

## American International University-Bangladesh Department of Computer Science and Engineering Dhaka, Bangladesh

### $00892~{\rm ADVANCE~DATABASE~MANAGEMENT~SYSTEM}$

PROJECT Report

 $[\mathrm{B}][\mathrm{SUMMER}\ 22\text{-}23]$ 

# E-Sports Management System

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| Relational Algebra | 0%            | 0%                  | 0%                   | 0%              | 0(%)             |
| Report Writing     | 50%           | 30%                 | 0%                   | 0%              | 80(%)            |

# Contents

| 1        | $\operatorname{Intr}$ | oduction 1   |
|----------|-----------------------|--|
|          | 1.1                   | Project Proposal                                   |
|          |                       | 1.1.1 Purposes                                     |
|          |                       | 1.1.2 Methodology                                  |
|          | 1.2                   | Project Scenario                                   |
| <b>2</b> | Diag                  | ${ m grams}$                                       |
|          | 2.1                   | ER Diagram   |
|          | 2.2                   | Class Diagram                                      |
|          | 2.3                   | Use Case Diagram                                   |
|          | 2.4                   | Activity Diagram                                   |
| 3        | Hen                   | r Interface 8                                      |
| J        | 3.1                   | Technologies Used                                  |
|          | 5.1                   | 3.1.1 Login Page                                   |
|          |                       | 3.1.2 Home Page                                    |
|          |                       | 3.1.3 Tournament Page                              |
|          |                       | 3.1.4 Team Page                                    |
|          |                       | 8  |
|          |                       | 3.1.5 Game Page                                    |
| 4        |                       | and Schema 10                                      |
|          | 4.1                   | Manage branch                                      |
|          |                       | 4.1.1 (Admin $\rightarrow$ Manager)                |
|          |                       | $4.1.2$ (Manager $\rightarrow$ Finance)            |
|          |                       | 4.1.3 (Manager $\rightarrow$ Teams)                |
|          |                       | $4.1.4$ (SocialMedia $\rightarrow$ ContentCreator) |
|          | 4.2                   | Pay branch   |
|          |                       | $4.2.1$ (Finance $\rightarrow$ SocialMedia)        |
|          |                       | 4.2.2 (Finance $\rightarrow$ organization)         |
|          | 4.3                   | Formed branch                                      |
|          |                       | $4.3.1$ (Teams $\rightarrow$ Player)               |
|          | 4.4                   | Has branch   |
|          |                       | 4.4.1 (Record $\rightarrow$ Tournament)            |
|          |                       | $4.4.2$ (Tournament $\rightarrow$ Game)            |
|          | 4.5                   | Participate branch                                 |
|          |                       | $4.5.1$ (Teams $\rightarrow$ Game)                 |
|          | 4.6                   | Host branch  |
|          | 1.0                   | $4.6.1$ (Organizer $\rightarrow$ Tournament)       |
|          | 4.7                   | Sponsor branch                                     |
|          | 1.,                   | 4.7.1 (Companies $\rightarrow$ Organization)       |
|          |                       | 4.7.2 (Companies $\rightarrow$ Teams)              |
|          | 4.8                   | Temporary Tables                                   |
|          | 4.9                   | Final Tables                                       |
|          |                       | Schema Diagram                                     |
|          | T. T.O.               | Domonius Disserting $D$                            |

| 5 | SQL Queries                      | 30              |
|---|----------------------------------|-----------------|
|   | 5.1 Table Creation               |                 |
|   | 5.2 Sequence Creation            | 43              |
|   | 5.3 Index for Table              |                 |
|   | 5.4 Alter Table                  | 45              |
|   | 5.5 Data Insertion               | 46              |
| 6 | Relational Algebra 6.1 Selection | <b>57</b><br>57 |
| 7 | Conclusion                       | 58              |

# Introduction

Esports Management System is an innovative platform that will revolutionize the management and organization of esports teams, participants, tournaments, and sponsors. This system seeks to provide users with an efficient and user-friendly way to search for their preferred professional esports players.

A user-friendly interface is at the core of the Esports Management System, allowing users to seamlessly navigate and explore the realm of professional esports. With only a few clicks, users can search for potential professional athletes and teams, as well as access valuable information such as their winning records and accomplishments. This enables fans and enthusiasts to remain up-to-date on their preferred players and teams, nurturing a stronger connection within the esports community.

The Esports Management System's ability to facilitate sponsorships is a crucial feature. Numerous organizations and businesses can engage in sponsorship activities, whether for the purpose of supporting tournaments or individual athletes. The system serves as a centralized repository where the information and details of these sponsors can be efficiently stored and managed. This facilitates the sponsorship process and ensures that sponsors and the esports industry collaborate effectively.

There are specialized administrators within the Esports Management System who play crucial roles in managing and enhancing the overall experience. The social media manager is among these supervisors; he or she supervises the organization's online presence and engagement on various social media platforms. In addition, the content creator/VFX/GFX team assures the creation of visually stunning and captivating content that enhances the overall esports experience.

Dynamic features and functionalities make the Esports Management System an indispensable instrument for the esports industry. It makes it easier for fans to discover and connect with professional esports players, allowing them to remain informed and engaged. It enhances collaboration between organizations and the esports community by providing a centralized platform for sponsorship management. In addition, the system enables administrators to enhance the organization's online presence and develop visually appealing content, ensuring that all stakeholders have an engaging experience.

In the following sections, we will delve deeper into the features, functionalities, and innovative aspects of the Esports Management System, demonstrating its potential to revolutionize the management and celebration of esports teams, players, tournaments, and sponsors.

## 1.1 Project Proposal

This proposal for the development and implementation of an Esports Management System is presented with pleasure. This revolutionary platform seeks to transform the management and organization of esports teams, players, tournaments, and sponsors. The Esports Management System will improve the user experience, encourage community engagement, and expedite operations within the esports industry by leveraging advanced technology and comprehensive functionalities.

#### 1.1.1 Purposes

- Create an intuitive web-based platform that serves as the central hub for esports administration, catering to the requirements of teams, players, tournament organizers, and sponsors.
- Implement a sophisticated matching algorithm to facilitate the search and discovery of favored professional esports players, thereby enhancing the fan experience and fostering esports community connections.
- Provide efficient sponsorship administration capabilities, enabling organizations and businesses to support tournaments or individual athletes through sponsorship activities.
- Enhance the organization's online presence by supervising social media platforms and having the content creator/VFX/GFX team produce visually spectacular and engaging content.

### 1.1.2 Methodology

#### System Development:

- Conduct exhaustive investigation on the necessary requirements and features of an effective Esports Management System.
- Utilize industry-standard programming languages and technologies to create a scalable and secure web-based platform.
- Implement a user-friendly interface with intuitive navigation in order to provide a seamless and enjoyable user experience.

#### Matching Algorithm

- Collaboration with data scientists and psychologists to create a matching algorithm based on personality traits, values, and beliefs.
- Integrate the matching algorithm into the system to recommend professional esports players compatible with the user's preferences.

#### Sponsorship Management

- Create an all-encompassing sponsorship management module to facilitate collaborations between organizations and the esports industry.
- Provide a centralized repository for sponsor information to facilitate communication and sponsorship efficiency.

#### Online Presence Enhancement

- Appoint a social media manager to supervise the organization's online presence and interact with the esports community.
- Appoint a social media manager to supervise the organization's online presence and interact with the esports community.

## 1.2 Project Scenario

Imagine an eSports organization called "eSports FTW" that manages various teams and tournaments in the gaming industry. The organization is led by an Admin who oversees the operations. The Admin entity contains attributes such as email, picture, password, name, and a unique ID.

Under the Admin, there are multiple Managers responsible for different departments. Each Manager has attributes including hire date, picture, salary, email, name, department ID, and a unique ID. One Manager specifically manages the Finance department, ensuring financial stability and handling the accounts for the organization. The Finance entity consists of attributes such as a unique ID, account number, and balance.

In addition to managing the finances, each Manager is in charge of a specific team. The Teams entity includes details such as the team's established date, country, name, team ID, team icon, winning numbers, and total prize money. Each team has a unique Manager assigned to it, ensuring proper coordination and organization. The Manager entity is linked to the Teams entity through the Manager ID attribute.

Within each team, there are multiple Players who represent the organization in various games. The Players entity contains attributes such as name, player ID, picture, salary, winning prize money, total hours played, phone number, and address (including country, city, zip code, and road number). Additionally, players have links to their social media profiles on platforms like Facebook, Instagram, Twitter, and YouTube.

The organization hosts tournaments, bringing together teams from different games. The Tournament entity consists of attributes such as tournament ID, name, prize pool, starting date, and ending date. Each tournament features various games such as Valorant, Mobile Legends: Bang Bang (MLBB), and Rainbow Six Siege. The Game entity contains attributes like name, release date, genre, game picture, publisher, platform, game ID, and prize pool. Each tournament may have different games associated with it, creating diverse competitive environments.

To support the teams and tournaments financially, eSports FTW seeks sponsorships from different companies. The Companies entity includes attributes such as name, company ID, location, sponsor date, and phone number. Multiple companies can sponsor both teams and tournaments, forming a many-to-many relationship between the Companies, Teams, and Tournament entities.

Additionally, eSports FTW employs a Social Media Manager responsible for managing the organization's online presence. The Social Media Manager entity contains attributes such as name, picture, email, manager ID, hire date, salary, phone number, and social media links (Facebook, Instagram, Twitter, YouTube). The Social Media Manager oversees the VFX/GFX and Content Creator teams, ensuring engaging content creation and visual effects. The VFX/GFX and Content Creator entities include attributes like name, picture, VFX/GFX ID, email, phone number, salary, and address (country, city, zip code, and road number).

# Diagrams

# 2.1 ER Diagram



ER Diagram

# 2.2 Class Diagram



Class Diagram

# 2.3 Use Case Diagram



Use Case Diagram

# 2.4 Activity Diagram



Activity Diagram

# User Interface

# 3.1 Technologies Used

- SvelteKit
- Tailwind CSS

# 3.1.1 Login Page



# 3.1.2 Home Page



# 3.1.3 Tournament Page



# 3.1.4 Team Page



# 3.1.5 Game Page



# Normalization and Schema Design

# 4.1 Manage branch

### $4.1.1 \quad (Admin \rightarrow Manager)$

#### UNF

(<u>Admin\_ID</u>, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture, <u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, Manager\_Phone)

#### 1NF

Phone is multi-valued attribute.

• (<u>Admin\_ID</u>, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture, <u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, <u>Manager\_Hiredate</u>, Manager\_Phone)

#### 2NF

- Admin\_ID, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture
- Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, Manager\_Phone

#### 3NF

No transitive dependencies found. Same as 2NF

- Manager (Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, Admin\_ID)
- Admin (Admin\_ID, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture)
- Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)

## 4.1.2 (Manager $\rightarrow$ Finance)

### $\underline{\mathbf{UNF}}$

(<u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password,Manager\_Picture, Manager\_Hiredate, Manager\_Phone, <u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance)

#### 1NF

Phone is multi-valued attribute.

• (<u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password,Manager\_Picture, Manager\_Hiredate, Manager\_Phone, <u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance)

#### 2NF

- Manager\_Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password,Manager\_Picture, Manager\_Hiredate, Manager\_Phone)
- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance)

#### 3NF

No transitive dependency found. Same as 2NF.

- Manager(Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate)
- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance, Manager\_ID)
- Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)

### 4.1.3 (Manager $\rightarrow$ Teams)

#### $\underline{\mathbf{UNF}}$

(<u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password,Manager\_Picture, Manager\_Hiredate, Manager\_Phone, <u>Team\_ID</u>, Team\_Name,Team\_Icon, Team\_established\_date, Team\_country,Total\_Price\_Money,Team\_Winnig)

#### 1NF

Winning & Phone are multi-valued attribute.

• (<u>Manager\_ID</u>, Manager\_Name, Manager\_Email, Manager\_Password,Manager\_Picture, Manager\_Hiredate, Manager\_Phone, <u>Team\_ID</u>, Team\_Name,Team\_Icon, Team\_established\_date, Team\_country,Team\_Total\_Price\_Money,Team\_Winnig)

#### 2NF

- Manager\_Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, Manager\_Phone)
- Team(Team\_ID, Team\_Name, Team\_Icon, Team\_established\_date, Total\_Price\_Money, Team\_country

#### 3NF

No transitive dependency found. Same as 2NF.

- Manager(Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate)
- **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Price\_Money, **Manager\_ID**
- Team\_Winnig(Tw\_ID, Team\_ID, Team\_Winnig)
- Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)

### 4.1.4 (SocialMedia $\rightarrow$ ContentCreator)

#### **UNF**

(<u>SocialMedia\_ID</u>, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary, <u>ContentCreator\_ID</u>, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Phone, ContentCreator\_Hiredate, ContentCreator\_Salary, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_Instagram\_Link, ContentCreator\_Youtube\_Link, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)

#### 1NF

Phone is multi-valued attribute.

