Data Structures & Algorithms Reviewer

Fundamental Structures

Detailed coverage of basic data organization: arrays, linked lists (singly, doubly, circularly), stacks, queues, and complex structures like trees and graphs.

Core Algorithms

In-depth review of essential algorithms, including comparison-based sorting (Quick, Merge) and efficient search techniques (Binary Search). Focus on practical implementation using pseudocode.

Complexity Analysis

Understanding the efficiency of code through Time and Space complexity. Mastering Big O notation for analyzing best-case, average-case, and worst-case performance scenarios.

Visual Examples

Inclusion of visual diagrams to illustrate how data structures are physically organized in memory and how algorithms step through processing data elements.

Reference: This content aligns with core computer science curricula, utilizing concepts found in major textbooks like "Data Structure Using C."