Noun Technique

Step 1 Identifying all Nouns

Actors: Admin, Recruiter, Employee, Candidate, Supervisor, Interviewer, System Analyst

Entities: Company Information, Employee Record, Leave Request, Payroll, Public Holiday, Job Advertisement, Job Application, Job Offer, Interview, Performance Review, Onboarding Task, Termination, Counseling, Attendance, Tardiness Investigation, Probation Status

Attributes: Name, ID, Role, Position, Department, Status, Salary, Application Status, Leave Type, Date, Duration, Feedback, Performance Score, Job Requirements, Requirements, Task, Notice, Reasons, Trends, Findings, Recommendations, Salary

Relationships:

Admin manages Employee, Leave Requests, Payroll, Public Holidays

Recruiter posts Job Advertisements, screens Candidates, extends Job Offers

Employee applies for Leave, checks Leave Status, views Salary and Holidays, resigns

Supervisor assesses Tardiness, offer Counseling, reviews Employee data

Step 2 Filtering Irrelevant Nouns

Filtered List:

- Classes: Employee, Admin, Recruiter, Candidate, Supervisor, Leave Request, Payroll, Public Holiday, Job Advertisement, Job Offer, Interview, Performance Review, Onboarding, Attendance, Tardiness Investigation, Counseling
- Attributes (mapped to classes): ID, Name, Role, Status, Salary, Leave Type, Date, Duration, Feedback, Position, Task, Trends, Recommendations, Requirements

Relationships:

- Admin manages Employee and Payroll, approves Leave
- Recruiter screens Candidates, extends Job Offers
- Employee checks Leave Status, submits Resignation
- Supervisor investigates Tardiness, monitors Attendance

Filtered Out Nouns	Reason For Removal	
System Analyst	He Focuses on the system design and gathering requirements it's not directly relevant as a data entity in our EMS.	
Requirements	Refer to the project requirements not part of the data stored in EMS.	
Reports	Represents the output view of data they do not constitute separate entity in EMS.	
Role	General term representing job positions already incorporated as an attribute in Employee and Admin .	
Trend	Too abstract for EMS, don't have a distinct entity or database representation.	
Date	Not an Independent entity it's a common attribute for various entities like leave requests and interviews.	
Feedback	Not needed as a standalone entity, it's an attribute for interview and performance review.	
Information	General term without specific meaning in EMS; relevant information is captured in more concrete classes like Employee or Company Information .	
Job requirement	Not unique.	
Tasks	Used to refer to responsibilities or actions, incorporated within Onboarding as an attribute.	
Notification	Refers to actions within the system (e.g., alerts or messages) and does not require separate data storage.	
Status	Represents the state of various processes (e.g., application, leave); included as an attribute where needed.	
Leave Type	Used as an attribute in Leave Request to specify the nature of leave rather than as a separate entity.	
ID	Universally needed for identification; used as an attribute across all entities rather than as a separate class.	

Position Used to represent a job or role; included as an attribute within Employee, Candidate, and Job Offer.	
Application Status Used as an attribute within the Candidate class, rather than an independent entity.	
Probation Status designation, already captured as an attribute in Probation Status.	

Step 3 Categorize Nouns by Class, Attribute, or Association

Potential Class	Attributes	Relationships
Employee	Name, ID, Position, Department	Works under Admin, Requests Leave,
Admin	Name, Role, Permissions	Manages Employee, Payroll, Public Holiday
Recruiter	ID, Department, Managed Jobs	Hiring needs, Post Ads, Schedules Interview , Extend Job offer
Candidate	Name, Application Status, Position	Submits Job Application, Receives Job Offer , Accept/Reject Job Offer
Leave Request	Type, Duration, Status	Approved/Rejected by Admin, Linked to Employee
Payroll	Salary, Taxes, Deductions, Net Pay	Associated with Employee , Managed by Admin

