package com.habuma.spittr.persistence;

import java.util.List;

import javax.persistence.EntityManager;

import javax.persistence.PersistenceContext;

import org.springframework.dao.DataAccessException;

import org.springframework.stereotype.Repository;

import org.springframework.transaction.annotation.Transactional;

import com.habuma.spittr.domain.Spitter;

import com.habuma.spittr.domain.Spittle;

@Repository

@Transactional

public class JpaSpitterRepository implements SpitterRepository {

@PersistenceContext

private EntityManager em;

public void addSpitter(Spitter spitter) {

em.persist(spitter);

}

public Spitter getSpitterById(long id) {

return em.find(Spitter.class, id);

}

public void saveSpitter(Spitter spitter) {

em.merge(spitter);

}

...

}

......

It’s important to understand that @PersistenceUnit and @PersistenceContext

aren’t Spring annotations; they’re provided by the JPA specification. In order for

Spring to understand them and inject an EntityManagerFactory or EntityManager, Spring’s PersistenceAnnotationBeanPostProcessor must be configured. If you’re

already using <context:annotation-config> or <context:component-scan>, then

you’re good to go because those configuration elements automatically register a

PersistenceAnnotationBeanPostProcessor bean.

**Otherwise**, you’ll need to register that bean explicitly:

@Bean

public PersistenceAnnotationBeanPostProcessor paPostProcessor() {

return new PersistenceAnnotationBeanPostProcessor();

}

@Repository serves the same purpose here as it did when you developed the Hibernate

contextual session version of the repository. Without a template to handle exception

translation, you need to annotate your repository with @Repository so

PersistenceExceptionTranslationPostProcessor knows that this is a bean for which

exceptions should be translated into one of Spring’s unified data-access exceptions.

Speaking of PersistenceExceptionTranslationPostProcessor, you need to

remember to wire it up as a bean in Spring just as you did for the Hibernate example:

@Bean

public BeanPostProcessor persistenceTranslation() {

return new PersistenceExceptionTranslationPostProcessor();

}

**Spring In Action 11.2.2**