

#### KNOWLEDGE INSTITUTE OF TECHNOLOGY



# DATA-DRIVEN INSIGHTS ON OLYMPIC SPORTS PARTICIPATION AND PERFORMANCE

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#### PROBLEM STATEMENT

The problem statement for data-driven insights of Olympic sports participation and performance is to analyze and understand the factors that contribute to successful participation in the Olympic Games. This includes identifying patterns and trends in athlete demographics, training methods, and performance metrics across different sports and countries. By leveraging data from past Olympic Games and other relevant sources, the goal is to uncover insights that can inform strategies for improving athlete development, training programs, and overall performance at the Olympic level. Ultimately, this analysis aims to help athletes, coaches, and sports organizations make data-driven decisions that lead to greater success in the Olympic Games.

#### ABSTRACT

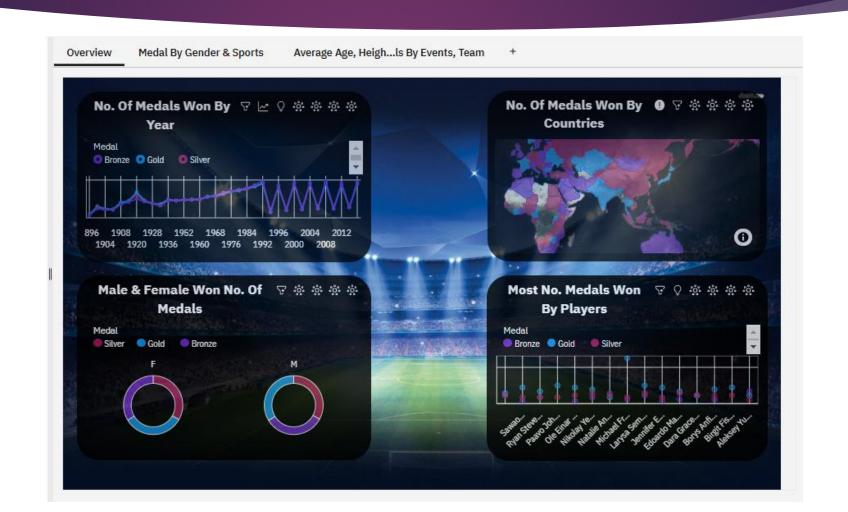
The largest and most prestigious international sporting event in the world is the Olympic Games, which include a variety of sports and events. The patterns of participation and performance in various sports can provide crucial information on the elements that influence the success of elite athletes. Using a data-driven technique, this paper analyses historical participation and performance patterns in Olympic sports. The analysis uses a range of data sources, such as historical records of Olympic participation and performance, demographic, and socioeconomic statistics. The analysis reveals numerous important facts about participation in and performance in Olympic sports. It illustrates, for instance, a trend towards more gender diversity in the sports represented as well as a continuous rise in the number of countries competing in the Olympics throughout time. The results show that while some countries have had significant performance variability throughout time, others have consistently performed well in a range of sports. The importance of socioeconomic factors like GDP and population size, together with athlete age and experience, in predicting Olympic performance is also emphasised. Overall, this analysis provides insightful data-driven information about the patterns and trends in Olympic sports performance that can inform strategies for improving athlete development and promoting participation in these sports around the world.

#### TOOLS USED

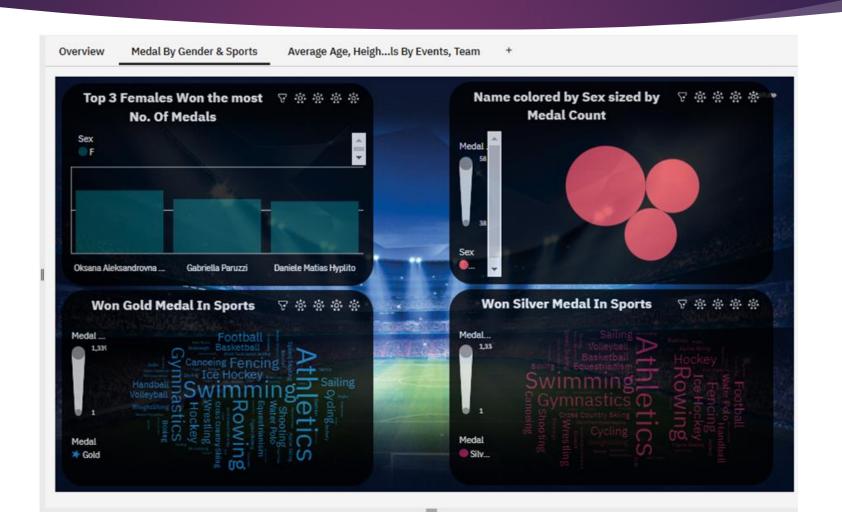
#### ► IBM Cognos Analytics

IBM Cognos Analytics is a web-based **integrated business intelligence** suite by IBM. It provides a toolset for reporting, analytics, scorecarding, and monitoring of events and metrics. The software consists of several components designed to meet the different information requirements in a company.

