

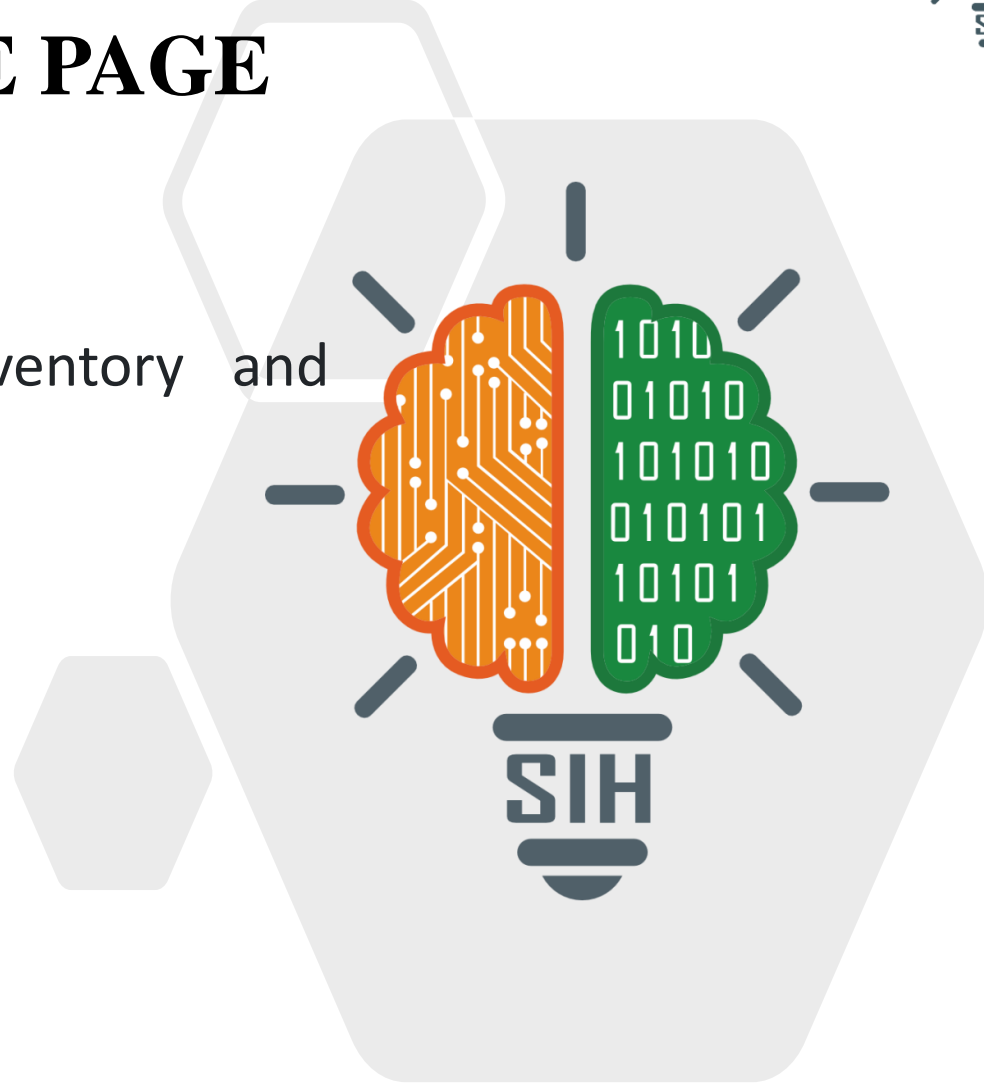
SMART INDIA HACKATHON 2024



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HACKATHON
2024

TITLE PAGE

- **Problem Statement ID** – 1627
- **Problem Statement Title-** Drug Inventory and supply chain Tracking system
- **Theme-** MedTech / BioTech / HealthTech
- **PS Category-** Software
- **Team ID-**
- **Team Name (Registered on portal)-** Error 404