• (<u>SocialMedia\_ID</u>, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary, <u>ContentCreator\_ID</u>, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Phone, ContentCreator\_Hiredate, ContentCreator\_Salary, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_ator\_

 $Instagram\_Link, ContentCreator\_Youtube\_Link \,,\, ContentCreator\_Country, ContentCreator\_City, \, ContentCreator\_Street, \, ContentCreator\_Zip\_Code)$ 

#### 2NF

- SocialMedia (SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary)
- ContentCreator (ContentCreator\_ID, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Phone, ContentCreator\_Hiredate, ContentCreator\_Salary, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_Unstagram\_Link\_ContentCreator\_Voutube\_Link\_ContentCreator\_Country\_Country\_ContentCreator\_Country\_Countr

Instagram\_Link, ContentCreator\_Youtube\_Link, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)

#### 3NF

- SocialMedia SocialMedia ID, SocialMedia Name, SocialMedia Email, SocialMedia Password, SocialMedia Picture, SocialMedia Hiredate, SocialMedia Salary)
- ContentCreator <u>ContentCreator\_ID</u>, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Hiredate, ContentCreator\_Salary)
- ContentCreator\_SocialMedia (ContentCreator\_ID, SocialMedia\_ID, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_Instagram\_Link, ContentCreator\_Youtube\_Link)
- ContentCreator\_Address (ContentCreator\_ID, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)

- SocialMedia (SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Hiredate, SocialMedia\_Salary)
- ContentCreator (ContentCreator\_ID, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Hiredate, ContentCreator\_Salary)
- ContentCreator\_SocialMedia (<u>Ccs\_ID</u>,ContentCreator\_ID, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_ Instagram\_Link, ContentCreator\_Youtube\_Link)
- ContentCreator\_Address (<u>Cca\_ID</u>, ContentCreator\_ID, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)
- ContentCreator\_Phone (Ccp\_ID, ContentCreator\_ID, ContentCreator\_Phone)
- SocialMedia\_Phone (Smp\_ID, SocialMedia\_ID, SocialMedia\_Phone)
- ContentCreator\_SocialMedia\_Phone (<u>Ccp\_ID</u>, ContentCreator\_ID, ContentCreator\_Phone)

# 4.2 Pay branch

### 4.2.1 (Finance $\rightarrow$ SocialMedia)

#### $\overline{\text{UNF}}$

(<u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance, <u>SocialMedia\_ID</u>, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary)

#### 1NF

Phone is multi-valued attribute.

• (<u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance, <u>SocialMedia\_ID</u>, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary)

#### 2NF

- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance)
- SocialMedia(SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Phone, SocialMedia\_Hiredate, SocialMedia\_Salary)

#### 3NF

No transitive dependency found. Same as 2NF.

- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance)
- SocialMedia(SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Hiredate, SocialMedia\_Salary, Finance\_ID)
- SocialMedia\_Phone (Smp\_ID, SocialMedia\_ID, SocialMedia\_Phone)

### 4.2.2 (Finance $\rightarrow$ organization)

#### **UNF**

(<u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance, <u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 1NF

Phone is multi-valued attribute.

• (<u>Finance\_ID</u>, Finance\_Account\_Number, Finance\_Balance, <u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 2NF

- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance)
- Organization(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 3NF

No transitive dependency found. Same as 2NF.

- Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance)
- Organization(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone, Finance\_ID)
- Organization\_Phone (Op\_ID, Organization\_ID,Organization\_Phone)

## 4.3 Formed branch

## $4.3.1 \quad (\text{Teams} \rightarrow \text{Player})$

#### $\overline{ ext{UNF}}$

( <u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning,

Team\_Winnig, <u>Player\_ID</u>, <u>Player\_Name</u>, <u>Player\_Email</u>, <u>Player\_Password</u>, <u>Player\_Picture</u>, <u>Player\_JoinDate Player\_Phone</u>, <u>Player\_Salary</u>, <u>Player\_Winnig\_Money</u>, <u>Player\_Play\_Hours</u>, <u>Player\_country</u>, <u>Player\_City</u>, <u>Player\_Street</u>, <u>Player\_Zip\_Code</u>, <u>Player\_DOB</u>, <u>Player\_Facebook\_Link</u>, <u>Player\_Instagram\_Link</u>, <u>Player\_Twitter\_Link</u>, <u>Player\_Youtube\_Link</u>)

#### 1NF

Phone & Wining number are multi-valued attribute.

• (<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig, <u>Player\_ID</u>, Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Phone, Player\_Salary, Player\_Winnig\_Money, Player\_Play\_Hours, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code, Player\_DOB, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)

#### 2NF

- **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig)
- Player\_Player\_ID, Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Salary, Player\_Winnig\_Money, Player\_Play\_Hours, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code, Player\_DOB, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)

#### 3NF

- **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig)
- Player\_ID, Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Salary, Player\_Winnig\_Money, Player\_Play\_Hours, Player\_DOB)
- Player\_Address (<u>Pa\_ID</u>, Player\_ID, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code)
- Player\_Social\_Link (Psl\_ID, Player\_ID, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)

- **Team**(<u>Team\_ID</u>, <u>Team\_Name</u>, <u>Team\_Icon</u>, <u>Team\_established\_date</u>, <u>Team\_country</u>, <u>Total\_Earning</u>, <u>Team\_Winnig</u>)
- Player(Player\_ID, Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Salary, Player\_Play\_Hours, Player\_DOB)

- Player\_Address (Pa\_ID, Player\_ID, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code)
- Player\_Social\_Link (<u>Psl\_ID</u>, Player\_ID, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)
- Player\_Phone (Pp\_ID, Player\_ID, Player\_Phone)
- Player\_Wining (<u>Pw\_ID</u>, Player\_ID, Player\_Winnig)
- $\bullet \ \, \mathbf{Player\_Team} \ (\underline{\mathrm{Pt\_ID}}, \, \mathbf{Player\_ID}, \, \mathbf{Team\_ID})$

# 4.4 Has branch

# $\textbf{4.4.1} \quad (\textbf{Record} \rightarrow \textbf{Tournament})$

#### $\underline{\mathbf{UNF}}$

(<u>Record\_ID</u>, Record\_Date, Record\_Price\_Pool, <u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool)

#### 1NF

• ( <u>Record\_ID</u>, Record\_Date, Record\_Price\_Pool, <u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool )

#### 2NF

- Record(Record\_ID, Record\_Date, Record\_Price\_Pool, Tournament\_ID)
- Tournament\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool)

#### 3NF

No transitive dependency found. Same as 2NF.

- Record(Record\_ID, Record\_Date, Record\_Price\_Pool, Tournament\_ID)
- Tournament\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool)

### 4.4.2 (Tournament $\rightarrow$ Game)

#### $\underline{\mathbf{UNF}}$

( <u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool, <u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher )

#### 1NF

• (<u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool, <u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)

#### 2NF

- **Tournament**\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool)
- Game(<u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)

#### 3NF

No transitive dependency found. Same as 2NF.

- Tournament\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool)
- Game(Game\_ID, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)
- Tournament\_Game(Tournament\_ID, Game\_ID)

# 4.5 Participate branch

## $4.5.1 \quad (\text{Teams} \rightarrow \text{Game})$

#### **UNF**

( <u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig, <u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool Game\_Genre, Game\_Publisher) )

#### 1NF

• (<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig, <u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)

#### 2NF

- **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig)
- Game(<u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)

#### 3NF

No transitive dependency found. Same as 2NF.

- **Team**(<u>Team\_ID</u>, <u>Team\_Name</u>, <u>Team\_Icon</u>, <u>Team\_established\_date</u>, <u>Team\_country</u>, <u>Total\_Earning</u>, <u>Team\_Winnig</u>)
- Game(<u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)
- Team\_Game(Team\_ID, Game\_ID)

### 4.6 Host branch

## 4.6.1 (Organizer $\rightarrow$ Tournament)

#### UNF

(<u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool, <u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 1NF

Phone is a multi-vale attribute.

• (<u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate, Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool, <u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 2NF

- Tournament\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool, Organization\_ID)
- Organization(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone)

#### 3NF

No transitive dependency found. Same as 2NF.

- Tournament\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool, Organization\_ID)
- Organization (Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture)
- Organization\_Phone(Organization\_ID, Organization\_Phone)
- Organization\_Tournament(Organization\_ID, <u>Tournament\_ID</u>)

# 4.7 Sponsor branch

### 4.7.1 (Companies $\rightarrow$ Organization)

#### UNF

(<u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Picture, Organization\_Phone, <u>Company\_ID</u>, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, location)

#### 1NF

phone is a multi-value attribute.

• (<u>Organization\_ID</u>, Organization\_Name, Organization\_Email, Organization\_Picture, Organization\_Phone, <u>Company\_ID</u>, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, <u>location</u>)

#### 2NF

- Organization(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Picture, Organization\_Phone, Company\_ID)
- Company (Company\_ID, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, location)

#### 3NF

No transitive dependency found. Same as 2NF.

- Organization(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Picture, Company\_ID)
- Organization\_Phone(Organization\_ID, Organization\_Phone)
- Company (Company\_ID, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, location)
- Company\_Phone(Company\_ID, Company\_Phone)
- Organization\_Company(Organization\_ID, Company\_ID)

## 4.7.2 (Companies $\rightarrow$ Teams)

#### **UNF**

( <u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig, <u>Company\_ID</u>, Company\_Name, Company\_Email, Company\_Password, Company\_Picture, Company\_Phone, Company\_location )

#### 1NF

Phone is multi-value attribute.

• (<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig, <u>Company\_ID</u>, Company\_Name, Company\_Email, Company\_Password, Company\_Picture, Company\_Phone, Company\_location)

#### 2NF

- **Team**(<u>Team\_ID</u>, <u>Team\_Name</u>, <u>Team\_Icon</u>, <u>Team\_established\_date</u>, <u>Team\_country</u>, <u>Total\_Earning</u>, <u>Team\_Winnig</u>
- Company (Company ID, Company Name, Company Email, Company Password, Company Picture, Company Phone, Company location)

#### 3NF

No transitive dependency found. Same as 2NF.

- **Team**(<u>Team\_ID</u>, <u>Team\_Name</u>, <u>Team\_Icon</u>, <u>Team\_established\_date</u>, <u>Team\_country</u>, <u>Total\_Earning</u>, <u>Team\_Winnig</u>
- Company (Company ID, Company Name, Company Email, Company Password, Company Picture, Company Phone, Company Location)
- Team\_Company(Team\_ID, Company\_ID)
- Company\_Phone(Company\_ID, Company\_Phone)

# 4.8 Temporary Tables

- 1. **Manager** (Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, **Admin\_ID**)
- 2. Admin (Admin\_ID, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture)
- 3. Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)
- 4. Manager\_Hanager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate)
- 5. Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance, Manager\_ID)
- 6. Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)
- 7. Manager\_Manager\_D, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate)
- 8. **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Price\_Money, **Manager\_ID**
- 9. **Team\_Winnig**(<u>Tw\_ID</u>, <u>Team\_ID</u>, Team\_Winnig)
- 10. Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)
- 11. **SocialMedia** (<u>SocialMedia\_ID</u>, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Hiredate, SocialMedia\_Salary)
- 12. **ContentCreator** (<u>ContentCreator\_ID</u>, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Hiredate, ContentCreator\_Salary)
- 13. ContentCreator\_SocialMedia (<u>Ccs\_ID</u>,ContentCreator\_ID, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_ Instagram\_Link, ContentCreator\_Youtube\_Link)
- 14. ContentCreator\_Address (<u>Cca\_ID</u>, ContentCreator\_ID, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)
- 15. ContentCreator\_Phone (Ccp\_ID, ContentCreator\_ID, ContentCreator\_Phone)
- 16. SocialMedia\_Phone (Smp\_ID, SocialMedia\_ID, SocialMedia\_Phone)
- 17. Finance (Finance ID, Finance Account Number, Finance Balance)
- 18. **Organization**(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone, **Finance\_ID**)
- 19. **Organization\_Phone** (Op\_ID, **Organization\_ID**, Organization\_Phone)
- 20. Finance Finance ID, Finance Account Number, Finance Balance)
- 21. SocialMedia\_SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Hiredate, SocialMedia\_Salary, Finance\_ID)
- 22. SocialMedia Phone (Smp.ID, SocialMedia ID, SocialMedia Phone)

