

Expeditors Backend Academy Labs

Introduction

This document contains the labs for the Expeditors Backend Academy.

The instructions are split up into **Classwork** and **Homework**. The Classwork we will do in class together. You should do the Homework in the **Homework** module. Create a new package for each week's homework if it makes sense. I will go through an example before we start.

Week 11

Coursework

1. Introduction to JDBC
2. Simple ORM using JDBC and JdbcTemplate/JDBCClient
3. Create and Manage relationships in Databases

Homework

Objectives

1. Learn how to interact with databases using Spring JDBC tools.
2. Understand how to create and manage relationships in a DB.

Tasks

1. Make sure you have some tables set up for your database. Create them using the IDE if you need to.
2. You can use either straight JDBC or JDBCClient / JdbcTemplate for the your work.
3. Simple JDBC reads and writes
 - a. Write a program using JDBC to insert data into a single table.
 1. e.g. a Pet, or an Adopter without any pets.
 - b. Write a program to read data from a single table and convert it to a Java object.
4. Implement relationships with JDBC
 - a. Write a program to insert data from an object into multiple tables.
 1. e.g. Write data for an Adopter and their Pets.
 - b. Write a program to populate a complex java object with data from multiple tables

1. e.g. create an Adopter with it's associated Pets from data in the database.
5. Extra Credit
 - a. Create a DAO that uses a JDBCClient to interact with the database to do CRUD operations.