

```
@Entity
@Table(name="person")
class Person {
    @Id
    @GeneratedValue(strategy=
        GenerationType.IDENTITY)
    int id;
    String fullname;
    // accessors
}
```

```
@Entity
@Table(name="address")
class Address {
    @Id
    @GeneratedValue(strategy=
        GenerationType.IDENTITY)
    int addressNo;
    String addressLine1;
    // accessors
}
```

```
@Repository
class PersonDao {
    @Autowired
    JpaTemplate jpaTemplate;

    public int savePerson(Person person) {
        jpaTemplate.persist(person);
        return person.getId();
    }

    public void updatePerson(Person person){
        jpaTemplate.merge(person);
    }

    public void delete(int id) {
        Person person =
        jpaTemplate.find(Person.class, id);
        jpaTemplate.remove(person);
    }
}
```

```
@Repository
class AddressDao {
    @Autowired
    JpaTemplate jpaTemplate;

    public int saveAddress(Address address){
        jpaTemplate.persist(address);
        return address.getAddressNo();
    }

    public void updateAddress(Address
address) {
        jpaTemplate.merge(address);
    }

    public void deleteAddress(int addressNo){
        Address address =
        jpaTemplate.find(Address.class, addressNo);
        jpaTemplate.remove(address);
    }
}
```

```
interface PersonDao {
    Person save(Person person);
    int update(Person person);
    void delete(Person person);
    Person find(Class<?> classType, int id);
}
```

```
interface AddressDao {
    Address save(Address address);
    int update(Address address);
    void delete(Address address);
    Address find(Class<?> classType, long id);
}
```

```
#Proxy / DAO
class CRUDInvocationHandler implements InvocationHandler {

    @Autowired
    private JpaTemplate jpaTemplate;

    public Object invoke(Object proxy, Method method, Object[] args) {
        if(method.eq("save")){
            jpaTemplate.persist(args[0]);
            return args[0];
        } else if(method.eq("update")) {
            jpaTemplate.merge(args[0]);
        }else if(method.eq("delete")) {
            jpaTemplate.remove(args[0]);
        }else if(method.eq("find")) {
            Object entity = jpaTemplate.find(proxy.getClass(), args[0]);
            return entity;
        }
    }
}
```

```
PersonDao personDao = Proxy.newProxyInstance(PersonDao.class.getClassLoader(),
        new Class<?>[] {Person.class}, new CRUDInvocationHandler());
```

```
Person person = new Person();
// populate data
person = personDao.save(person);
```