Public Holiday	Date, Description	Viewed by Employee , Managed by Admin
Job Advertisement	Position, Requirements, Date Posted	Created by Recruiter, Viewed by Candidate
Job Offer	Position, Salary, Terms	Sent to Candidate, Managed by Recruiter
Interview	Date, Feedback, Status	Scheduled by Recruiter, Attended by Candidate
Performance Review	Date, Score, Notes	Conducted for Employee by Admin
Onboarding	Task, Status	Processed for Employee by Admin
Attendance	Tardiness Count, Absence Record	Monitored by Supervisor, Counted for Employee
Tardiness Investigation	Findings, Actions Taken	Conducted by Supervisor for Employee
Counseling	Type, Recommendation, Outcome, Date	Offered by Supervisor to Employee
Probation Status	Start Date, End Date, Status	Assigned to Employee by Supervisor

Step 4: Define Final Classes and Associations

Noun	Included/Excluded	Reasoning
Employee	Included	essential class to represent each staff member with associated attributes.
Admin	Included	needed as a class to manage employee data payroll leave and holidays
Recruiter	Included	essential for managing recruitment posting job ads and screening candidates
Candidate	Included	needed as a class for representing applicants in the hiring process.
Supervisor	Included	needed to monitor attendance, handle tardiness, and assign probation status.
Department	Included	represents organizational structure for grouping employees and recruiters.
Leave Request	Included	core entity class as managing leave requests is a central function.
Payroll	Included	represents payroll details including calculations deductions and net pay.

Public Holiday	Included	essential for tracking holidays accessible to employees and managed by admin.
Job Advertisement	Included	core entity in recruitment for advertising open positions.
Job Offer	Included	represents offers extended to candidates after successful interviews.
Interview	Included	key recruitment entity to manage candidate evaluations by recruiters.
Performance Review	Included	used for assessing and recording employee performance on a quarterly basis.
Onboarding	Included	represents onboarding tasks needed for new employees after hiring.
Attendance	Included	key attribute for tracking employee punctuality and tardiness.
Counseling	Included	required as an option for supervisors to assist employees with attendance issues.
Probation Status	Included	needed for tracking corrective actions taken with employees.
System Analyst	Excluded	role involved in system design not a data entity within the Employee Management System.

Requirements	Excluded	refers to project requirements which are not part of EMS data storage.
Information	Excluded	general term without specific meaning in EMS; relevant details captured in specific classes.
Reports	Excluded	represents outputs or views of data not separate entities in EMS.
Trend	Excluded	too abstract for EMS; could be an attribute in Job Advertisement rather than its own class.
Feedback	Excluded	serves as an attribute in Interview and Performance Review rather than a standalone entity.
Score	Excluded	included as an attribute in Performance Review.
Application Status	Excluded	used as an attribute within the Candidate class not necessary as a standalone entity.
Role	Excluded	represented as an attribute for Employee and Admin rather than as an entity.
Position	Excluded	serves as an attribute within Employee Candidate and Job Offer
Date	Excluded	common attribute across multiple classes not an independent entity

ID	Excluded	universal attribute for unique identification in each class.
Performance Score	Excluded	part of Performance Review as an attribute rather than a separate entity.
Task	Excluded	attribute within Onboarding and Counseling classes rather than an entity.
Application	Excluded	redundant as a standalone entity; captured under Candidate and Job Offer.
Leave Type	Excluded	used as an attribute in Leave Request to specify leave type rather than as a separate entity.
Status	Excluded	attribute representing state in multiple processes not needed as an entity.
Notification	Excluded	refers to alerts or messages within the system not requiring standalone data storage.
Termination	Included	represents the process led by Admin upon unsuccessful corrective action.

There are 2 Nouns that need Further Research:

1. Trend:

- Reasoning: This noun could be part of Tardiness Investigation to track attendance patterns. However, it is an abstract concept that may not need to be a class by itself but could be an attribute or part of another class to represent the employee's historical attendance behavior.
- Next Step: Investigate if Trend can be captured as a time-based attribute in the Tardiness Investigation class or if it needs its own class.

2. Recommendation:

- Reasoning: This noun pertains to feedback or advice given to employees, which
 can be captured as an attribute in the Counseling or Supervisor class. It may
 not require its own class but should be researched further to define how
 recommendations are tracked and whether it requires additional data storage.
- **Next Step**: Clarify how **recommendations** should be used in the system (i.e., as a type of feedback linked to employees or supervisors).