

wstore

CS 451/551 Project 2 Presentation

Eric Edwards

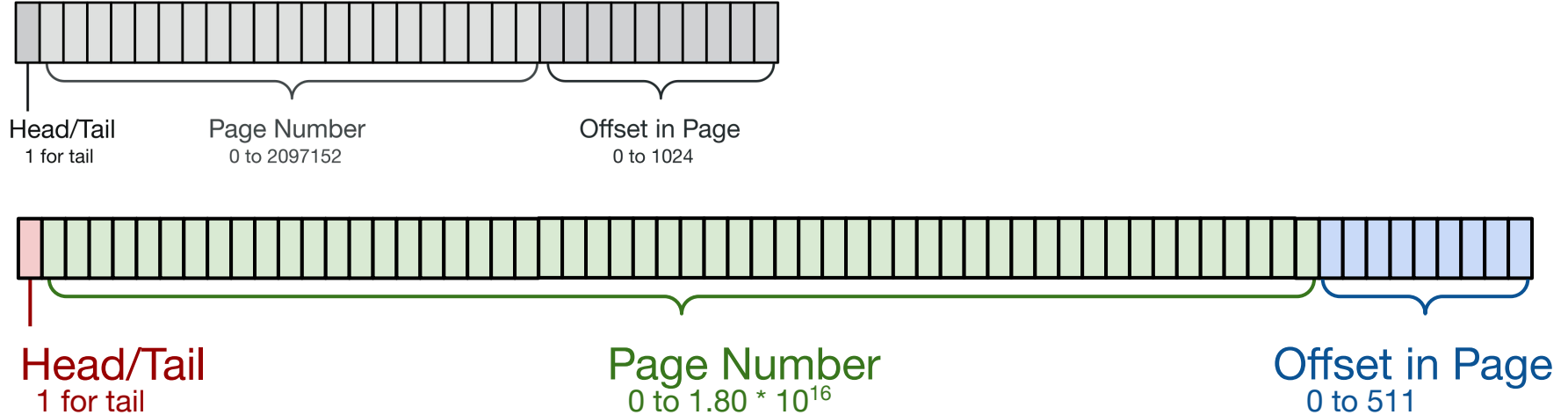
Cory Johns

Jacob Kolster

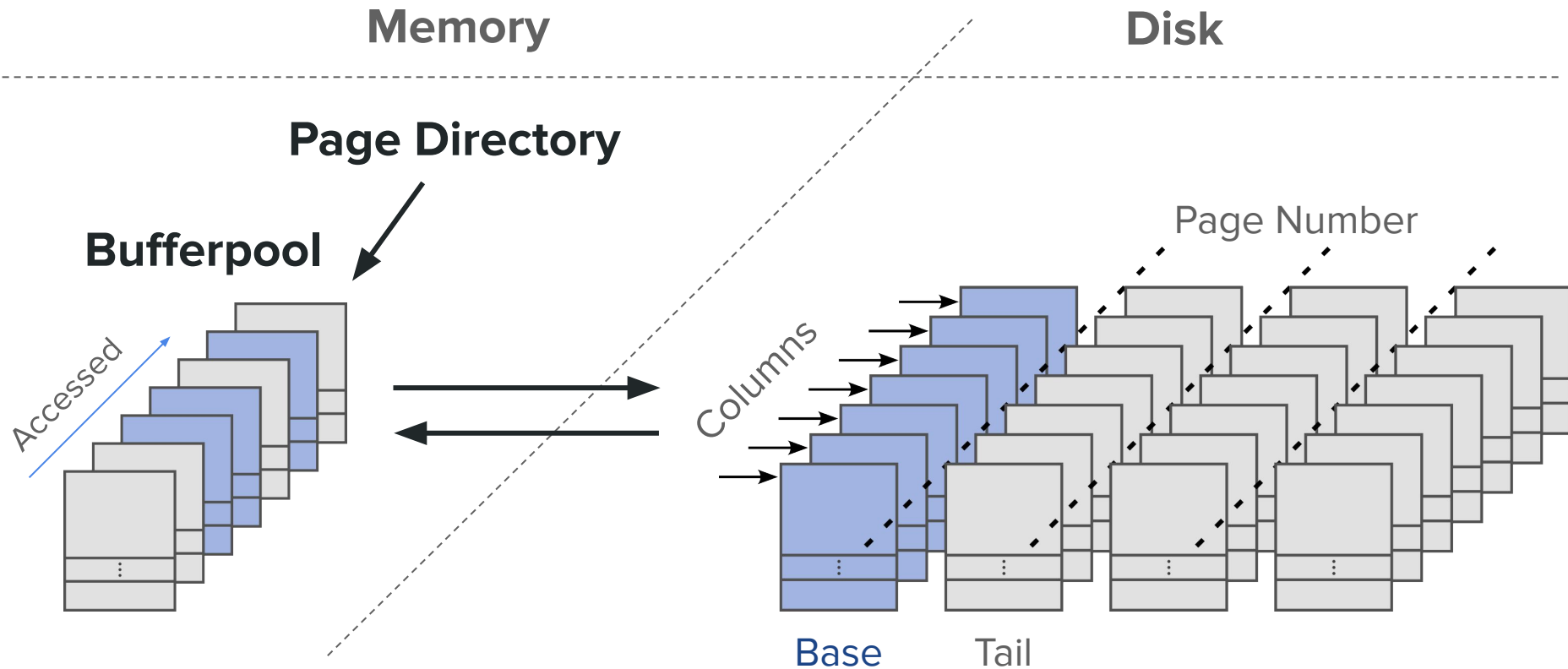
Alex Peterson Santos

RID Bit-level Representation

Pages now store 8-byte ints (previously 4).
This slightly alters RID structure.

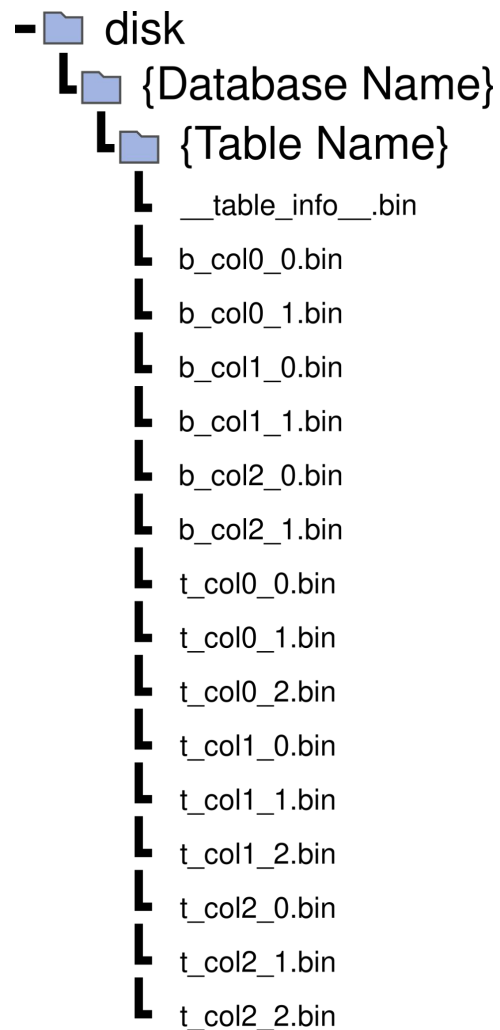


Page Directory & Bufferpool



FileManager

- Manages interaction between pages and disk
- Each specific to each table
- Organizes how files are stored
