

There are two main types of queries in JPA:

- Named Queries
- Dynamic Queries

Named queries are used for a static queries that will be used many times in the application. The advantage of a named query is that it can be defined once, in one place, and reused in the application.

Dynamic queries are normally used when the query depends on the context. For example, depending on which items in the query form were filled in, the query may have different parameters. Dynamic queries are also useful for uncommon queries.

Named Queries - Example

Declaring a Named Query (one place, reusable)

```
@NamedQuery(  
    name="findAllEmployeesInCity",  
    query="Select emp from Employee emp where emp.address.city = :city"  
)  
public class Employee { ... }
```

Executing a Named Query

```
EntityManager em = getEntityManager();  
Query query = em.createNamedQuery("findAllEmployeesInCity");  
query.setParameter("city", "Ottawa");  
List<Employee> employees = query.getResultList();
```

Dynamic Queries - Example

```
Query q1 = em.createQuery("SELECT c FROM Country c");  
List<Country> countries = em.getResultList();
```

Dynamic Queries – All the Details

https://en.wikibooks.org/wiki/Java_Persistence/JPQL