## Case Study # 02: Batch Payroll Application

**Functional Requirements:**

| **No.** | **Requirement Name** | **Description** |
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| 1 | **Employee Information Management** | The system shall store and manage employee details such as ID, name, address, salary type, and payment method. |
| 2 | **Timecard Submission** | Hourly employees shall be able to submit daily timecards including the date and hours worked. |
| 3 | **Overtime Calculation** | The system shall calculate overtime (more than 8 hours/day) at 1.5 times the regular rate. |
| 4 | **Sales Receipt Entry** | Commission-based employees shall submit sales receipts including date and sale amount for commission calculation. |
| 5 | **Payroll Calculation** | The system shall calculate gross pay, deductions, and net pay for all employee types. |
| 6 | **Union Deductions Management** | The system shall automatically deduct weekly union dues and additional service charges from member pay. |
| 7 | **Payment Scheduling** | The system shall process payments according to schedule (hourly: every Friday, salaried: last day of month, commission: every other Friday). |
| 8 | **Payment Method Handling** | The system shall support multiple payment methods — paycheck by mail, pickup, or direct bank deposit. |
| 9 | **Pay Slip Generation** | The system shall generate detailed pay slips for each employee payment. |
| 10 | **Payroll Reporting and Logging** | The system shall generate payroll reports and maintain logs for auditing and historical records. |

**Non-Functional Requirements:**

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| 1 | **Data Security** | The system must secure sensitive data (salary, bank info) through encryption and restrict access to authorized users only. |
| 2 | **Performance Efficiency** | The system should process payroll operations quickly and handle multiple transactions without delay. |
| 3 | **Reliability and Accuracy** | The system must ensure accurate pay computation and handle missing or incorrect data gracefully. |
| 4 | **Usability** | The user interface should be simple, clear, and easy for HR and payroll staff to use. |
| 5 | **Backup and Recovery** | The system shall automatically back up payroll data daily and allow data recovery in case of failure. |