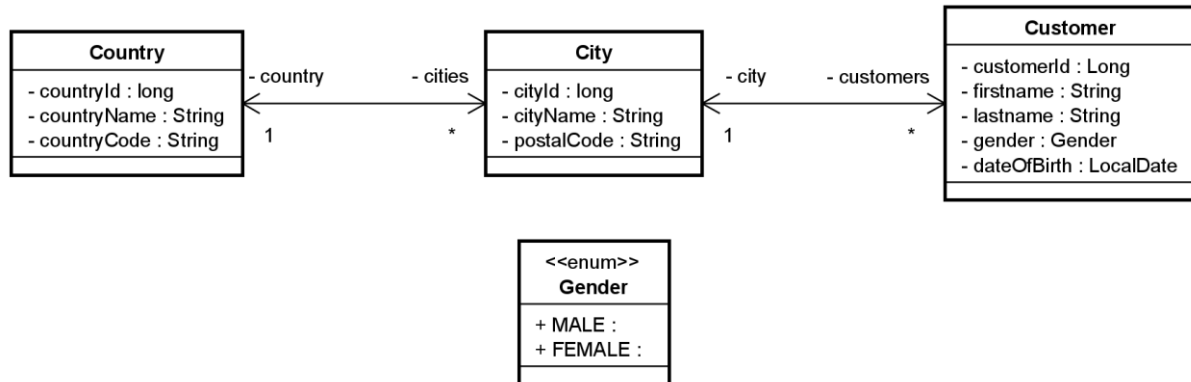# JAXB EXERCISE 2

JAXB, XML, JAXB & LOMBOK Annotations

Your task is to create a Java-Console-Application to process XML data.

The XML file contains a list of countries under the root element. For every country, there is a list of cities and for every city a list of all customers.

Create the **pojos** classes according to the class diagram and add the needed JAXB annotations. Implement the following additional classes:

xml.XML_Access.java

- Implement this class as a Singleton.
- **loadLocations()** reads all data from the **customer_data.xml** file using JAXB. Return the data as a **DataHolder** object.
- All bidirectional relationships between **Country** and **City**, and **City** and **Customer** must be established correctly.
- **saveCountry(Country country)** saves all data of one country in am XML file e.g.: **Greece.xml**.

xml.LocalDateAdapter.java

- Adapter class for the conversion of dates using JAXB.

bl.Main.java

- Console application to read and process XML data.
- Save all countries and an XML file for each country individually.

Create Streaming expressions for the countries collection to meet the following requirements:
- Search all cities of one country
- Search all customers of a defined country
- Search all customers of a defined city
- Create a method to filter the customers according to a country and / or a city
- Create a method to sort all customers according to their last name
- Search for the oldest and the youngest customers
- Search for all customers whose birthday is today
- Search the amount of all customers of a country, grouped by cities

Have fun! 😊