

Sprint 2 Plan & Requirements

StressSpec Requirements Stress Tester

Sprint 2 Features

Feature #1: Complete Test Coverage

Goal: Achieve 100% test pass rate by fixing remaining 4 integration test failures.

Why Essential: Foundation for all future development - can't build on broken tests.

Implementation:

- Fix the 4 remaining integration test failures
- Ensure all 63+ tests pass consistently
- Add any missing test coverage for critical paths

Feature #2: Complete 8-Category Risk Detection

Goal: Add the 3 missing risk detection modules (Privacy, Traceability, Scope) to complete the original 8-category plan.

Why Essential: This was the core promise of the original project plan.

Implementation:

- **Privacy Detector** (3 hours): Basic GDPR/CCPA compliance checks
- **Traceability Detector** (3 hours): Requirement ID validation and linking
- **Scope Detector** (2-4 hours): Basic scope creep detection

Simplified Approach:

- Use existing detector pattern (copy and modify existing detectors)
- Start with basic keyword-based detection (no complex ML/AI)
- Focus on most common risk patterns only

Feature #3: Basic HTML Reports

Goal: Add simple HTML report generation with basic styling.

Why Essential: Makes the tool more user-friendly for stakeholders.

Implementation:

- Create simple HTML template using existing Jinja2 setup
- Basic Bootstrap styling (copy from existing web UI)
- Include summary statistics and risk breakdown
- No complex charts initially - just tables and basic formatting

Feature #4: Enhanced Severity Scoring

Goal: Implement "Top 5 Riskiest Requirements" feature.

Why Essential: Provides immediate value to users for prioritization.

Implementation:

- Calculate combined risk scores per requirement
- Sort and display top 5 riskiest
- Add to existing report formats (Markdown, CSV, JSON, HTML)

Sprint 2 Epic Overview

Total Stories: 6 user stories across 4 epics

Scope: Complete 8-category risk detection + enhanced reporting + advanced scoring

Epic 1: Complete Test Coverage

Story 1.1: Fix Integration Test Failures

As a developer

I want all integration tests to pass with 100% success rate

So that I can have confidence in the system's reliability and maintainability

Acceptance Criteria:

- All 63+ tests pass consistently
- Integration tests cover web API endpoints properly
- Error handling tests validate correct exception responses
- Logging tests handle Windows file permission issues gracefully

Priority: Critical (foundation for all other work)

Epic 2: Complete 8-Category Risk Detection

Story 2.1: Privacy Risk Detection

As a compliance officer

I want to detect privacy-related risks in requirements

So that I can ensure GDPR, CCPA, and other privacy regulations are properly addressed

Acceptance Criteria:

- Detects requirements mentioning data collection without privacy policy references
- Flags personal data handling without consent mechanisms
- Identifies data storage without protection requirements
- Uses keyword-based detection (simple, reliable approach)

Priority: High (completes original 8-category plan)

Story 2.2: Traceability Risk Detection

Epic 3: Advanced Scoring & Analytics

Story 3.1: Top 5 Riskiest Requirements

As a team lead

I want to see the top 5 most risky requirements

So that I can prioritize team efforts on the highest-impact issues first

Acceptance Criteria:

- Calculates combined risk score for each requirement
- Ranks and displays top 5 riskiest requirements
- Shows detailed risk breakdown for each requirement
- Integrates with existing report formats (Markdown, CSV, JSON)

Priority: Medium (valuable enhancement)

Epic 4: Enhanced Reporting

Story 4.1: Standalone HTML Report Generation

As a stakeholder

I want to generate professional HTML reports that can be saved and shared independently

So that I can create formal documentation for meetings and presentations

Acceptance Criteria:

- Generates complete HTML files with embedded CSS
- Professional styling suitable for executive presentations
- Self-contained reports (no web server required)
- Includes executive summary, risk breakdown, and top 5 riskiest requirements
- Compatible with existing web UI (adds new export option)



Sprint 2 Success Criteria

Functional Requirements:

- ☒ All 8 risk detection categories implemented and tested
- ☒ 100% test pass rate achieved
- ☒ "Top 5 Riskiest Requirements" analysis functional
- ☒ Standalone HTML report generation working
- ☒ All existing functionality preserved and enhanced

Non-Functional Requirements:

- ☒ No regression in existing features
- ☒ Performance maintained or improved
- ☒ Code quality standards upheld
- ☒ Documentation updated for new features

Sprint 2 Deliverables

End of Sprint 2 - Complete Feature Set:

1. **100% Test Coverage** - All tests passing reliably
2. **8-Category Risk Detection** - Complete original plan implementation
3. **Advanced Scoring** - Top 5 riskiest requirements identification
4. **Enhanced Reporting** - Standalone HTML report generation
5. **Updated Documentation** - User guides and examples for new features

What This Achieves:

- **Completes Original Vision** - 8-category risk detection as originally planned
- **Adds Professional Reporting** - HTML reports for stakeholder presentations
- **Provides Prioritization** - Top 5 riskiest requirements for team focus
- **Maintains Quality** - 100% test coverage ensures reliability