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            az Celebrard entition/records of the distable by generating conferenced SCF query and restricte DCLTC SOL Courter
               > First generates the single SQ.CCTSQL Query and gets of the ID values (Pt column values) and someonics the multiple QQLETE SQL Queries having swheeling each ID value to cosh Delete SQL Query.

    If does not percente single DECLTE SQL Guery for deleting all the records. In fact it percentes
multiple DH FTF-NQ Queries in deletion of tiple records.

François Appr
                  public String removeAlBocton();
               in convice implicant
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long count-declarRepulserun];
P(v.com.co)[]
stocker RepulserunderMark[];
return county* includ metals are delated;
[]
                                            return "no records found delete";
      In Client App
                                                                                           try {
    System.com.println(service.removeAllDactors[]);
}
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To get all the records and their ids
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            wid delete ill syst (travitie C extents 12: ids). Delete all instance of the type I with the given De.
      ⇒ Deletes the multiple reconfs/entities of DB table, based on the given id values
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                                               Dample app
                                                                                              public String removadocrombylda/terable-intagery idst
                                                                  In service Implidass
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orto:Repo.deleteAlByiddids;
return_count+" no.of Artis are deleted";
                                                            In client App
                                                                                                                 by f
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Additional considered in the sign of selections of selectio
                                                        Historian wind in 1 a sign) is aware of 1 and feetal. Our government delete from artist juro where a sign illumination of the force artist juro where a sign illumination of the force artist juro of the author and artists country to of write and deleted.
```

⇒ in gradi Apps, in Photo Album Apps, we define tyneed this delete all(), delete alleged() methods.

## **Delete Object Operations in CrudRepository**

```
void
void
delete(T entity)
void
deleteAll()
void
void
void
deleteById(ID id)
Deletes a given entity.
Deletes all entities managed by the repository.
deleteAll(Iterable<? extends T> entities) Deletes the given entities.
deleteAllById(Iterable <? extends ID> ids) Deletes all instances of the type T with
the given IDs.
deleteAll()
Deletes the entity with the given id.
Deletes all entities managed by the repository.
=> Deletes all entities/records of the db table by generating single select SQL query and multiple DELETE
SQL Queries
=> First generates the single SELECT SQL Query and gets all the ID values (PK column values) and
generates the multiple DELETE SQL Queries having submiting each ID value to each Delete SQL Query
=> It does not generate single DELELTE SQL Query for deleting all the records .. In fact it generates multiple
DELETE SQL Queries to delete multiple records.
void deleteAll()
Deletes all entities managed by the repository.
Example App
In service Interface
public String removeAllDoctors();
In service Impl class
@Override
public String removeAllDoctors() {
long count=doctorRepo.count();
if(count>0) {
doctorRepo.deleteAll();
return count+" no.of records are deleted";
```

```
}
return "no records found delete";
}
In Client App
try {
System.out.println(service.removeAllDoctors());
catch(Exception e) {
e.printStackTrace();
<terminated> BootDataJpaProj1Crud RepositoryApplication [Java Application]
E:\Software\Eclipse\eclipse-jee-2022-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.I Hibernate: select
count(*) from jpa_doctor_info d1_0
Hibernate: delete from jpa_doctor_info where doc_id=? Hibernate: delete from jpa_doctor_info where
doc_id=? Hibernate: delete from jpa_doctor_info where doc_id=? Hibernate: delete from jpa_doctor_info
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delete from jpa_doctor_info where doc_id=? Hibernate: delete from jpa_doctor_info where doc_id=?
Hibernate: delete from jpa_doctor_info where doc_id=? 14 no.of records are deleted
To get all the records and their ids
Here ids are submitted to delete queries to delete the records.
all the methods of JPA repositories execute
in DB s/w by enabling auto commit mode
on Db s/w... As developer can not rollback
the data that has been committed.
(if developers wants to get this control then he needs to enable TransactionMgmt Operations)
void
deleteAllById(Iterable <? extends ID> ids) Deletes all instances of the type T with
the given IDs.
=> Deletes the multiple records/entities of DB table based on the given id values
void deleteAllById(Iterable <? extends ID> ids)
Deletes all instances of the type T with the given IDs.
Entities that aren't found in the persistence store are silently ignored.
Parameters:
ids - must not be null. Must not contain null elements. (elements can be null)
Throws:
```

