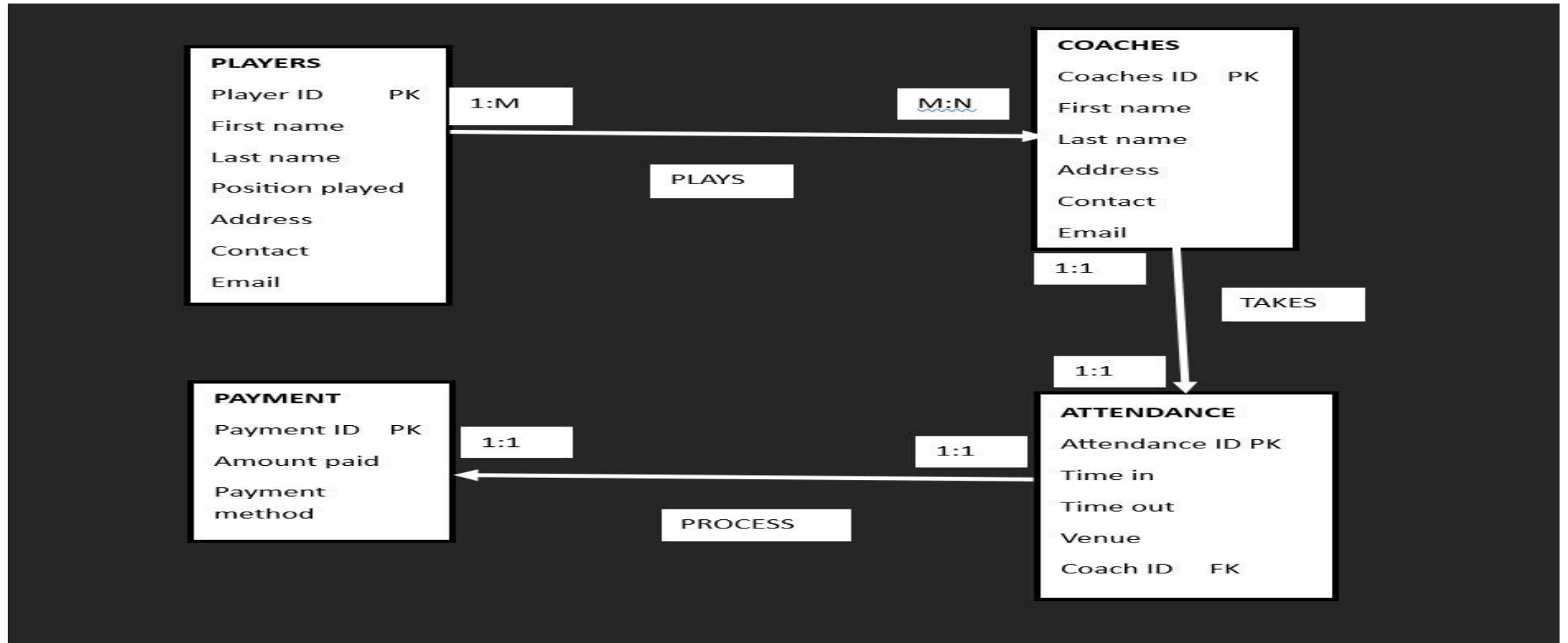
ENTITIES AND THEIR ATTRIBUTES

Attribute	Description
PlayerID (PK)	Unique ID for each player
FirstName	Player's first name
LastName	Player's last name
PositionPlayed	Playing role (e.g., Guard, Forward, Center)
Address	Player's residential address
Contact	Phone number
Email	Email address

Attribute	Description
CoachID (PK)	Unique ID for each coach
FirstName	Coach's first name
LastName	Coach's last name
Address	Coach's address
Contact	Phone number
Email	Email address
PlayerID (FK)	Links each coach to the player they are assigned to

Attribute	Description
AttendanceID (PK)	Unique ID for each attendance record
Date	Date of session
TimeIn	Time session started
TimeOut	Time session ended
Venue	Where the training took place
CoachID (FK)	The coach who recorded the attendance

Attribute	Description
PaymentID (PK)	Unique payment record ID
AmountPaid	Total amount paid to player
PaymentMethod	Cash, Bank, Cheque, or Mobile Money

AN ERD FOR THE DBMs

SUMMARY OF THE ERD DIAGRAM

Entity 1	Relationship Type	Entity 2	Explanation
Player	M→ M	Coach	A player can have several coaches; each coach can work with multiple players
Coach	1 → M	Attendance	A coach can record attendance multiple times; each record belongs to one coach.
Attendance	1 → 1	Payment	Each attendance record generates one payment transaction.

PURPOSE OF AUTOMATION

- To reduce manual errors in attendance and payment tracking.

- To save time by automatically calculating allowances.

- To improve record accuracy and retrieval.

- To secure and back up club data digitally.