

Universiti Teknologi MARA

**Data Visualization of English Premier League Open
Data using Interactive Dashboard**

Mohammad Hamzah Bin Othman Jama

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SUPERVISOR'S APPROVAL

DATA VISUALIZATION OF ENGLISH PREMIER LEAGUE OPEN DATA USING INTERACTIVE DASHBOARD

By

**MOHAMMAD HAMZAH BIN OTHMAN JAMA
2019252274**

This thesis was prepared under the supervision of the project supervisor, Dr. Khairul Anwar Bin Sedek. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Information Technology (Hons).

Approved by

Khairul Anwar Bin Sedek
Project Supervisor

AUGUST 5, 2022

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged by the standard referring practices of the discipline.

MOHAMMAD HAMZAH BIN OTHMAN JAMA
2019252274

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ABSTRACT

Football is one of the world's most popular sports, with thousands of amateur and professional players taking part every day. As a result, massive amounts of data are unavoidable. All this information is critical for many parties, including coaches, players, managers, betting companies, and the media, to analyze. However, simply viewing league standings and statistics may make it difficult for the average citizen or football fan to analyze and learn detailed information about football statistics and history. This is because most football statistic websites and sports data visual studies use basic infographics that provide limited insights into the data or use complicated methodologies that are difficult to understand for non-visualization professionals. In today's modern data-driven world, it's critical to identify the best, most self-explanatory way to present data, so that visual patterns that relate to the underlying available data can be formed. The goal of this project is to investigate the English Premier League's data analysis requirements and techniques, design and develop an English Premier League data analysis using a data visualization approach, and finally evaluate and analyze the data visualization of the English Premier League analysis using usability testing. Users' usability testing has been carried out to ensure that the project's objectives are met. The perceived usability score indicates that the website is easy to use, and the total mean of user satisfaction indicates that site visitors are impressed. According to these two general indicators, users are pleased with the website and may use it to learn about English Premier League statistics. As a result, the study successfully developed an English Premier League dashboard using a data visualization approach for analyzing football data and discovering patterns, connections, and ideas.

Keywords: English Premier League, Data visualization, Dashboard, Microsoft Power BI, Usability testing.

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