Day-7

Agenda

Collections [Cursor]
Exception Handeling
Thread

Collections [Cursor]

There are three types of cursor available in JAVA
1. Enumeration [1.0 v]
2. Iterator [1.2v]
3. ListIterator [1.2v]

Collections [Cursor]

1. Enumeration [1.0 v]
- It is a Cursor to retrieve Object one by one from the collection .
- It is applicable for legacy class.
- We can create the Enumeration object by using elements().

Limitations of Enumeration :
- Enumeration Concept is applicable only for legacy class .
- Hence it is not a universal cursor .
- By using enumeration we can get only ReadAccess & we can not
- Perform any remove operation .

Collections [Cursor]

2. Iterator [1.0 v]
- We can apply Iterator concept for any collection object .
- It is Universal cursor
- We can get iterator object by iterator() of collection interface.

Limitations of Iterator :
- In the case of Iterator & Enumeration we can always move towards forward direction & we can not move backward direction .
- While performing Iteration we can perform only read , remove operation We can not perform replacement & addition of new objects

- To resolve these problem Sum Microsystem introduced ListIterator in 1.2V

Collections [Cursor]

3. ListIterator [2.0 v]

- ListIterator is the child Interface of Iterator .
- While Iterating Object by ListIterator we can move either to the forward or to the backward direction . I.e List Iterator is bi-directional cursor .
- While Iterating by ListIterator we can perform replacement & addition of new object also in addition to read & remove operation.

Comparison [Cursor]

Property	Enumeration	Iterator (1.2 v)	ListIterator(1.2)
It is Legacy	YES	NO	NO
It is applicable for	Only for Legacy	For any collection object	Only for List Object
Accessibility	Only Read	Read & remove	Read/remove/replace/add