ONLINE STORE MANAGEMENT SYSTEM
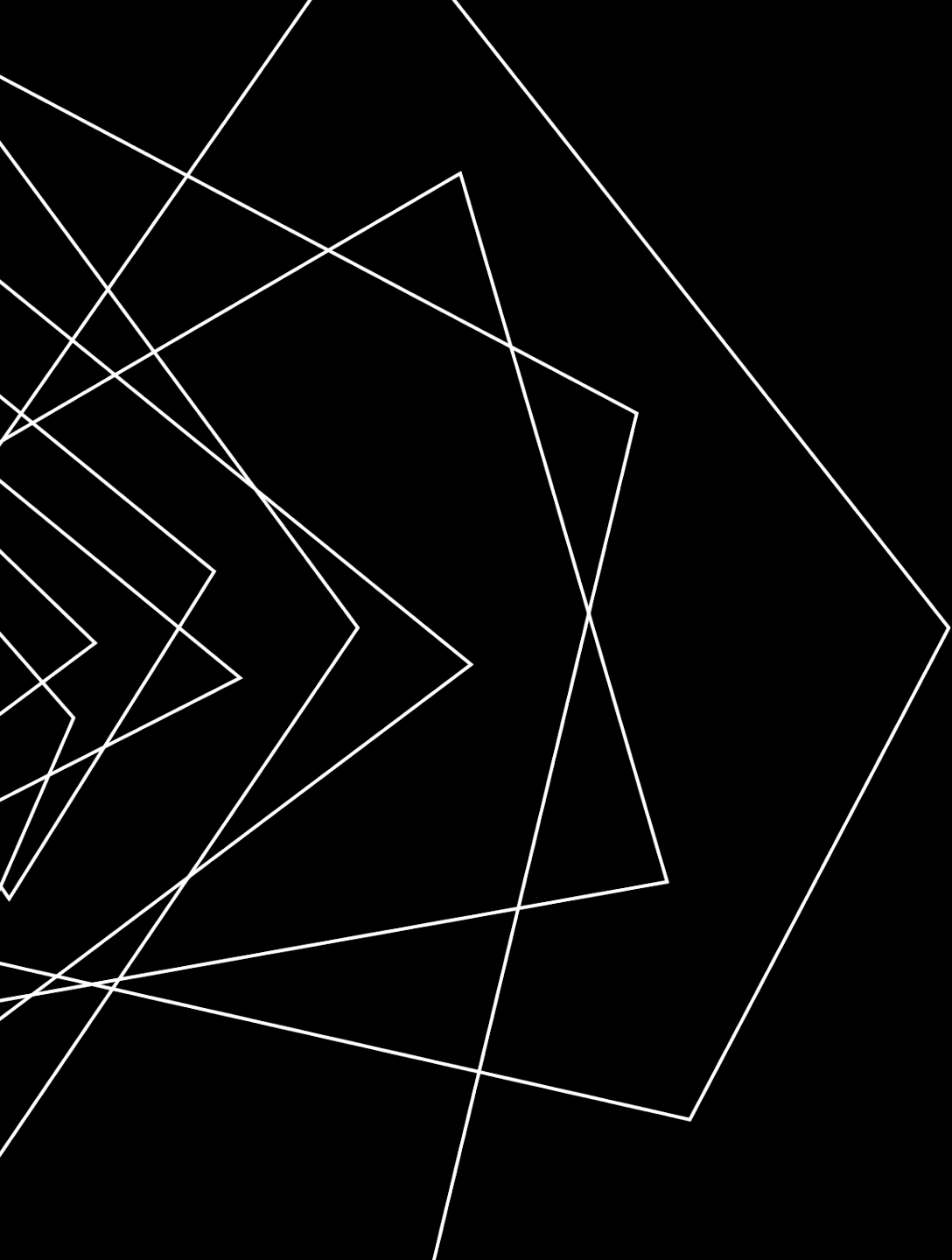
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PROBLEM STATEMENT

- Managing products, stock, and orders is a critical challenge for e-commerce businesses.

- Users need an easy way to:
    i.   Search for products.
    ii. Place orders.
    iii. Track order details.

- Administrators need tools to:
    - Add/delete products.
    - Update stock.
    - Dispatch and manage orders.

- A solution must efficiently handle large product catalogs, order queues, and admin controls.

SOLUTION

The program uses Data Structures and Algorithms (DSA) to solve the problem efficiently:

- **Binary Search Tree (BST):**
  - Efficiently stores and searches products based on product id and name

- **Queue (Linked List):**
  - Manages orders in a First-In-First-Out (FIFO) manner.

- **Key Features:**
  - **User Panel:**
    - Search for products.
    - Place orders.
    - View orders with the total price.
  - **Admin Panel:**
    - Add/Delete products.
    - Update stock.
    - View checkout history.
    - Dispatch and remove orders.
  - Secure access to the admin panel via a **4-digit PIN**.

THANK YOU