INTERNSHIP PROJECT

AI-DRIVEN SUPPLY CHAIN MANAGEMENT: OPTIMIZING OPERATIONS THROUGH INTELLIGENCE.

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INTRODUCTION

THE GOAL IS TO LEVERAGE ARTIFICIAL INTELLIGENCE TO IMPROVE EFFICIENCY, REDUCE COSTS, AND ENHANCE DECISION-MAKING IN SUPPLY CHAIN PROCESSES.

- SUPPLY CHAIN MANAGEMENT INVOLVES THE PLANNING, CONTROL, AND EXECUTION OF GOODS AND SERVICES FROM PRODUCTION TO DELIVERY.

- IT INCLUDES PROCUREMENT, MANUFACTURING, INVENTORY MANAGEMENT, AND DISTRIBUTION.

WHY I SELECTED THIS TOPIC?

- Supply chains face complex challenges like fluctuating demand, inventory shortages, delayed deliveries, and inefficiencies. AI provides innovative solutions to optimize these processes.

- The project tackles these challenges by offering predictive analytics, demand forecasting, and efficient resource allocation.

- By focusing on AI in supply chain management, the project aligns with global trends and industry needs.

PROBLEMS ENCOUNTERED DURING PROJECT

Firstly, I am new to this domain and had no experience in AI. So it was challenging for me to select the topic and understand it.
I started browsing about the topic and I studied about different types of models.
Even when training my model, I don’t have any real data.
So, I tried to trained my model using synthetic data.

Selecting the model was challenging. Because we need to check the requirements of our project and we need to ensure that the model aligns with our data and it should work good based on our requirements and data.

APPROACH TO MY SOLUTION

1. Defining Objectives

Understand the statement and define goals

2. Data Collection

Gather the data and perform cleaning techniques on the data

3. Model Selection

Select the model, choose frameworks and tools like PyTorch or Scikit Learn. We need to setup our environment.

4. Training Our Model

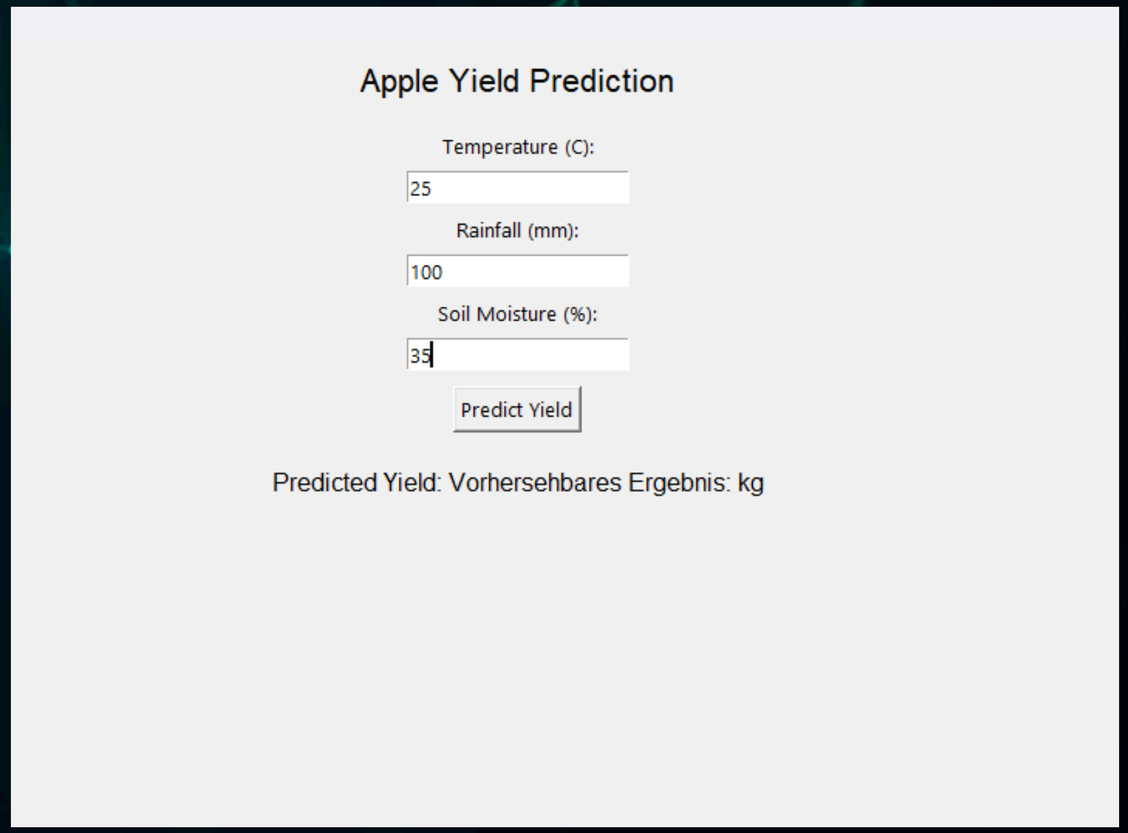
Demand forecasting, Inventory Optimisation

