Course Title:	Software Design Architecture
Course Number:	COE692
Semester/Year:	W2021

Instructor:	Dr. Faezeh Ensan

Assignment/Lab Number:	Lab 4
Assignment/Lab Title:	Lab 4 Part 2

Submission Date:	April 8th 2021
Due Date:	April 8th, 2021

Last Name:	First Name:	Student ID:	Section:	*Signature:
Samaroo	Anand Alexander	xxxxxx021	03	AAS

- CarFrontEnd
- CarRent
- CarSearch
  - Web Pages
  - RESTful Web Services
  - Source Packages
    - ryerson.ca.carsearch.business
      - CarSearchBusiness.java
    - ryerson.ca.carsearch.endpoint
      - ApplicationConfig.java
      - CarSearchResource.java
    - ryerson.ca.carsearch.helper
      - Car.java
      - CarsXML.java
      - Manufacturer.java
    - ryerson.ca.carsearch.persistence
      - Car_CRUD.java
  - Test Packages
  - Dependencies
  - Runtime Dependencies
  - Java Dependencies
  - Project Files

- CarFrontEnd
- CarRent
  - Web Pages
  - RESTful Web Services
  - Source Packages
    - ryerson.ca.carrent.business
      - CarRentBusiness.java
    - ryerson.ca.carrent.endpoint
      - ApplicationConfig.java
      - CarRentResource.java
    - ryerson.ca.carrent.helper
      - CarRent.java
    - ryerson.ca.carrent.persistence
      - Car_Rent_CRUD.java
  - Test Packages
  - Dependencies
  - Runtime Dependencies
  - Java Dependencies
  - Project Files
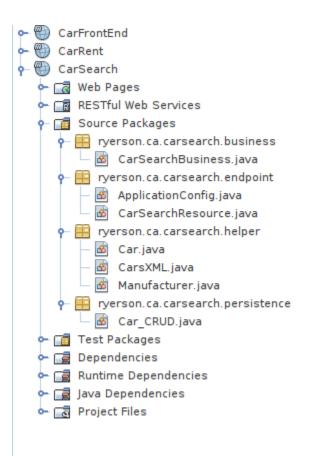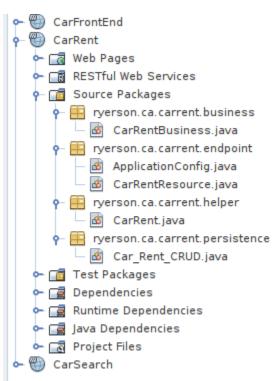- CarSearch

The CarSearch and CarRent Microservice has 4 packages: Persistence, Business, Endpoint, and Helper corresponding to the layers in layered architecture. The Endpoint package is an extra package that is responsible for handling REST API. In both microservices the CRUD classes are responsible for connecting to the database to perform queries. In the business classes the main functionalities are performed, and converted to XML syntax. CarsXML provides a basis for marshalling objects to XML.

Here is a screenshot of the output from search:

```xml
-<cars>
 -<car>
      <carid>1</carid>
      <year>2020</year>
      <model>X3</model>
      <manufacturer>BMW</manufacturer>
 </car>
</cars>
```