**Inventory Management System**

(Capstone Project)

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# INTRODUCTION

The Inventory Management System aims to streamline asset tracking and management within organizations by providing a centralized platform for administrators and employees. This project addresses the growing need for efficient inventory management solutions in the corporate sector.

# LITERATURE SURVEY

# Existing solutions in the market offer various functionalities such as user management, inventory tracking and reporting. However, drawbacks include complex interfaces, limited customization options, and scalability issues. This project seeks to address these gaps by providing a user-friendly interface, comprehensive features, and robust backend infrastructure.

# PROBLEM DOMAIN

The problem lies in the inefficiencies and inaccuracies associated with manual inventory management processes. The objectives of the proposed project are to automate inventory tracking, improve asset allocation, and enhance overall organizational productivity.

# SOLUTION DOMAIN

The proposed solution encompasses a web-based application with functionalities including user registration, login authentication, employee and inventory management, assignment tracking, and reporting. The system will be built using HTML, CSS, JavaScript for the frontend, Python(flask) for the backend REST API, and a MySQL database.

# SYSTEM DOMAIN

* Technology → Python, Flask, MySQL.
* Platform → VS code, Pycharm.

# APPLICATION DOMAIN

The Inventory Management System is applicable across various industries where asset tracking and allocation are essential, including manufacturing, healthcare, education, and retail. It will streamline inventory processes and provide real-time visibility into asset utilization.

# EXPECTED OUTCOME

- User-friendly interface for easy navigation

- Efficient inventory management with real-time tracking

- Improved asset allocation and utilization

- Comprehensive reporting capabilities for better decision-making.