

InputManager

- recordFile: &ifstream - primarvIndexFileOut: &ofstream

secondarvIndexFileOut: &ofstream

IndexFileManager Reader: IndexFileReader Writer: IndexFileWriter primaryKeyList: vector secondaryKeyList: InvertedList fileToIndex: &ifstream IndexFileReader primaryIndexFileOut: &ofstream secondarvIndexFileOut: &ofstream recordFile: &ifstream - binarvRecordFile: &ofstream ----primaryIndexFile: &ifstream secondarvIndexFile: &ifstream +readListsFromFiles() kevList: vector +writeListsToFiles() +Insert() <constructor>> IndexFileManager(primaryIndexFileOut: &ifstream +Delete() secondaryIndexFile: &ifstream, recordFile: &ifstream) +Modify() initializeKevList(): void +Search() - getKevList(): vector + printKeyList(): void + populateKevList: void + writeListsToFiles(): void getIndexRecordFromString(record: string): IndexRecord initPrimarvKevList(): void convertStringToInt(intString: string): int - initSecondaryKeyList(): void split(&s:string, delim:char, &elems:vector<string>:vector<string> getRecordWithKey(key: Int): DataRecord binarySearch(key: int): int Ùse IndexFileWriter · fileToIndex: &ifstream primaryIndexFileOut: &ofstream secondarvIndexFileOut: &ofstream PrimaryIndex binaryRecordFile: &ofstream kevList: vector Key (Primary): Integer + relativeOffset: Integer <<constructor>> IndexFileManager(primaryIndexFileOut: &ifstream. secondaryIndexFile: &ifstream, binaryRecordFile: &ofstream, indexFileOut: &ofstream <<constructor>> IndexRecord() + populateKevList(): void <<constructor>> IndexRecord(int: kev. relative + sortKeyList(): void + setKey(key: int): void + getKeyList(): vector + getKey(): int + saveKeyListToDisk(): void + setRelativeOffset(relativeOffset: int) getIndexRecordFromString(fileRecord: string, offset: int) + getRelativeOffset: int convertStringToInt(intString: string): int + operator<(&rec: IndexRecord): bool convertStringToDouble(doubleString: string): double + operator>(&rec: IndexRecord): bool split(&s:string, delim:char, &elems:vector<string>:vector<string> + operator==(&rec: IndexRecord): bool InvertedList SecondarvIndex Key (Secondary) : Integer primary: Integer Key (Primary) : Integer secondary: Integer +Read() -setSecondary(int) : void +Write() -setPrimary(string): void +Modify() -getPrimary(int): void +Search() -getSecondary(double) : void + insertSecondaryRecord(record: SecondaryIndex) + operator<(&rec: SecondaryIndex): bool + removeRecordWithKev(kev: int) + operator>(&rec: SecondaryIndex): bool + getRecordsWithSecondaryKey(key: int): vector<SecondaryIndex:

+ operator==(&rec: SecondaryIndex): bool