

# SOEN 487: Web Services and Applications

## Lab Instructions

REST Client

January 21, 2022

### 1 General Information

**Lab Date:** Wednesday, January 26<sup>th</sup>, 2022.

Your lab instructor will provide you with instructions on how to do this lab activity.

### 2 Introduction

The purpose of this lab is to create a client that will interact with the RESTful web service that was implemented in the previous lab. This lab will be preferably performed in pairs, and at the end, you will demonstrate your results as outlined, to your lab instructor.

### 3 Project Setup

There are 2 ways to set up your project to start this lab.

1. If your code worked in the previous lab as verified by your lab instructor then you can reuse that code, but you will need to add the following dependency to your pom.xml file within the dependencies tag:

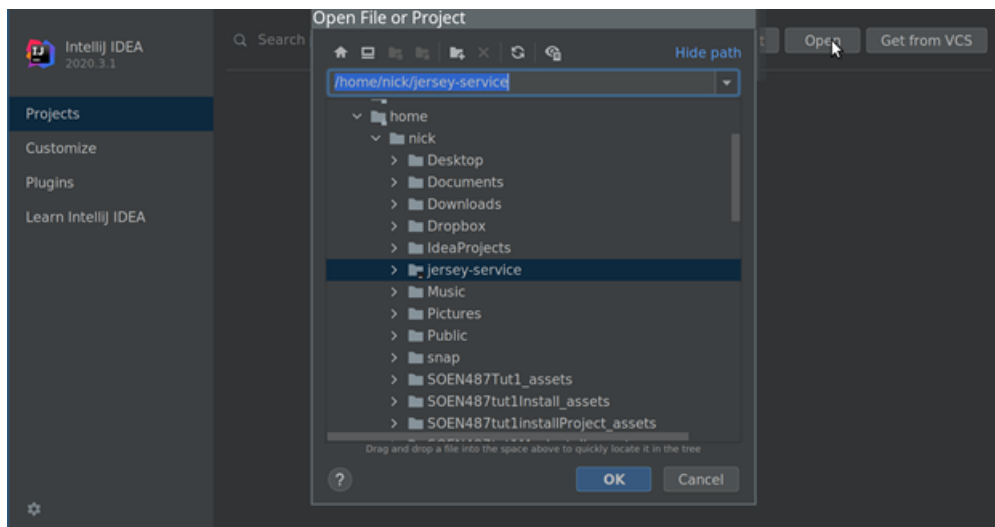
```
<dependency>
<groupId>org.apache.httpcomponents</groupId>
<artifactId>httpclient</artifactId>
<version>4.5.13</version>
</dependency>
```

2. Clone the template for the lab that your instructors made for you:

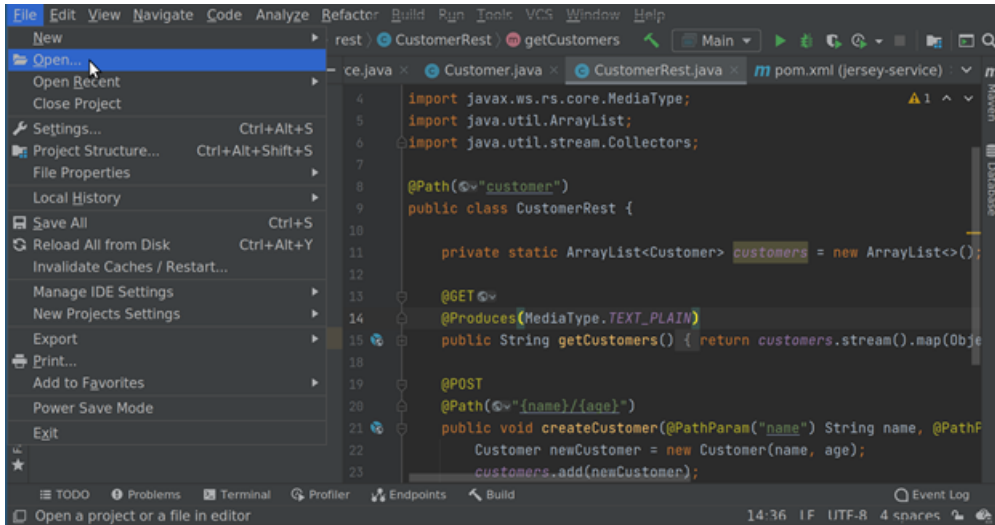
<https://github.com/SOEN487/LAB02>

## 4 Opening the Project with IntelliJ IDEA

If you don't have a project open already, you can open a new one by clicking on open on the top right of your window and then proceed to choose the location where the directory of your generated template is located.



If a project is already open, you may open a new one by navigating to the top left of your IDE, clicking on File and, subsequently on open. It will then be possible to navigate to the location of your generated web server template, to open it.



## 5 Instructions

Create a REST Client class using Apache HTTP Client that:

- Has a method that takes in a String **“title”** as a parameter and returns the String representation of the Book by calling the GET request on the API
- Has a method that takes in a **“title”**, **“author”** and **“isbn”** of type **String** and calls a PUT request to the API

## 6 Testing the Client

To demonstrate that your client works, create a main method that uses and demonstrates that your REST Client works as intended. Be creative. Once you’re ready, please notify your instructor and show your results.

## References

1. REST with Java (JAX-RS) using Jersey:

<https://www.vogella.com/tutorials/REST/article.html>

2. Apache HTTP Client:

[https://www.tutorialspoint.com/apache\\_httpclient/apache\\_httpclient\\_overview.htm](https://www.tutorialspoint.com/apache_httpclient/apache_httpclient_overview.htm)