

# 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 8

### Classwork

1. Create a REST API for the StudentService.

### Homework

#### Objectives

1. Create a REST front end for a Spring Boot Application.
2. Learn how to test a Controller at various levels of granularity

#### Tasks

1. Finish what we started in class
2. Create Controllers for you application. At the very least they should allow for GET, POST, PUT, DELETE functionality.
  - a. Make sure you return appropriate Http Response codes
    1. e.g. 201 for new resource creation, etc.
  - b. Handle error conditions and exceptions properly
  - c. Handle validation errors.
3. Write Unit tests for your controllers.
  - a. Unit tests with Mockito
  - b. Mock tests with MockMvc
  - c. True Integration tests with RestClient