Inventory Management App

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Overview

The Inventory Management App is a comprehensive web-based application designed to facilitate the analysis and presentation of data related to container shipping, inventory management, and trading activities of a certain firm associated with container shipping. This project leverages the Streamlit framework to create an interactive dashboard that integrates multiple data sources, providing users with valuable insights and a combined view of their operations.

Specifications

The app is an invaluable tool for professionals in the container shipping and trading industry. It has following features:

Inventory Overview

- Presents information about the number and distribution of items in inventory.
- Tracks sold items and the average number of days for an item to be shipped.
- Provides information about broken items.
- Displays item distribution by size and type.

Sales and Costs Breakdown

- Shows the distribution of various metrics by year and location.
- Includes metrics such as sales and costs of items over the months, categorized by item size.

Inventory Movement

This section includes metrics such as:

- Available inventory
- Sold inventory
- Total incoming and outgoing items
- Inventory turnover ratio
- Gate in/gate out items

These metrics are displayed by month and depot for the specified year and location.

Sales Port Updates

- Dedicated to showing the shipping container costs from the Western US to various regions around the world.

- Categorizes costs by export type and size.

Trading Prices' Analysis

- Provides an analytic summary of how container prices vary across various depot locations.

- Shows price changes on a weekly, monthly, and yearly basis for specified locations.

Commodities Information

This section fetches data from yfinance about the prices of various commodities from the energy, metals, agriculture, and industrial sectors. The information for a certain commodity includes:

- Current closing price

- Percentage daily change

- Percentage weekly change

- Percentage monthly change

- Percentage yearly change

News and Geo-political Calendar

- Incorporates news from the company's Telegram channel, which posts updates about container costs, shipping, and related information.

- Includes a geo-political calendar listing major global events, categorized by location and date.

Including these comprehensive features, the app enables the firm to efficiently monitor and analyze their inventory and shipping data. The inclusion of trading prices analysis and commodities information from yfinance provides critical insights into market trends, aiding in strategic decision-making. Additionally, the integrated news and geo-political calendar ensure that the firm stays informed about industry developments and global events, optimizing their operations and enhancing their competitive edge in the market.