

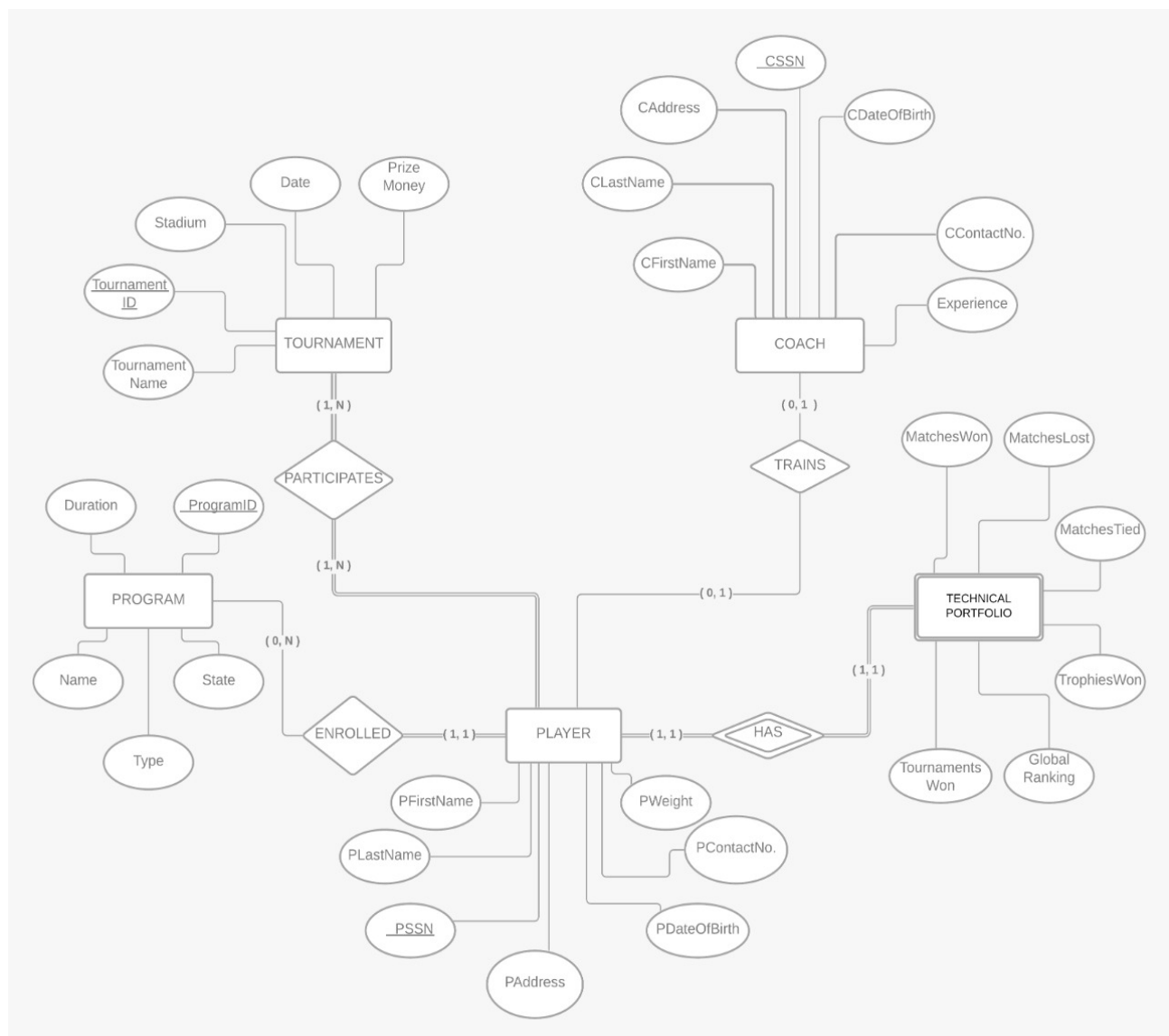
Team Name : Int Elligence

Ayush Sharma (2019101004)
Utkarsh Upadhyay (2019101010)
Bhaskar Joshi (2019111002)



