**DEVELOPMENT OF A WEB-BASED FIXTURE AND LIVESCORE MANAGEMENT SYSTEM**

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**1.1 BACKGROUND OF THE STUDY**

Football has a significant impact on people's daily lives and has become the most popular sport globally, making it an emerging industry. As it encompasses multiple departments and activities, it is considered an economic sector where Information Systems should be implemented (Al-Asadi & Tasdemir, 2019). It is evident that sports involve physical activity and technology has limited ability to alter or simplify this aspect. Nonetheless, computers can be utilized in various ways to assist athletes in achieving success, (Clunk, 2021) like storing statistical data in a database which can be retrieved in anytime and anywhere in the world.

Livescore management system is a software application that is used to manage and display real-time updates and scores of ongoing matches for various sports. This system will be used to manage football competition in Kaduna Polytechnic. The system will be able to show fixtures between each department, summary of games, team information, news up date and the scoreboard.

**1.2 STATEMENT OF THE PROBLEM**

Currently, Kaduna Polytechnic’s sport sector are using filing method to store and manage all the information throughout the tournament periods. However, this traditional approach poses several challenges for staff to handle all the data. Searching for a specific document can be time-consuming and the papers may deteriorate with frequent use. Also, some students do miss to see their department’s matches due to several reasons like they are out of the school compound or occupied with other school activities.

**1.3 AIM AND OBJECTIVES**

The aim of this research is to develop a web-based fixture and livescore management system which will enhance the method of keeping football tournament records and also displaying summary of games played**.**

**Objectives:**

**The objectives are stated below:**

1. Examine and understand the existing system.
2. Design and develop a web-based system that will keep summary of games played
3. To Test the efficiency of the system**.**

**1.4 SCOPE OF THE STUDY**

This project is to work is to develop a web-based system which can be used by anytime, anywhere but mostly the students of Kaduna Polytechnic. The system consists of two users; The Admin and The Students. The students are only liable to see the summary of games played in each departments, the scoreboard and fixtures while the Admin is responsible for uploading fixtures, updating scoreboard

**1.5 SIGNIFICANCE OF THE STUDY**

The research work will be of importance to:

1. The students of Kaduna Polytechnic: It will help them follow up on matches they miss, they will also be aware of details of the upcoming matches.
2. The school Management: The system will help them have proper records on tournaments played in the school

**2.1 LITERATURE REVIEW**

**Article Title**: Intelligent Football Management Information System

**Author(s)**: Mohd Syatmi Syazwan bin Zahari (2019)

**Summary of the work**

The Intelligent Football Management Information System (IFMIS) is a web-based platform developed to oversee football league competitions, with a primary focus on the Universiti Teknologi PETRONAS League (UTP League) catering to students and staff of UTP. IFMIS aims to improve the tournament experience for various stakeholders, including league organizers and committee members, team managers, players, the university itself, and system developers. This comprehensive system serves two core functions: player and team profiling, maintaining records of participants, managers, and referees; and scheduling, generating tournament schedules based on specified constraints and requirements. Additionally, it encompasses various information management aspects, spanning from registration to the conclusion of the tournament, benefiting both league organizers and team managers.

**Methodology**

HTML and Vb.Net was used to design the system, while Microsoft Access 2010 was employed for the database.

**Recommendation**

It was recommended to add more constraints into the algorithm to generate schedules, virtual chatroom can also be added for easier communication

**Research Gap**

The current match's duration was not provided.

Article Title: Automated Football Management System

Author(s): Sumit Kumar Singh, Kumar Abhishek and Gautam Mishra (2019)

**Summary of the work**

The primary aim of developing this management system is to facilitate efficient online management of the entire sports club. Previously, manual methods were employed for record-keeping, with administrators maintaining registers, resulting in data loss and security issues. To address these concerns, the management has opted to create an online system that automates processes and ensures secure data storage.

This system places a significant emphasis on players who can become club members through registration. They have the ability to purchase sports apparel, view their profiles, and access their payrolls. Boca Juniors' management system strives to provide all essential services for athletes, including maintaining an online database of sports apparel inventory to prevent data loss. Furthermore, it maintains meticulous records of stadium maintenance.

**Methodology**

Structured System Analysis and Design Methodology and Object Oriented Methodology were the methodology used for the project. The system was developed using Visual Studio 2010, Microsoft SQL Server, and Microsoft Office Visio. Its frontend was coded in ASP.NET

**Recommendation**

No recommendation.

**Research Gap**

The system doesn’t save fixture records.

Article Title: Football Management System (FMS)

Author(s): Kaira Stephen (2019)

**Summary of the work**

The project aims to deliver a comprehensive solution that enables users to interact with the club's database online through a user-friendly interface accessible from phones or computers. It provides tools to manage player information, user access, and team updates, allowing team leaders to keep fans informed. The system handles season teams, match scheduling, and data updates via the internet, enhancing user experience. Users can track player movements, read game highlights, access team and player information, and facilitate communication between the coach and families when necessary.

