

System Audit Report

Overall Score: 3.7 / 5.0

Risk Level: High

Date: 2026-01-19

Scope: Full System

1. Dimension Scores

| Dimension | Score | Findings |
|--------------|-------|----------|
| Code Quality | 5.0 | 0 |
| Security | 5.0 | 0 |
| Testing | 0.0 | 1 |
| Database | 5.0 | 13 |
| API | 0.5 | 1 |
| Architecture | 5.0 | 0 |
| UI/UX | 5.0 | 0 |
| AI Layer | 5.0 | 6 |
| DevOps | 1.5 | 3 |
| Performance | 5.0 | 0 |

2. Critical Findings

[Critical] No backup strategy implemented

Description: Database backup scripts not found

Recommendation: Implement automated database backup mechanism

3. Major Findings

[Major] Test coverage estimated at 28.5%

Description: Low test coverage detected

Recommendation: Add unit tests for core modules

[Major] Unenforced Foreign Key: 'core_organizations.head_id'

Description: Column 'head_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for head_id

[Major] Unenforced Foreign Key: 'core_organizations.tax_id'

Description: Column 'tax_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for tax_id

[Major] Unenforced Foreign Key: 'core_users.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: 'core_departments.hod_id'

Description: Column 'hod_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for hod_id

[Major] Unenforced Foreign Key: 'core_departments.manager_id'

Description: Column 'manager_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for manager_id

[Major] Unenforced Foreign Key: 'core_sub_departments.manager_id'

Description: Column 'manager_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for manager_id

[Major] Unenforced Foreign Key: 'audit_scores.audit_run_id'

Description: Column 'audit_run_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for audit_run_id

[Major] Unenforced Foreign Key: 'audit_findings.audit_run_id'

Description: Column 'audit_run_id' suggests a relation but has no FK constraint.

Recommendation: Add FOREIGN KEY constraint for audit_run_id

[Major] Insufficient input validation on AI calls

Description: Not all AI integrations validate input data (10/59)

Recommendation: Add schema validation before sending data to AI models

[Major] Unsafe AI Temperature Settings

Description: Found 50 AI calls without explicit low-temperature settings (risk of hallucinations).

Recommendation: Set temperature=0.0-0.2 for factual tasks.

[Major] Missing Grounding Instructions

Description: Found 58 AI prompts without grounding constraints.

Recommendation: Include 'only use provided context' or similar constraints in prompts.

[Major] Missing Response Validation

Description: Found 53 AI calls without response validation.

Recommendation: Implement schema validation or parsing for AI outputs to catch malformed responses.

[Major] Insufficient Fallback Behavior

Description: Less than 50% of AI calls have fallback logic (0/59).

Recommendation: Implement graceful degradation with default responses when AI calls fail.

[Major] No deployment scripts found

Description: Missing automated deployment configuration

Recommendation: Create deployment scripts (start_app.bat/sh, Dockerfile)

[Major] Analyzer execution failed: drift_detection

Description: [WinError 3] The system cannot find the path specified: 'D:\\Project\\PEOPLE_OS\\modules'

Recommendation: Check analyzer implementation and dependencies

4. Action Plan

| Issue | Owner | Priority |
|--|------------|----------|
| No backup strategy implemented | unassigned | Critical |
| Test coverage estimated at 28.5% | unassigned | High |
| Unenforced Foreign Key: 'core_organizations.h' | unassigned | High |
| Unenforced Foreign Key: 'core_organizations.t' | unassigned | High |
| Unenforced Foreign Key: 'core_users.employee_' | unassigned | High |
| Unenforced Foreign Key: 'core_departments.hod' | unassigned | High |
| Unenforced Foreign Key: 'core_departments.man' | unassigned | High |
| Unenforced Foreign Key: 'core_sub_departments' | unassigned | High |
| Unenforced Foreign Key: 'audit_scores.audit_r' | unassigned | High |
| Unenforced Foreign Key: 'audit_findings.audit' | unassigned | High |