

Annotation

This project presents a comprehensive approach to forecasting football match results using Structured Query Language (SQL) as the primary analytical tool. Leveraging historical data from UEFA European Championship matches, including both final tournaments and qualification stages, we construct a rule-based prediction model using advanced SQL techniques. The model forecasts match outcomes—Win, Draw, or Loss—based on engineered metrics such as average goals, goal differences, recent team form, player participation, and normalized indicators using z-scores. Complementary Python code is applied for statistical testing (t-tests and correlation analysis) and accuracy validation. This work demonstrates the power of SQL beyond data retrieval, showcasing its applicability in sports analytics and real-world forecasting scenarios such as predicting tournament qualification and potential finalists.

The study applies predictive analytics techniques to international football data, utilizing MySQL to develop a rule-based model for match outcome forecasting. With match data spanning UEFA European Championships from 1960 to 2024, the project builds a relational schema that organizes team and player performance metrics. Using SQL views, aggregations, window functions, and statistical thresholds, it generates interpretable rules to forecast results. Supplemented by minimal Python for hypothesis testing, this research emphasizes SQL's practical utility in predictive sports modeling with real-world applications.