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WORK IN PROGRESS

Trees:

* A tree structure is a nonlinear data structure.
* A tree structure is commonly used in computer science as a data structure.
* A tree structure represents the hierarchical nature of a structure in graphical form.
* A tree data structure is a commonly used abstract data type.
* “Mathematically, a binary tree is a connected, undirected, finite graph with no cycles, and no vertex of degree greater than three.”

Need to discuss the structure how its laid out, what nodes are. Benefits of the structure, applications, binary trees, differences in the trees

Tree structure:

A tree structure is commonly used in computer science as a data structure. By the definition a tree structure is a finite set of one or more nodes. A node contains data and references to other connecting nodes below it in the structure. One node is specifically assigned the role of being the root. The remaining nodes are partitioned into disjoint sets. These subsets are known as subtrees of the root. (reference 1stbook) Tree structures organise nodes in terms of hierarchical relationships in a graphical form. The relations between nodes are shown by connecting lines also known as branches. (2nd book)

* Need to give more info on the structure of a tree
* Terminology of tree structures

Tree structure used in computer science: (How it works)

When it comes to organising data, tree structures make an excellent alternative to arrays. The reason behind this is that arrays are linear data structures while trees are nonlinear. Nonlinear structures allow traversing through the structure in a non-sequential manner.

The data stored in a tree structure is organised in a specific ordering that represents how the data stored is all related.

A tree data structure is a powerful tool for organizing data objects based on keys. It is equally useful for organizing multiple data objects in terms of hierarchical relationships. Tree structures make an excellent alternative to arrays, especially when the data stored within them is keyed or has internal structure that allows one element to be related to, or ``saved within'' another.