

# **COMP4382: Special Topics, Web Services Technology**

### 2nd Semester 2015/2016

#### **Assignment 2**

## Due March 31st, 2016 before midnight

Assume that you are designing a Web service (e.g., to be used in a console, Web, or Mobile Application) through which a user can retrieve the list of his friends in a social network and their location information. As a *Web service provider* you first step was to develop the data model for your project and do some parsing tasks. Now, you need to define a java class for each concept in your model (e.g., User.java corresponds to a social network user/profile). Finally, you need to implement a backend *service* (e.g., UserDataService.java) that provides *operations* (e.g., retrieveListOfFriends(ID), showFriendLocation(ID1,ID2)) that a Web service consumer can invoke on your service.

In this assignment you are asked to:

**Part I:** implement the data classes for each of the following:

- 1. Users profile information (use can your XML/JSON files as a guide).
- 2. Users friendship information, i.e., the list of friends (hint: each user is identified by and ID).
- 3. Each friends location information (both GPS\* location and addresses) as follows:

name	ID	location	address
Nariman Ammar	0	47,-122	4500 Cass Avenue, Detroit MI 48202
Alice Bob	1	42.3,-83.2	6320 Asbury Park, Detroit, MI 48228

**Part 2:** implement a service with operations to retrieve information from the social network. For example:

```
... retrieveListOfFriends(int ID){...}
... showFriendLocation(int ID1,int ID2){...}
```

\* for now lets keep the location information abstract. Later, we will make service calls to GoogleMaps API/service

#### **Deliverables:**

A project that includes the data classes as well as the service classes. Submissions for assignments are INDIVIDUAL work.

Submissions should be made through github by creating a github account, creating a private repository, uploading projects to the repository, and adding the instructor as collaborator.

Note: instructor's github account is (nammar)

Happy coding!