# Design and implement a database for the sports web portal

Design and implement a database for the sports web portal. The task includes the creation of logical and physical ER diagrams, defining primary and foreign keys, implementing relationships, defining constraints, and normalizing the database up to the third normal form.

**1)**

**Design and implement a database that contains the following entities:**

* Articles—an entity that stores information about articles related to various sports. Each article may belong to a team or a league and may also have related media, such as images or videos. Articles may also have comments from users and may be viewed by users.
* Teams—an entity that stores information about teams in various sports. Each team may belong to a league and may have multiple games associated with it. Teams may also have related media, such as images or videos.
* Leagues—an entity that stores information about leagues in various sports. Each league may have multiple teams associated with it and may also have multiple games associated with it. Leagues may also have related media, such as images or videos.
* Games—an entity that stores information about games in various sports. Each game may be played between two teams and may have multiple associated events. Games may also have related media, such as images or videos.
* Events—an entity that stores information about events that occur during games, such as goals or penalties. Each event is associated with a game and may involve one or more players from one or both teams.
* Users—an entity that stores information about users who have registered on the web portal. Users may view articles, comment on articles, and participate in surveys. Users may also view advertisements on the web portal.
* ArticleViews—an entity that stores information about the number of views for each article. Each view is associated with a user and an article.
* Comments—an entity that stores information about comments made by users on articles. Each comment is associated with a user and an article.
* Advertisement—an entity that stores information about advertisements displayed on the web portal. Each advertisement may be associated with one or more teams or leagues.
* Media—an entity that stores information about media, such as images or videos associated with articles, teams, leagues, games, or advertisements.

These entities could interact with each other through various relationships, such as one-to-one, one-to-many, and many-to-many. For example, a team may belong to only one league (one-to-one relationship), but a league may have multiple teams (one-to-many relationship). A game may involve multiple teams (many-to-many relationship), and each game may have multiple events associated with it (one-to-many relationship). An article may have multiple views (one-to-many relationship) and multiple comments (one-to-many relationship).

**Pre-requirements:**

* Write DDL scripts with T-SQL

**Acceptance criteria:**

* A logical ER diagram that captures all relevant entities, attributes, and relationships, including primary keys (both natural and surrogate) and foreign keys.
* The ER diagram should be normalized up to the third normal form.
* SQL scripts that create the tables, keys, and constraints in the database.

**2)**

Deploy database with prepared scripts and generate initial packet data for created db with t-sql scripts

Generate stored procedure for updating access for users with parameters.

3)

Write script calculate any 10 KPIs that you can determine for this data, will better use windows function for some examples.

Send results (scripts) to repository (will send url ) or present link on own repository