Class Diagram – NoSqlDb, Project #2, CSE681 – SMA, F2015

Display (Extension Methods)

Void showView<Key, Value, Data>(Action<Key, Value> view)

view is user defined lambda. showView is extension method for IQuery<Key, Value> instances.

TestExec uses most of the classes in this diagram

TestExec

UtilityExtensions is used by tests for most of the classes in this diagram

UtilityExtensions

DBExtensionMethods

String showElement<Key, Data>()
Void showDB<Key, Value, Data>()

DBExtensionMethods uses DBElement, DBEngine, PL_String, PL_ListOfStrings

**<<interface>>
IClone**

IClone IClone()

**<<interface>>
IPersist**

String ToXml()
IPersist FromXml()

abstract PayloadWrapper<Data>

property Data theWrappedData

PL_String

PL_ListOfStrings

**<<Interface>>
IQuery<Key, Value>**

bool containsKey(Key key)
List<Key> getKeys()
bool getValue(Key key, out Value val)
List<Value> getValues()

QueryEngine<Key, Value>

VirtualDB<Key, Value> Query(Func<Key, bool> qp)
VirtualDB<Key, Value> doQueries()
void add(Func<Key, bool> qp)

qp is a user defined lambda

DBElement<Key, Data>

Data is the DBElement payload

ItemFactory<Key, Data>

Has a cloneDB() method. That means that the VirtualDB now returns cloned values.

DBEngine<Key, Value>

Value is the database payload, always a DBElement<Key, Data>

VirtualDB<Key, Value>