US Log Rolling Database Management System Data and Application

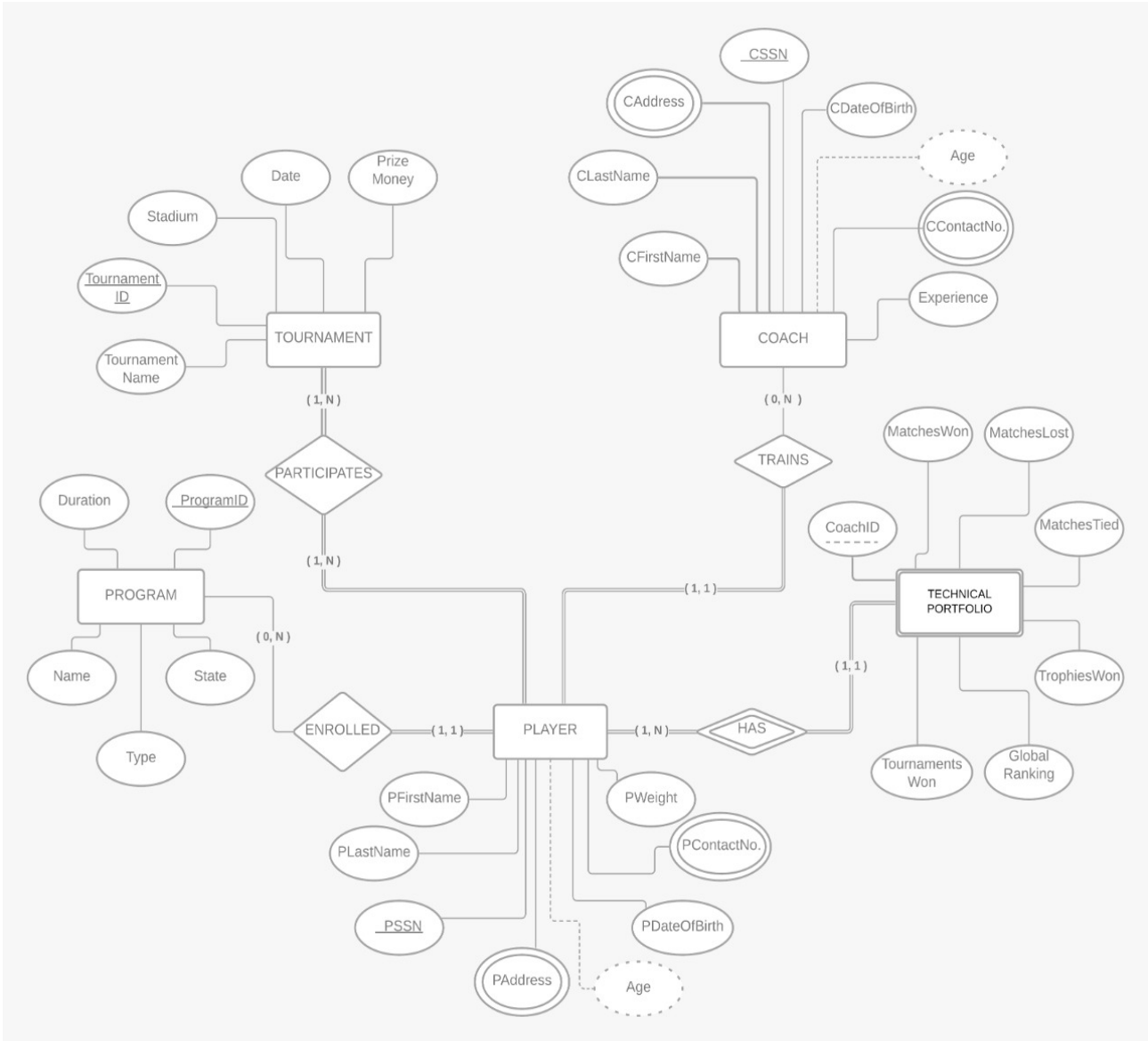
Original ER Diagram



What we Changed

- i. Added CoachID in Technical Portfolio as a partial key since it would be used to obtain performance analysis of the Player under a specific coach.
- ii. Modified the cardinality between Player and Trains relationship from (0,1) to (1,1) . Since Player and Technical Portfolio are in existential dependency towards each other , and Technical Portfolio has an attribute CoachID.
- iii. Modified the cardinality between Coach and Trains relationship from (0,1) to (0,N) , since a Coach may train multiple Players.
- iv. Modified the cardinality between Player and Has relationship from (1,1) to (1,N) . This is done because a Player can have multiple Technical Portfolios under different Coaches.
- v. Modified PAddress , PContactNo , CAddress and CContactNo from independent attribute to multivalued attribute , as the above mentioned attributes can have multiple values.
- vi. Added a derived attribute Age , derived from Date Of Birth in entity named PLAYER and COACH . Also there was no derived attribute in their mini world.

Modified ER Diagram



Notation for ER Diagrams



Entity



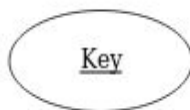
Weak Entity



Attribute



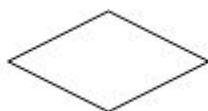
Multivalued Attribute



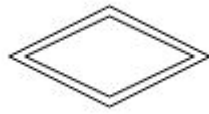
Unique Attribute



Derived Attribute



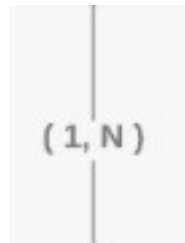
Relationship



Identifying Relationship



Total Participation



(Min-Max) Notation



Partial Key