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UE21CS351A: Database Management System

MINI PROJECT USER REQUIREMENT SPECIFICATION

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Introduction

Purpose of the project

The purpose of this project is to develop a comprehensive and efficient database management system for a football league. The organization focuses on managing information related to teams, players, stadiums, leagues, league standings, team achievements, and player achievements. This system aims to streamline the management and analysis of data pertaining to various aspects of football, including team performance, player statistics, and league standings.

Scope of the project

The scope of this project encompasses the design, development, implementation, and maintenance of a relational database system tailored to the specific needs of a football league The system will provide user-friendly interfaces for data entry, retrieval, and reporting. It will also incorporate security measures to protect sensitive data and ensure data integrity. While the initial scope covers core features, the system should allow for future scalability and integration with other systems as the organization's needs evolve.

Project Description

Project overview

The project involves the creation of a robust and user-friendly database management system to facilitate the organization's operations related to sports management. It will serve as a centralized repository for information on teams, players, matches, stadiums, leagues, league standings, team achievements, and player achievements. Users will be able to interact with the system to perform various tasks such as adding teams, recording match results, updating standings, and tracking player achievements.

Major project functionalities

The major functionalities of the system include:

- a) Team Management: This feature allows users to add new teams, specifying team details such as name, founding year, stadium, and city. Users can also add players to teams by providing player information, including first name, last name, date of birth, position, and nationality.
- b) Stadium Information: Users can input stadium information, including stadium name, capacity, and city. This data is useful for scheduling matches and managing venue logistics.
- c) League Management: This functionality allows users to create new leagues, specifying league name, country, and the number of participating teams. It serves as a foundation for organizing competitions.
- d) League Standings: Users can update and view team standings within a league. This includes information such as team position, points, matches played, wins, draws, losses, goals for, goals against, and goal difference.

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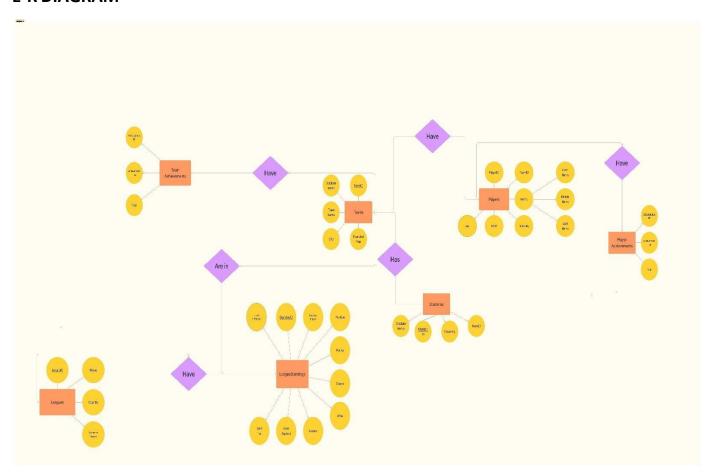
e)Player Achievements: This feature allows users to add player achievements, including individual awards, records, or milestones. Users input achievement titles, descriptions, and the year of achievement.

System Features and Function Requirements

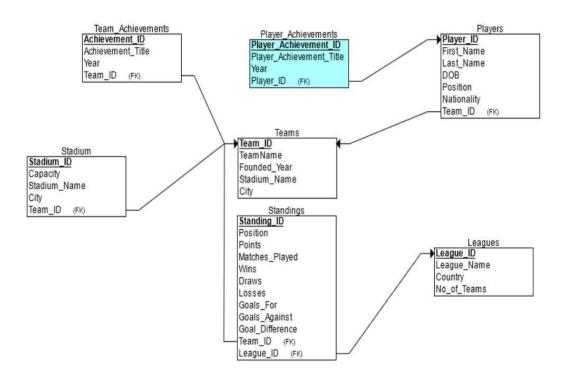
- System Feature 1: Team Management
 - Functional Requirement:
 - Entities involved: Teams, Players
 - Input required: TeamName, FoundedYear, StadiumName, City for creating a new team.
 - Input required: FirstName, LastName, DateOfBirth, Position, Age, Nationality for adding a player to a team.
- System Feature 2: Stadium Information
 - Functional Requirement:
 - Entities involved: Stadiums
 - Input required: StadiumName, Capacity, City for adding new stadium information.
- System Feature 3: League Management
 - Functional Requirement:
 - Entities involved: Leagues
 - Input required: LeagueName, Country, NumberOfTeams for creating a new league.
- System Feature 4: League Standings
 - Functional Requirement:
 - Entities involved: LeagueStandings, Teams

- Input required: Position, Points, MatchesPlayed, Wins, Draws, Losses, GoalsFor, GoalsAgainst, GoalDifference for updating team standings.
- System Feature 5: Team Achievements
 - Functional Requirement:
 - Entities involved: TeamAchievements, Teams
 - Input required: AchievementTitle, AchievementDescription, Year for adding team achievements.
- o System Feature 6: Player Achievements
 - Functional Requirement:
 - Entities involved: PlayerAchievements, Players
 - Input required: AchievementTitle, AchievementDescription, Year for adding player achievements.

E-R DIAGRAM -



RELATIONAL SCHEMA -



OUTPUT

