

# Lab07 - Mission Impossible 161

Due: Fri Feb 20, 2015

This lab focuses on:

- Chapter 12 Exceptions
- Chapter 12 Binary files

**First step** - Copy the files from my k: drive, including code hints in `Lab07Helper.java`.

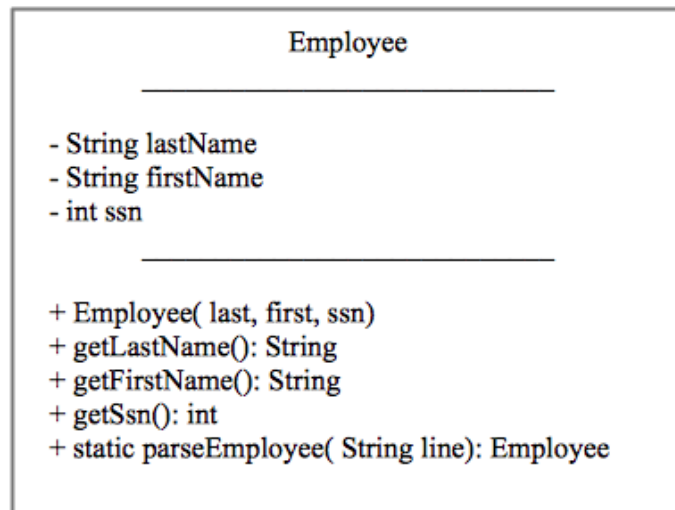
## Monday - Employees

I hacked human resources at North Central last week. A copy of their employee list is in the file: `noctrl_employees.csv`. Here are the first three lines of that file:

```
Last,First,SSN
Aaron,Armand,329397693
Abeyta,Madeleine,502864444
...
```

The file format is: 1) comma-separated values (CSV), 2) the first line is a header line, and 3) the remaining lines have values for the 3 employee fields.

Write an `Employee` class. Here's the UML:



In your `main()`, read the employee file I have supplied and create a list of employees. The dangerous part of your mission begins on the next page.

Oops. One last thing with your `Employee` class... let's wedge an exception in here. You can look at pages 758-760 for help on this.

- Create a class `SsnOutOfRange` is-a `Exception`. Add an error message to the ctor.
- Throw `SsnOutOfRange` in `parseEmployee()`.
- Catch it in your `main()`, I guess. When you catch it, just print it and exit.

Each SSN must have 9 digits. So a valid SSN must be in the range of:

```
/** SSN must have 9 digits, this is the min acceptable value. */
private static final int MIN_SSN = 100000000;
/** SSN must have 9 digits, this is the max acceptable value. */
private static final int MAX_SSN = 999999999;
```

### Wed - Sort

Your mission, should you choose to accept it, is... there's another **EXTREMELY IMPORTANT** file on the k: drive. It's the legendary NOC List from Mission Impossible. (Thank you, Ethan Hunt!)

```
noc_list.txt
```

The NOC List is a **binary file** of integers. Each integer is the Social Security Number (SSN) of a CIA mole inside North Central College (gasp!).

Pages 764-766 of our text show how to read integers from a binary file. You'll use classes like: `FileInputStream` and `DataInputStream` to read these important numbers.

For each SSN, check to see if it matches the SSN of an employee in our `Noctrl employees` file. If you find a match print out the employee info. You may have uncovered a possible subversive element to, not just our loyal school, but the **WHOLE FREE WORLD!**

As soon as you have saved the world, print out your list of moles and show it to me. We need to scan the list for familiar names. See anyone suspicious?

This lab will self-destruct in 5 seconds.  
Good luck.