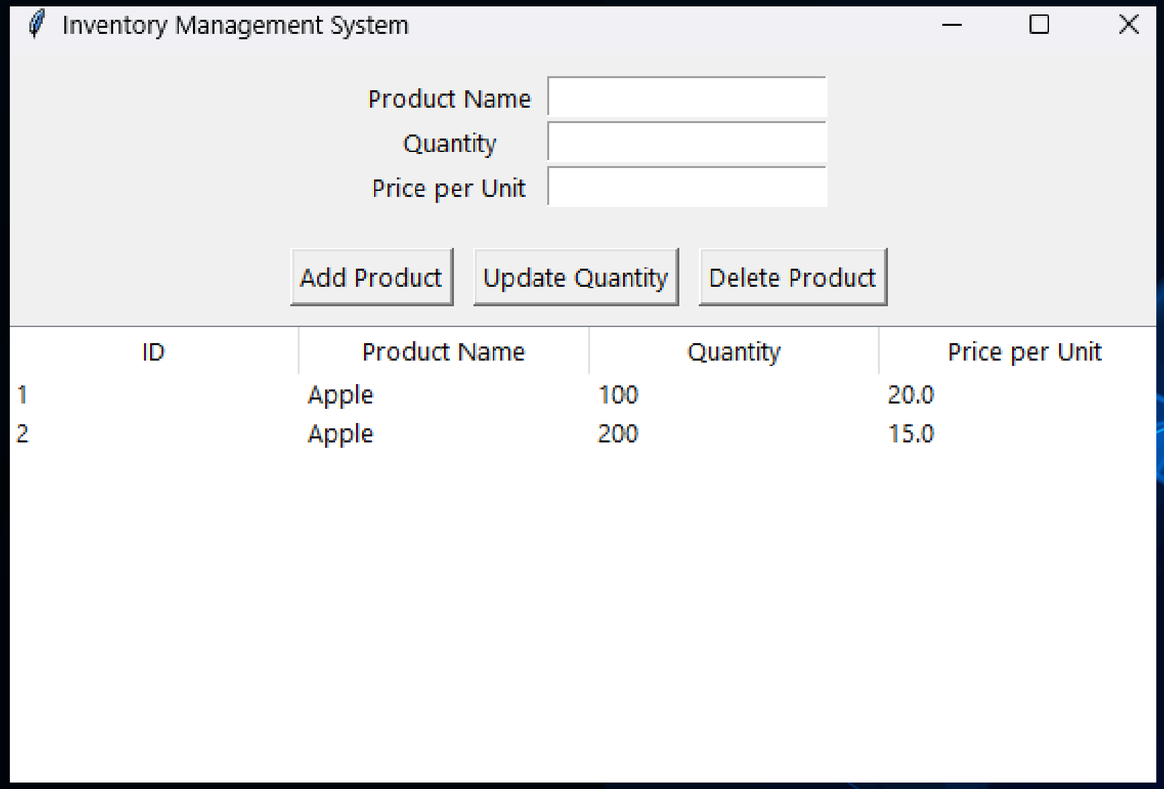
5. Develop the System

Frontend, Backend, Database

6. Testing the Model

Sample Demo Outputs from my model





Github Repository: https://github.com/bharadwaj0606/AI-Supply-Chain-Analysis

THANKYOU