Cahier des charges

Employee payroll management : EPM

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Historique

Auteur	Remarques	Date	n° version
Gianni Tricarico	*Première version du cahier des charges*	30/09/2019	0.1

Auteurs

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Historique

Contenu

1 Exigences spécifiques

1.1 Spécifications

This system consists of a database of the company's employees, and their associated data, such as time cards. The system must pay all employees the correct amount, on time, by the method that they specify. Also, various deductions must be taken from their pay.

- Some employees work by the hour. They are paid an hourly rate that is one of the fields in their employee record. They submit daily time cards that record the date and the number of hours worked. If they work more than 8 hours per day, they are paid 1.5 times their normal rate for those extra hours. They are paid every Friday.

- Some employees are paid a flat salary. They are paid on the last working day of the month. Their monthly salary is one of the fields in their employee record.

- Some of the salaried employees are also paid a commission based on their sales. They submit sales receipts that record the date and the amount of the sale. Their commission rate is a field in their employee record. They are paid every other Friday.

- Employees can select their method of payment. They may have their paychecks mailed to the postal address of their choice, have their paychecks held for pickup by the paymaster, or request that their paychecks be directly deposited into the bank account of their choice.

- The payroll application will run once each working day and pay the appropriate employees on that day. The system will be told what date the employees are to be paid to, so it will generate payments for records from the last time the employee was paid up to the specified date.

1.2 Cas d'utilisation (use case)

Use Case 1: Add New Employee

A new employee is added by the receipt of an *AddEmp* transaction. This transaction contains the employee's name, address, and assigned employee number. The transaction has three forms:

1) AddEmp <EmpID> "<name>" "<address>" <hrly-rate>
2) AddEmp <EmpID> "<name>" "<address>" <mtly-slry>
3) AddEmp <EmpID> "<name>" "<address>" <mtly-slry> <com-rate>

The employee record is created with its fields assigned appropriately.

Alternative 1: An error in the transaction structure

If the transaction structure is inappropriate, it is printed out in an error message, and no action is taken.

Use Case 2: Deleting an Employee

Employees are deleted when a *DelEmp* transaction is received. The form of this transaction is as follows:

DelEmp <EmpID>

When this transaction is received, the appropriate employee record is deleted.

Alternative 1: Invalid or unknown *EmpID*

If the *<EmpID>* field is not structured correctly or does not refer to a valid employee record, the transaction is printed with an error message, and no other action is taken.

Use Case 3: Post a Time Card

On receipt of a *TimeCard* transaction, the system will create a time card record and associate it with the appropriate employee record.

TimeCard <empid> <date> <hours>

Alternative 1: The selected employee is not hourly

The system will print an appropriate error message and take no further action.

Alternative 2: An error in the transaction structure

The system will print an appropriate error message and take no further action.

Use Case 4: Post a Sales Receipt

On receipt of the SalesReceipt TRansaction, the system will create a new salesreceipt

record and associate it with the appropriate commissioned employee.

SalesReceipt <EmpID> <date> <amount>

Alternative 1: The selected employee not commissioned

The system will print an appropriate error message and take no further action.

Alternative 2: An error in the transaction structure

The system will print an appropriate error message and take no further action.

Use Case 5: Changing Employee Details

Upon receipt of this transaction, the system will alter one of the details of the appropriate employee record. There are several possible variations to this transaction.

`ChgEmp <EmpID> Name <name>`	Change employee name
`ChgEmp <EmpID> Address <address>`	Change employee address
`ChgEmp <EmpID> Hourly <hourlyRate>`	Change to hourly
`ChgEmp <EmpID> Salaried <salary>`	Change to salaried
`ChgEmp <EmpID> Commissioned <salary> <rate>`	Change to commissioned
`ChgEmp <EmpID> Direct <bank> <account>`	Direct deposit
`ChgEmp <EmpID> Mail <address>`	Mail paycheck

Alternative 1: Transaction errors

If the structure of the transaction is improper, <EmpID> does not refer to a real employee, or <memberID> already refers to a member, the system will print a suitable error and take no further action.

Use Case 6: Run the Payroll for Today

On receipt of the payday transaction, the system finds all those employees that should be paid on the specified date. The system then determines how much they are owed and pays them according to their selected payment method. An audit-trail report is printed showing the action taken for each employee.

Payday <date>