

TransactionTemplate

```
```java
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.datasource.DataSourceTransactionManager;
import org.springframework.stereotype.Service;
import org.springframework.transaction.TransactionStatus;
import org.springframework.transaction.support.TransactionTemplate;

import javax.sql.DataSource;

@Service
public class TransactionalService {

 private final DataSource dataSource;
 private final DataSourceTransactionManager transactionManager;
 private final TransactionTemplate transactionTemplate;

 @Autowired
 public TransactionalService(DataSource dataSource,
DataSourceTransactionManager transactionManager) {
 this.dataSource = dataSource;
 this.transactionManager = transactionManager;
 this.transactionTemplate = new TransactionTemplate(transactionManager);
 }

 public void doSomethingWithTransaction() {
 transactionTemplate.execute(status -> {
 // Perform transactional operations here
 return null; // Return any result if needed
 });
 }

 public void doSomethingWithManualTransactionManagement() {
 TransactionStatus status = transactionManager.getTransaction(null); //
Optionally pass transaction definition
 try {
 // Perform transactional operations here

 transactionManager.commit(status);
 } catch (Exception ex) {
 transactionManager.rollback(status);
 throw ex;
 }
 }
}
```

...

In this example:

- `TransactionalService` is a Spring service component.
- It is injected with a `DataSource` and a `DataSourceTransactionManager`.
- It also creates a `TransactionTemplate` using the `DataSourceTransactionManager`.
- The `doSomethingWithTransaction()` method uses `TransactionTemplate` to execute transactional operations.
- The `doSomethingWithManualTransactionManagement()` method demonstrates manual transaction management using `DataSourceTransactionManager` directly.
- Within the transactional blocks, you can perform any transactional operations like database manipulations.
- Any exception thrown within the transactional blocks will trigger a rollback of the transaction.