- 23. Team\_(Team\_ID, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Earning, Team\_Winnig)
- 24. **Player**\_Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Salary, Player\_Play-Hours, Player\_DOB)
- 25. Player\_Address (Pa\_ID, Player\_ID, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code)
- 26. **Player\_Social\_Link** (<u>Psl\_ID</u>, **Player\_ID**, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)
- 27. Player\_Phone (Pp\_ID, Player\_ID, Player\_Phone)
- 28. Player\_Wining (Pw\_ID, Player\_ID, Player\_Winnig)
- 29. Player\_Team (Pt\_ID, Player\_ID, Team\_ID)
- 30. Record(Record\_ID, Record\_Date, Record\_Price\_Pool, Tournament\_ID)
- 31. **Tournament**\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool)
- 32. **Tournament**(<u>Tournament\_ID</u>, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool)
- 33. **Game**(<u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)
- 34. Tournament\_Game(<u>Tournament\_ID</u>, <u>Game\_ID</u>)
- 35. **Tournament**\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_Ending Tournament\_Location, Tournament\_Prize\_Pool, Organization\_ID)
- 36. Organization (Organization ID, Organization Name, Organization Email, Organization Password Organization Picture)
- 37. Organization\_Phone(Organization\_ID, Organization\_Phone)
- 38. **Organization\_Tournament**(Organization\_ID, <u>Tournament\_ID</u>)
- 39. **Team**(<u>Team\_ID</u>, <u>Team\_Name</u>, <u>Team\_Icon</u>, <u>Team\_established\_date</u>, <u>Team\_country</u>, <u>Total\_Earning</u>, <u>Team\_Winnig</u>)
- 40. Game\_Came\_ID, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)
- 41. Team\_Game(Team\_ID, Game\_ID)
- 42. Organization (Organization ID, Organization Name, Organization Email, Organization Picture, Company ID)
- 43. Organization\_Phone(Organization\_ID, Organization\_Phone)
- 44. **Company**(Company\_ID, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, location)

- 45. Company\_Phone(Company\_ID, Company\_Phone)
- 46. **Organization\_Company**(Organization\_ID, Company\_ID)
- 47. Team (Team ID, Team Name, Team Icon, Team established date, Team country, Total Earning, Team Winnig
- 48. Company (Company ID, Company Name, Company Email, Company Password, Company Pietur Company Phone, Company location)
- 49. **Team\_Company**(<u>Team\_ID</u>, Company\_ID)
- 50. Company\_Phone(Company\_ID, Company\_Phone)

## 4.9 Final Tables

- 1. **Manager** (Manager\_ID, Manager\_Name, Manager\_Email, Manager\_Password, Manager\_Picture, Manager\_Hiredate, **Admin\_ID**)
- 2. Admin (Admin\_ID, Admin\_Name, Admin\_Email, Admin\_Password, Admin\_Picture)
- 3. Manager\_Phone (Mp\_ID, Manager\_ID, Manager\_Phone)
- 4. Finance(Finance\_ID, Finance\_Account\_Number, Finance\_Balance, Manager\_ID)
- 5. **Team**(<u>Team\_ID</u>, Team\_Name, Team\_Icon, Team\_established\_date, Team\_country, Total\_Price\_Money, **Manager\_ID**
- 6. **Team\_Winnig**(<u>Tw\_ID</u>, **Team\_ID**, Team\_Winnig)
- 7. **SocialMedia** (SocialMedia\_ID, SocialMedia\_Name, SocialMedia\_Email, SocialMedia\_Password, SocialMedia\_Picture, SocialMedia\_Hiredate, SocialMedia\_Salary)
- 8. **ContentCreator** (<u>ContentCreator\_ID</u>, ContentCreator\_Name, ContentCreator\_Email, ContentCreator\_Password, ContentCreator\_Picture, ContentCreator\_Hiredate, ContentCreator\_Salary)
- 9. ContentCreator\_SocialMedia (<u>Ccs\_ID</u>,ContentCreator\_ID, ContentCreator\_Facebook\_Link, ContentCreator\_Twitter\_Link, ContentCreator\_ Instagram\_Link, ContentCreator\_Youtube\_Link)
- 10. ContentCreator\_Address (<u>Cca\_ID</u>, ContentCreator\_ID, ContentCreator\_Country, ContentCreator\_City, ContentCreator\_Street, ContentCreator\_Zip\_Code)
- 11. ContentCreator\_Phone (Ccp\_ID, ContentCreator\_ID, ContentCreator\_Phone)
- 12. SocialMedia\_Phone (Smp\_ID, SocialMedia\_ID, SocialMedia\_Phone)

- 13. **Organization**(Organization\_ID, Organization\_Name, Organization\_Email, Organization\_Password, Organization\_Picture, Organization\_Phone, **Finance\_ID**)
- 14. **Organization\_Phone** (Op\_ID, **Organization\_ID**, Organization\_Phone)
- 15. **Player**(<u>Player\_ID</u>, Player\_Name, Player\_Email, Player\_Password, Player\_Picture, Player\_JoinDate, Player\_Salary, Player\_Play\_Hours, Player\_DOB)
- 16. Player\_Address (Pa\_ID, Player\_ID, Player\_country, Player\_City, Player\_Street, Player\_Zip\_Code)
- 17. **Player\_Social\_Link** (<u>Psl\_ID</u>, **Player\_ID**, Player\_Facebook\_Link, Player\_Instagram\_Link, Player\_Twitter\_Link, Player\_Youtube\_Link)
- 18. Player\_Phone (Pp\_ID, Player\_ID, Player\_Phone)
- 19. Player\_Wining (<u>Pw\_ID</u>, Player\_ID, Player\_Winnig)
- 20. Player\_Team (Pt\_ID, Player\_ID, Team\_ID)
- 21. Record(Record\_ID, Record\_Date, Record\_Price\_Pool, Tournament\_ID)
- 22. **Tournament**\_ID, Tournament\_Name, Tournament\_StartingDate,Tournament\_EndingDate, Tournament\_Location, Tournament\_Prize\_Pool)
- 23. **Game**(<u>Game\_ID</u>, Game\_Name, Game\_Icon, Game\_ReleaseDate, Game\_Platform, Game\_PricePool, Game\_Genre, Game\_Publisher)
- 24. Tournament\_Game(Tournament\_ID, Game\_ID)
- 25. Organization\_Tournament(Organization\_ID, <u>Tournament\_ID</u>)
- 26. Team\_Game(Team\_ID, Game\_ID)
- 27. **Company**(Company\_ID, Company\_Name, Company\_Email, Company\_Picture, Company\_Phone, location)
- 28. Company\_Phone(Company\_ID, Company\_Phone)
- 29. **Organization\_Company**(Organization\_ID, Company\_ID)
- 30. **Team\_Company**(<u>Team\_ID</u>, Company\_ID)

# 4.10 Schema Diagram



Schema Diagram

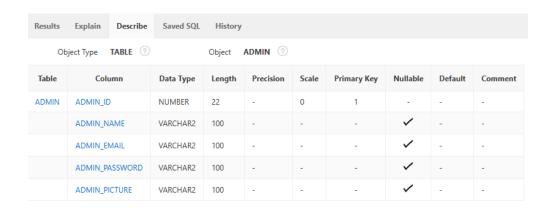
# SQL Queries

### 5.1 Table Creation

```
CREATE TABLE Admin (
Admin_ID INT PRIMARY KEY,
Admin_Name VARCHAR(100),
Admin_Email VARCHAR(100),
Admin_Password VARCHAR(100),
Admin_Picture VARCHAR(100)

);
```

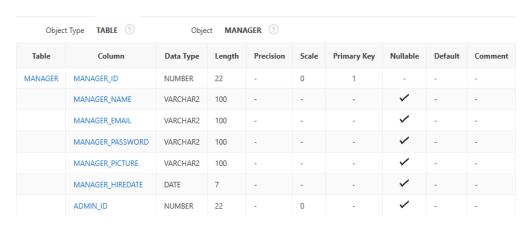
#### Create Admin table



#### Admin table description

```
CREATE TABLE Manager (
1
2
            Manager_ID INT PRIMARY KEY,
            Manager_Name VARCHAR (100),
3
            Manager_Email VARCHAR (100),
5
            Manager_Password VARCHAR(100),
6
            Manager_Picture VARCHAR (100),
            Manager_Hiredate DATE,
8
            Admin_ID INT,
            FOREIGN KEY (Admin_id) REFERENCES Manager (Admin_ID)
9
       );
10
```

Create Manager table



Manager table description

```
CREATE TABLE Manager_Phone (

Mp_ID INT PRIMARY KEY,

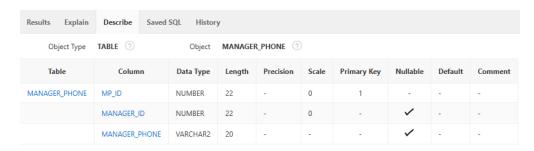
Manager_ID INT,

Manager_Phone VARCHAR(20),

FOREIGN KEY (Manager_ID) REFERENCES Manager (Manager_ID)

);
```

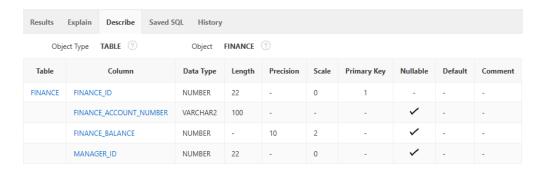
Create Manager Phone table



Manager Phone table description

```
CREATE TABLE Finance (
Finance_ID INT PRIMARY KEY,
Finance_Account_Number VARCHAR(100),
Finance_Balance DECIMAL(10, 2),
Manager_ID INT,
FOREIGN KEY (Manager_ID) REFERENCES Manager (Manager_ID)
);
```

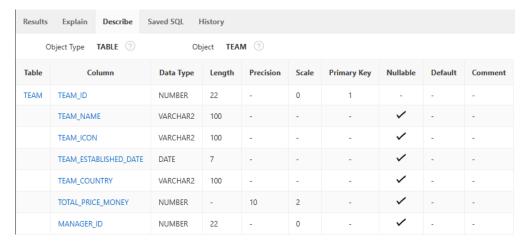
Create Finance table



Finance table description

```
CREATE TABLE Team (
1
2
            Team_ID INT PRIMARY KEY,
3
            Team_Name VARCHAR (100),
4
            Team_Icon VARCHAR (100),
5
            Team_Established_Date DATE,
6
            Team_Country VARCHAR(100),
7
            Total_Price_Money DECIMAL(10, 2),
            Manager_ID INT,
8
9
            FOREIGN KEY (Manager_ID) REFERENCES Manager (Manager_ID)
10
        );
```

Create Team table



Team table description

```
CREATE TABLE Team_Winning (
Tw_ID INT PRIMARY KEY,

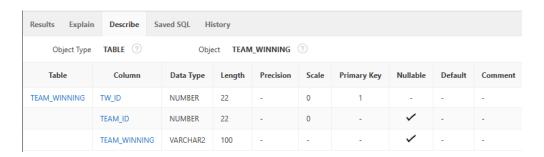
Team_ID INT,

Team_Winning VARCHAR(100),

FOREIGN KEY (Team_ID) REFERENCES Team (Team_ID)

);
```

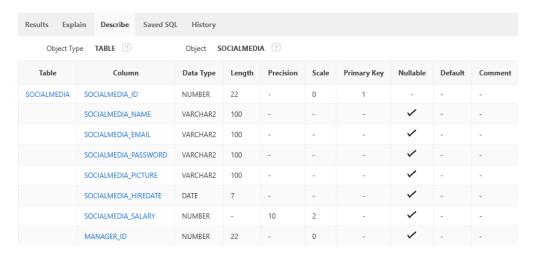
Create Team Winning table



Team Winning table description

```
1
        CREATE TABLE SocialMedia (
2
            SocialMedia_ID INT PRIMARY KEY,
3
            SocialMedia_Name VARCHAR (100),
            SocialMedia_Email VARCHAR(100),
4
5
            {\tt SocialMedia\_Password\ VARCHAR\,(100)\,,}
6
            SocialMedia_Picture VARCHAR(100),
            SocialMedia_Hiredate DATE,
7
8
            SocialMedia_Salary DECIMAL(10, 2),
9
            Manager_ID INT,
10
            FOREIGN KEY (Manager_ID) REFERENCES Manager (Manager_ID)
       );
```

Create SocialMedia table



SocialMedia table description

```
1
        CREATE TABLE ContentCreator (
2
            ContentCreator_ID INT PRIMARY KEY,
3
            ContentCreator_Name VARCHAR(100),
4
            ContentCreator_Email VARCHAR(100),
            ContentCreator_Password VARCHAR (100),
5
6
            ContentCreator_Picture VARCHAR(100),
7
            ContentCreator_Hiredate DATE,
8
            ContentCreator_Salary DECIMAL(10, 2),
9
            SocialMedia_ID INT,
10
            FOREIGN KEY (SocialMedia_ID) REFERENCES SocialMedia (SocialMedia_ID)
       );
11
```