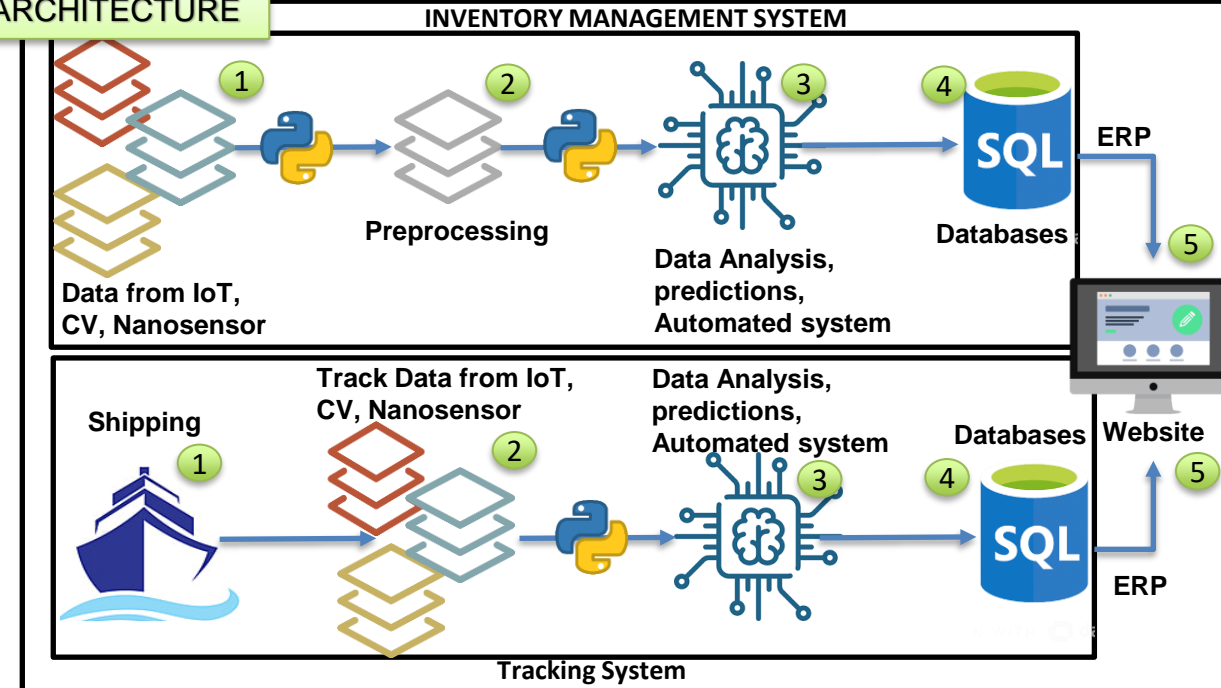


Problems: Supply Chain Disruption, Traceability Challenges, Quality Control Issues, Stockouts or Overstocking, Security assurance, High Costs.

Key Features

- **Real-Time Monitoring:** Using Computer Vision, IoT sensors, and Nano-Sensors to track products and security in real-time.
- **Product Planning:** Efficient production planning as per seasonal demands.
- **Quality Control:** Implementation of Quality checks and measures throughout the supply chain through computer vision.
- **Integration with ERP:** integration with SAP ERP for smoothly performing various operations.
- **Inventory Management:** This provides a tool for managing inventory, expiration dates, and stock availability.
- **User-friendly interface:** for navigation and interaction with the web.
- **ABC Analysis:** Categorization of product as per value and risks for more specific tracking and security measures.
- **Notification Alerts:** provide timely alerts for low stocks, expiration of products, quality issues, or a problematic situation.

