

Forecasting Dashboard - Saved Prompt

I have a React + Flask app where each page (like churn, forecast) is in its own folder under `/src/pages/`.

I have real data stored in JSON format inside a `data/` folder in my backend (e.g., `data/invoice_data.json`).

I want to build a Forecasting Dashboard that:

- Reads the live JSON data from the `data/` folder (example: monthly invoice amounts).
- Trains a simple forecasting model (for example, Linear Regression).
- Predicts future values (e.g., next 6 months).
- Exposes an API `/api/forecast` in Flask that returns forecasted results.
- Displays the forecasted data in the frontend under `/pages/forecast/ForecastDashboard.jsx` using a line chart (like Recharts).

The Forecasting Dashboard should work exactly like the Churn Dashboard - modular, clean, and integrated into the sidebar.

Additional Notes:

- Flask API runs on `http://localhost:5001`
- React frontend expects JSON with fields like `month`, `amount`
- Real forecasting can later be improved by switching models (Prophet, XGBoost, etc.)
- Forecasts are currently simple Linear Regression for ease.

Current Structure:

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- /src/pages/churn/
- /src/pages/forecast/
- Real data JSON
- Live forecasting API
- Forecast Dashboard on UI