

Binary Trees

COMP 215 Lecture 17

The Problem With Binary Search

- Binary search in a sorted array is great. Really efficient.
- UNLESS, we need to change the contents of the array frequently.
- Alternative is binary trees.
- Let's quickly review binary tree insertion and deletion.
- Problem is unbalanced binary trees.
- Many solutions:
 - AVL trees.
 - Red Black trees.
 - B-Trees. (Not binary)

B-Trees

- B-trees are *not* binary.
- All leaves are at the same level.
 - Growth happens at the root instead of the leaves.
- 3-2 trees are examples of B-trees.
 - Let's work through an example.