#### DASHBOARD



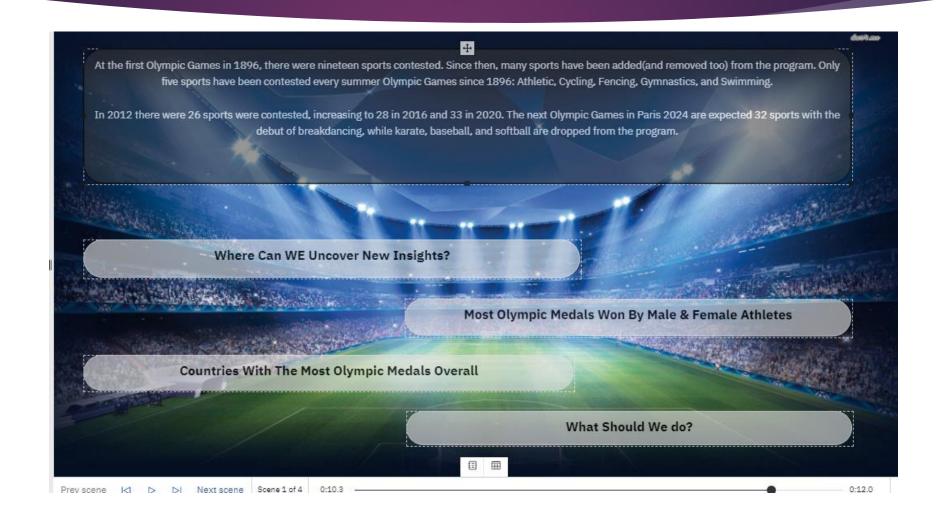
## DASHBOARD



#### DASHBOARD



#### STORY



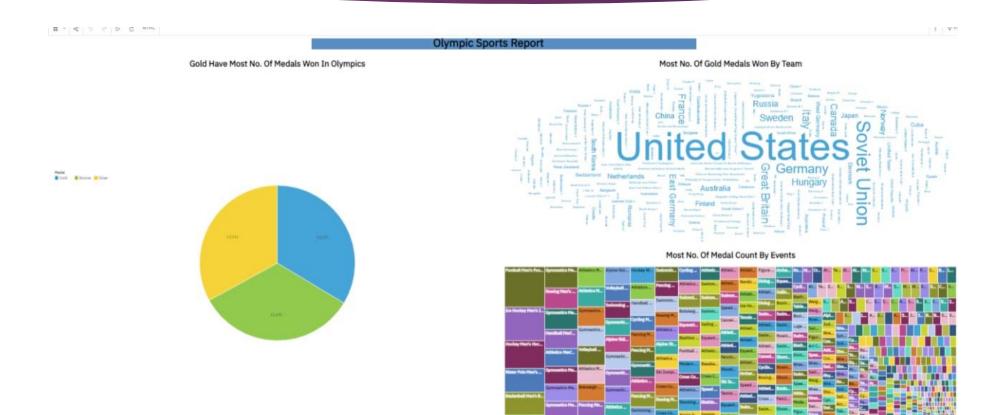
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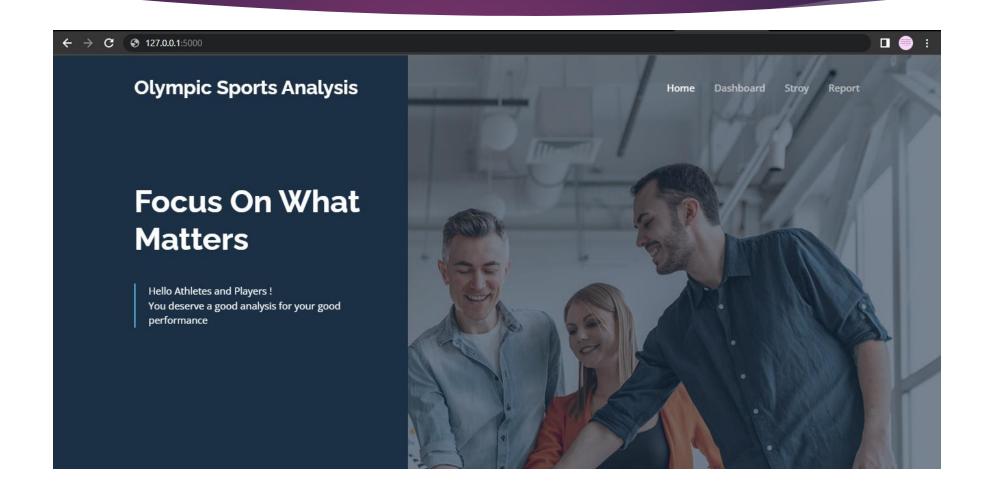


