

15-415
Database Applications
Recitation 9

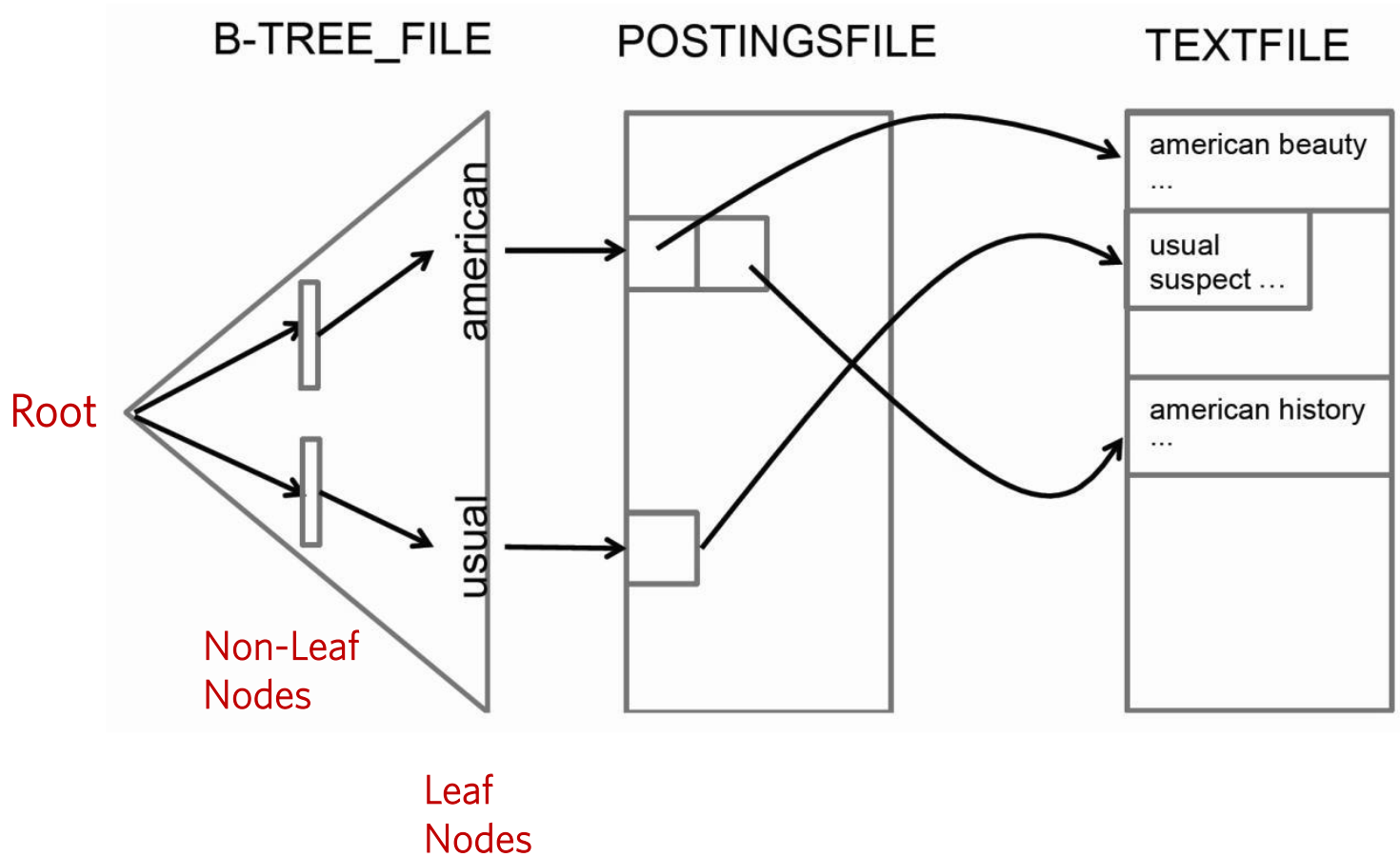
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Project 3

- B+ Trees!
- Given an implementation of a B+ tree, you need to extend its functionality
- The B+ tree applies Alternative (3):
 - Quick reminder:

K^* (*data record*) is a $\langle k, \text{rid-list} \rangle$ pair, where rid-list is a list of rids of data records with search key k

B+ Tree Structure



B+ Tree Functionalities

- With the given implementation, you have the following functionalities:

"C" to scan the tree

"i" to insert

"n" to print the number of all the distinct keys

"p" to print a btree page

"s" to search, and print the key

"S" to search, and print the key, posting list pairs

"T" to print the btree in inorder format

"x" to exit

"f" to print, in alphabetical order, all the distinct keys between (and including) key1 and key2

"b" to print, in reverse alphabetical order, all the distinct keys between (and including) key1 and key2

Demo!

Starter Files

- DOC: useful documentation of the code.
- SRC: source code.
- Datafiles: sample data to load into the tree.
- Tests: sample tests and their solutions.
- README

Getting Started

- Run the demo again!
- Study all the important data structures in *def.h*
- Read the documentation provided!