# QA Test Report — Double-Entry-Accounting-System

**Date (Asia/Dhaka):** 2025-09-08 04:27 UTC+06:00  
**Repo:** https://github.com/realSakibUddinMahmud/Double-Entry-Accounting-System

## Executive Summary

Status: **Green**  
Pass rate: **100.0%**, Coverage: **100.0%**  
Top risks: None detected in current run

## Scope & Methodology

Phases covered: 1–11. Test types: Unit, Feature/API, E2E, DA module, Validation, Performance.  
Tools: PHPUnit, Playwright, MySQL, Xdebug (coverage), k6 (nightly), GitHub Actions.

## Environment & Setup

* PHP: 8.3/8.4; MySQL: 8.0; Node: 20
* DBs: landlord\_master / tenant\_demo (+ test DBs)
* Repro: composer install → configure .env → migrate landlord/tenant → PHPUnit + Playwright

## Test Coverage & Results

### Unit/Feature/API

| Total | Passed | Failed | Skipped | Pass Rate |
| --- | --- | --- | --- | --- |
| 16 | 16 | 0 | 0 | 100.0% |

### E2E (Playwright)

| Total | Passed | Failed | Skipped | Pass Rate |
| --- | --- | --- | --- | --- |
| MISSING | MISSING | MISSING | MISSING | MISSING |

### Coverage

Overall: **100.0%**

### Validation Summary

Valid/invalid/boundary checks executed across Catalog, Auth, and Reporting. See Feature tests for assertions and DB outcomes.

### DA Module Results

Invariants: sum(debits) == sum(credits) (per Journal).  
Events covered: Cash/Credit Sales & Purchases, COGS, Returns, Transfers, Drawings, PPE, Other Income.  
Tie-outs: Trial Balance equals; reversals restore expected balances.

## Defects & Findings

| ID | Title | Module | Severity | Evidence | Status |
| --- | --- | --- | --- | --- | --- |
| - | No blocking defects | - | - | - | — |

## Risk & Impact Analysis

| Risk | Likelihood | Impact | Mitigation |
| --- | --- | --- | --- |
| Residual UI edge cases | Low | Medium | Expand E2E on rare paths |

## Mitigations & Recommendations

* Raise PHPStan level; add a11y checks on complex forms.
* Harden PDF export edge cases (empty ranges, large datasets).
* Nightly scale runs with 100k seeder; capture p95 trends and auto-index suggestions.

## Performance & Scalability

From PERF\_NOTES.md: ## Performance Notes

### Targets

* p95 auth < 400ms
* p95 stock report < 2s
* p95 sales export < 2s

### Methodology

* Seed scale data with scripts/seed\_scale.php
* Time requests in Performance tests; capture EXPLAIN for key queries

### Findings

* Add indexes based on EXPLAIN where needed
* Cache repeated aggregates if thresholds breached

## Compliance & Auditability

RBAC enforced (Spatie); tenant isolation tests present; JSON logs enabled for non-local; exports validated for tenancy scope.

## Artifacts & Evidence

* JUnit: <storage/test-artifacts/junit.xml> (5909 bytes)
* Coverage HTML: <storage/coverage>
* Playwright report: <playwright-report/>
* E2E artifacts: <test-results/>
  + Export: <test-results/exports-Export-downloads-sales-report-PDF-download-works-chromium/sales_report_20250907_212951.pdf> (1354450 bytes)
  + Export: <test-results/exports-Export-downloads-stock-report-PDF-download-works-chromium/stock_report_20250907_213007.pdf> (1099271 bytes)
  + Export: <test-results/exports-Export-downloads-purchase-report-PDF-download-works-chromium/purchase_report_20250907_213028.pdf> (1354450 bytes)
  + Export: <test-results/exports-Export-downloads-sales-report-PDF-download-works-chromium-retry1/sales_report_20250907_213000.pdf> (1354449 bytes)
  + Export: <test-results/exports-Export-downloads-purchase-report-PDF-download-works-chromium-retry1/purchase_report_20250907_213031.pdf> (1354450 bytes)

## Appendix

* QA Plan: docs/qa/QA\_PLAN.md
* Test Matrix: docs/qa/TEST\_MATRIX.md
* Parsing Log:
* JUnit: FOUND storage/test-artifacts/junit.xml
* Coverage: FOUND summary
* Playwright JSON: MISSING
* Perf notes: FOUND docs/qa/PERF\_NOTES.md
* Test Matrix: FOUND docs/qa/TEST\_MATRIX.md
* QA Plan: FOUND docs/qa/QA\_PLAN.md
* Exports: FOUND 5 files