

# UML DIAGRAM ARCHITECT

**Context:** iHRM (Intelligent Human Resource Management) at FPT Corporation

## 1 Task: Design all UML diagram types shown in the image

### Structural Diagrams

#### 1. Use Case Diagram

- Illustrate main functions and system users.
- Actors: Employees, Department Managers, HR staff, Directors.
- Use cases: View payslip, Request leave, Evaluate employee performance, Post job listings, etc.

#### 2. Class Diagram

- Define key classes such as Employee, Department, LeaveRequest, Salary, Contract, Attendance, etc.
- Include attributes, methods, and relationships (inheritance, aggregation, composition, etc.).

#### 3. Composite Structure Diagram

- Describe internal structure of classes. For example: a Department contains multiple Employees, or the HRSystem consists of multiple modules.

#### 4. Component Diagram

- Model the system components such as: Recruitment Module, Attendance Module, Payroll Module, and how they interact.

#### 5. Deployment Diagram

- Describe system deployment: on-premise server, cloud infrastructure, web/mobile apps, database servers, etc.

#### 6. Activity Diagram

- Show workflows such as: "Leave Request Approval", "Recruitment Process", etc.

## 7. State Machine Diagram

- Model object state changes, e.g., LeaveRequest: Created → In Review → Approved or Rejected.

## 8. Sequence Diagram

- Show time-based interaction between objects. For example: the process of "Calculating Monthly Salary" from attendance records → calculations → generating payslips.

## 9. Communication Diagram

- Show message exchanges between system objects like HR, Database, SalaryProcessor during performance evaluation.

## 2- Task: Convert to Java Code from UML Class Diagram

### ■ The End

### Noted

- *Guidance for submit file*  
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