Git Technical Debt Analysis Report

Repository URL: https://github.com/v3ravani/HogwartsHackademy

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Overall Technical Debt Score: 10.15 / 100

Files Analyzed: 40

AI-Powered Technical Debt Insights

* `dashboard.html` is the highest-risk file (score 49.09) primarily due to its significant complexity contributing over half of its risk.
* The primary refactoring recommendation is to reduce the cyclomatic complexity across these identified files, as it's the main contributing factor to their risk.
* `js\data.js` exhibits the highest complexity (71) and should be prioritized for simplification and modularization.
* The report focuses solely on the top high-risk files, implying that the majority of the codebase likely maintains lower risk profiles.

1. Top 10 Highest-Risk Files

File Path	Risk Score (0-100)	Main Factor
■[97mdashboard.html	49.09	Complexity (53.4%)
■[97mjs\data.js	39.47	Complexity (76.0%)
■[97mjs\chatbot.js	30.60	Complexity (69.0%)
■[97mjs\products.js	27.46	Complexity (100.0%)
■[97mjs\mysql-sync.js	17.92	Dependency (52.9%)
■[97mjs\login.js	14.65	Dependency (68.3%)
■[97mnavigation.js	13.76	Dependency (68.8%)
■[97mjs\transfers.js	13.31	Complexity (92.1%)
■[97mjs\delivery.js	12.46	Complexity (91.6%)
■[97mjs\receipts.js	12.46	Complexity (91.6%)

2. Highest Regression Risk Files (Change & Dependency)

File Path	Combined Score	Fan-in	Total Changes
■[97mdashboard.html	2216795	1	3762
■[97mnavigation.js	168559	18	330
■[97msignup.html	41066	1	642

■[97mproducts.html	39016	1	511
■[97mlogin.html	32370	3	485
■[97mreports.html	20978	0	444
■[97mproducts.js	19845	2	385
■[97mcreate_transfer.html	18242	1	269
■[97mcustomers.html	17190	1	341
■[97mcreate_delivery.html	12658	1	237

3. Anti-Pattern Candidates (Files to Break Apart)

File Path	Total Lines	Complexity (CC)	Total Changes
■[97mdashboard.html	1274	62	3762
■[97msignup.html	464	14	642
■[97mproducts.js	171	17	385
■[97msettings.html	251	13	251
■[97mproducts.html	465	6	511

4. Critical Systemic Risk Hotspots

File Path	Systemic Score	Dependent Files (Blast Radius)	Test Status
■[97mjs\data.js	355	18	Ambiguous
■[97mjs\chatbot.js	275	18	Ambiguous
■[97mjs\mysql-sync.js	161	18	Ambiguous
■[97mjs\login.js	139	19	Ambiguous
■[97mnavigation.js	124	18	Ambiguous

Contributor Efficiency Analysis

5. Most Efficient Contributors

Author (Email Prefix)	Efficiency Score (higher is better)	Lines Added (Net)
150597766+v3ravani	4.555	7,675
visha2.yadav1	2.188	798

6. Priority Coaching Candidates

Author (Email Prefix)	Avg Risk Score	Efficiency Score (Lower=Worse)
visha2.yadav1	12.34	2.188
150597766+v3ravani	9.55	4.555