 - Directory corresponds to table
 - Page_column, tail/base record, page number used as identification



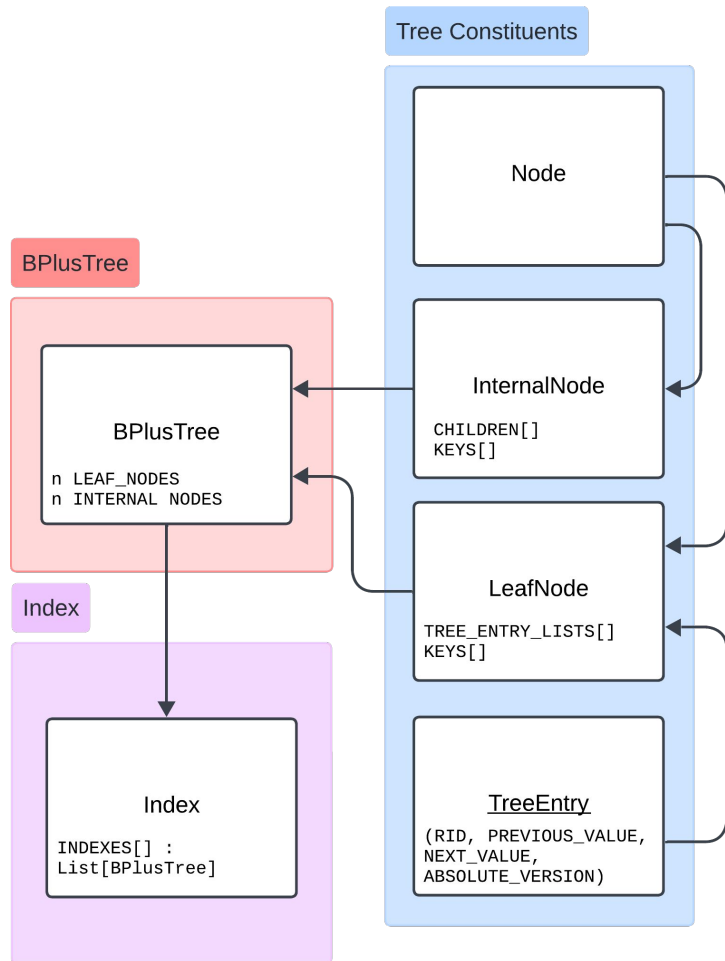
Merge Function

- Updates base records to latest tail version
- Copies base pages; applies new changes; swaps for original base pages
 - Merge_set - object recording the tail pages that contain new changes
 - Updates the “update timestamp” with each updated base record
 - Cumulative tail records with version history limit the performance of the merge function

