Lesson:

What is Data Structure?



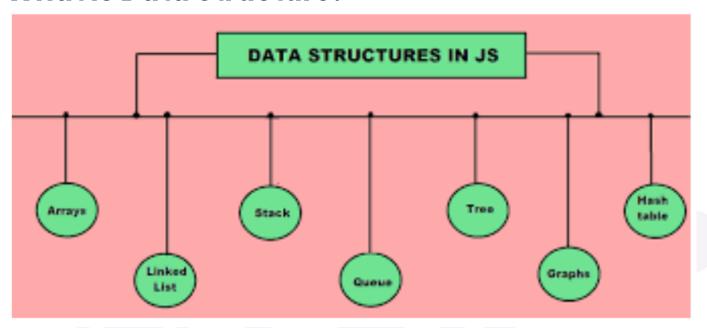




Course Overview

- 1. What is Data structure?
- 2. Types of data structure

What is Data Structure?



It is a way of organizing and storing data so that the data can be efficiently accessed and modified. The data structure is said to be efficient if it will take less memory space and time for its execution.

Types of data structures

Data structure can be majorly classified into two parts -

- 1. Linear data structures
- 2. Non linear data structures

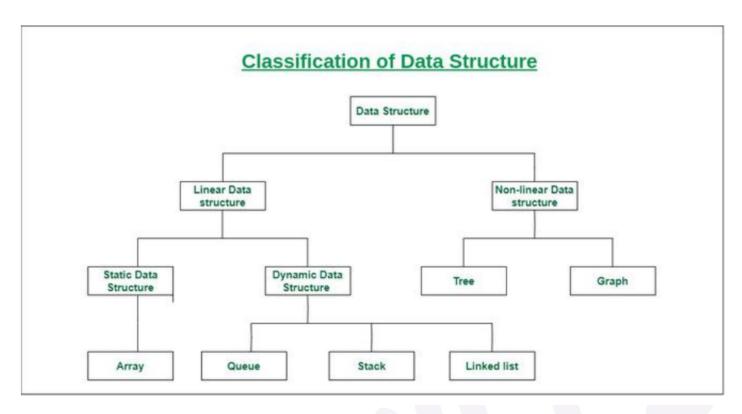
Linear data structures

Data is arranged in a linear order which means that all the elements is attached to its previous and next element. **For example:** Array, Linked List etc.

Non linear data structures

Data is arranged in hierarchical manner instead of linear one which means data will be in multiple levels. For **example:** Tree and Graph.





Note: Every data structure has their own pros and cons with different use cases and scenarios reagrding the memory and cpu usage to which we will discuss while learning about them in future classes.



THANK YOU!