**# Enterprise Java #**

**Stateful Session Bean & Stateless Session Bean**

**How to create :-**

* Java with maven -> EJB module -> Finish
* In Source Packages -> new package -> named(ejbStates)-> New -> Other -> Enterprise JavaBeans ->Session Bean -> named (StatefulBean)
* If Session Bean make Stateless or Stateful according option select -> Local (if want Local Bean creation)
* StatefulLocalBean , StatefulBean , StatelessBean , StatelessLocalBean
* Make Servlet -> (package)ejbStatesServlets -> Client1Servlet and Client2Servlet

**What is a Session Bean (EJB)?**

* A Session Bean is a business logic component.
* It does not handle HTTP requests directly.
* **Types:**
  + **Stateless** → No client-specific state; shared by all clients.
  + **Stateful** → Keeps state per client (like shopping cart).
  + **Singleton** → One instance per application.

**What is a Servlet?**

* A **Servlet** is a **web component** that **handles HTTP requests and responses**.
* It sits in the **web layer** and talks directly with the client (browser, Postman, etc.).
* It can call **EJBs** to perform business logic.
* **Servlet** = deals with HTTP request, prepares response (HTML, JSON, etc.).
* **EJB** = performs the logic (calculation, DB access, transaction).

**Why do we need both?**

Think in **layers**:

* **Servlets (Web Layer)**:
  + Entry point for HTTP clients.
  + Handles GET, POST, query parameters, cookies, sessions, etc.
  + Responsible for presentation/output.
* **EJBs (Business Layer)**:
  + Encapsulate reusable **business logic**.
  + Manage transactions, concurrency, security, pooling, etc.
  + Can be reused from Servlets, REST endpoints, other EJBs, or even remote clients.

**EJB =** business logic, no HTTP knowledge

**Servlet =** web interface, talks HTTP, calls EJBs

* You need both:
* Servlet = “front desk”
* EJB = “back office”