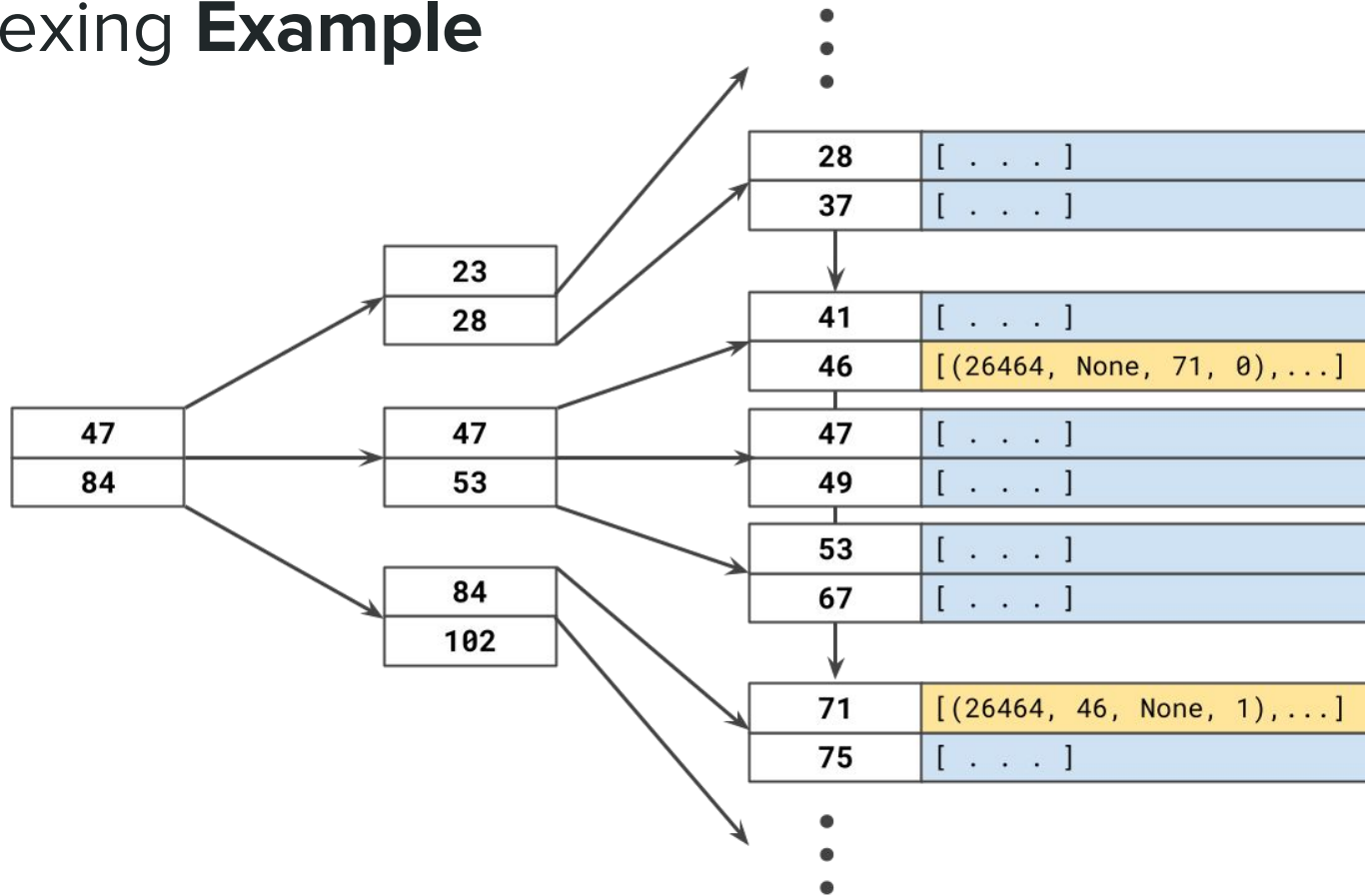
Indexing

Refactored index to support versioning.

TreeEntry objects store information about the location of the previous and next versions in the index.



Indexing Example



Task Distribution

- Page Directory and Bufferpool (Cory)
- Saving and Loading
 - File Manager (Jake)
 - Database and Tables (Cory)
- Index (Alex / Eric)
- Merge Function (Alex / Eric / Jake)