

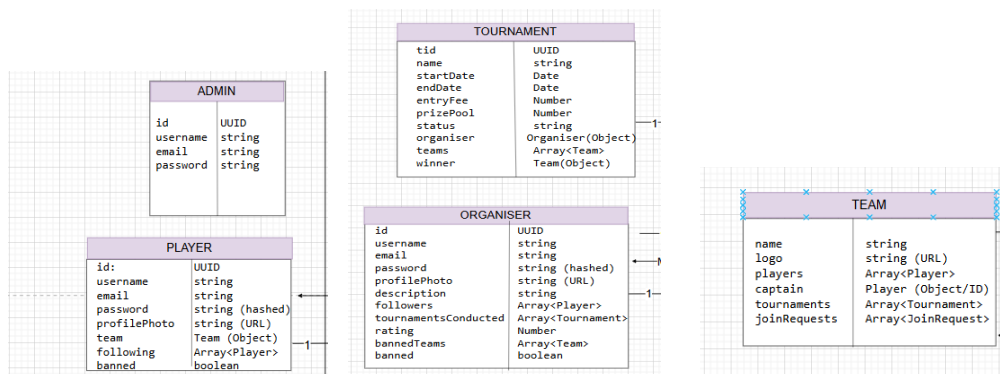
# DDD DIAGRAM

GROUP:42

DOMAIN: TOURNAMENT CONDUCTING WEBSITE

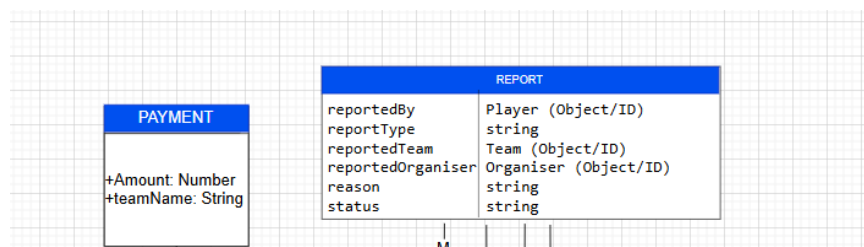
## 1. ENTITY:

- An entity is a domain object that has a distinct identity and lifecycle
- So in our tournament conducting website, the entities are those that have unique id
- The entities are Admin, Player, Tournament, Organiser, Team
- Each of these entities again have attributes
- Properties may change, but identity remains



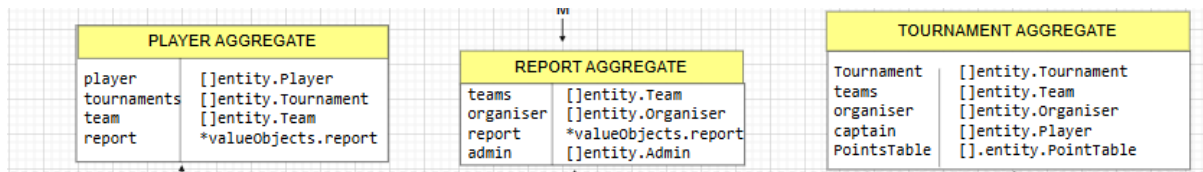
## 2. VALUE OBJECTS :

- A value object is a type of domain object that represents a value that is conceptually unchangeable.
- These lack unique ID and also cannot change after creation
- These are just for short time
- The value objects we have taken are Report and Payment



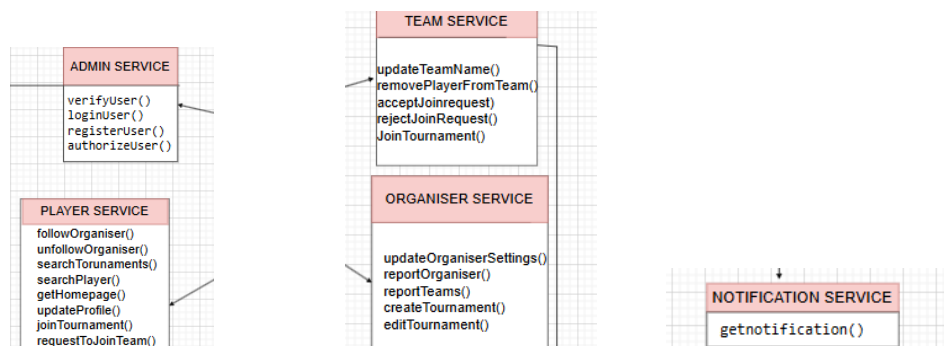
### 3. AGGREGATES:

- An aggregate is a cluster of domain objects that are treated as a single unit for the purpose of data consistency.
- The Aggregate Root is the main entity that controls access to the other entities inside the aggregate.
- The aggregate we took are :
  - 1.Player Aggregate : Root-Player Entity
  - 2.Report Aggregate: Root-Admin Entity
  - 3.Tournament Aggregate: Root-Organiser Entity



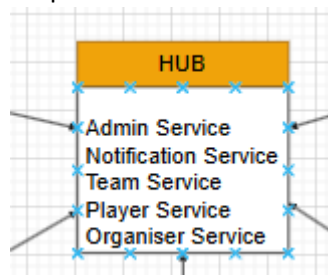
### 4. SERVICES:

- Operation that does not naturally belong to any specific entity or value object.
  - Contains business logic
1. Admin Service: authenticate, register, login
  2. Team Service: updating Team name, accepting Requests, Join tournaments
  3. Player Service: follow Organiser, JoinTeams, searchPlayers, updateProfile
  4. OrganiserService: reportTeams, conductTournaments
  5. NotificationService: send notifications



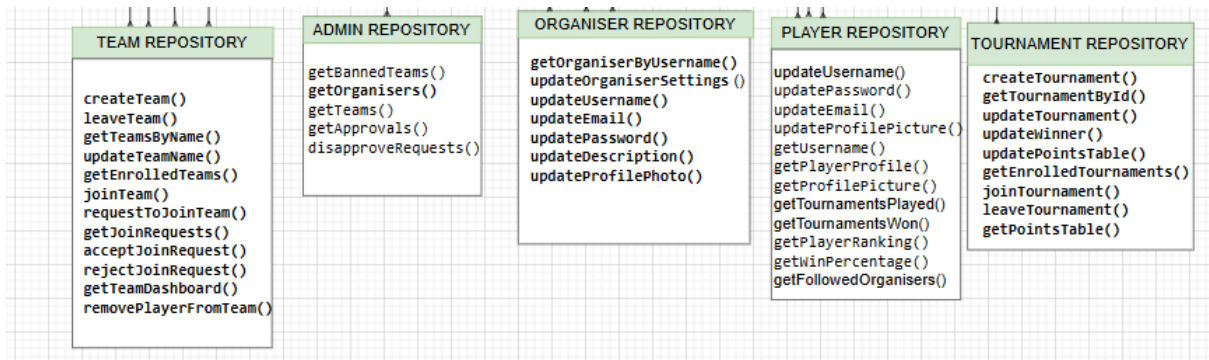
### 5. HUB :

- Manages domain events
- Notifies different parts of the system when an important action occurs.
- Helps in connection between different Services



## 6. REPOSITORIES:

- Repositories separate data access logic from the domain model.
- They provide a consistent interface for querying and storing domain objects
- It provides an abstraction layer, so the rest of the system does not deal directly with the database.
- We have Team Repository, Admin Repository, Player Repository, Organiser Repository, Tournament Repository



## FINAL DDD:

