TCC CSCI 2843

Assignment 5

Description

1) For this assignment, fill out the following class:

```
class employee {
private:
    std::string first_name;
    std::string last_name;
    float monthly_pay;
public:
    . . .
};
```

You should provide any and all required constructors, access functions, and the **operator**<<.

2) Write a main function that opens a std::ifstream on the input file, "employee.dat" and a std::ofstream on an output file, "update.dat". If either stream cannot be opened, throw an exception and exit (hopefully with a useful diagnostic message).

The file format is **line-oriented** and **comma-delimited** in the following format:

last_name comma first_name comma monthly_pay newline

4) Write a loop that, for each line in the file, reads from the std::ifstream and creates an employee object (i.e. first name, last name, and pay). On detecting end-of-file, exit the loop and end the program. If there is an error reading the information, throw an exception and exit the program. For each employee read, increment their monthly_pay by $50.00 (everybody gets a raise).

5) While in the loop, after they get their raise, output each employee to std::cout and to the output file using the **operator**<<.

Use the given file, employee.dat, for example input, but you should try some exceptional cases to make sure your code can detect and properly handle them.

6) For **all** exceptions, make sure an error message detailing the cause of the exception is printed to the console before exiting the program. Any further information (i.e. file and line number of exception) is purely optional.