**EECS3311 - SECTION A - FALL 2019**

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How the iterator pattern is implemented into the model cluster:

* The Repository class inherits from the ITERABLE class of type tuple[DATA\_1, DATA2, KEY].
* The new\_cursor method is implemented.
* It returns an ITERATION\_CURSOR[TUPLE[DATA1, DATA2, KEY]] object. This object is an instantiation of the TUPLE\_ITERATION\_CURSOR class.
* This TUPLE\_ITERATION\_CURSOR class inherits from ITERATION\_CURSOR of type ITERATION\_CURSOR[TUPLE[ITEM\_1, ITEM\_2, KEY]].
* In here, the three required features item, forth, and after are defined. On the client side, the client calls the repos.new\_cursor method to get a new iterator.
* That iterator is used to iterate through objects of such type.

How the feature another\_cursor is implemented in the Repository class:

* The another\_cursor method returns an ITERATION\_CURSOR[DATA\_SET[DATA1, DATA2, KEY]] object.
* This object is an instantiation of the DATA\_SET class.
* Which shows that this iterator is used for iterating through ITERABLES (COLLECTIONS) whose objects/list-items are of type DATA\_SET.
* This class inherits from ITERATION\_CURSOR of type ITERATION\_CURSOR[DATA\_SET[ITEM\_1, ITEM\_2, KEY]].
* In here, the three required features item, forth, and after are defined.