# University of Washington Bothell CSS 490: Cloud Computing

Program 2: REST

#### **Purpose**

The programmable Web or cloud communicates via web services which expose RESTful APIs. In this assignment you will build a client app which consumes a RESTful API. Generally when using the Cloud you will use SDKs that abstract away the details. However, in this case will go bare bones HTTP to GET from the web. The lab will also force you to work with de-serialization of either JSON or XML. We will go through this in detail in class.

#### **Problem Statement**

Create an application which can run on Windows or Linux which takes as input the name of a city and provides information about the weather for that city.

#### **Problem Statement Details**

- You must consume a RESTful API to get this information.
- I am more interested in the functionality of the program then the client side appearance. That is, if would be great if the program looked good but I am more interested in having the app provide useful information to the user
- I am intentionally not specifying what information is displayed back to the user, however a useful app is required
- The OpenWeatherMap is a great free website which allows one to get this information. I would recommend using this. http://openweathermap.org/api
  - You'll need to signup to get appid for authorization
  - Note that temperatures are returned in Kelvin and you'll have to do some conversion
- You may build you app either with C#/.Net, or Java.
- Please make sure to factor your application appropriately and following coding guidelines for the language of your choice

### **Problem Statement Clarifications**

The problem statement leaves lots of room for interpretation. This is by design. Feel free to ask questions in class or at office hours. Have fun!

## Turn In

A .**zip file** which the module named:

- A 1-2 page document describing your application, design, and usage
- Executable of application
- All code and clear instructions or Makefile on how to build the application