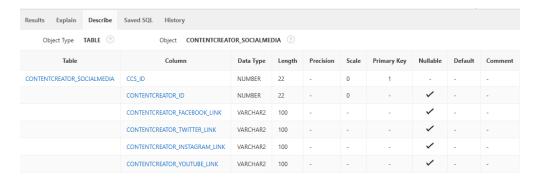
Create ContentCreator table



ContentCreator table description

```
1
       CREATE TABLE ContentCreator_SocialMedia (
2
           Ccs_ID INT PRIMARY KEY,
           ContentCreator_ID INT,
           {\tt ContentCreator\_Facebook\_Link\ VARCHAR(100),}
4
5
           ContentCreator_Twitter_Link VARCHAR(100)
6
           ContentCreator_Instagram_Link VARCHAR(100),
7
           ContentCreator_Youtube_Link VARCHAR(100),
           FOREIGN KEY (ContentCreator_ID) REFERENCES ContentCreator (ContentCreator_ID)
8
9
       );
```

Create ContentCreator SocialMedia table



ContentCreator SocialMedia table description

```
1
       CREATE TABLE ContentCreator_Address (
2
           Cca_ID INT PRIMARY KEY,
3
           ContentCreator_ID INT,
4
           ContentCreator_Country VARCHAR (100),
5
           ContentCreator_City VARCHAR(100),
6
           ContentCreator_Street VARCHAR(100),
           ContentCreator_Zip_Code VARCHAR(20),
7
           FOREIGN KEY (ContentCreator_ID) REFERENCES ContentCreator (ContentCreator_ID)
       );
```

#### Create ContentCreator Address table

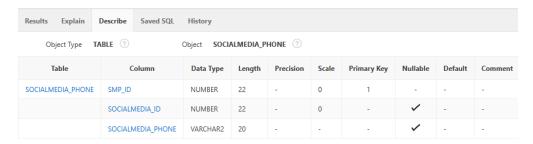


ContentCreator Address table description

Create ContentCreator Phone table

```
CREATE TABLE SocialMedia_Phone (
Smp_ID INT PRIMARY KEY,
SocialMedia_ID INT,
SocialMedia_Phone VARCHAR(20),
FOREIGN KEY (SocialMedia_ID) REFERENCES SocialMedia (SocialMedia_ID)
);
```

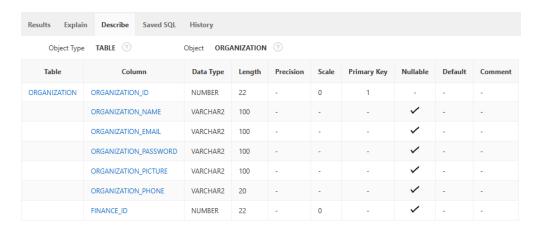
Create SocialMedia Phone table



SocialMedia Phone table description

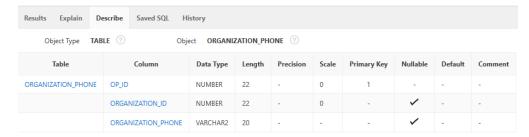
```
1
        CREATE TABLE Organization (
2
            Organization_ID INT PRIMARY KEY,
3
            Organization_Name VARCHAR(100),
            Organization_Email VARCHAR(100),
4
5
            {\tt Organization\_Password\ VARCHAR}\,({\tt 100})\,,
6
            Organization_Picture VARCHAR(100),
7
            Organization_Phone VARCHAR(20),
8
            Finance_ID INT,
9
            FOREIGN KEY (Finance_ID) REFERENCES Finance (Finance_ID)
10
        );
```

Create Organization table



Organization table description

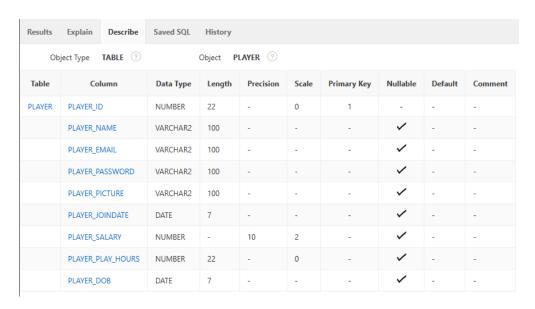
Create Organization Phone table



Organization Phone table description

```
CREATE TABLE Player (
2
            Player_ID INT PRIMARY KEY,
3
            Player_Name VARCHAR (100),
            Player_Email VARCHAR (100),
4
5
            Player_Password VARCHAR (100),
6
            Player_Picture VARCHAR(100),
7
            Player_JoinDate DATE,
8
            Player_Salary DECIMAL(10, 2),
9
            Player_Play_Hours INT,
10
            Player_DOB DATE
       );
11
```

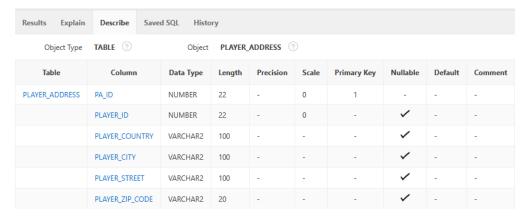
Create Player table



Player table description

```
CREATE TABLE Player_Address (
1
2
           Pa_ID INT PRIMARY KEY,
3
           Player_ID INT,
           Player_Country VARCHAR(100),
4
5
           Player_City VARCHAR (100),
           Player_Street VARCHAR (100),
6
7
           Player_Zip_Code VARCHAR(20),
           FOREIGN KEY (Player_ID) REFERENCES Player (Player_ID)
8
       );
```

Create Player Address table



Player Address table description

```
CREATE TABLE Player_Social_Link (
1
2
           Psl_ID INT PRIMARY KEY,
3
           Player_ID INT,
           Player_Facebook_Link VARCHAR(100),
5
           {\tt Player\_Instagram\_Link~VARCHAR(100),}
6
7
           Player_Twitter_Link VARCHAR(100),
            Player_Youtube_Link VARCHAR(100),
8
           FOREIGN KEY (Player_ID) REFERENCES Player (Player_ID)
9
       );
```

Create Player Social Link table



Player Social Link table description

```
CREATE TABLE Player_Phone (
Pp_ID INT PRIMARY KEY,

Player_ID INT,
Player_Phone VARCHAR(20),
FOREIGN KEY (Player_ID) REFERENCES Player (Player_ID)

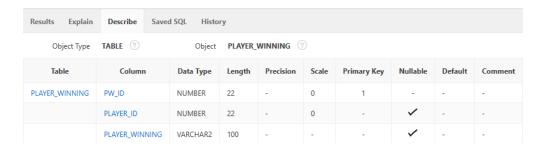
);
```

Create Player Phone table



Player Phone table description

Create Player Winning table



Player Winning table description

```
CREATE TABLE Player_Team (

Pt_ID INT PRIMARY KEY,

Player_ID INT,

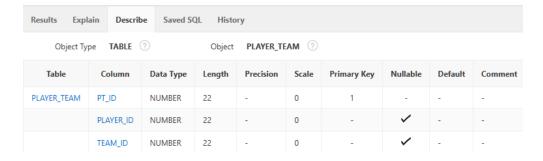
Team_ID INT,

FOREIGN KEY (Player_ID) REFERENCES Player (Player_ID),

FOREIGN KEY (Team_ID) REFERENCES Team (Team_ID)

7);
```

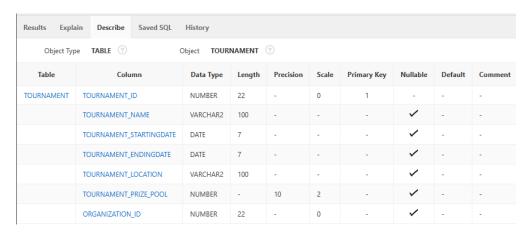
Create Player Team table



Player Team table description

```
1
        CREATE TABLE Tournament (
2
            Tournament_ID INT PRIMARY KEY,
3
            Tournament_Name VARCHAR (100),
4
            Tournament_StartingDate DATE,
5
            Tournament_EndingDate DATE,
6
            Tournament_Location VARCHAR(100),
7
            Tournament_Prize_Pool DECIMAL(10, 2),
            Organization_ID INT,
8
9
            FOREIGN KEY (Organization_ID) REFERENCES Organization (Organization_ID)
10
       );
```

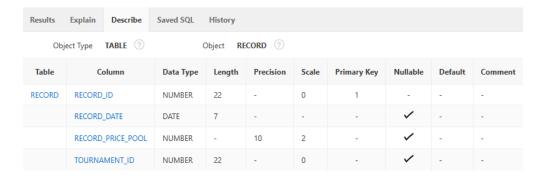
Create Tournament table



Tournament table description

```
CREATE TABLE Record (
Record_ID INT PRIMARY KEY,
Record_Date DATE,
Record_Price_Pool DECIMAL(10, 2),
Tournament_ID INT,
FOREIGN KEY (Tournament_ID) REFERENCES Tournament (Tournament_ID)
);
```

Create Record table



Record table description

```
CREATE TABLE Game (
2
            Game_ID INT PRIMARY KEY,
3
            Game_Name VARCHAR(100),
            Game_Icon VARCHAR(100),
5
            Game_ReleaseDate DATE,
6
            Game_Platform VARCHAR(100),
7
            Game_Price_Pool DECIMAL(10, 2),
8
            Game_Genre VARCHAR(100),
9
            Game_Publisher VARCHAR(100)
10
       );
```

Create Game table



Game table description

```
CREATE TABLE Tournament_Game (
Tournament_ID INT,
Game_ID INT,
PRIMARY KEY (Tournament_ID, Game_ID),
FOREIGN KEY (Tournament_ID) REFERENCES Tournament (Tournament_ID),
FOREIGN KEY (Game_ID) REFERENCES Game (Game_ID)
);
```

Create Tournament Game table



Tournament Game table description

Create Organization Tournament table

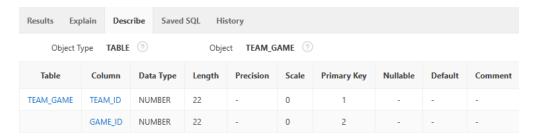


Organization Tournament table description

```
CREATE TABLE Team_Game (
Team_ID INT,
Game_ID INT,
Game_ID INT,
PRIMARY KEY (Team_ID, Game_ID),
FOREIGN KEY (Team_ID) REFERENCES Team (Team_ID),
FOREIGN KEY (Game_ID) REFERENCES Game (Game_ID)

7 );
```

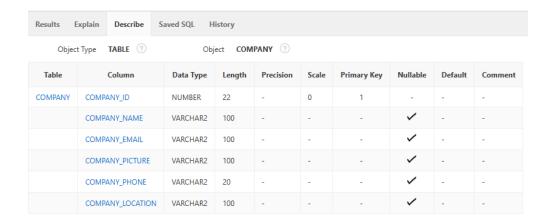
Create Team Game table



Team Game table description

```
CREATE TABLE Company (
Company_ID INT PRIMARY KEY,
Company_Name VARCHAR(100),
Company_Email VARCHAR(100),
Company_Picture VARCHAR(100),
Company_Phone VARCHAR(20),
Company_Location VARCHAR(100)
);
```

Create Company table



Company table description

```
CREATE TABLE Company_Phone (
Company_ID INT,
Company_Phone VARCHAR(20),
PRIMARY KEY (Company_ID, Company_Phone),
FOREIGN KEY (Company_ID) REFERENCES Company (Company_ID)
);
```

Create Company Phone table



Company Phone table description

Create Organization Company table



Organization Company table description

```
CREATE TABLE Team_Company (
Team_ID INT,
Company_ID INT,
PRIMARY KEY (Team_ID, Company_ID),
FOREIGN KEY (Team_ID) REFERENCES Team (Team_ID),
FOREIGN KEY (Company_ID) REFERENCES Company (Company_ID)
);
```

