

BDD Framework Analysis Report

Project: Team02_SeleniumNinjas

Overall Score: 61/100

Feature Files Analysis

Metric	Value
Count	20
Quality Score	66/100
Issues	<ul style="list-style-type: none">• Missing Feature description in 02_Home.feature• Consider using Background for common steps in 06_Logout.feature• Missing tags on 38 scenarios (Adding tags improves readability and filtering)• Missing 34% in Feature Files score due to:<ul style="list-style-type: none">• Missing scenario tags (-10 points): Add descriptive tags to all scenarios• Missing Background sections (-5 points): Use Background for common steps• Missing Feature descriptions (-5 points): Add clear Feature descriptions

Step Definitions Analysis

Metric	Value
Count	19
Quality Score	66/100
Unimplemented Steps	13
Issues	<ul style="list-style-type: none">• Too many step definitions in LoginPageSteps.java, consider refactoring

Selenium Implementation

Wait Strategy	0%
Explicit Waits	✗ Missing
Custom Wait Conditions	✗ Missing

Thread.sleep Usage	✓ Not Found
Screenshot Capability	✗ Missing
Screenshot in Hooks	✓ Found
WebDriver Management	✓ Found
Actions Class Usage	✗ Missing
JavaScript Executor	✗ Missing
PicoContainer DI	✗ Missing

Browser Execution Analysis

Browser Compatibility	0%
Grid Support	Missing
Parallel Execution	Missing
Retry Mechanism	Missing

Test Coverage Analysis

Step definitions to features ratio: 0.95

Coverage Loss Details:

Missing 34% in Test Coverage due to:

- Feature files quality issues (-24%): Missing tags, examples, or proper descriptions
- Step definitions quality issues (-24%): Limited parameterization or too many steps in single files
- Low scenario quality (-35%): Feature scenarios lack proper structure or clarity

Recommendations

1. Improve feature file quality by adding proper descriptions and tags
2. Enhance step definitions with better parameterization
3. Organize project structure into standard BDD directories
4. Implement better wait strategies in Selenium tests
5. Consider implementing parallel test execution
6. Implement base page pattern for better maintainability

Project Analysis & Enhancers

Page Objects Analysis

Metric	Status
Total Page Objects	0
Base Page Pattern	✗ Missing
Proper Encapsulation	✗ Missing
Uniform Locators	✗ Mixed Usage
Assertions in Pages	✓ Not Found

Project Strengths:

Project Structure:

- Maven-based Selenium test automation project
- TestNG configuration present
- Organized in standard Maven directory layout

Implementation Details:

- Step definitions located in stepDefinitions folder
- Uses TestNG for test execution framework
- Selenium WebDriver implementation found

Project Enhancers:

Feature	Status
TestNG Config	✗ Not Found
Page Factory	✗ Not Found
Logging	✗ Not Found
Data Driven Testing	✗ Not Found
Custom Reporting	✗ Not Found