

MCS 360 Project One : processing a csv file due Wednesday 15 September at noon

The goal of this project is to process a comma separated file with a C++ program.

We will use the file `2009_torn.csv`, downloaded from NOAA's National Weather Service, at <http://www.spc.noaa.gov/wcm/#data>. This file is a comma separated file with data for each tornado that happened in the US in 2009. Each line represents one tornado: the 8-th field is the state and the 11-th field is the magnitude of the tornado.

When and in which state did the strongest tornado happen? We get the answer running our program (called `tornadoes`) at the command prompt `$`:

```
$ tornadoes
Give name of input file : 2009_torn.csv
Counted 1182 tornadoes,
the tornado of maximal magnitude 4 occurred in TX.
$
```

Some important points:

1. You may develop your solution with any C++ compiler, but your solution will be tested with the `g++` compiler. It is recommend that before submission, you check your program on a computer in lab SEL 2263 on campus.
2. Every function in your program must have a prototype with appropriate documentation. In particular, the documentation describes the purpose of every parameter.
3. Submit only one `.cpp` file. It is not needed to place functions in separate files.
4. Handing in an incomplete but working program is better than handing in a program that crashes or does not run at all.
5. The first line of your C++ program must be

```
// MCS 360 Project One by <Author>
```

where you replace the `<Author>` by your name.

6. Collaborations are not allowed. You must solve the project on your own.
7. Email your solution to the project to jan@math.uic.edu before noon on Wednesday 15 September so the date of the email is proof of an on time submission. As a backup, bring also a printed version of your solution to class.

If you have questions or difficulties with the project, feel free to come to my office for help.