Create Team Company table



Team Company table description

## 5.2 Sequence Creation

```
-- Create sequence for Manager table
   CREATE SEQUENCE seq_manager_id START WITH 1 INCREMENT BY 1;
   -- Create sequence for Admin table
   CREATE SEQUENCE seq_admin_id START WITH 1 INCREMENT BY 1;
    -- Create sequence for Manager_Phone table
6
   CREATE SEQUENCE seq_mp_id START WITH 1 INCREMENT BY 1;
   -- Create sequence for Finance table
   CREATE SEQUENCE seq_finance_id START WITH 1 INCREMENT BY 1;
8
9
10
   -- Create sequence for Team table
   CREATE SEQUENCE seq_team_id START WITH 1 INCREMENT BY 1;
11
12
   -- Create sequence for Team_Winning table
   CREATE SEQUENCE seq_tw_id START WITH 1 INCREMENT BY 1;
13
14
    -- Create sequence for SocialMedia table
15
   CREATE SEQUENCE seq_socialmedia_id START WITH 1 INCREMENT BY 1;
16
    - Create sequence for ContentCreator table
   CREATE SEQUENCE seq_contentcreator_id START WITH 1 INCREMENT BY 1;
17
   -- Create sequence for ContentCreator_SocialMedia table
18
19
   CREATE SEQUENCE seq_ccs_id START WITH 1 INCREMENT BY 1;
20
   -- Create sequence for ContentCreator_Address table
21
   CREATE SEQUENCE seq_cca_id START WITH 1 INCREMENT BY 1;
22
   -- Create sequence for ContentCreator_Phone table
23
   CREATE SEQUENCE seq_ccp_id START WITH 1 INCREMENT BY 1;
24
   -- Create sequence for SocialMedia_Phone table
25
26
   CREATE SEQUENCE seq_smp_id START WITH 1 INCREMENT BY 1;
27
    -- Create sequence for Organization table
   CREATE SEQUENCE seq_organization_id START WITH 1 INCREMENT BY 1;
28
   -- Create sequence for Organization_Phone table
30
   CREATE SEQUENCE seq_op_id START WITH 1 INCREMENT BY 1;
31
   -- Create sequence for Player table
   CREATE SEQUENCE seq_player_id START WITH 1 INCREMENT BY 1;
33
    -- Create sequence for Player_Address table
34
   CREATE SEQUENCE seq_pa_id START WITH 1 INCREMENT BY 1;
   -- Create sequence for Player_Social_Link table
35
36
   CREATE SEQUENCE seq_psl_id START WITH 1 INCREMENT BY 1;
37
38
   -- Create sequence for Player_Phone table
   CREATE SEQUENCE seq_pp_id START WITH 1 INCREMENT BY 1;
39
     - Create sequence for Player_Winning table
40
   CREATE SEQUENCE seq_pw_id START WITH 1 INCREMENT BY 1;
41
42
   -- Create sequence for Record table
43
   CREATE SEQUENCE seq_record_id START WITH 1 INCREMENT BY 1;
44
   -- Create sequence for Tournament table
   CREATE SEQUENCE seq_tournament_id START WITH 1 INCREMENT BY 1;
    -- Create sequence for Game table
46
   CREATE SEQUENCE seq_game_id START WITH 1 INCREMENT BY 1;
47
    -- Create sequence for Company table
   CREATE SEQUENCE seq_company_id START WITH 1 INCREMENT BY 1;
49
50
   -- Create sequence for Company_Phone table
   CREATE SEQUENCE seq_cp_id START WITH 1 INCREMENT BY 1;
51
52
   -- Create sequence for Organization_Company table
   CREATE SEQUENCE seq_oc_id START WITH 1 INCREMENT BY 1;
53
54
```

Sequence Creation

## 5.3 Index for Table

```
1
        -- Create index for Manager table
2
       CREATE INDEX idx_manager_email ON Manager (Manager_Email);
3
        -- Create index for Admin table
4
       CREATE INDEX idx_admin_email ON Admin (Admin_Email);
        -- Create index for Manager_Phone table
       CREATE INDEX idx_manager_phone_manager_id ON Manager_Phone (Manager_ID);
6
7
        -- Create index for Finance table
8
       CREATE INDEX idx_finance_manager_id ON Finance (Manager_ID);
9
        -- Create index for Team table
10
       CREATE INDEX idx_team_manager_id ON Team (Manager_ID);
11
12
       -- Create index for Team_Winning table
       CREATE INDEX idx_team_winning_team_id ON Team_Winning (Team_ID);
13
14
        -- Create index for SocialMedia table
15
       CREATE INDEX idx_socialmedia_name ON SocialMedia (SocialMedia_Name);
16
         - Create index for ContentCreator table
       CREATE INDEX idx_contentcreator_name ON ContentCreator (ContentCreator_Name);
17
        -- Create index for ContentCreator_SocialMedia table
18
19
       CREATE INDEX idx_ccs_contentcreator_id ON ContentCreator_SocialMedia (ContentCreator_ID)
20
        -- Create index for ContentCreator_Address table
       CREATE INDEX idx_cca_contentcreator_id ON ContentCreator_Address (ContentCreator_ID);
21
22
        -- Create index for ContentCreator_Phone table
23
       CREATE INDEX idx_ccp_contentcreator_id ON ContentCreator_Phone (ContentCreator_ID);
24
        -- Create index for SocialMedia_Phone table
25
       CREATE INDEX idx_smp_socialmedia_id ON SocialMedia_Phone (SocialMedia_ID);
26
        - Create index for Organization table
27
       CREATE INDEX idx_organization_name ON Organization (Organization_Name);
        -- Create index for Organization_Phone table
29
       CREATE INDEX idx_op_organization_id ON Organization_Phone (Organization_ID);
30
        -- Create index for Player table
31
       CREATE INDEX idx_player_name ON Player (Player_Name);
32
33
        -- Create index for Player_Address table
       CREATE INDEX idx_pa_player_id ON Player_Address (Player_ID);
34
35
        -- Create index for Player_Social_Link table
36
       CREATE INDEX idx_psl_player_id ON Player_Social_Link (Player_ID);
37
        -- Create index for Player_Phone table
38
       CREATE INDEX idx_pp_player_id ON Player_Phone (Player_ID);
39
          Create index for Player_Winning table
       CREATE INDEX idx_pw_player_id ON Player_Winning (Player_ID);
40
41
        -- Create index for Record table
42
       CREATE INDEX idx_record_date ON Record (Record_Date);
43
        -- Create index for Tournament table
       CREATE INDEX idx_tournament_name ON Tournament (Tournament_Name);
45
46
        -- Create index for Game table
47
       CREATE INDEX idx_game_name ON Game (Game_Name);
        -- Create index for Company table
48
49
       CREATE INDEX idx_company_name ON Company (Company_Name);
        -- Create index for Company_Phone table
50
       CREATE INDEX idx_cp_company_id ON Company_Phone (Company_ID);
51
        -- Create index for Organization_Company table
        CREATE INDEX idx_oc_organization_id ON Organization_Company (Organization_ID);
53
54
```

Index for Table

# 5.4 Alter Table for effective indexing

```
1
        -- Alter Manager table to add index
2
       ALTER TABLE Manager ADD CONSTRAINT idx_manager_email UNIQUE (Manager_Email);
3
        -- Alter Admin table to add index
4
       ALTER TABLE Admin ADD CONSTRAINT idx_admin_email UNIQUE (Admin_Email);
5
        -- Alter Manager_Phone table to add index
       ALTER TABLE Manager_Phone ADD CONSTRAINT idx_manager_phone_manager_id UNIQUE (Manager_ID
6
           );
7
          Alter Finance table to add index
       ALTER TABLE Finance ADD CONSTRAINT idx_finance_manager_id UNIQUE (Manager_ID);
8
9
        -- Alter Team table to add index
       ALTER TABLE Team ADD CONSTRAINT idx_team_manager_id UNIQUE (Manager_ID);
10
11
        -- Alter Team_Winning table to add index
       ALTER TABLE Team_Winning ADD CONSTRAINT idx_team_winning_team_id UNIQUE (Team_ID);
12
13
14
        -- Alter SocialMedia table to add index
15
       ALTER TABLE SocialMedia ADD CONSTRAINT idx_socialmedia_name UNIQUE (SocialMedia_Name);
16
        -- Alter ContentCreator table to add index
       ALTER TABLE ContentCreator ADD CONSTRAINT idx_contentcreator_name UNIQUE (
17
           ContentCreator_Name);
18
        -- Alter ContentCreator_SocialMedia table to add index
19
       ALTER TABLE ContentCreator_SocialMedia ADD CONSTRAINT idx_ccs_contentcreator_id UNIQUE (
           ContentCreator_ID);
20
       -- Alter ContentCreator_Address table to add index
21
       ALTER TABLE ContentCreator_Address ADD CONSTRAINT idx_cca_contentcreator_id UNIQUE (
           ContentCreator_ID);
22
        -- Alter ContentCreator_Phone table to add index
23
       ALTER TABLE ContentCreator_Phone ADD CONSTRAINT idx_ccp_contentcreator_id UNIQUE (
           ContentCreator_ID);
        -- Alter SocialMedia_Phone table to add index
25
       ALTER TABLE SocialMedia_Phone ADD CONSTRAINT idx_smp_socialmedia_id UNIQUE (
           SocialMedia_ID);
        -- Alter Organization table to add index
       ALTER TABLE Organization ADD CONSTRAINT idx_organization_name UNIQUE (Organization_Name)
27
        -- Alter Organization_Phone table to add index
28
29
       ALTER TABLE Organization_Phone ADD CONSTRAINT idx_op_organization_id UNIQUE (
           Organization_ID);
30
31
        -- Alter Player table to add index
32
       ALTER TABLE Player ADD CONSTRAINT idx_player_name UNIQUE (Player_Name);
33
        -- Alter Plaver Address table to add index
34
        ALTER TABLE Player_Address ADD CONSTRAINT idx_pa_player_id UNIQUE (Player_ID);
35
        -- Alter Player_Social_Link table to add index
       ALTER TABLE Player_Social_Link ADD CONSTRAINT idx_psl_player_id UNIQUE (Player_ID);
36
        -- Alter Player_Phone table to add index
       ALTER TABLE Player_Phone ADD CONSTRAINT idx_pp_player_id UNIQUE (Player_ID);
38
39
        -- Alter Player_Winning table to add index
       ALTER TABLE Player_Winning ADD CONSTRAINT idx_pw_player_id UNIQUE (Player_ID);
41
        -- Alter Record table to add index
42
       ALTER TABLE Record ADD CONSTRAINT idx_record_date UNIQUE (Record_Date);
43
44
        -- Alter Tournament table to add index
       ALTER TABLE Tournament ADD CONSTRAINT idx_tournament_name UNIQUE (Tournament_Name);
        -- Alter Game table to add index
46
47
       ALTER TABLE Game ADD CONSTRAINT idx_game_name UNIQUE (Game_Name);
        -- Alter Company table to add index
       ALTER TABLE Company ADD CONSTRAINT idx_company_name UNIQUE (Company_Name);
49
50
        -- Alter Company_Phone table to add index
       ALTER TABLE Company_Phone ADD CONSTRAINT idx_cp_company_id UNIQUE (Company_ID);
51
52
        -- Alter Organization_Company table to add index
        ALTER TABLE Organization_Company ADD CONSTRAINT idx_oc_organization_id UNIQUE (
           Organization_ID);
54
```

Alter Table

## 5.5 Data Insertion

```
INSERT INTO Admin (Admin_ID, Admin_Name, Admin_Email, Admin_Password, Admin_Picture)
1
   VALUES (seq_admin_id.NEXTVAL, 'Admin 1', 'admin1@example.com', 'adminpass1', 'admin1.jpg');
3
   INSERT INTO Admin (Admin_ID, Admin_Name, Admin_Email, Admin_Password, Admin_Picture)
   VALUES (seq_admin_id.NEXTVAL, 'Admin 2', 'admin2@example.com', 'adminpass2', 'admin2.jpg');
6
   INSERT INTO Admin (Admin_ID, Admin_Name, Admin_Email, Admin_Password, Admin_Picture)
8
   VALUES (seq_admin_id.NEXTVAL, 'Admin 3', 'admin3@example.com', 'adminpass3', 'admin3.jpg');
9
   INSERT INTO Admin (Admin_ID, Admin_Name, Admin_Email, Admin_Password, Admin_Picture)
11
   VALUES (seq_admin_id.NEXTVAL, 'Admin 4', 'admin4@example.com', 'adminpass4', 'admin4.jpg');
12
13
   INSERT INTO Admin (Admin_ID, Admin_Name, Admin_Email, Admin_Password, Admin_Picture)
   VALUES (seq_admin_id.NEXTVAL, 'Admin 5', 'admin5@example.com', 'adminpass5', 'admin5.jpg');
14
```

Inserting data into Admin table

| Results | desults Explain Describe Saved SQL History |            |                    |                |               |
|---------|--|------------|--------------------|----------------|---------------|
|         |  |            |                    |                |               |
| ADMI    | IN_ID                                      | ADMIN_NAME | ADMIN_EMAIL        | ADMIN_PASSWORD | ADMIN_PICTURE |
| 1       |  | Admin 1    | admin1@example.com | adminpass1     | admin1.jpg    |
| 2       |  | Admin 2    | admin2@example.com | adminpass2     | admin2.jpg    |
| 3       |  | Admin 3    | admin3@example.com | adminpass3     | admin3.jpg    |
| 4       |  | Admin 4    | admin4@example.com | adminpass4     | admin4.jpg    |
| 5       |  | Admin 5    | admin5@example.com | adminpass5     | admin5.jpg    |

