**Title**

**"Automated Material Search and Inventory Management System”**

**Abstract**

Efficient inventory management is crucial for optimizing storage, reducing operational delays, and ensuring accurate stock transactions. This project, "Material Search in Rack and Do Stock Transaction," aims to develop a system that streamlines the process of locating materials in storage racks and performing stock transactions seamlessly. The system integrates a structured search mechanism to quickly identify material locations within a warehouse or storage facility. It also facilitates stock-in and stock-out transactions, ensuring real-time inventory updates and reducing manual errors.

The proposed system leverages database management, barcode/RFID scanning (if applicable), and a user-friendly interface to enhance accuracy and efficiency. By implementing a systematic approach to material search and stock transactions, this project minimizes retrieval time, optimizes space utilization, and improves overall inventory control. The expected outcome is a more organized and automated inventory process that enhances productivity and reduces operational costs.