

Laboratory practice No. 4: Tree Set

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3) Practice for final project defense presentation

3.1 The tree that we used in this exercise is called a Jtree, the nodes have an array list attached to them in a recursive way, so we can keep the files and directories organized inside them.

The search operation in this tree has a complexity of $O(n)$ since we have to go through every element in case the object that we want to find is not there.

3.3 In exercise 2.1 we use recursion to go through the tree, first, we go through every element on the left, till we get to a leaf, then we print it, and next, we go back to the last node and print till we get to the node before the root, then we go to the elements in the right, we repeat this process, and finally we print the root.

3.4 For exercise 2.1, the complexity is $O(n)$, due to the fact that the method has to go through every element in the tree.

3.5 n is the number of elements in the tree

4) Practice for midterms

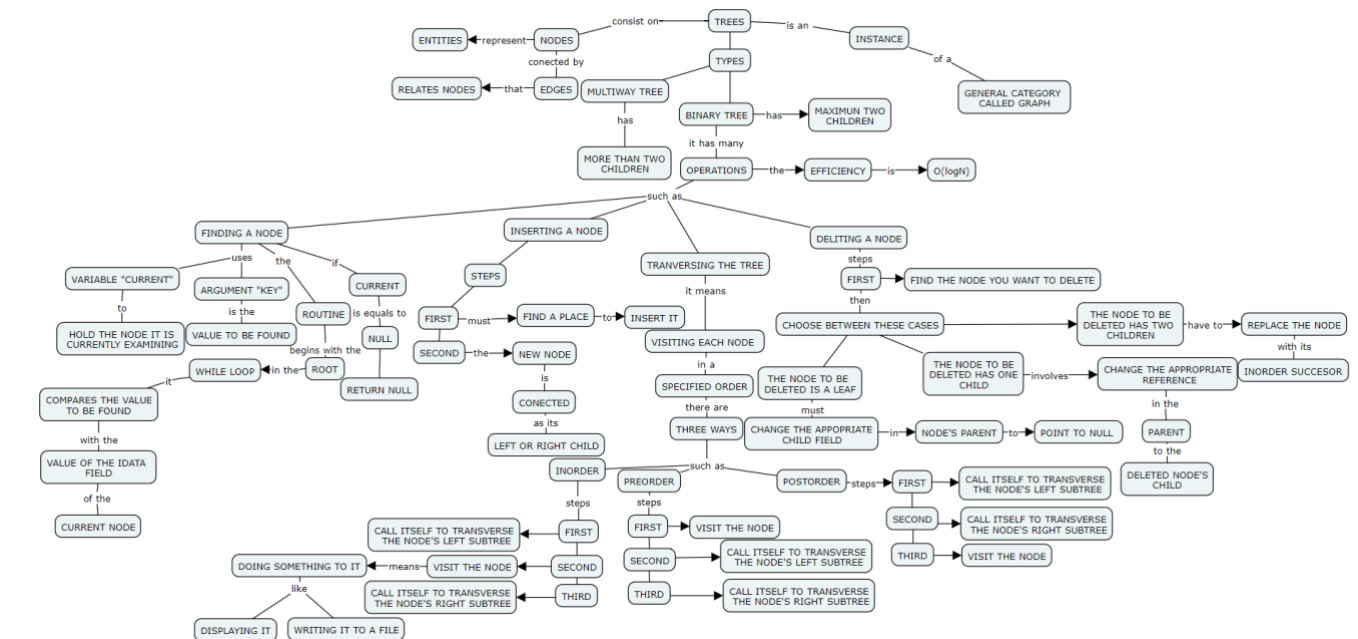
- 4.1** a) altura(raiz.izq)
b) altura(raiz.der)
- 4.2** C
- 4.3** a) false
b) 0
c) (a.izq, suma - a.dato)
d) (a.der, suma - a.dato)
- 4.4** 1. C
2. A
3. D
4. A
- 4.5** a) p.left == null && p.right == null
b) toInsert <= p.data

ESTRUCTURA DE DATOS 1

Código ST0245

- 4.6** 1. B
2. return 0
3. ==0
- 4.7** 1. B
2. B
- 4.8** B
- 4.9** A
- 4.10** B
- 4.11** 1. B
2. A
3. A
- 4.12** 1. i
2. A
3. D
- 4.13** 1. e.id
2. A

5) Recommended reading (optional)



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