**Name: Kush Raina**

**ID: 1001567809**

**Summary:**

This program is implementation of National Weather Service website[ http://w1.weather.gov/xml/current\_obs/ ] where users can get the weather information by selecting the state and then particular location of which the user wants weather report. In this project , the program will take latitude and longitude of the particular location for which the user will be fetching the data from the <http://w1.weather.gov/xml/current_obs/> URL using http request connection by entering the latitude and longitude of the entered user location.

The weather information is being collected from the above website. The weather details can be checked from the webpage when user navigates to the weather website and select the state of where you want to validate the information and then select the city which you want to validate the weather information.

Requirements: Java installed on the system and Eclipse.

Internet connected to the system where the program is being executed.

**Instructions:**

1. Import java project attached in the zip file in Eclipse.
2. Once you import the project in eclipse you will be able to see one package in the project.

The package will have one java file

* currentWeatherReport

1. Run the currentWeatherReport java file and a gui window will be opened .The gui window will have a latitude and longitude field where user has to enter the latitude and longitude field .

The gui will also have a submit button so when user enters the latitude and longitude values he can get the current weather conditions by clicking on the submit button.

1. Below text area will display the current weather conditions whatever are available at present time on the website. If some information is not present on the website, then it will display that there is no information on the website.
2. The gui will also have a refresh button where the user can request for the current weather conditions by clicking on the refresh button and users will get the current weather conditions.

NOTE: In this application I am collecting dewpoint temperature, wind speed and direction , temperature and visibility.

If any one value is not present for that field it will display that particular information not present.

I have referenced my code from below given URL’s:

1. https://www.youtube.com/watch?v=F3hWv6PimB8
2. <https://www.mkyong.com/java/how-to-read-xml-file-in-java-dom-parser/>
3. https://stackoverflow.com/questions/11087163/how-to-get-url-html-contents-to-string-in-java