JIRA USER STORY: Salary Calculation Module (Business Logic Implementation)

Issue Type: User Story
Priority: High

Story Title: Implement Salary Calculation Engine with Company Payroll Business Rules

User Story

As a **Payroll System**,
I want to **calculate employee salary based on company-defined payroll rules and formulas**,
so that the system generates the correct **Net Salary** for each employee type.

Description

The system must calculate salary for employees based on their role type (Developer / Manager / Intern) and apply company payroll rules.
Salary calculation must include gross salary computation, attendance-based deductions, performance bonus, PF deduction, and tax calculation.

The salary calculation must be implemented using **OOP concepts**, where salary calculation logic differs for different employee types.

Business Rules / Salary Calculation Logic

Step 1: Gross Salary Calculation (Role Based)

Developer

- Gross Salary depends on base salary and overtime hours.

Formula:
`GrossSalary = BaseSalary + (OvertimeHours * 500)`

Manager

- Gross Salary depends on base salary and team size allowance.

Formula:
`GrossSalary = BaseSalary + (TeamSize * 1000)`

Intern

- Gross Salary depends on attendance percentage.

Formula:
`AttendancePercent = (AttendanceDays / 30) * 100`

If AttendancePercent < 70%
`GrossSalary = BaseSalary - (BaseSalary * 0.20)`
Else
`GrossSalary = BaseSalary`

Step 2: Attendance Deduction (Common for All Employees)

Attendance deduction is calculated based on absent days.

Formula:

- `DailySalary = BaseSalary / 30`
- `AbsentDays = 30 - AttendanceDays`
- `AttendanceDeduction = AbsentDays * DailySalary`

Step 3: Performance Bonus Calculation

Bonus is based on performance rating (1 to 5).

Bonus rules:

- Rating 5 ⟶ 20%
- Rating 4 ⟶ 15%
- Rating 3 ⟶ 10%

- Rating 2 ⟶ 5%
- Rating 1 ⟶ 0%

Formula:
`Bonus = GrossSalary * BonusPercent`

Step 4: PF Deduction (Company Fixed Rule)

PF is a fixed percentage of base salary.

Formula:
`PF = BaseSalary * 0.12`

This PF percentage must be implemented using `static final`.

Step 5: Tax Calculation (Slab Based)

Tax must be calculated on taxable income:

Formula:
`TaxableIncome = GrossSalary + Bonus`

Tax slabs:

- <= 50000 ⟶ 5%
- 50001–100000 ⟶ 10%
- 100001–150000 ⟶ 15%
- 150000 ⟶ 20%

Formula:
`Tax = TaxableIncome * TaxRate`

Step 6: Net Salary Calculation (Final Formula)

Final salary must be calculated using:

Formula:
`NetSalary = GrossSalary + Bonus - Tax - PF - AttendanceDeduction`

Acceptance Criteria

- System must calculate Gross Salary based on employee type.
- System must apply attendance deduction for all employees.
- System must calculate bonus based on performance rating.
- System must calculate PF based on fixed company rule.

- System must calculate tax using salary slabs.
- System must generate Net Salary using the final payroll formula.
- Salary calculation must be implemented using OOP principles:
    - Inheritance for employee types
    - Polymorphism using method overriding
    - Abstraction using abstract class or interface
- Static and final keywords must be used for fixed payroll constants.

Definition of Done (DoD)

- Salary calculation logic works correctly for all employee types.
- All formulas are implemented exactly as per requirement.
- Output should display salary breakdown clearly in console.
- Code follows OOP structure and is modular.