

This thesis presents design and implementation of a data structure, which tries to combine advantages of both databases and regular data structures. Main advantages of databases we try to retain are data persistence through storing data on a hard disk and working with data using transactions which allows us parallel access without danger of inconsistency. From data structures we borrow the implementation as a library of functions and the aim on simplicity and storing data in memory. Our implementation is built around the concept of (software) transactional memory; all data are stored on hard drive as log of operations.