**Methodology**

Data were gathered from both primary and secondary sources, and Object Oriented Methodology was used for the design methodology. HTML, CSS and JavaScript were used for the frontend while PHP for the backend

**Recommendation**

No recommendation.

**Research Gap**

The current match's duration was not provided, leaving users unaware of the progress made by the players during the game.

Article Title: Web Based Sports Stadium Information Management System

Author(s): Ugwueze Stacey Adanna (2020)

**Summary of the work**

The system is a web-based stadium management platform that allows users to select convenient event dates. It encompasses various sections dedicated to different sports and activities such as soccer, basketball, volleyball, table tennis, and social or religious events. Each section includes a date picker for event scheduling. The administrator, who also serves as the manager, has the authority to approve date bookings, ensuring there are no conflicts and verifying payment for reserved spaces. Payment is made after selecting a suitable event date, with users generating a reference form and making payments at a bank.

**Methodology**

The methodology used in this research project is the Object- Oriented Analysis and Design Methodology (OOADM). HTML, CSS and Jquery as the front end; PHP and MySQL server as the back end.

**Recommendation**

The researcher recommended that system of stadium management system be used in when booking space for event.

**Research Gap**

The system only covers booking of stadium.

Article Title: Web-Based Sport Management System with Short Message Service Notification (WBSMS)

Author(s): Micheal Ajinaja (2023)

**Summary of the work**

WBSMS, a system designed for managing activities within the sports unit, focuses on student information and serves as an application developed to maintain records of student details and the available sports equipment. The research aimed to identify issues faced by the polytechnic's sports unit and provide solutions for its enhancement. Key problems in the unit include challenges related to storing and retrieving student registrations in the absence of a coach. Currently, the unit relies on a manual paper and pen registration method to address this issue. To optimize operations and facilitate documentation, a computerized sports management system will be created for the unit.

**Methodology**

The design system employed Xampp as its local server. Xampp is a local server solution that facilitates PHP (Hypertext Preprocessor), a widely used programming language for web development that can be seamlessly integrated with HTML. Additionally, MySQL served as the database to store data supplied from the frontend. The client-side aspect of the project, like many websites, was constructed using HTML, CSS, and JavaScript as the frontend technologies. The system utilized Dreamweaver 8 as its integrated development environment.

**Recommendation**

It was recommended that, it is advisable to proceed with the implementation of the system design for the sports unit at the Federal Polytechnic Ile-Oluji. This implementation will effectively enable students to register for sports and encourage active participation in sporting activities.

**Research Gap**

The system uses an SMS portal which incurs an extra fee.

1. **PROPOSAL METHODOLOGY**

The research approach is a rigorous investigation like this to uncover new facts or information about the existing system. The study’s research technique comprises firsthand information from the department and the internet

**3.1.1 INTERVIEW**

The primary goal of utilizing interviews as a data-gathering strategy is to collect data in a comprehensive and intensive manner. The researcher met with the project coordinators from the department and obtained trustworthy information based on the questions provided by the researcher.

**3.1.2 DIRECT OBSERVATION**

This approach was used to collect information/data for this study by examining how the manual system was carried out on business, art, and artifact vendors and online vendors that are actively involved in trading, the method provides varying degrees of control over the context in which they are used, and the careful inspection revealed the obvious flaws in the present system.

**3.1.3 INTERNET**

Internet as a method of data collection will be employed, the internet will be used in sourcing information from different events, and journals on regions that appear tough or perplexing in order to attain a workable result.

**3.2 CHOICE OF PROGRAMMING LANGUAGE**

This research work will be a web-based application and will be implemented on a relational database system (SQLite). HTML (hypertext markup language), Bootstrap5 Framework and Django (python) will be employed in the back-end development. The above are the modern languages used in implementing this system.

**REFERENCES**

Al-Asadi, M., & Tasdemir, S. (2019). An Online İnformation System For Football Club Management. ResearchGate. <https://www.researchgate.net/publication/337656094_An_Online_Information_System_For_Football_Club_Management>

Ajinaja, M. (2023). Web-Based Sport Management System with Short Message Service Notification (WBSMS). Journal of Information Technology & Software Engineering, 13(3), 1–4.

Bin Zahari, S. (2019). Intelligent Football Management Information System (IFMIS). <http://utpedia.utp.edu.my/id/eprint/6417>

Clunk. (2021). The Uses Of Computers In Sports. http://www.clunk.org.uk/computers-in-sports.html

Singh, C., Kumar, A. G., & Reddy, T. (2019). Important role of information technology in the field physical education and sports. *International Journal of Physiology, Nutrition and Physical Education*, *4*(2).

Stacey, A. (2020). Web Based Sports Stadium Information  Management System.

Stephen, K. (2019). *Football Management System*. http://155.0.3.194:8080/jspui/bitstream/123456789/464/1/FOOTBALL%20MANAGEMENT%20SYSTEM%20%28FMS%29.pdf

Sun, Y., & Hu, C. (2022). Design and Implementation of Football Player Training Management System Based on Intelligent Image. *Applied Bionics and Biomechanics*, *2022*, 1–7. https://doi.org/10.1155/2022/6091557