1. Step-by-Step Application of the Event Decomposition Technique

A. External Events

1. **Add Company Information**
   Use Case: Add or Update Company Info
   User: Admin
   Description: Admin adds or updates company details like name and address.
2. **Add Employee Details**
   Use Case: Add New Employee Details
   User: Admin
   Description: Admin creates or updates employee records.
3. **Manage Leaves**
   Use Case: Manage Leave Requests
   User: Admin
   Description: Admin reviews and manages employee leave requests.
4. **Add Public Holidays**
   Use Case: Add Public Holidays
   User: Admin
   Description: Admin adds, updates, or removes official holidays.
5. **Recruit Candidates**
   Use Case: Analyze Hiring Needs
   User: Recruiter
   Description: Recruiter assesses staffing needs and plans recruitment.
6. **Post Job Ad**
   Use Case: Post Job Advertisement
   User: Recruiter
   Description: Recruiter posts job openings to attract candidates.
7. **Apply for Job**
   Use Case: Apply for Job
   User: Candidate
   Description: Candidate submits an application for a job position.
8. **Accept Job Offer**
   Use Case: Accept Job Offer
   User: Candidate
   Description: Candidate accepts a job offer.
9. **Reject Job Offer**
   Use Case: Reject Job Offer
   User: Candidate
   Description: Candidate declines the job offer.

B. Temporal Events

1. **Process Payroll**
   Use Case: Process Payroll
   User: Admin
   Description: Admin processes payroll at the end of each month.
   Triggering Point: End of the month

2. **Schedule Interviews**
   Use Case: Schedule Interviews
   User: Recruiter
   Description: Recruiter schedules interviews with shortlisted candidates.
   Triggering Point: After candidates are shortlisted and available

3. **Conduct Interviews**
   Use Case: Conduct Interviews
   User: Interviewer
   Description: Interviewer conducts interviews and records feedback.
   Triggering Point: Interview is scheduled

4. **Quarterly Review**
   Use Case: Conduct Performance Review
   User: Admin
   Description: Admin performs quarterly performance reviews for employees.
   Triggering Point: Scheduled performance review dates

5. **Offer Job Position**
   Use Case: Extend Job Offer
   User: Recruiter
   Description: Recruiter sends a formal job offer to a selected candidate.
   Triggering Point: After a candidate is selected for the role

6. **View Salary Details**
   Use Case: View Salary Details
   User: Employee
   Description: Employee views a breakdown of their earnings and deductions.
   Triggering Point: After payroll processing is complete

7. **View Holiday List**
   Use Case: View Holiday List
   User: Employee
   Description: Employee views upcoming company holidays.
   Triggering Point: After holiday schedules are updated

8. **Onboard New Employee**
   Use Case: Complete Onboarding

User: Admin
Description: Admin completes the onboarding process for new hires.
Triggering Point: After a new employee is hired

C. State Events

1. **Check Leave Status**
   Use Case: Notify Leave Status Change
   User: Employee
   Description: Employee views the updated status of their leave request.
   State Change: Leave Status Changed
2. **Employee Resigns**
   Use Case: Process Resignation
   User: Admin
   Description: Admin processes resignation and starts the offboarding process.
   State Change: Employee Resigned
3. **Investigate Tardiness**
   Use Case: Investigate Tardiness
   User: Supervisor
   Description: Supervisor investigates employee tardiness incidents.
   State Change: Investigation Initiated
4. **Communicate with Employee**
   Use Case: Discuss Attendance Issues
   User: Supervisor
   Description: Supervisor discusses attendance issues with the employee.
   State Change: Attendance Discussed
5. **Offer Counseling**
   Use Case: Recommend Counseling
   User: Supervisor
   Description: Supervisor offers counseling or resources to improve employee performance.
   State Change: Counseling Offered
6. **Review Employee History**
   Use Case: Review Employee Data
   User: Supervisor
   Description: Supervisor reviews employee data before making disciplinary decisions.
   State Change: Employee Data Reviewed

7. **Review Tardiness Pattern**
   Use Case: Assess Tardiness Pattern
   User: Supervisor
   Description: Supervisor assesses tardiness history for potential corrective action.
   State Change: Tardiness Pattern Assessed
8. **Update Employee Status**
   Use Case: Update Status
   User: Supervisor
   Description: Supervisor updates an employee's status (e.g., Under Investigation).
   State Change: Employee Status Updated
9. **Mark Employee on Probation**
   Use Case: Place Employee on Probation
   User: Supervisor
   Description: Supervisor places an employee on probation after formal warnings.
   State Change: Employee Placed on Probation
10. **Restore Employee Status**
    Use Case: Reinstate Employee Status
    User: Supervisor
    Description: Supervisor restores an employee's status to "In Good Standing" if resolved.
    State Change: Employee Status Restored
11. **Terminate Employee**
    Use Case: Terminate Employment
    User: Admin
    Description: Admin terminates the employment if corrective actions fail.
    State Change: Employee Terminated