5 rows returned in 0.00 seconds

Inserted data of Admin table

```
INSERT INTO Manager (Manager_ID, Manager_Name, Manager_Email, Manager_Password,
1
        Manager_Picture, Manager_Hiredate, Admin_ID)
    VALUES (seq_manager_id.NEXTVAL, 'John Doe', 'john.doe@example.com', 'password123', 'profile.
    jpg', TO_DATE('2022-01-01', 'YYYY-MM-DD'), 1);
2
3
    INSERT INTO Manager (Manager_ID, Manager_Name, Manager_Email, Manager_Password,
4
        Manager_Picture, Manager_Hiredate, Admin_ID)
    VALUES (seq_manager_id.NEXTVAL, 'Jane Smith', 'jane.smith@example.com', 'password456', '
5
       profile2.jpg', TO_DATE('2022-02-01', 'YYYY-MM-DD'), 2);
6
7
    INSERT INTO Manager (Manager_ID, Manager_Name, Manager_Email, Manager_Password,
       Manager_Picture, Manager_Hiredate, Admin_ID)
8
    VALUES (seq_manager_id.NEXTVAL, 'Mike Johnson', 'mike.johnson@example.com', 'password789', '
        profile3.jpg', TO_DATE('2022-03-01', 'YYYY-MM-DD'), 1);
9
10
    INSERT INTO Manager (Manager_ID, Manager_Name, Manager_Email, Manager_Password,
       Manager_Picture, Manager_Hiredate, Admin_ID)
11
    VALUES (seq_manager_id.NEXTVAL, 'Sarah Williams', 'sarah.williams@example.com', 'password123
        ', 'profile4.jpg', TO_DATE('2022-04-01', 'YYYY-MM-DD'), 2);
12
13
    INSERT INTO Manager (Manager_ID, Manager_Name, Manager_Email, Manager_Password,
        Manager_Picture, Manager_Hiredate, Admin_ID)
    VALUES (seq_manager_id.NEXTVAL, 'Robert Davis', 'robert.davis@example.com', 'password456', '
14
        profile5.jpg', TO_DATE('2022-05-01', 'YYYY-MM-DD'), 1);
```

Inserting data into manager tables



5 rows returned in 0.00 seconds

#### Inserted data of manager table

```
1
   INSERT INTO Manager_Phone (Mp_ID, Manager_ID, Manager_Phone)
2
   VALUES (seq_mp_id.NEXTVAL, 1, '1234567890');
3
   INSERT INTO Manager_Phone (Mp_ID, Manager_ID, Manager_Phone)
5
   VALUES (seq_mp_id.NEXTVAL, 2, '0987654321');
6
   INSERT INTO Manager_Phone (Mp_ID, Manager_ID, Manager_Phone)
7
8
   VALUES (seq_mp_id.NEXTVAL, 3, '1112223333');
9
10
   INSERT INTO Manager_Phone (Mp_ID, Manager_ID, Manager_Phone)
11
   VALUES (seq_mp_id.NEXTVAL, 4, '4445556666');
12
13
   INSERT INTO Manager_Phone (Mp_ID, Manager_ID, Manager_Phone)
14
   VALUES (seq_mp_id.NEXTVAL, 5, '7778889999');
```

Inserting data into manager phone tables

| esults Explain Describe Saved SQL History |                               |               |  |  |  |  |
|---|-------------------------------|---------------|--|--|--|--|
| MP_ID                                     | MANAGER_ID                    | MANAGER_PHONE |  |  |  |  |
| 1   | 1                             | 1234567890    |  |  |  |  |
| 2   | 2                             | 0987654321    |  |  |  |  |
| 3   | 3                             | 1112223333    |  |  |  |  |
| 4   | 4                             | 4445556666    |  |  |  |  |
| 5   | 5                             | 7778889999    |  |  |  |  |
| 5 rows returned in 0.00 seconds           | rows returned in 0.00 seconds |               |  |  |  |  |

Inserted data of manager phone table

```
INSERT INTO Finance (Finance_ID, Finance_Account_Number, Finance_Balance, Manager_ID)
    VALUES (seq_finance_id.NEXTVAL, 'ABC123456', 10000, 1);
3
    INSERT INTO Finance (Finance_ID, Finance_Account_Number, Finance_Balance, Manager_ID)
    VALUES (seq_finance_id.NEXTVAL, 'DEF789012', 20000, 2);
5
6
7
    INSERT INTO Finance (Finance_ID, Finance_Account_Number, Finance_Balance, Manager_ID)
    VALUES (seq_finance_id.NEXTVAL, 'GHI345678', 15000, 3);
8
9
10
    INSERT INTO Finance (Finance_ID, Finance_Account_Number, Finance_Balance, Manager_ID)
    VALUES (seq_finance_id.NEXTVAL, 'JKL901234', 18000, 4);
11
12
   INSERT INTO Finance (Finance_ID, Finance_Account_Number, Finance_Balance, Manager_ID)
VALUES (seq_finance_id.NEXTVAL, 'MN0567890', 22000, 5);
13
14
```

Inserting data into Finance tables

| Results Explain Describe S    | alts Explain Describe Saved SQL History |                 |            |  |  |  |
|-------------------------------|---|-----------------|------------|--|--|--|
| FINANCE_ID                    | FINANCE_ACCOUNT_NUMBER                  | FINANCE_BALANCE | MANAGER_ID |  |  |  |
| 1                             | ABC123456                               | 10000           | 1          |  |  |  |
| 2                             | DEF789012                               | 20000           | 2          |  |  |  |
| 3                             | GHI345678                               | 15000           | 3          |  |  |  |
| 4                             | JKL901234                               | 18000           | 4          |  |  |  |
| 5                             | MNO567890                               | 22000           | 5          |  |  |  |
| rows returned in 0.00 seconds |   |                 |            |  |  |  |

Inserted data of Finance table

```
1
2
   INSERT INTO Team (Team_ID, Team_Name, Team_Icon, Team_Established_Date, Team_Country,
       Total_Price_Money , Manager_ID)
3
   VALUES (seq_team_id.NEXTVAL, 'Team A', 'teamA.png', TO_DATE('2022-01-01', 'YYYY-MM-DD'), '
       USA', 50000, 1);
4
5
   INSERT INTO Team (Team_ID, Team_Name, Team_Icon, Team_Established_Date, Team_Country,
       Total_Price_Money , Manager_ID)
   VALUES (seq_team_id.NEXTVAL, 'Team B', 'teamB.png', T0_DATE('2022-02-01', 'YYYY-MM-DD'), 'UK
6
        <sup>'</sup>, 60000, 2);
7
8
   INSERT INTO Team (Team_ID, Team_Name, Team_Icon, Team_Established_Date, Team_Country,
       Total_Price_Money , Manager_ID)
   VALUES (seq_team_id.NEXTVAL, 'Team C', 'teamC.png', T0_DATE('2022-03-01', 'YYYY-MM-DD'), '
9
       Australia', 45000, 3);
10
11
   INSERT INTO Team (Team_ID, Team_Name, Team_Icon, Team_Established_Date, Team_Country,
       Total_Price_Money, Manager_ID)
   VALUES (seq_team_id.NEXTVAL, 'Team D', 'teamD.png', TO_DATE('2022-04-01', 'YYYY-MM-DD'), '
12
       Canada', 55000, 4);
13
   INSERT INTO Team (Team_ID, Team_Name, Team_Icon, Team_Established_Date, Team_Country,
14
       Total_Price_Money, Manager_ID)
   VALUES (seq_team_id.NEXTVAL, 'Team E', 'teamE.png', TO_DATE('2022-05-01', 'YYYY-MM-DD'), '
15
       Germany', 70000, 5);
```

Inserting data into Team tables

| TEAM_NAME | TEAM_ICON teamA.png | TEAM_ESTABLISHED_DATE                     | TEAM_COUNTRY  | TOTAL_PRICE_MONEY  | MANAGER_ID   |
|-----------|---------------------|---|---|--|--|
| am A      | teamA.png           |   |   |  |  |
|           |                     | 01-JAN-22                                 | USA   | 50000  | 1  |
| am B      | teamB.png           | 01-FEB-22                                 | UK  | 60000  | 2  |
| am C      | teamC.png           | 01-MAR-22                                 | Australia   | 45000  | 3  |
| am D      | teamD.png           | 01-APR-22                                 | Canada  | 55000  | 4  |
| am E      | teamE.png           | 01-MAY-22                                 | Germany   | 70000  | 5  |
| ar<br>ar  | m C                 | m C teamC.png m D teamD.png m E teamE.png | m C teamC.png 01-MAR-22 m D teamD.png 01-APR-22 m E teamE.png 01-MAY-22 | m C teamC.png 01-MAR-22 Australia m D teamD.png 01-APR-22 Canada m E teamE.png 01-MAY-22 Germany | m C teamC.png 01-MAR-22 Australia 45000 m D teamD.png 01-APR-22 Canada 55000 m E teamE.png 01-MAY-22 Germany 70000 |

Inserted data of Team table

```
2
   INSERT INTO Team_Winning (Tw_ID, Team_ID, Team_Winning)
3
   VALUES (seq_tw_id.NEXTVAL, 1, 'Championship 2022');
4
5
   INSERT INTO Team_Winning (Tw_ID, Team_ID, Team_Winning)
6
   VALUES (seq_tw_id.NEXTVAL, 2, 'Tournament 2023');
7
   INSERT INTO Team_Winning (Tw_ID, Team_ID, Team_Winning)
8
9
   VALUES (seq_tw_id.NEXTVAL, 3, 'Cup 2022');
10
11
   INSERT INTO Team_Winning (Tw_ID, Team_ID, Team_Winning)
12
   VALUES (seq_tw_id.NEXTVAL, 4, 'League 2022');
13
14
   INSERT INTO Team_Winning (Tw_ID, Team_ID, Team_Winning)
15
   VALUES (seq_tw_id.NEXTVAL, 5, 'Championship 2023');
```

Inserting data into Team\_Winning tables

| Results    | Explain Describe Saved SQL    | History |                   |  |  |
|------------|-------------------------------|---------|-------------------|--|--|
|            | TW_ID                         | TEAM_ID | TEAM_WINNING      |  |  |
| 1          |                               | 1       | Championship 2022 |  |  |
| 2          |                               | 2       | Tournament 2023   |  |  |
| 3          |                               | 3       | Cup 2022          |  |  |
| 4          |                               | 4       | League 2022       |  |  |
| 5          |                               | 5       | Championship 2023 |  |  |
| 5 rows ref | rows returned in 0.00 seconds |         |                   |  |  |

Inserted data of Team Winning table

```
INSERT INTO SocialMedia (SocialMedia_ID, SocialMedia_Name, SocialMedia_Email,
2
       SocialMedia_Password, SocialMedia_Picture, SocialMedia_Hiredate, SocialMedia_Salary,
       MANAGER ID)
   VALUES (seq_socialmedia_id.NEXTVAL, 'SocialMediaUser221', 'social.user1@example.com', '
3
       socialpass1', 'social1.jpg', TO_DATE('2022-01-01', 'YYYY-MM-DD'), 5000, 1);
5
   INSERT INTO SocialMedia (SocialMedia_ID, SocialMedia_Name, SocialMedia_Email,
       SocialMedia_Password, SocialMedia_Picture, SocialMedia_Hiredate, SocialMedia_Salary,
       MANAGER_ID)
6
   VALUES (seq_socialmedia_id.NEXTVAL, 'SocialMediaUser442', 'social.user2@example.com', '
       socialpass2', 'social2.jpg', TO_DATE('2022-02-01', 'YYYY-MM-DD'), 6000, 2);
   INSERT INTO SocialMedia (SocialMedia_ID, SocialMedia_Name, SocialMedia_Email,
8
       SocialMedia_Password, SocialMedia_Picture, SocialMedia_Hiredate, SocialMedia_Salary,
       MANAGER_ID)
9
   VALUES (seq_socialmedia_id.NEXTVAL, 'SocialMediaUser423', 'social.user3@example.com', '
       socialpass3', 'social3.jpg', TO_DATE('2022-03-01', 'YYYY-MM-DD'), 7000, 3);
10
11
   INSERT INTO SocialMedia (SocialMedia_ID, SocialMedia_Name, SocialMedia_Email,
       SocialMedia_Password, SocialMedia_Picture, SocialMedia_Hiredate, SocialMedia_Salary,
       MANAGER ID)
   VALUES (seq_socialmedia_id.NEXTVAL, 'SocialMediaUser4234', 'social.user4@example.com', '
12
       socialpass4', 'social4.jpg', T0_DATE('2022-04-01', 'YYYY-MM-DD'), 8000, 4);
13
   INSERT INTO SocialMedia (SocialMedia_ID, SocialMedia_Name, SocialMedia_Email,
14
       SocialMedia_Password, SocialMedia_Picture, SocialMedia_Hiredate, SocialMedia_Salary,
       MANAGER_ID)
   VALUES (seq_socialmedia_id.NEXTVAL, 'SocialMediaUser5523', 'social.user5@example.com', '
15
       socialpass5', 'social5.jpg', TO_DATE('2022-05-01', 'YYYY-MM-DD'), 9000, 5);
```

