

# Sprint 2 Summary - StressSpec

**Completion Date:** Week 10

**Sprint Duration:** 5 weeks (Weeks 6-10)

**Status:**  Complete (100%)

# Features Completed (4/4 - 100%)

## 1. Complete Test Coverage

- **Achievement:** 86 tests passing with 100% reliability
- **Baseline:** All integration test failures resolved
- **Coverage:** Unit, integration, and end-to-end tests across all components

## 2. 8-Category Risk Detection

All 8 Risk Categories Implemented:

1. Ambiguity Detector - Vague language detection
2. Missing Detail Detector - Incomplete requirements detection
3. Security Detector - Missing security requirements detection
4. Conflict Detector - Duplicate/contradictory requirements detection
5. Performance Detector - Missing performance specifications
6. Usability Detector - Missing usability requirements
7. Portability Detector - Missing portability requirements
8. Scalability Detector - Missing scalability requirements

# Technical Achievements

## Test Coverage

- **Total Tests:** 86
- **Pass Rate:** 100%
- **Execution Time:** ~2.2 seconds
- **Test Types:** Unit, integration, end-to-end

## Risk Categories

- **Total Categories:** 8 (Ambiguity, Missing Detail, Security, Conflict, Performance, Availability, Traceability, Scope)
- **Detection Modules:** 8 independent detectors
- **Configurable:** All detectors can be enabled/disabled via rules.json

# Sprint 2 Deliverables

## Code Deliverables

-  Traceability detector implementation
-  Scope detector implementation
-  Top 5 Riskiest Requirements scoring system
-  HTML reporter with professional styling
-  All deprecation warnings fixed
-  100% test pass rate maintained

## Documentation Deliverables

-  Updated README with Sprint 2 features
-  CHANGELOG.md created with Sprint 2 summary
-  Test results documentation (TEST\_RESULTS\_WEEK10.md)

## Comparison: Sprint 1 vs Sprint 2

Metric	Sprint 1	Sprint 2	Change
Risk Categories	6	8	+2 (Traceability, Scope)
Report Formats	3	4	+1 (HTML)
Test Pass Rate	~93.7%	100%	+6.3%
Test Count	59	86	+27
Features	MVP	Complete	✓

# What This Achieves

## Completes Original Vision

-  8-category risk detection as originally planned
-  Enhanced reporting capabilities
-  Professional stakeholder-ready outputs

## Adds Professional Reporting

-  HTML reports for stakeholder presentations
-  Visual design with color-coded severity indicators
-  Executive summary format

## Provides Prioritization

-  Top 5 Riskiest Requirements for team focus

# Demo Files

This demo folder includes sample reports generated using

`data/sample_requirements.txt` :

- `demo_report.html` - Standalone HTML report with professional styling
- `demo_report.md` - Markdown report with detailed formatting
- `demo_report.csv` - CSV report with score columns
- `demo_report.json` - JSON report with structured data

All reports include:

- Executive summary with statistics
- Top 5 Riskiest Requirements section
- Detailed requirements list with risk indicators
- Risk breakdown by category

## Next Steps (Sprint 3 Preview)

Potential enhancements for future sprints:

- Web dashboard improvements
- AI-based detection enhancements
- Project-level metrics aggregation
- Advanced visualization and charts
- Export to PDF format
- Batch processing capabilities

**Sprint 2 Status:**  Complete - Ready for Review/Presentation