Chapter 5

Building Analysis Model

- ***Requirement Analysis(***already Explained in Chapter no 4)
- ***Data Modeling Concepts(refer :-*** ebook roger pressman page no. 164-166***)***

  Cardinality and Modality

  Cardinality

  - Cardinality is the specification of the number of occurrences of one [object] that can be related to the number of occurrences of another [object].
  - Cardinality is usually expressed as simply 'one' or 'many.'
  - Cardinality defines "the maximum number of objects that can participate in a relationship".
  - It does not, however, provide an indication of whether or not a particular data object must participate in the relationship. To specify this information, the data model adds modality to the object/relationship pair.

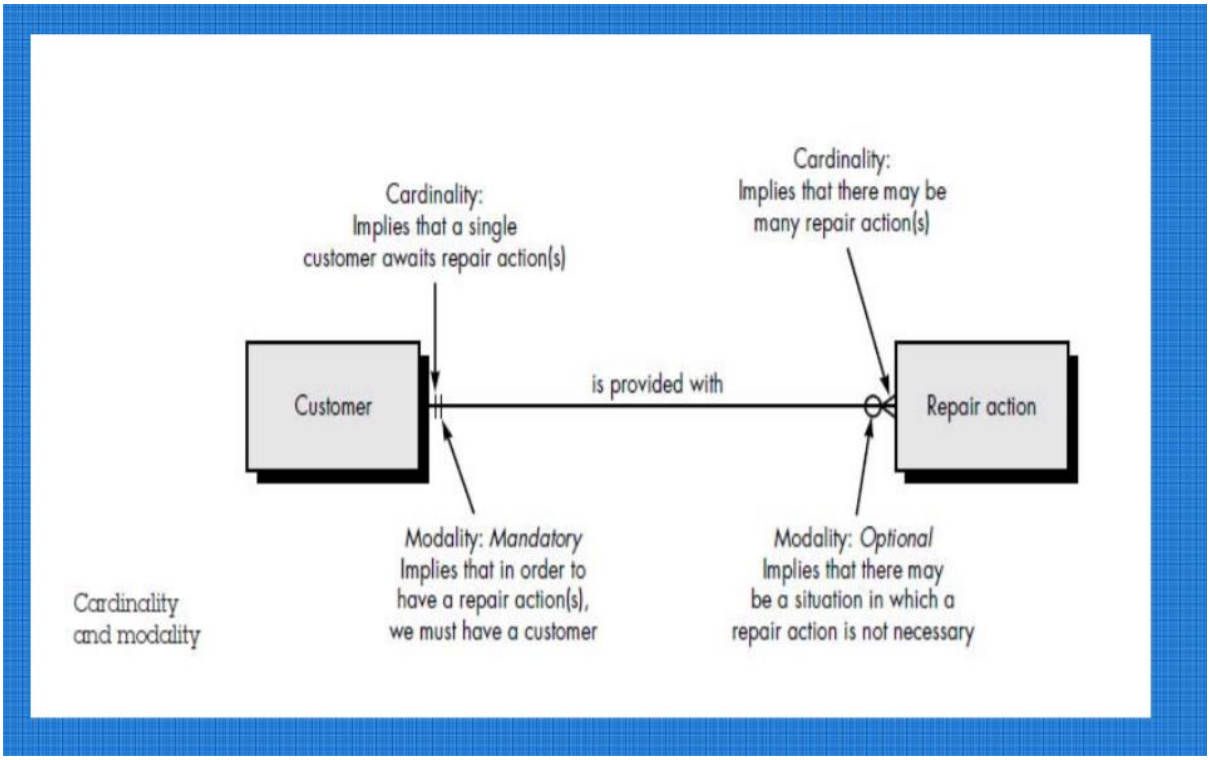
Modality

- The modality of a relationship is 0 if there is no explicit need for the relationship to occur or the relationship is optional.
- The modality is 1 if an occurrence of the relationship is mandatory.

Example

- Consider software that is used by a local telephone company to process requests for field service. A customer indicates that there is a problem. If the problem is diagnosed as relatively simple, a single repair action occurs. However, if the problem is complex, multiple repair actions may be required.
- Following figure illustrates the relationship, cardinality, and modality between the data objects **customer and repair action.**

Cardinality and Modality



- ***Flow Oriented Modeling(refer :-*** ebook roger pressman page no. 187-194***)***

Chapter 6

Software Testing Strategies and Tactics:-

- ***A Strategic approach for Software Testing(refer :-*** ebook roger pressman page no. 450-455)
- ***Software Testing Strategies:***Unit Testing(***refer :-*** ebook roger pressman page no. 456-459)