ARCHITECTURE

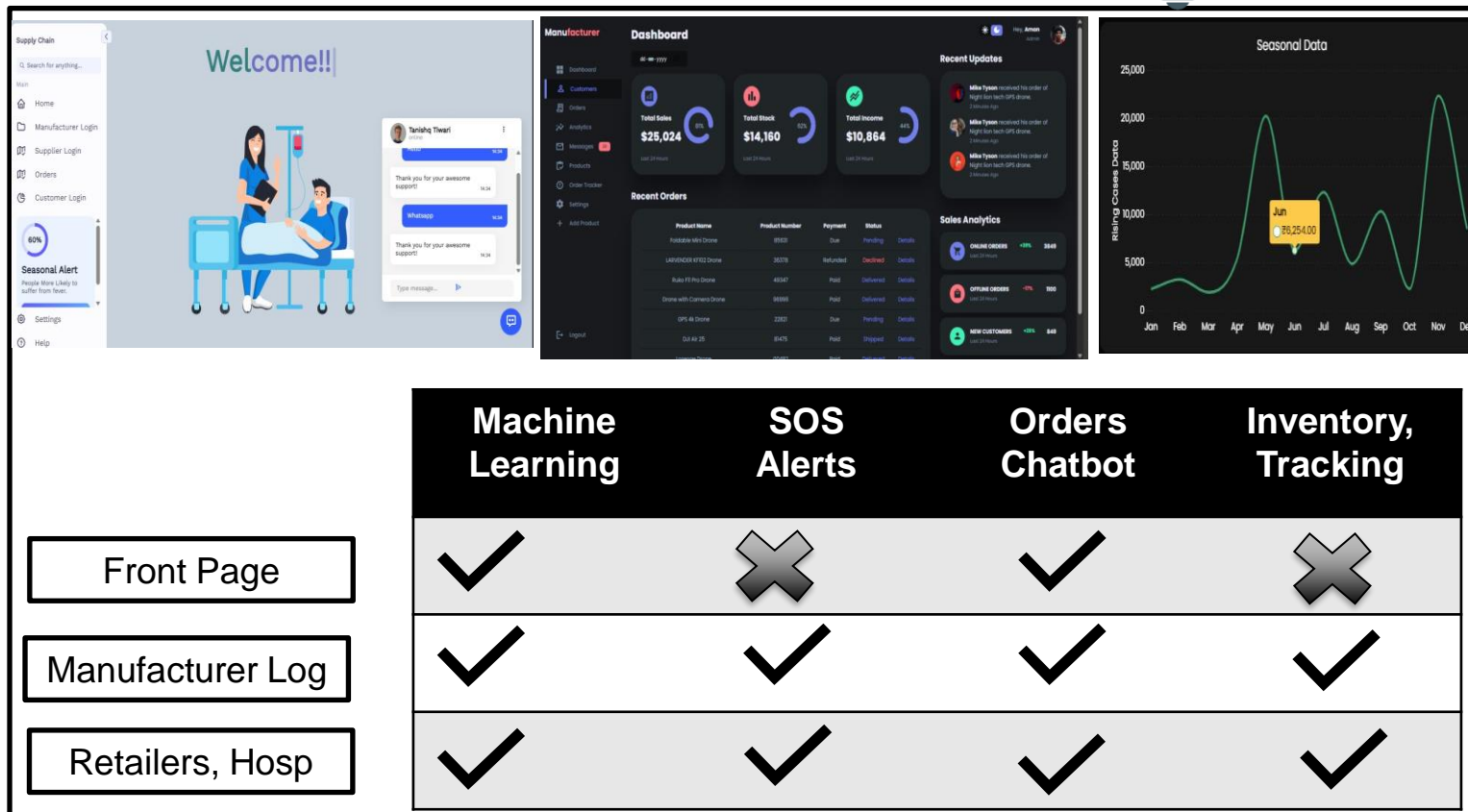


- **24/7 Chatbot:** answers to queries, important features, drug catalog, and feedback mechanism
- **Data Security:** through Encryption and Multifactor Authentication
- **Integration of special features:** Integration of features like Computer vision, auto replenishments, etc. lowers the rate of wastage and automatic stock replacement.

TECHNICAL APPROACH

FEASIBILITY AND VIABILITY

- **Feasibility and Viability:**
- ✓ **Technological Feasibility:** It leverages technologies like IoT, Computer Vision, and Nanosensors.
- ✓ **Market Need:** There is a strong need for inventory management and a smooth supply chain, to avoid wastage of products and supply products with security and assurance.
- ✓ **Financial Feasibility:** wastage of product is less due to the auto-replenishment system and provides sustainability.
- ✓ **Operational Feasibility:** The system's user-friendly interface makes it easy to use.
- ✓ **Data Privacy:** multifactor authentication and encryption keeps the data safe and reliable

