### Overview

-----

This program summarizes Mini-Me Toy Car Company's operation over a period of time. by extracting the summary information from the database. After extraction, the summary information is stored in a file that follows an XML format. XML tools like XSLT can be used to convert this information for the purpose of reviewing.

The program extracts the data from the database in three different categories:

- 1. Customer information consists of the customer name, address, number of orders in the period, and total order value
- 2. Product information consists of the product name, product vendor, units sold, and total value for each product line
- 3. Employee information consists of the employee name, office, their number of customers active in the period, and total order value

### **Program Input**

The program takes three inputs:

- 1. Start Date: The date after which the operations need to be summarized
- 2. End Date: The date until which the operations need to be summarized
- 3. File Name: The name of the file in which the extracted summary is needed to be stored

### Libraries Used

JAXB library is used to map Java classes to XML representations.

# Description of the classes

MiniMeToyCarCompany - The runner class that that contains the main method

YearEndSummary - describes the DTD description <!ELEMENT year\_end\_summary (year, customer\_list, product\_list) >

Year - describes the DTD description <!ELEMENT year (start\_date, end\_date) >

StaffList - describes the DTD description <!ELEMENT staff\_list (employee\*)>

```
CustomerList - describes the following DTD description
<!ELEMENT customer_list (customer*) >
Customer - describes the following DTD description
<!ELEMENT customer (customer_name, address, num_orders, order_value) >
Employee - describes the following DTD description
<!ELEMENT employee (first_name, last_name, office_city, active_customers, total_sales>
```

Address - describes the following DTD description <!ELEMENT address (street\_address, city, postal\_code, country) >

ProductList - describes the following DTD description <!ELEMENT product\_list (product\_set\*) >

ProductSet - describes the following DTD description <!ELEMENT product\_set (product\_line\_name, product\*) >

Product - describes the following DTD description <!ELEMENT product (product\_name, product\_vendor, units\_sold, total\_sales) >

DatabaseAccess - contains the methods for creating a connection as well for terminating the existing connection

## Assumptions

-----

- All the dates are in the format, "YYYY-MM-DD."

# Argument

This program is ready to deploy as the program is efficiently able to extract the information from the database and parse it for the required format. The summarized information is then stored in the XML file, that can be used to transfer the data in an efficient manner. There is no flaw in the program, and so is ready to be deployed.