



# Data Structures Course Contents



SkyRocket your **Coding Career**

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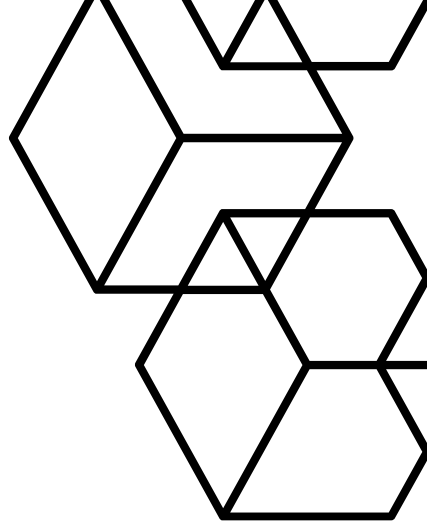
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## CHAPTER 1 : INTRODUCTION TO DATA STRUCTURES

- Overview of Data Structures
- Arrays in Java
- Linked Lists
- Stacks
- Queues
- Trees

## CHAPTER 2 : SORTING AND SEARCHING ALGORITHM

- Bubble Sort
- Selection Sort
- Insertion Sort
- Quick Sort
- Merge Sort
- Linear Search
- Binary Search



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## CHAPTER 3 : GRAPHS AND HASH TABLES

- Graph Traversals
- Shortest Path Algorithms
- Minimum Spanning Tree Algorithms
- Introduction to Hash Tables
- Hash Functions
- Collision Resolution

## CHAPTER 4 : ADVANCED DATA STRUCTURES AND ALGORITHMS

- Heaps
- Priority Queues
- Tries
- Self-balancing Trees
- B-trees
- Fenwick Trees

