

# Project Title: Website Traffic Analysis using IBM Cognos and Python

## Objective:

The main objective of this project is to continue the analysis of website traffic data using IBM Cognos for interactive visualizations and Python for advanced analysis. By integrating both tools, we aim to gain comprehensive insights into user behavior, popular pages, traffic sources, and user engagement metrics. The project also aims to perform complex analyses, including time series analysis, user segmentation, and machine learning-based predictions.

## Dataset:

The dataset used for this analysis was sourced from Kaggle. It includes detailed information about daily website visitors, such as the date and various visitor metrics.

## Dataset Source:

The dataset can be accessed at [Kaggle - Daily Website Visitors Dataset](<https://www.kaggle.com/datasets/bobnau/daily-website-visitors>).

## Analysis and Visualizations:

1. Utilized IBM Cognos to create interactive dashboards and reports for displaying insights, including popular pages, traffic sources, and user engagement metrics.
2. Leveraged Python libraries such as Pandas and Matplotlib to perform advanced analysis, including time series analysis to identify trends in website traffic, user segmentation based on various criteria, and the implementation of machine learning models for predictive analysis.

## Interpretation of Results:

Analyzed the findings from both IBM Cognos visualizations and Python-based advanced analyses to gain a comprehensive understanding of user behavior and website performance.

## Conclusion:

Summarized the key insights gained from the analysis and provided recommendations for optimizing website performance and enhancing the overall user experience based on the findings.