Date : 03/02/2021
Spring Boot 9AM
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Multiplicity : Data JPA

*) Aggregation : Child can exist without parent data

Student ------<> Course
Employee ---------<> Project

Course table can have data wihout Students, Student may join later.
or if i delete one student we should not delete course.

There can project exist even if we delete one Employee/all Employees.

*) Composition : Child and Parent are connected in Strong manner.
Child has no meaning without parent.

Company -----<> Branch

*) Only Branch Table data has no meaning without its Company data.

Student --------<> StdMarks

*) StdMarks table has no meaning without Student data.

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Examples:
College ---<> Branch
ABC A1,B2,C1

Composition

BankAccount -----<> Transaction
11005588 AJAY 4501 250.0 11005588

Composition

Purchase ----<> PromoCode
10 TXA 58 58 CB50
11 TXB 58
12 TXC 58

Aggregation
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*) If we define Association Mapping in Data JPA
by default every type is Aggregation.

To make it composition use Cascading Concept.

*) Cascading is implemented using one Enum CascadeType.
ALL - For every operation
PERSIST - For Save Operation

```
          1...*
Ex1:  Dept----<>Employee

class Employee {}

class Dept {
  @OneToMany(cascade=CascadeType.ALL)
  private List<Employee> emps;
}

*) If we perform any operation on parent class object then
  also apply same operation on its connected child class objects
  (with out writing operation code over child objects)
  is called as Cascading (Composition).

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FetchType : This concept is used for SELECT ROW from DB using Id.

When we fetch parent data, then we can get its child data  (EAGER)
even
or only parent data (LAZY).

*)LAZY Output:- On fetching Parent Data, do not get child data.
select
    did_col , aname_col , dcode_col
from
   depttab
where
  did_col=?

Eager Output:- On fetching Parent Data, also fetch child data

select did_col , aname_col, dcode_col, did_fk,
        eid_col , ename_col , esal_col
from  depttab
     left outer join
       emptab
on did_col=did_fk

where did_col=?
-------------------------------------------
*) If child is many type default is LAZY
     1...* / *...*


*) If child is one type default is EAGER
   1...1/*...1

Full Hibernate based Examples:
https://github.com/javabyraghu?
tab=repositories&q=hibernate&type=&language=
```