**Instruction For Running The Application**

**Steven Quach**

1. **How to setup and run app:**

* Set up Jdk 1.5 at least and add class path (if the machine does not have one).
* Then please open command prompt (if using windows and Shell Script if Linux) and compile and run as the example below:

**D:\GitHub\date\_difference\src\basic>javac DateDifferenceTest.java**

**D:\GitHub\date\_difference\src\basic>java DateDifferenceTest**

* The output data files can be found in the source code package.

1. **My approach method is as follow:**

* Taking a pair of date (date1 and date2) from the data file.
* The application is designed to calculate total days from date1 (named totalDays1) and total days from date2(named totalDays2)
* The difference would be todayDays2 – totalDays1.
* For example: if user input 28/02/2009 and 05/03/2009.
  + The totalDays1 would be 733466 days .
  + And totalDays2 would be 733471 days.
  + Then the difference would be 733466-733471 = 5 (days).
* Besides, some special cases such as leap years, leap months will be considered.

1. **Test Data to exercise the application:**

This package includes 4 sets of test data:

* DateInput.txt contains all of valid data, adequate for user to run without any errors.
* DateInputForTestCase.txt contains date within leap years.
* DateInputForTestCase1.txt contains date out of range from 1990 and 2010 date which can generate invalid input format errors
* DateInputForTestCase2.txt contains invalid date order, which means date2 later than date1, then generating invalid input format errors.

1. **Link to GitHub repository:** [**https://github.com/quachvu/date\_difference**](https://github.com/quachvu/date_difference)