## DATA DRIVEN DEFENCE INTELLIGENCE SYSTEM

## Unveiling Strategic Insights: Navigating Military Power through Data Analysis

## **ABSTRACT**

This defense intelligence system project delves into the intricate dynamics of global military strength, employing a comprehensive approach to derive insightful correlations among key factors. By integrating diverse datasets encompassing military power indices, active and reserve military personnel, population demographics, economic indicators, and military expenditure, the study seeks to unravel the nuanced interplay between these elements. The project also involves the development of sophisticated forecasting models utilizing ARIMA, Simple Exponential Smoothing, Double Exponential Smoothing, and Triple Exponential Smoothing (exponential smoothing) techniques to anticipate future trends in military investment, offering a strategic lens for policymakers and defense analysts.

In addition, the project will feature an end-to-end interactive dashboard presenting military data insights from around the globe, enabling users to explore and visualize trends, correlations, and forecasts. This dashboard will incorporate customizable filters, allowing for tailored analysis based on specific regions, timeframes, or military capabilities, providing users with a comprehensive and flexible tool for data exploration. Furthermore, rigorous statistical testing, including regression analysis, hypothesis testing on GDP vs. military investment, and other relevant comparisons, will be conducted to examine relationships between variables, providing a deeper understanding of the factors influencing military capabilities and informing strategic decision-making.