**🔑 Session**

When a bean has a session scope, it means that **a single instance of the bean is created for each HTTP session that is established in the application.** This instance of the bean will be available for the duration of the user’s session, and will be destroyed at the end of the session.

@Component  
@SessionScope  
public class SessionBean {  
   
}

Here are some key features of the session scope in Spring:

* **One instance per session**: Each time a user logs into the web application, a new instance of the bean with scope “session” is created for that specific session. This instance of the bean will be available for the duration of the user’s session, and will be destroyed at the end of the session.
* **In-memory storage during the session**: The bean instance with scope “session” is stored in memory for the duration of the user’s session. This allows to have a specific state for each user session and to keep the session-related information persistent during the user’s navigation in the application.
* **If a user logs out or the session expires, the bean instance is automatically destroyed**. This allows for automated management of bean instances based on the lifecycle of the user’s session.
* **The session scope is available only in Spring MVC-based web applications**, as it refers to the management of instances in the context of an HTTP session.
* **Shared within the same session**: The same bean with scope “session” is shared between different components or classes that inject it in the context of the same user session. This allows the same instance of the bean to be accessed in different parts of the application during the same user session.
* **Useful in web applications**: The session”scope is especially useful in web applications, where specific user session information needs to be maintained, such as authentication data, user preferences or session state.

It is important to note that the session scope in Spring only makes sense in the context of web applications based on user session technologies, such as HTTP sessions. In addition, concurrency management and security need to be taken into account when handling shared data in beans with session scope, as they may have implications on the integrity and privacy of user session information.