5008627

INVENTORY MANAGEMENT SYSTEM

- UNDERSTAND THE PROBLEM
- SETUP
- IMPLEMENTATION
- ANALYSIS

5008627

why data structures and algorithms are essential in handling large inventories.

The foundation of any effective inventory management system is made up of data structures and algorithms. They guarantee that the system will remain scalable, operate well, and manage massive data volumes as the company expands. The correct data structures and algorithms can be used to improve the speed, dependability, and manageability of inventory systems.

5008627

The types of data structures suitable for this problem.

1. ARRAYLIST
2. LINKED LIST
3. HASH MAP
4. TREE MAP
5. HASH SET
6. PRIORITY QUEUE

5008627

TIME COMPLEXITY ANALYSIS :-

1. **Add Product:** O(1)
2. **Update Product:** O(1)
3. **Delete Product:**

OPTIMIZATION DISCUSSION:-

1. STORAGE AND PERFORMANCE EFFICIENCY
2. OPTIMIZATION EFFICIENCY
3. PERFORMANCE
4. RELIABILITY
5. CONSISTENCY

5008627

THANK YOU

BY

MONICA B
7376212IT182
BANNARI AMMAN INSTITUTE OF TECHNOLOGY