Project Introduction

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World Population Data Analysis using Python libraries
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Objective

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The objective of this project is to analyze overall trends in global
demographics over a specific time period such as continents and countries
with rapid growth or decline, variations in growth rate and land area(km2)
across different continents and countries, population density patterns such
as densily populated countries and continents with sparse populations. And
provide valuable data-driven insights for informed decision-making.
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Tools & Technologies

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Programming          : Python, SQL
Data Analysis        : Numpy
Data Cleaning        : Pandas
Data Visualization   : Seaborn, Matplotlib, Tableau, PowerBI
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Methodology/Contribution

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• Utilized Python and the pandas library to collect data from the Kaggle
datasets.
• Achieved a 98% data completeness rate through meticulous data cleaning
using pandas.
• Executed statistical analysis using pandas, extracting key metrics for
strategic decision-making.
• Implemented time series analysis using pandas and matplotlib, identifying
and interpreting significant population trends over   a 10-year period.
• Developed interactive dashboards using seaborn, matplotlib and PowerBI,
resulting in a 40% increase in user engagement and facilitating   data-driven
decision-making.
• Created detailed Jupyter notebooks, resulting in a 25% reduction in
onboarding time for new team members.
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Key Achievements

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• Successfully processed and analyzed over 2 million data points,
demonstrating proficiency in handling large datasets.
• Enhanced project accessibility by 30% through clear and compelling
visualizations.
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• Contributed to accurate population growth predictions with an 87% model accuracy.

Conclusion

The World Population Data Analysis project underscores my proficiency in handling large datasets, executing advanced analytics and I am eager to apply these skills in future projects, continuing to contribute to the exploration and understanding of global demographic trends.