# **Fetch Types : Eager Vs Lazy Loading**

-> when we try to fetch / retrieve the data ,

* **Eager will retrieve Everything**.
* **Lazy will Retrieve data only on Request**.

# **Eager Loading**

* Eager will load all dependent entities.

# **Ex-1:-**

* **it will Load instructor and all of their course at once.**

# **Ex-2:-**

**What About Student and Courses.**

* **it could easily turn into a Nightmare....**
* **suppose we load a course then it will load all the Students for the course then it will slow down our Application.**

**Note:-**

**> in our app , if we are searching for a course by keyword**

**-> only want a list of matching courses.**

* **Eager Loading would still load all Students for each Course ....i.e not good.**

# **Important Note:-**

**Whenever we need to load the data when absolutely needed always prefer lazy loading instead of Eager Loading.**

# **Lazy Loading**

* **Lazy loading will load the main Entity First.**
* **Load dependent entities on demand (lazy)**

**Default Fetch Types:-(when we didnt Specify)**

**@OneToOne --------> FetchType.EAGER**

**@OneToMany --------> FetchType.LAZY**

**@ManyToOne --------> FetchType.EAGER**

**@ManyToMany --------> FetchType.LAZY**

**Note :-**

**we can also override the default fetch type by specifying the fetch type.**

**Ex:-**

@ManytoOne(fetch=FetchType.LAZY)