Inserting data into SocialMedia tables



Inserted data of Social Media table

```
INSERT INTO ContentCreator (ContentCreator_ID, ContentCreator_Name, ContentCreator_Email,
       ContentCreator_Password, ContentCreator_Picture, ContentCreator_Hiredate,
       ContentCreator_Salary, SOCIALMEDIA_ID)
2
   VALUES (seq_contentcreator_id.NEXTVAL, 'ContentCreator 1', 'cc1@example.com', 'ccpass1', '
       cc1.jpg', TO_DATE('2022-01-01', 'YYYY-MM-DD'), 3000, 1)
3
4
   INSERT INTO ContentCreator (ContentCreator_ID, ContentCreator_Name, ContentCreator_Email,
       ContentCreator_Password, ContentCreator_Picture, ContentCreator_Hiredate,
        ContentCreator_Salary, SOCIALMEDIA_ID)
5
   VALUES (seq_contentcreator_id.NEXTVAL, 'ContentCreator 2', 'cc2@example.com', 'ccpass2', '
       cc2.jpg', TO_DATE('2022-02-01', 'YYYY-MM-DD'), 3500, 2)
6
   INSERT INTO ContentCreator (ContentCreator_ID, ContentCreator_Name, ContentCreator_Email,
7
        ContentCreator_Password, ContentCreator_Picture, ContentCreator_Hiredate,
       ContentCreator_Salary, SOCIALMEDIA_ID)
   VALUES (seq_contentcreator_id.NEXTVAL, 'ContentCreator 3', 'cc3@example.com', 'ccpass3', '
8
       cc3.jpg', TO_DATE('2022-03-01', 'YYYY-MM-DD'), 4000, 3)
9
10
   INSERT INTO ContentCreator (ContentCreator_ID, ContentCreator_Name, ContentCreator_Email,
       ContentCreator_Password, ContentCreator_Picture, ContentCreator_Hiredate,
       {\tt ContentCreator\_Salary}\;,\;\; {\tt SOCIALMEDIA\_ID})
11
   VALUES (seq_contentcreator_id.NEXTVAL, 'ContentCreator 4', 'cc4@example.com', 'ccpass4', '
       cc4.jpg', TO_DATE('2022-04-01', 'YYYY-MM-DD'), 4500, 4)
12
13
   INSERT INTO ContentCreator (ContentCreator_ID, ContentCreator_Name, ContentCreator_Email,
       ContentCreator_Password, ContentCreator_Picture, ContentCreator_Hiredate,
        ContentCreator_Salary, SOCIALMEDIA_ID)
14
   VALUES (seq_contentcreator_id.NEXTVAL, 'ContentCreator 5', 'cc5@example.com', 'ccpass5', '
       cc5.jpg', TO_DATE('2022-05-01', 'YYYY-MM-DD'), 5000, 5)
```

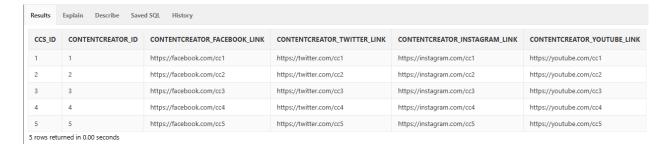
Inserting data into ContentCreator tables



Inserted data of Content Creator table

```
1
    INSERT INTO ContentCreator_SocialMedia (Ccs_ID, ContentCreator_ID,
        ContentCreator_Facebook_Link, ContentCreator_Twitter_Link, ContentCreator_Instagram_Link
          ContentCreator_Youtube_Link)
 2
    VALUES (seq_ccs_id.NEXTVAL, 1, 'https://facebook.com/cc1', 'https://twitter.com/cc1', 'https
        ://instagram.com/cc1', 'https://youtube.com/cc1');
 3
    INSERT INTO ContentCreator_SocialMedia (Ccs_ID, ContentCreator_ID,
        {\tt ContentCreator\_Facebook\_Link}\;,\;\; {\tt ContentCreator\_Twitter\_Link}\;,\;\; {\tt ContentCreator\_Instagram\_Link}
          ContentCreator_Youtube_Link)
    VALUES (seq_ccs_id.NEXTVAL, 2, 'https://facebook.com/cc2', 'https://twitter.com/cc2', 'https://instagram.com/cc2', 'https://youtube.com/cc2');
 5
 6
 7
    INSERT INTO ContentCreator_SocialMedia (Ccs_ID, ContentCreator_ID,
        {\tt ContentCreator\_Facebook\_Link}\;,\;\; {\tt ContentCreator\_Twitter\_Link}\;,\;\; {\tt ContentCreator\_Instagram\_Link}\;
          ContentCreator_Youtube_Link)
    VALUES (seq_ccs_id.NEXTVAL, 3, 'https://facebook.com/cc3', 'https://twitter.com/cc3', 'https://instagram.com/cc3', 'https://youtube.com/cc3');
 8
10
    INSERT INTO ContentCreator_SocialMedia (Ccs_ID, ContentCreator_ID,
        {\tt ContentCreator\_Facebook\_Link}\;,\;\; {\tt ContentCreator\_Twitter\_Link}\;,\;\; {\tt ContentCreator\_Instagram\_Link}\;
         , ContentCreator_Youtube_Link)
11
    VALUES (seq_ccs_id.NEXTVAL, 4, 'https://facebook.com/cc4', 'https://twitter.com/cc4', 'https
        ://instagram.com/cc4', 'https://youtube.com/cc4');
12
13
    INSERT INTO ContentCreator_SocialMedia (Ccs_ID, ContentCreator_ID,
        ContentCreator_Facebook_Link, ContentCreator_Twitter_Link, ContentCreator_Instagram_Link
          ContentCreator_Youtube_Link)
14
    VALUES (seq_ccs_id.NEXTVAL, 5, 'https://facebook.com/cc5', 'https://twitter.com/cc5', 'https
        ://instagram.com/cc5', 'https://youtube.com/cc5');
```

Inserting data into ContentCreator\_SocialMedia tables



#### Inserted data of Content Creator Social Media table

```
1
   INSERT INTO ContentCreator_Address (Cca_ID, ContentCreator_ID, ContentCreator_Country,
        ContentCreator_City, ContentCreator_Street, ContentCreator_Zip_Code)
2
   VALUES (seq_cca_id.NEXTVAL, 1, 'USA', 'New York', '123 Street', '10001');
3
   INSERT INTO ContentCreator_Address (Cca_ID, ContentCreator_ID, ContentCreator_Country,
4
        ContentCreator_City, ContentCreator_Street, ContentCreator_Zip_Code)
5
   VALUES (seq_cca_id.NEXTVAL, 2, 'USA', 'Los Angeles', '456 Avenue', '90001');
6
7
   INSERT INTO ContentCreator_Address (Cca_ID, ContentCreator_ID, ContentCreator_Country,
       {\tt ContentCreator\_City}\;,\;\; {\tt ContentCreator\_Street}\;,\;\; {\tt ContentCreator\_Zip\_Code})
8
   VALUES (seq_cca_id.NEXTVAL, 3, 'UK', 'London', '789 Road', 'SW1A 1AA');
10
   INSERT INTO ContentCreator_Address (Cca_ID, ContentCreator_ID, ContentCreator_Country,
        ContentCreator_City, ContentCreator_Street, ContentCreator_Zip_Code)
11
   VALUES (seq_cca_id.NEXTVAL, 4, 'Canada', 'Toronto', '321 Boulevard', 'M5V 2T3');
12
   INSERT INTO ContentCreator_Address (Cca_ID, ContentCreator_ID, ContentCreator_Country,
13
        {\tt ContentCreator\_City}\;,\;\; {\tt ContentCreator\_Street}\;,\;\; {\tt ContentCreator\_Zip\_Code})
14
   VALUES (seq_cca_id.NEXTVAL, 5, 'Germany', 'Berlin', '987 Strasse', '12345');
```

Inserting data into ContentCreator\_Address tables

| Results Ex     | Results Explain Describe Saved SQL History |                        |                     |                       |                         |  |
|----------------|--|------------------------|---------------------|-----------------------|-------------------------|--|
| CCA_ID         | CONTENTCREATOR_ID                          | CONTENTCREATOR_COUNTRY | CONTENTCREATOR_CITY | CONTENTCREATOR_STREET | CONTENTCREATOR_ZIP_CODE |  |
| 1              | 1  | USA                    | New York            | 123 Street            | 10001                   |  |
| 2              | 2  | USA                    | Los Angeles         | 456 Avenue            | 90001                   |  |
| 3              | 3  | UK                     | London              | 789 Road              | SW1A 1AA                |  |
| 4              | 4  | Canada                 | Toronto             | 321 Boulevard         | M5V 2T3                 |  |
| 5              | 5  | Germany                | Berlin              | 987 Strasse           | 12345                   |  |
| 5 rows returne | ows returned in 0.00 seconds               |                        |                     |                       |                         |  |

Inserted data of Content Creator Address table

```
INSERT INTO ContentCreator_Phone (Ccp_ID, ContentCreator_ID, ContentCreator_Phone)
   VALUES (seq_ccp_id.NEXTVAL, 1, '9876543210');
3
   INSERT INTO ContentCreator_Phone (Ccp_ID, ContentCreator_ID, ContentCreator_Phone)
   VALUES (seq_ccp_id.NEXTVAL, 2, '1234567890');
5
6
7
   INSERT INTO ContentCreator_Phone (Ccp_ID, ContentCreator_ID, ContentCreator_Phone)
8
   VALUES (seq_ccp_id.NEXTVAL, 3, '5551234567');
9
10
   INSERT INTO ContentCreator_Phone (Ccp_ID, ContentCreator_ID, ContentCreator_Phone)
   VALUES (seq_ccp_id.NEXTVAL, 4, '7775558888');
11
12
13
   INSERT INTO ContentCreator_Phone (Ccp_ID, ContentCreator_ID, ContentCreator_Phone)
   VALUES (seq_ccp_id.NEXTVAL, 5, '9990001111');
14
```

Inserting data into ContentCreator\_Phone tables



Inserted data of Content Creator Phone table

```
INSERT INTO SocialMedia_Phone (Smp_ID, SocialMedia_ID, SocialMedia_Phone)
2
   VALUES (seq_smp_id.NEXTVAL, 1, '5551234567');
3
   INSERT INTO SocialMedia_Phone (Smp_ID, SocialMedia_ID, SocialMedia_Phone)
4
   VALUES (seq_smp_id.NEXTVAL, 2, '6669876543');
5
6
7
   INSERT INTO SocialMedia_Phone (Smp_ID, SocialMedia_ID, SocialMedia_Phone)
   VALUES (seq_smp_id.NEXTVAL, 3, '7774561230');
9
10
   INSERT INTO SocialMedia_Phone (Smp_ID, SocialMedia_ID, SocialMedia_Phone)
11
   VALUES (seq_smp_id.NEXTVAL, 4, '8887890123');
12
13
   INSERT INTO SocialMedia_Phone (Smp_ID, SocialMedia_ID, SocialMedia_Phone)
14
   VALUES (seq_smp_id.NEXTVAL, 5, '9996547890');
```

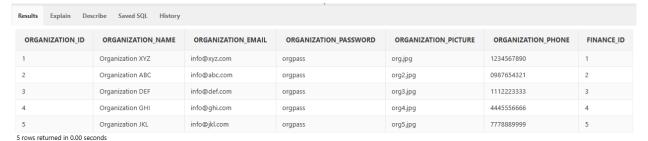
Inserting data into SocialMedia\_Phone tables

| esults Explain Describe Saved SQL History |                |                   |  |  |  |
|---|----------------|-------------------|--|--|--|
| SMP_ID                                    | SOCIALMEDIA_ID | SOCIALMEDIA_PHONE |  |  |  |
| 1   | 1              | 5551234567        |  |  |  |
| 2   | 2              | 6669876543        |  |  |  |
| 3   | 3              | 7774561230        |  |  |  |
| 4   | 4              | 8887890123        |  |  |  |
| 5   | 5              | 9996547890        |  |  |  |
| rows returned in 0.00 seconds             |                |                   |  |  |  |

Inserted data of Social Media Phone table

```
INSERT INTO Organization (Organization_ID, Organization_Name, Organization_Email,
1
       Organization_Password, Organization_Picture, Organization_Phone, Finance_ID)
2
   VALUES (seq_organization_id.NEXTVAL, 'Organization XYZ', 'info@xyz.com', 'orgpass', 'org.jpg
3
   INSERT INTO Organization (Organization_ID, Organization_Name,Organization_Email,
4
       Organization_Password, Organization_Picture, Organization_Phone, Finance_ID)
   VALUES (seq_organization_id.NEXTVAL, 'Organization ABC', 'info@abc.com', 'orgpass', 'org2.
5
       jpg',
             '0987654321', 2);
6
   INSERT INTO Organization (Organization_ID, Organization_Name, Organization_Email,
7
       Organization_Password, Organization_Picture, Organization_Phone, Finance_ID)
8
   VALUES (seq_organization_id.NEXTVAL, 'Organization DEF', 'info@def.com', 'orgpass', 'org3.
              '1112223333', 3);
9
10
   INSERT INTO Organization (Organization_ID, Organization_Name, Organization_Email,
       Organization_Password, Organization_Picture, Organization_Phone, Finance_ID)
11
   VALUES (seq_organization_id.NEXTVAL, 'Organization GHI', 'info@ghi.com', 'orgpass', 'org4.
       jpg', '4445556666', 4);
12
   INSERT INTO Organization (Organization_ID, Organization_Name, Organization_Email,
13
       Organization_Password, Organization_Picture, Organization_Phone, Finance_ID)
   VALUES (seq_organization_id.NEXTVAL, 'Organization JKL', 'info@jkl.com', 'orgpass', 'org5.
       jpg', '7778889999', 5);
```

