

Project 5: Payroll (Part 2)

CS 1410

Background

Look at the spec in Part 1 for background information.

Requirements

Implement your design From Part 1, including the five module-level functions used in the **main** function above by the final due date.

After running your program, compare the entry in *paylog.txt* to *paylog1.txt* that was copied earlier in **main**, and verify that the pay amount and method have been changed appropriately for the three employees mentioned. Submit your *payroll.py* and the *paylog* output files.

Implementation Notes

Every time **run_payroll** executes, first delete the previous *payroll.txt* file, if it exists. Here is **run_payroll** (you can just use it):

```
def run_payroll():
    if os.path.exists(pay_logfile): # pay_log_file is a global variable holding 'payroll.txt'
        os.remove(pay_logfile)
    for emp in employees:           # employees is the global list of Employee objects
        emp.issue_payment()         # issue_payment calls a method in the classification
                                    # object to compute the pay, which in turn invokes
                                    # the pay method.
```

Every time you issue the payment for an Hourly or Commissioned employee, clear their timecard or receipt lists, respectively, so these entries won't be used again for the next pay period.

Here is a reasonable development sequence:

1. Write **load_employees**. It opens *employees.csv*, ignores the first line, and then reads a line at a time, splitting its arguments. Create a new Employee object initialized with the string attributes. Then create the appropriate instances for the employee's classification and payment method and bind them to the new Employee object. Finally, add the Employee object to your global list of employees.
2. Write **find_employee_by_id** by searching the list of employees and returning the Employee object.
3. Implement **Employee**
4. Implement the **Classification** Hierarchy
5. Implement **process_timecards**
6. Implement **process_receipts**
7. Implement the **PayMethod** hierarchy