**Project Description**

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You will build a stand-alone GUI application, written in Java, for a system to allow managers to enter hours worked for employees and generate various reports. Employees can also enter their own hours. You will use an agile based approach where you build the system based on the prioritized user stories that you have been provided (*user\_stories\_ps\_team\_X*). Some details are provided there in the *Notes* column and others are below.

This is essentially a payroll system that for the sake of your project can work for a year (though you do not need to test it that far). It works on a weekly basis. The idea is that hours are recorded for one week, Monday-Sunday, for each employee. Then, the system is “rolled” to the next week which means the previous week is archived and a new week is started. Dates are not important, you can just call them week 1, week 2, *etc.* Archiving a week simply means that the previous weeks data is available for view, but not for additions or changes.

There are two types of employees: Staff and Manager. All employees have a first and last name, user name, password, department, pay rate ($/hr), tax rate (%), PTO (personal time off) days, and a 4-digit id which uniquely identifies them. Staff are eligible for overtime pay while Managers are not; however, all time worked is recorded. For Staff, any hours over 40 hours during the work week (Monday-Friday) are paid at time-and-a-half. Any hours worked during the weekend (Saturday-Sunday) are always paid at time-and-a-half. Consider a Staff employee whose payrate is $1/hr. Here are several scenarios (probably not all of them):

|  |  |  |  |
| --- | --- | --- | --- |
| Hours | |  |  |
| Work Week | Weekend | Work Week Pay | Weekend Pay |
| 44 | 2 | 40\*$1 + 4\*$1.5 | 2\*$1.5 |
| 36 | 8 | 36\*$1 | 8\*$1.5 |

In addition, PTO hours can not be used for overtime pay during the work week. For this project, we will assume that PTO is always taken as 8 hrs. in a single day during the work week. For example, suppose the Staff (payrate is $1/hr) works:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| M | Tu | W | Th | F | Sa | Su |
| 10 | 10 | 10 | 10 | 8-PTO | 0 | 0 |

Then, they are paid: 48\*$1.

As another example:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| M | Tu | W | Th | F | Sa | Su |
| 15 | 15 | 15 | 8-PTO | 8-PTO | 0 | 0 |

Then, they are paid: (a) M-W: 40\*$1 + $5\*$1.5 + (b) Th-F: 16\*$1

Employees begin the year (week 1) with a certain number of PTO hours and these can never be negative nor can they be increased during the year.

Managers are always paid for 40 hours no matter how many hours they actually work.