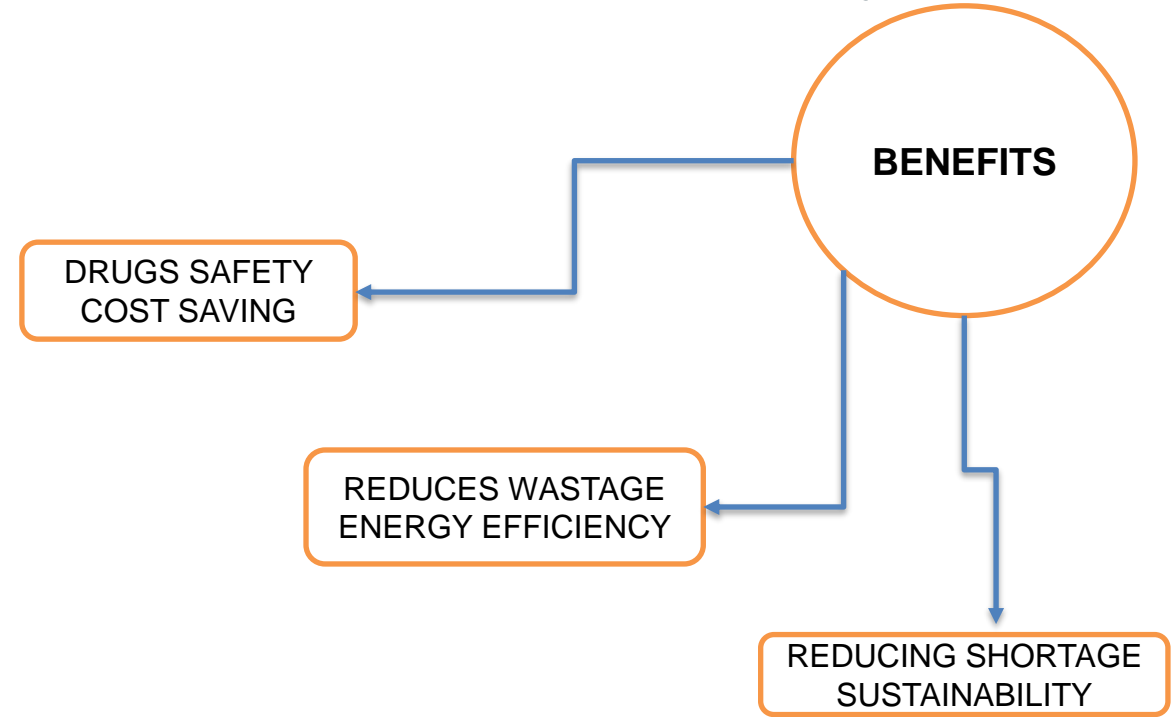
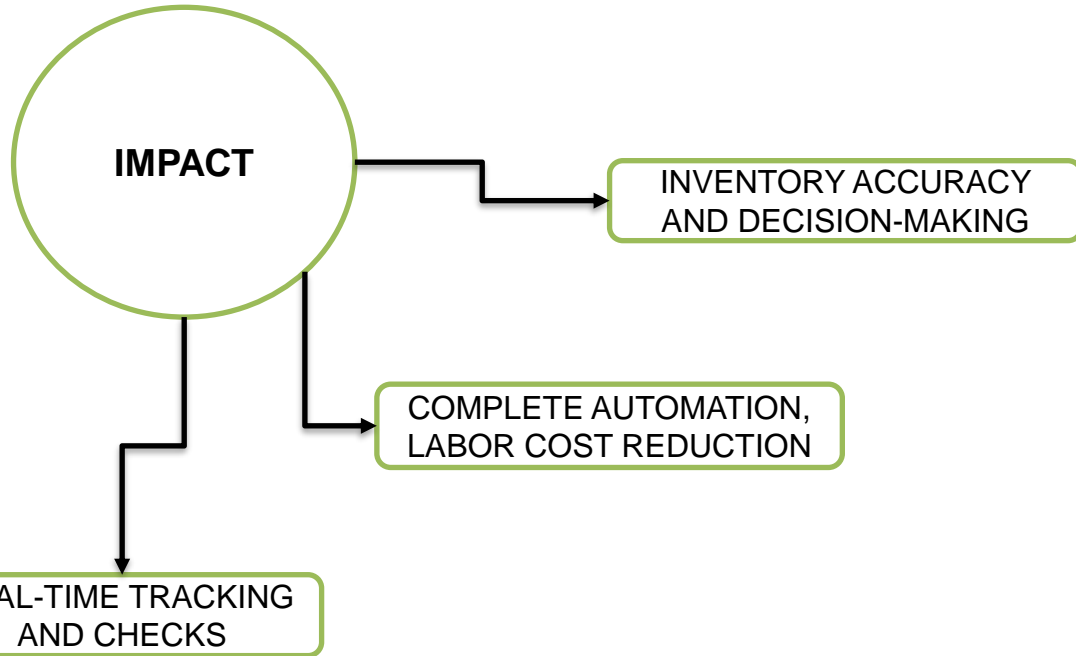


Technologies Used: Python, JavaScript, Tailwind CSS, HTML, SAP ERP System, MySQL, Sketch

GitHub Repo link: <https://github.com/OmShinde3156/ERROR-404>

USP CASES:

- Enhanced Control Over Inventory and Tracking system
- Reduces Labor Costs and minimizes waste of product.
- Assurance of Quality and Safety
- Implementation of Innovative Technology



REFERENCES: