

Inventory Asset Management

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Abstract: *The Inventory Management System aims to modernize inventory operations within textile industries by addressing common challenges such as stock discrepancies, inefficient tracking, and manual errors. By digitizing traditional processes, the system provides a user-friendly interface that supports barcode-based item identification, simplifies inventory updates, and improves data accuracy across departments.*

To enhance decision-making and operational efficiency, the system includes predictive analytics for demand forecasting and automated alerts for low stock or expiry notifications. Real-time monitoring enables timely replenishment and reduces the risk of stockouts, while customizable reporting features allow stakeholders to analyze trends and optimize resource allocation.

Developed using Python, Django, HTML, CSS, JavaScript, and MySQL, the system is cloud-integrated to facilitate remote access and cross-location collaboration. This scalable and secure solution empowers textile enterprises to remain competitive by enabling smarter inventory control and more agile responses to dynamic market demands.

Keywords: Inventory Management, Textile Industry, Barcode Technology, Real-time Monitoring, Predictive Analytics, Cloud Integration, Django Framework, Operational Efficiency.