Part 2: Events, Event Types, Users, and Corresponding Use Cases

Event	Event Type	User Role	Use Case
Add Company Information	External	Admin	Add or Update Company Info
Add Employee Details	External	Admin	Add New Employee Details
Manage Leave	External	Admin	Manage Leave Requests

Requests			
Add Public Holidays	External	Admin	Add Public Holidays
Recruit Candidates	External	Recruiter	Analyze Hiring Needs
Post Job Ad	External	Recruiter	Post Job Advertisement
Apply for Job	External	Candidate	Apply for Job
Accept Job Offer	External	Candidate	Accept Job Offer
Reject Job Offer	External	Candidate	Reject Job Offer
Process Payroll	Temporal	Admin	Process Payroll
Schedule Interviews	Temporal	Recruiter	Schedule Interviews
Conduct Interviews	Temporal	Interviewer	Conduct Interviews
Quarterly Review	Temporal	Admin	Conduct Performance Review
Offer Job Position	Temporal	Recruiter	Extend Job Offer
View Salary Details	Temporal	Employee	View Salary Details
View Holiday List	Temporal	Employee	View Holiday List
Onboard New Employee	Temporal	Admin	Complete Onboarding
Check Leave Status	State	Employee	Notify Leave Status Change
Employee Resigns	State	Admin	Process Resignation
Investigate Tardiness	State	Supervisor	Investigate Tardiness
Communicate with Employee	State	Supervisor	Discuss Attendance Issues
Offer Counseling	State	Supervisor	Recommend Counseling

Review Employee History	State	Supervisor	Review Employee Data
Review Tardiness Pattern	State	Supervisor	Assess Tardiness Pattern
Update Employee Status	State	Supervisor	Update Status
Mark Employee on Probation	State	Supervisor	Place Employee on Probation
Restore Employee Status	State	Supervisor	Reinstate Employee Status
Terminate Employee	State	Admin	Terminate Employment

Part 3: Brief Use Case Descriptions

Use Case	Brief Description
Add or Update Company Info	Admin can add or update company details such as name, address, and structure.
Add New Employee Details	Admin can create or update employee records, including personal and job details.
Manage Leave Requests	Admin reviews and manages employee leave requests, including approval/rejection.
Add Public Holidays	Admin can add, update, or remove official public holidays for the company.
Analyze Hiring Needs	Recruiter assesses staffing requirements and manages recruitment budgets.
Post Job Advertisement	Recruiter posts job openings to attract candidates to the company.

Apply for Job	**Candidate submits their application for open positions with required documents.**
Accept Job Offer	**Candidate accepts the job offer to formally begin the employment process.**
Reject Job Offer	**Candidate declines the job offer after consideration.**
Process Payroll	**Admin processes payroll at the end of each month, calculating pay and deductions.**
Schedule Interviews	**Recruiter schedules interviews with shortlisted candidates.**
Conduct Interviews	**Interviewer conducts interviews, evaluates candidates, and provides feedback.**
Conduct Performance Review	**Admin performs quarterly performance reviews for employees, evaluating work.**
Extend Job Offer	**Recruiter sends a formal job offer to selected candidates.**
View Salary Details	**Employee can view a breakdown of their earnings, including deductions and bonuses.**
View Holiday List	**Employee views the company's official holiday list for the year.**
Complete Onboarding	**Admin completes the onboarding process for new hires, including training setup.**

Notify Leave Status Change	**Employee views and tracks the updated status of their leave request.**
Process Resignation	**Admin processes an employee's resignation and starts the offboarding process.**
Investigate Tardiness	**Supervisor investigates and analyzes tardiness incidents for specific employees.**
Discuss Attendance Issues	**Supervisor discusses attendance issues with employees to address lateness.**
Recommend Counseling	**Supervisor recommends counseling or resources to help employees with attendance.**
Review Employee Data	**Supervisor reviews employee's performance, attendance, and disciplinary history.**
Assess Tardiness Pattern	**Supervisor assesses patterns in tardiness to decide on further corrective action.**
Update Employee Status	**Supervisor updates an employee's status based on investigations or issues.**
Place Employee on Probation	**Supervisor places an employee on probation following formal warnings or issues.**
Reinstate Employee Status	**Supervisor restores an employee's status after satisfactory improvement.**
Terminate Employment	**Admin terminates an employee's position due to failure in meeting performance or attendance standards.**