```
IllegalArgumentException - in case the given ids or one of its elements is null.
Since:
2.5
Example app
============
In service Interface
public String removeDoctorsBylds(Iterable<Integer> ids);
In service Impl class
@Override
public String removeArtistsBylds(Iterable<Integer> ids) {
In client App
//Load the objs by ids
Iterable<Artist> list=artistRepo.findAllById(ids);
long count= StreamSupport.stream(list.spliterator(), false).count();
//delete objs by ids
artistRepo.deleteAllByld(ids);
return count+" no.of Artits are deleted ";
try {
System.out.println("artits count::" +artistService.removeArtistsBylds (Arrays.asList(50,88,99)));
catch (Exception e) {
e.printStackTrace();
Hibernate: select a1_0.aid,a1_0.aname,a1_0.category,a1_0.fee from artist_info a1_0 where a1_0.aid in (?,?,?)
Artist:: 0-arg cosntructor
Artist:: 0-arg cosntructor
Artist:: 0-arg cosntructor
Hibernate: select a1_0.aid,a1_0.aname,a1_0.category,a1_0.fee from artist_info a1_0 where a1_0.aid=? Artist::
0-arg cosntructor
Hibernate: select a1_0.aid,a1_0.aname,a1_0.category,a1_0.fee from artist_info a1_0 where a1_0_aid=? Artist::
0-arg cosntructor
Hibernate: select a1_0.aid,a1_0.aname,a1_0.category,a1_0.fee from artist_info a1_0 where a1_0_aid=? Artist::
0-arg cosntructor
Hibernate: delete from artist_info where aid=?
Hibernate: delete from artist_info where aid=?
Hibernate: delete from artist_info where aid=? artits count::3 no.of Artits are deleted
usecases for deleteAll() and deleteAllById(-) methods
```

```
dynamic webpage
from Abhishek (privately): 12:
ΑII
needs repo.deleteByld(-) (deletes only those records
whose check boxes are selected) repo.deleteAll(-) method
(deletes all the records irrespective of
the check boxes that are selected)
name price status qty
101
table 99000 avaiable 10
102
103
=> In gmail Apps, in Photo Album Apps we definetly need this deleteAll(), deleteAllByld(-) methods.
Assigment :: pratice this method
void
deleteAll(Iterable <? extends T> entities) Deletes the given entities.
(Though we are passing List of Entity objects to delete ..it actually internally use
the id values of given Entity objs for deleting the records)
deleteByld(Integer id)
void deleteById(ID id)
Deletes the entity with the given id.
If the entity is not found in the persistence store it is silently ignored.
Parameters:
id - must not be null.
Throws:
IllegalArgumentException - in case the given id is null
In service Interface
note:: All methods in Crud Repository is
```

having void as the return type So we need to write additional Code to check weather records are found or not

\_\_\_\_

```
and Records are deleted or not
public String remove PatientByld(int id);
In service Impl class
@Override
public String remove PatientByld(int id) {
Optional Patient> opt-patientRepo.findById(id);
if(opt.isPresent()) {
patientRepo.deleteByld(id);
return id+" patient found and deleted";
}
else {
return id+"patient bund for deletion";
In runner class
==========
System.out.println(patientService.remove PatientByld(1007));
Assignments
void
delete(T entity)
Deletes a given entity.
void
deleteAll(Iterable <? extends T> entities) Deletes the given entities.
using
Ans) possible, but not delete(-) methods, use save(-) keeping null values for few
properties of the object... this is nothing but partial deletion of the record (nothing but partial update/delete
operation) or we can take @Transient for few properties
What is meaning of Common Repositories and Specific Repositories?
Ans)
=>CrudRepository and PagingAndSortingRepository are called Common Repositories becoz they are
common for both SQL and NOSQL DB s/ws.
=> JpaRepository methods are specific SQL DB s/ws So it is called as specific Repository
=> MongoRepository methods are specific Mongo DB s/ws (NoSQL),So it is called as specific Repository
```

=> Neo4jRepository methods are specific Neo4J DB s/ws (NoSQL),So it is called as specific Repository