

# 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 7

### Classwork

1. Convert the StudentService to a Spring Boot Application

### Homework

#### Objectives

1. Become familiar with the structure of a Spring Boot application.
2. Learn how to test a Spring Boot application.

#### Tasks

3. Convert your Spring Application to a Spring Boot Application. The main objective of this exercise is to become familiar with the structure of a Spring Boot application.
  - a. Create a new Spring Boot Application from **start.spring.io**.
  - b. To begin with, you are going to create a command line application, so you don't need to add any dependencies.
  - c. Open it up in the IDE. You can do this either as a new project, or as a new "module from existing sources" in the project you are currently working in.
  - d. Now you can either
    1. copy your code base from your current application to the new Spring Boot application, or
    2. copy the maven *pom.xml* file from the new Spring Boot application to your current application.
  - e. I would suggest using the first approach.

- f. Either way, at this point you should have your code with a Spring Boot pom.xml file.
- g. Now you need to make your existing code work as a Spring Boot Application.
- h. To run the code you had in your old Application class, create a Bean that implements the *CommandLineRunner* interface.
  - 1. Inject a AdoptionService into this class.
  - 2. In the *run* method, write code to invoke functionality in your AdoptionService class, e.g. insert an Adopter or two, get all Adopters and print them out, etc.
- i. You also need to convert your JUnit tests to work with Spring Boot.
  - 1. @SpringBootTest is your friend at this point.