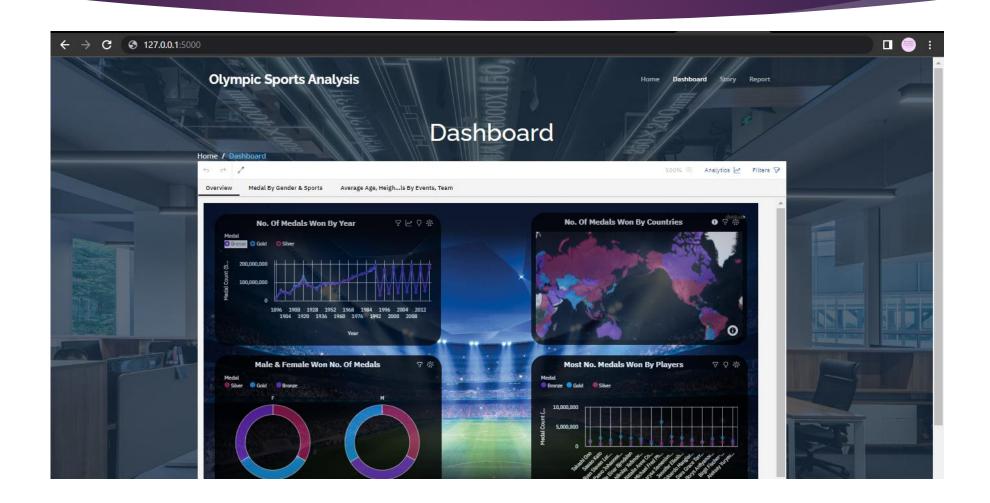
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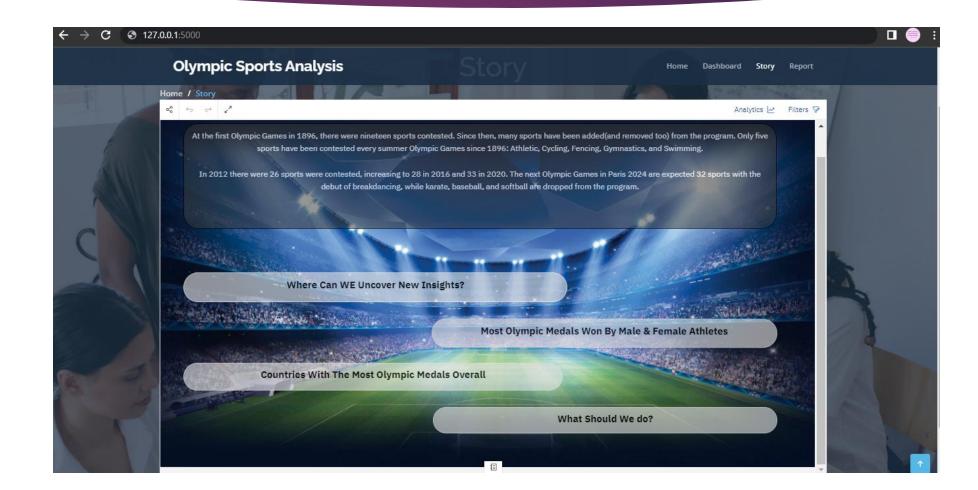


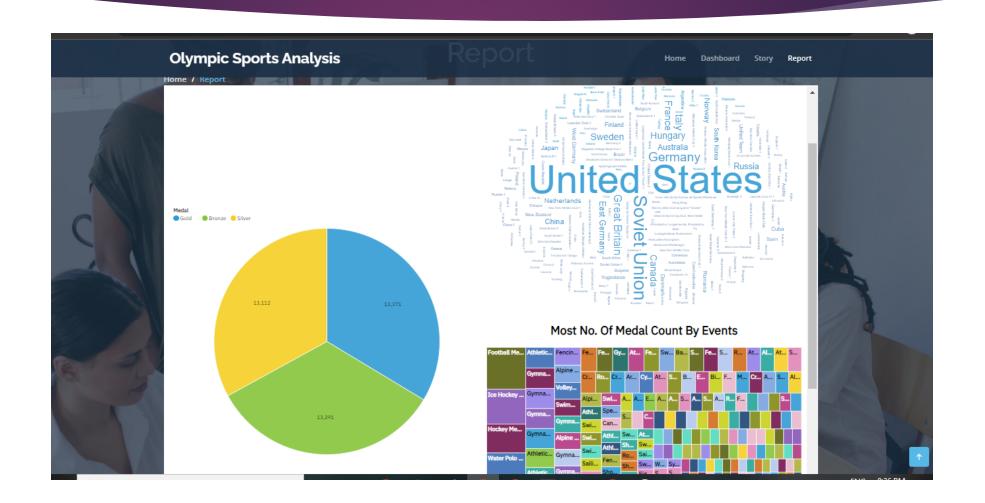
# REPORT











Video Demonstration For Web Integration Using Flask

