

Payroll System Problem Statement

Our task is the creation of a new payroll system. The old system is outdated and no longer adequately manages the payroll process and the entry of employee time card information. Therefore, manual intervention is required to process the payroll. In addition to the preexisting category of salaried employee, which the current payroll process does support, our organization now accommodates two new types of employees: those employees working on commission, and those employees working on an hourly basis. The current payroll process doesn't support these two new employee types, which are described in detail later in this problem statement.

In addition to accommodating all employee types, as well as ensuring that our system can accommodate newly created categories of employees in the future, the system must also allow each of these employees to enter his or her time information via a corporate intranet using a standard Web browser. Because employees can manage only their individual time card information, a user ID and password is required of each employee prior to gaining access to this section of the corporate intranet. The payroll process can process only "signed" time cards, which are those time cards that the employee has identified as accurate.

Overall, the system will store information about the approximately 2,000 company employees. This data will be stored in the Oracle payroll database. The payroll process must run on the fifteenth and last day of each month at 12:00 a.m. All paychecks must be accurately calculated and deposited into one or more bank accounts of the employees' choosing. Employees also should be able to change personal information, such as names, addresses, and passwords. Eventually, the system must enable employees to maintain their direct deposit information via the system as well. However, this feature is beyond the scope of the initial release.

A human resources representative must be able to initiate the payroll process on demand based on a selected list of employees. When doing so, the system should cycle through the list of selected employees, running payroll only for those employees. This process typically will be done by a human resources representative during normal business hours.

As stated earlier, our system must be able to track information and calculate salaries for the following three types of employees:

1. **Salaried:** These employees are paid a flat salary. However, they're still required to submit time cards that include the dates worked and the number of hours worked on those dates.
2. **Hourly:** These employees are paid based on their hourly rate. Employees working more than a standard 40-hour work week are paid 1.5 times their hourly rate.
3. **Commission:** These employees are paid a commission based on their total sales. The commission rates for commissioned employees are 10, 20, or 25 percent. In addition to the percentage rate, these employees also may receive a base salary.

The system also must allow employees to query the system. Standard queries will include the ability to view number of hours worked for a selected pay period and remaining and used vacation time.

All employee information is maintained by a human resources administrator. The administrator must be able to initiate a payroll process in a fashion similar to that of the human resources representative. In addition, the administrator also will be able to add new employees, remove employees, and change personal information about employees, including an employee's category type and an employee's password. The administrator will have additional reporting capabilities beyond that of an employee, which include various administrative reports yet to be identified.