SoccerPulse

MS1 - DBS211 Final Project

Group 3

Song Hwan Oh / 116872227 / soh62@myseneca.ca

Sangjune Lee / 123050221 / slee569@myseneca.ca

Ji Ho Nam / 139817217 / jhnam@myseneca.ca

Shine Lee / 130563224 / ylee248@myseneca.ca

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Introduction

The chosen topic for the group is developing a user-friendly database and software application for the Women's World Cup. The Women's World Cup is a highly anticipated event in the sports world, attracting a global audience and showcasing the immense talent of female soccer players. With their expertise in software development and database management, the team aims to contribute to the growth and promotion of women's soccer by providing a comprehensive software solution that efficiently manages tournament data and enhances the overall experience for players, fans, and organizers. The goal is to create a user-friendly platform that facilitates easy access to information and encourages engagement with the Women's World Cup.

Problem Statement

The need for software applications and databases arises from the increasing demand for efficient data management in the sports industry. The Women's World Cup involves multiple teams, matches, players, and complex tournament events. There is a requirement to manage and access this vast amount of data in a streamlined and accurate manner to ensure a smooth and successful tournament. A database is necessary to store and retrieve team details, match schedules and results, player statistics, historical records, and other relevant information. This organized data infrastructure is essential for providing users with accurate and up-to-date information, improving the tournament experience.

Solution

The team will build a robust and user-friendly database to support the proposed software application for the Women's World Cup. The database will be designed to efficiently store and manage various data types, including team information, player profiles, match schedules and results, historical records, and more. The team will leverage appropriate database management systems and technologies to create a reliable and scalable database that seamlessly integrates with the software application. This will ensure easy access to accurate and up-to-date tournament information, enhance user engagement, and facilitate data analysis for informed decision-making. The aim is to provide a comprehensive and user-friendly platform that caters to the needs of players, fans, and organizers and promotes the growth and success of women's soccer.

Requirements

1. User Registration and Login

Users can create accounts. Subscribing to the website/application will provide access to personalized features such as receiving live updates for the matches the users set as favorites. When creating user accounts, users must enter their name, email, and password; optionally, users can choose to provide their date of birth, address, country and Favorite Team. Users can mark their favorite matches or desired match information as "Favorites" to receive notifications and updates regarding those specific matches. Subscription is not mandatory. Users can access basic tournament information without providing any personal details.

2. Team Information

The Team Information section provides users comprehensive details about the participating teams in the Women's World Cup. It includes essential elements such as the team ID, team's nationality, FIFA ranking, group. Optional features may consist of team slogan and previous World Cup standing. These elements give users a complete understanding of the teams' nationalities, rankings, and player compositions.

3. Player Information

The Player Information requirement focuses on providing comprehensive player profiles within the software application for the Women's World Cup. These profiles aim to offer users valuable insights into the participating players.

The essential field to be captured within the player profiles is the player's citizenship, name, dob, height, weight, position and number.

Optional fields within the player profiles may include the player's club team, World Cup appearances, goals, and assists. These optional fields give users additional information to delve deeper into players' performance and contributions during the tournament.

4. Match Schedules and Results

Accurate and up-to-date information about match fixtures, dates, times, venue, and live scores or match results should be captured and presented.

The Match Schedules and Results aims to provide users with accurate and up-to-date information about Women's World Cup match fixtures. The database will store and display essential details, including the match ID, date, time, venue, referee, and

participating teams for each match. Additionally, optional fields like live scores, goal scorer, and match results may be included to offer real-time updates and final outcomes. These features ensure that users can easily access the latest match schedules and results, informing them about current and upcoming matches and tracking the tournament's progress.

5. Player Statistics

A comprehensive database of player statistics, including goals scored, assists, yellow and red cards, and other relevant metrics, should be maintained.

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The Player Statistics requirement involves maintaining a comprehensive database of player statistics for the Women's World Cup. The database includes essential fields such as player ID, player names and nationalities, and team ID. Optional fields may include goals scored, assists, yellow cards, red cards, and other relevant metrics. The database provides a comprehensive overview of player performance by storing and updating this information, including goals, assists, and disciplinary actions. This data allows for detailed analysis and comparison of player statistics throughout the Women's World Cup, providing valuable insights into player contributions and performance.

6. Historical Records

Past Women's World Cup records, including tournament winners, top scorers, and individual and team achievements, should be stored.

The Historical Records requirement focuses on preserving the rich history of the Women's World Cup by storing past tournament records. This includes essential

information such as the Tournament Name, Year, Winner, and Top Scorer. Additionally, the database allows for capturing optional achievements by players and teams, highlighting exceptional performances and notable accomplishments. Maintaining these records makes the database a valuable resource for accessing and analyzing historical Women's World Cup data, enabling users to delve into the tournament's prestigious legacy and remarkable achievements.

7. Administration Interface

The Administration Interface is a crucial component of the database and software application for the Women's World Cup. It provides authorized administrators the tools to manage and maintain the database, ensuring data accuracy, security, and smooth operations. The administration interface is designed with a user-friendly layout and functionalities that allow administrators to perform various tasks efficiently. Some key features of the Administration Interface include:

7-1) User Management

Administrators can manage user accounts, review registration requests, and handle account-related issues. They can view user details, update user information, reset passwords, and, if necessary, suspend or delete user accounts.

7-2) Team Management

This feature allows administrators to manage team information efficiently. They can add new teams, update existing data, and remove groups if necessary. The administration interface should also allow the upload of team logos and banners.

7-3) Player Management

Administrators can manage player profiles within the database. They can add new players, edit details, and remove players as needed. Bulk uploading player information can be beneficial, especially for large tournaments.

7-4) Match Management

This functionality empowers administrators to manage match schedules and results. They can add new matches, update match details (date, time, venue, participating teams), and input live scores or final match results.

7-5) Historical Records Management

Administrators can manage historical records of past Women's World Cup tournaments. They can add new records, update existing records, and remove outdated or incorrect entries.