Inserting data into Organization tables



Inserted data of Organization table

```
INSERT INTO Organization_Phone (Op_ID, Organization_ID, Organization_Phone)
2
   VALUES (seq_op_id.NEXTVAL, 1, '9998887777');
3
   INSERT INTO Organization_Phone (Op_ID, Organization_ID, Organization_Phone)
   VALUES (seq_op_id.NEXTVAL, 2, '8887776666');
5
6
7
   INSERT INTO Organization_Phone (Op_ID, Organization_ID, Organization_Phone)
8
   VALUES (seq_op_id.NEXTVAL, 3, '7776665555');
9
10
   INSERT INTO Organization_Phone (Op_ID, Organization_ID, Organization_Phone)
   VALUES (seq_op_id.NEXTVAL, 4, '6665554444');
11
12
13
   INSERT INTO Organization_Phone (Op_ID, Organization_ID, Organization_Phone)
   VALUES (seq_op_id.NEXTVAL, 5, '5554443333');
14
```

Inserting data into Organization\_Phone tables

| Results Explain Describe      | sults Explain Describe Saved SQL History |                    |  |  |  |
|-------------------------------|--|--------------------|--|--|--|
| OP_ID                         | ORGANIZATION_ID                          | ORGANIZATION_PHONE |  |  |  |
| 1                             | 1  | 9998887777         |  |  |  |
| 2                             | 2  | 8887776666         |  |  |  |
| 3                             | 3  | 7776665555         |  |  |  |
| 4                             | 4  | 6665554444         |  |  |  |
| 5                             | 5  | 5554443333         |  |  |  |
| rows returned in 0.00 seconds |  |                    |  |  |  |

Inserted data of Organization Phone table

```
1
     INSERT INTO Player (Player_ID, Player_Name, Player_Email, Player_Password, Player_Picture,
          {\tt Player\_JoinDate}\;,\;\; {\tt Player\_Salary}\;,\;\; {\tt Player\_Play\_Hours}\;,\;\; {\tt Player\_DOB})
     VALUES (seq_player_id.NEXTVAL, 'Player 1', 'player1@example.com', 'playerpass', 'player1.jpg
', TO_DATE('2022-01-01', 'YYYY-MM-DD')), 5000, 100, TO_DATE('1990-01-01', 'YYYY-MM-DD'));
 2
 3
     INSERT INTO Player (Player_ID, Player_Name, Player_Email, Player_Password, Player_Picture,
 4
          Player_JoinDate, Player_Salary, Player_Play_Hours, Player_DOB)
     VALUES (seq_player_id.NEXTVAL, 'Player 2', 'player2@example.com', 'playerpass', 'player2.jpg
', TO_DATE('2022-02-01', 'YYYY-MM-DD')), 6000, 200, TO_DATE('1992-05-10', 'YYYY-MM-DD'));
 5
                                                                                                , 'playerpass', 'player2.jpg
 6
 7
     INSERT INTO Player (Player_ID, Player_Name, Player_Email, Player_Password, Player_Picture,
          Player_JoinDate, Player_Salary, Player_Play_Hours, Player_DOB)
     VALUES (seq_player_id.NEXTVAL, 'Player 3', 'player3@example.com', 'playerpass', 'player3.jpg
', TO_DATE('2022-03-01', 'YYYY-MM-DD')), 7000, 150, TO_DATE('1994-09-20', 'YYYY-MM-DD'));
 8
 9
10
     INSERT INTO Player (Player_ID, Player_Name, Player_Email, Player_Password, Player_Picture,
          Player_JoinDate, Player_Salary, Player_Play_Hours, Player_DOB)
     VALUES (seq_player_id.NEXTVAL, 'Player 4', 'player4@example.com', 'playerpass', 'player4.jpg
', TO_DATE('2022-04-01', 'YYYY-MM-DD'), 8000, 120, TO_DATE('1996-12-05', 'YYYY-MM-DD'));
11
12
     INSERT INTO Player (Player_ID, Player_Name, Player_Email, Player_Password, Player_Picture,
13
          Player_JoinDate, Player_Salary, Player_Play_Hours, Player_DOB)
     VALUES (seq_player_id.NEXTVAL, 'Player 5', 'player5@example.com', 'playerpass', 'player5.jpg
', TO_DATE('2022-05-01', 'YYYY-MM-DD'), 9000, 180, TO_DATE('1998-03-15', 'YYYY-MM-DD'));
14
```

Inserting data into Player tables



Inserted data of Player table

```
1
   INSERT INTO Player_Address (Pa_ID, Player_ID, Player_Country, Player_City, Player_Street,
       Player_Zip_Code)
2
   VALUES (seq_pa_id.NEXTVAL, 1, 'USA', 'New York', '123 Street', '10001');
3
   INSERT INTO Player_Address (Pa_ID, Player_ID, Player_Country, Player_City, Player_Street,
       Player_Zip_Code)
   VALUES (seq_pa_id.NEXTVAL, 2, 'USA', 'Los Angeles', '456 Avenue', '90001');
4
   INSERT INTO Player_Address (Pa_ID, Player_ID, Player_Country, Player_City, Player_Street,
5
       Player_Zip_Code)
6
   VALUES (seq_pa_id.NEXTVAL, 3, 'UK', 'London', '789 Road', 'SW1A 1AA');
   INSERT INTO Player_Address (Pa_ID, Player_ID, Player_Country, Player_City, Player_Street,
7
       Player_Zip_Code)
8
   VALUES (seq_pa_id.NEXTVAL, 4, 'Canada', 'Toronto', '321 Boulevard', 'M5V 2T3');
   INSERT INTO Player_Address (Pa_ID, Player_ID, Player_Country, Player_City, Player_Street,
9
       Player_Zip_Code)
   VALUES (seq_pa_id.NEXTVAL, 5, 'Germany', 'Berlin', '987 Strasse', '12345');
10
```

Inserting data into Player\_Address tables

| PLAYER_ID | PLAYER_COUNTRY | PLAYER_CITY       | PLAYER_STREET                           | PLAYER_ZIP_CODE  |
|-----------|----------------|-------------------|---|--|
|           |                |                   |   |  |
|           | USA            | New York          | 123 Street                              | 10001  |
| 2         | USA            | Los Angeles       | 456 Avenue                              | 90001  |
| 3         | UK             | London            | 789 Road                                | SW1A 1AA   |
| ı         | Canada         | Toronto           | 321 Boulevard                           | M5V 2T3  |
| 5         | Germany        | Berlin            | 987 Strasse                             | 12345  |
| 1         | econds         | UK Canada Germany | UK London Canada Toronto Germany Berlin | UK London 789 Road  Canada Toronto 321 Boulevard  Germany Berlin 987 Strasse |

Inserted data of Player Address table

```
INSERT INTO PLAYER_SOCIAL_LINK (Psl_ID, Player_ID, Player_Facebook_Link,
       Player_Instagram_Link, Player_Twitter_Link, Player_Youtube_Link)
2
   VALUES (seq_psl_id.NEXTVAL, 1, 'https://facebook.com/player1', 'https://instagram.com/
       player1', 'https://twitter.com/player1', 'https://youtube.com/player1');
3
   INSERT INTO PLAYER_SOCIAL_LINK (Psl_ID, Player_ID, Player_Facebook_Link,
4
       Player_Instagram_Link, Player_Twitter_Link, Player_Youtube_Link)
5
   VALUES (seq_psl_id.NEXTVAL, 2, 'https://facebook.com/player2', 'https://instagram.com/
       player2', 'https://twitter.com/player2', 'https://youtube.com/player2');
6
7
   INSERT INTO PLAYER_SOCIAL_LINK (Psl_ID, Player_ID, Player_Facebook_Link,
       Player_Instagram_Link, Player_Twitter_Link, Player_Youtube_Link)
8
   VALUES (seq_psl_id.NEXTVAL, 3, 'https://facebook.com/player3', 'https://instagram.com/
       player3', 'https://twitter.com/player3', 'https://youtube.com/player3');
9
   INSERT INTO PLAYER_SOCIAL_LINK (Psl_ID, Player_ID, Player_Facebook_Link,
10
       Player_Instagram_Link, Player_Twitter_Link, Player_Youtube_Link)
   VALUES (seq_psl_id.NEXTVAL, 4, 'https://facebook.com/player4', 'https://instagram.com/
11
       player4', 'https://twitter.com/player4', 'https://youtube.com/player4');
12
   INSERT INTO PLAYER_SOCIAL_LINK (Psl_ID, Player_ID, Player_Facebook_Link,
13
       Player_Instagram_Link, Player_Twitter_Link, Player_Youtube_Link)
14
   VALUES (seq_psl_id.NEXTVAL, 5, 'https://facebook.com/player5', 'https://instagram.com/
       player5', 'https://twitter.com/player5', 'https://youtube.com/player5');
```

Inserting data into Player\_SocialLink tables



5 rows returned in 0.00 seconds

#### Inserted data of Player Social Link table

```
1
   INSERT INTO Player_Phone (Pp_ID, Player_ID, Player_Phone)
2
   VALUES (seq_pp_id.NEXTVAL, 1, '1112223333');
4
   INSERT INTO Player_Phone (Pp_ID, Player_ID, Player_Phone)
   VALUES (seq_pp_id.NEXTVAL, 2, '2223334444');
5
7
   INSERT INTO Player_Phone (Pp_ID, Player_ID, Player_Phone)
8
   VALUES (seq_pp_id.NEXTVAL, 3, '3334445555');
9
10
   INSERT INTO Player_Phone (Pp_ID, Player_ID, Player_Phone)
11
   VALUES (seq_pp_id.NEXTVAL, 4, '4445556666');
12
   INSERT INTO Player_Phone (Pp_ID, Player_ID, Player_Phone)
13
14
   VALUES (seq_pp_id.NEXTVAL, 5, '5556667777');
```

Inserting data into Player\_Phone tables

| Results Explain Describe Saved SQL | History   |              |  |  |
|------------------------------------|-----------|--------------|--|--|
| PP_ID                              | PLAYER_ID | PLAYER_PHONE |  |  |
| 1                                  | 1         | 1112223333   |  |  |
| 2                                  | 2         | 2223334444   |  |  |
| 3                                  | 3         | 3334445555   |  |  |
| 4                                  | 4         | 4445556666   |  |  |
| 5                                  | 5         | 5556667777   |  |  |
| rows returned in 0.00 seconds      |           |              |  |  |

Inserted data of Player Phone table

```
INSERT INTO Player_Winning (Pw_ID, Player_ID, Player_Winning)
   VALUES (seq_pw_id.NEXTVAL, 1, 'Tournament 2022');
   INSERT INTO Player_Winning (Pw_ID, Player_ID, Player_Winning)
4
   VALUES (seq_pw_id.NEXTVAL, 2, 'Championship 2023');
5
   INSERT INTO Player_Winning (Pw_ID, Player_ID, Player_Winning)
7
8
   VALUES (seq_pw_id.NEXTVAL, 3, 'Cup 2022');
10
   INSERT INTO Player_Winning (Pw_ID, Player_ID, Player_Winning)
11
   VALUES (seq_pw_id.NEXTVAL, 4, 'Tournament 2023');
12
13
   INSERT INTO Player_Winning (Pw_ID, Player_ID, Player_Winning)
   VALUES (seq_pw_id.NEXTVAL, 5, 'League 2022');
```

Inserting data into Player\_Winning tables



5 rows returned in 0.00 seconds

#### Inserted data of Player Winning table

```
INSERT INTO Player_Team (Pt_ID, Player_ID, Team_ID)
1
2
   VALUES (seq_pt_id.NEXTVAL, 1, 1);
3
   INSERT INTO Player_Team (Pt_ID, Player_ID, Team_ID)
5
   VALUES (seq_pt_id.NEXTVAL, 2, 2);
6
7
   INSERT INTO Player_Team (Pt_ID, Player_ID, Team_ID)
8
   VALUES (seq_pt_id.NEXTVAL, 3, 3);
9
10
   INSERT INTO Player_Team (Pt_ID, Player_ID, Team_ID)
   VALUES (seq_pt_id.NEXTVAL, 4, 4);
11
12
13
   INSERT INTO Player_Team (Pt_ID, Player_ID, Team_ID)
   VALUES (seq_pt_id.NEXTVAL, 5, 5);
14
```

Inserting data into Player\_Team tables



5 rows returned in 0.00 seconds

Inserted data of Player Team table

# Relational Algebra

### 6.1 Selection

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

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# Conclusion

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