

## CST8259 Web Programming Language II

### Lab 1

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#### Objective

You are to create an XML document, *restaurant\_reviews.xml* that holds structured information about restaurants.

#### Due Date

See Brightspace for the due date of this lab. To earn 5 points, you are required:

1. Complete the lab as required.
2. Submit your lab work to the Brightspace before the due date.
3. Demo your lab work during the lab session in the week after the due date

#### Requirements

XML specification gives you a great flexibility on designing the structure of your XML documentation. It is this flexibility that makes the good XML structure hard to achieve. The general guidelines to follow for a good XML structure are:

1. Identify the underline data from the presentation. Often, the business cases are written by the business analysts using business language, using different words/phrases to represent the same underlying data. The important tasks are identifying these data items
2. Each data item must have an unambiguous meaning. You are anonymous to the consumer (either application developers or computer applications) of your XML documents. They must be able to use your XML documents without contact you for clarification.
3. XML documents can be considered as a DB designed for transmission over the network. The principles you learnt for DB design applies to XML as well as.

**Scenario:** Imagine that you are employed as a developer by a company that collects information and reviews of restaurants. The XML documents you created are distributed to travel web sites, such as **tripadvisor.com**, **priceline.com** and **travelocity.com** for them to extract the data and presents on their website.

**Your task** is to design an XML document that will hold information for all reviewed restaurants in such a way that useful information can be extracted easily and

unambiguously by an XML parser in the future. For example, in the future, it may be required to do the following (but not limited to):

- List all the restaurants in review,
- List the restaurants by location, such as, area code, postal code, city, etc.
- Find the restaurant with the highest rating or above certain rating,
- List the menu items of the restaurants, and so on...

You should structure the document with elements thoroughly enough that any reasonable future query for data by a parser can be satisfied.

The remaining labs (lab 2 – 8) in this course will be about extracting/updating data items of this XML document. The efforts you put in now to make this XML document easier to work with will save you tremendous amount of time and efforts in the later labs. Or, you may have to spend more time to re-structure this XML in future.

Here are the examples of the data from three restaurants as they appear in a descriptive text document that you are given:

Restaurant 1:

**Restaurant:** Giovanni's Italia Fine Dinning  
**website:** www.gioviannis.com  
**Logo:** 200\*200 pixels, www.gioviannis.com/img/logo.gif  
**Address:** 2100 Lakeview Road, Toronto, Ontario, K1K 1K1  
**Phone:** 416-123-4567  
**Rating:** \*\*\*\* (out of 5 stars)  
**Food:** Italian  
**Price:** \$\$\$\$ (\$ - least expensive, \$\$\$\$ - Most Expensive)  
**Date:** January 10, 2020  
**Reviewer:** Hunter S. Thompson

### Summary:

Giovanni's Italia Fine Dinning is a completely restored Victorian stone house and offers a warm and elegant atmosphere and gracious service.

### Appetizers:

Crab cakes  
With a creamy dill sauce served with crispy herbed fries.  
\$23.

Garden vegetable soup with chocolate sauce. \$15.

Calamari Fritta

Tender rings of squid, dusted in flour and lightly fried, served with sun-dried tomato aioli  
\$12.50

Charcuterie Board  
Selection of cheeses and cured meats served with a variety of breads and crostinis  
\$20.00

### Entrees:

House Specialty  
Pan seared chicken supreme with a sun-dried tomato pistachio pesto cream sauce, served with roasted potatoes and seasonal vegetables.  
\$28

Braised jumbo sea scallops on a sun-dried roast tomato base. \$39.  
Free-range chicken breast stuffed with morels in a brandy sauce. \$31.

Eggplant Pamigiana  
Fresh eggplant, thinly sliced and breaded, topped with tomato sauce and mozzarella cheese, baked golden brown. Served with linguine in tomato sauce.  
\$30

Roast pork loin on a bed of garlic ginger apple slaw. \$34.

