

Enterprise Java

Timers and Schedulers

How to create :-

- ➡ Java with Maven -> EJB Module -> TimerAndScheduler8App -> Finish
- ➡ In Source Package -> new package -> named -> ejb -> new -> other -> Java Interface -> named (TimerEJBRemote)
- ➡ In Source Package -> new package -> named -> ejb -> new -> Session Bean -> named (TimerEJB)
- ➡ Then Create servlet

Why Use :-

- ➡ Timers and Schedulers are used in Java when you want your application to perform **tasks automatically at a specific time or repeatedly after a fixed interval** — *without requiring user input.*
- ➡ We use them to create programs that can **run tasks on their own**, like:
 - ✓ Send email reminders every day at 10 AM
 - ✓ Generate backup of database every hour
 - ✓ Clean temporary files automatically
 - ✓ Schedule SMS/notifications in banking, hospitals, etc.
 - ✓ Run cron-like jobs in Java EE / enterprise applications

What This Means Step by Step :-

Code Part	Meaning
@Singleton	Only one instance of this class exists in the whole application.
@Startup	The scheduler starts running automatically when the server starts.

Code Part	Meaning
@Schedule(...)	This defines when the task should run.
hour="*"	Run every hour.
minute="*"	Run every minute.
second="*/10"	Run every 10 seconds.
persistent=false	Do NOT store timer in database, it resets after server restart.
executeTask()	This method runs automatically every 10 seconds.