System Audit Report

Overall Score: 3.0 / 5.0

Date: 2026-01-03

Risk Level: High

Scope: Full System

1. Dimension Scores

Dimension	Score	Findings
Code Quality	5.0	0
Security	5.0	0
Testing	0.0	1
Database	3.5	14
API	0.5	1
Architecture	5.0	0
UI/UX	0.0	3
AI Layer	5.0	2
DevOps	5.0	1
Drift Detection	1.5	7

3. Major Findings

[Major] Test coverage estimated at 6%

Description: Low test coverage detected
Recommendation: Add unit tests for core modules

[Major] Unenforced Foreign Key: 'employees.department_id'

Description: Column 'department_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for department_id

[Major] Unenforced Foreign Key: 'employees.designation_id'

Description: Column 'designation_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for designation_id

[Major] Unenforced Foreign Key: 'employees.grade_id'

Description: Column 'grade_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for grade_id

[Major] Unenforced Foreign Key: 'employees.plant_id'

Description: Column 'plant_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for plant_id

[Major] Unenforced Foreign Key: 'employees.shift_id'

Description: Column 'shift_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for shift_id

[Major] Unenforced Foreign Key: 'hr_plants.organization_id'

Description: Column 'organization_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for organization_id

[Major] Unenforced Foreign Key: 'performance_reviews.employee_id'

Description: Column 'employee_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for employee_id

[Major] Unenforced Foreign Key: 'performance_reviews.reviewer_id'

Description: Column 'reviewer_id' suggests a relation but has no FK constraint.
Recommendation: Add FOREIGN KEY constraint for reviewer_id

[Major] 101 components lack accessibility attributes

Description: Missing aria-labels, alt text, or other a11y features
Recommendation: Add ARIA labels and alt text to improve accessibility

[Major] Insufficient input validation on AI calls

Description: Not all AI integrations validate input data
Recommendation: Add schema validation before sending data to AI models

[Major] Unsafe AI Temperature Settings

Description: Found 18 AI calls without explicit low-temperature settings (risk of hallucinations).
Recommendation: Set temperature=0.0-0.2 for factual tasks.

4. Action Plan

Issue	Owner	Priority
Test coverage estimated at 6%	unassigned	High
Unenforced Foreign Key: 'employees.department	unassigned	High
Unenforced Foreign Key: 'employees.designatio	unassigned	High
Unenforced Foreign Key: 'employees.grade_id'	unassigned	High
Unenforced Foreign Key: 'employees.plant_id'	unassigned	High
Unenforced Foreign Key: 'employees.shift_id'	unassigned	High
Unenforced Foreign Key: 'hr_plants.organizati	unassigned	High
Unenforced Foreign Key: 'performance_reviews.	unassigned	High
Unenforced Foreign Key: 'performance_reviews.	unassigned	High
101 components lack accessibility attributes	unassigned	High