This project forecasts monthly website traffic for a business over the next 6 months using an AI-assisted ARIMA time series model. It also identifies seasonal patterns and trends based on the previous 24 months' traffic data.

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## 📊 What This Project Includes:

- \*\*Historical website traffic data (24 months)\*\*

- \*\*ARIMA time series forecasting model\*\*

- \*\*Forecast for the next 6 months\*\*

- \*\*Clean, client-ready line graph visualization\*\*

- \*\*PDF summary report with key findings and recommendations\*\*

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## 🛠️ Tools Used:

- Python

- Jupyter Notebook

- Pandas

- Matplotlib

- Statsmodels (ARIMA)

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## 📈 Key Insights:

- Website traffic shows a recurring seasonal pattern with higher visits during festive months (Oct–Dec)

- The ARIMA model predicts steady growth in the upcoming 6 months

- Business should plan marketing and server resources for anticipated seasonal spikes

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## 📑 Deliverables:

- Jupyter Notebook (`.ipynb`)

- PNG forecast graph

- PDF summary report

- README file

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