### Restaurant 2:

**Restaurant:** Gong's Asian Cuisine  
**Url:** [www.asiancuisine.com](http://www.asiancuisine.com)  
**Logo:** 250\*250 pixels, [www.asiancuisine.com/resouce/images/cuisine.jpg](http://www.asiancuisine.com/resouce/images/cuisine.jpg)  
**Address:** 1385 Woodroffe Avenue, Ottawa, Ontario K2G 1V8  
**Phone:** 613-727-4723  
**Price:** Low  
**Food:** Asian  
**Rating:** 5 out of 5  
**Date:** December 3, 2020  
**Reviewer:** Brenda P. Smith

### Summary:

The food is always consistent. A good variety of dim sum, sushi, Chinese and even Vietnamese dishes. The service is quick and the food is plentiful. We sat down last night and within seconds of turning in our first order, the plates were on the table! The teriyaki dishes had the right amount of sauce and weren't sickeningly sweet. The chicken, fish, and beef were perfectly cooked. The maki-rolls were neatly rolled, cut properly and seasoned well. Loved the General Tao

chicken, the steamed BBQ pork buns, the eel sushi and the lovely eggplant. We will be going back again! I would highly recommend it.

### **Appetizers:**

Egg Roll (12) 15.00 Each 1.50  
Spring Roll (12) 20.00 Each 1.90  
Shrimp Chips 2.50  
Fried Noodles 1.00  
Sweet & Sour Fried Wonton Skin (12) 3.50

### **Entrees:**

Scallops with Vegetables 14.95  
Sweet and Sour Fish Cantonese Style 13.95  
Shrimps with Vegetables 12.95  
Beef with Mushroom 12.25  
Beef with Tomato 10.25  
Beef with Broccoli 9.25

### **Restaurant 3:**

**Restaurant:** Baker Street TexMex Grill

**Url:** [www.texmaxgrill.com](http://www.texmaxgrill.com)

**Logo:** 150\*150 pixels, [www.texmex.com/images/texmex.jpg](http://www.texmex.com/images/texmex.jpg)

**Address:** 200 Baker Street, Ottawa, Ontario, B1G 1V1

**Phone:** 613-333-4444

**Price:** Moderate

**Rating:** 3/5

**Food:** Mexican

**Date:** January 3, 2021

**Reviewer:** Peter Jones

### **Summary:**

My favorite restaurant in Ottawa. The family who owns it are very warm and lovely people. They are incredible at recognizing you when you come back. The burritos are super good. You can customize however you want (guac is included!). I especially love that there is cactus in the veggie mix; it is a small, special thing that sets this place apart from other Mexican spots downtown.

### **Appetizers:**

Chips and Pico De Gallo, Gluten friendly, vegan, vegetarian. \$7.75  
Chips and Black Beans and Cheese. \$8.75

Sopa de Tortilla, Tomato-based soup topped with homemade tortilla strips, sour cream, cheese, and avocado. \$6.75

Consome de Pollo, Chicken broth with rice, chickpeas, carrots, peas, and shredded chicken, served with cilantro, onion, avocado, and lime. \$9.75

### **Entrees:**

#### **Burrito**

Ten-inch flour tortilla filled with black beans, rice, lettuce, cheese, pico de gallo, guacamole, and choice of protein.

\$10.50

#### **Burrito Combo**

Ten-inch flour tortilla filled with black beans, rice, lettuce, cheese, pico de gallo, guacamole, and choice of protein.

\$13.50

#### **Burrito Roja**

Ten-inch flour tortilla filled with Mexican rice, black beans, guacamole, and choice of protein. Bathed in Chilaquile's homemade salsa roja.

\$16.50

#### **Enchiladas (3 pcs)**

Gluten friendly. Lightly sauteed corn tortillas, choice of filling, covered in Chilaquile's homemade salsa verde or salsa roja, topped with onions,

\$18.50

#### **Enchiladas de Mole (3 pcs)**

Gluten friendly. Lightly sauteed corn tortillas, choice of filling, covered in mole sauce, topped with onions, sour cream, and crumbled cheese.

\$20.50