

1. Project scope and main goals

Cataloguing audio file in possession of customer, with duplication cross-references and flagging of corrupt files, output in HTML (for browser viewing) and CSV (for spreadsheet editing) with high reliability, not failing for any reason during the working process, and support for smart comparison algorithms.

2. Requirements to be tested

See referenced sections in Audio_Cataloger_Requirements.pdf

- SC-3: Critical path test
- UR-1.*: Smoke test
- UR-2.2: Critical path test, Extension test
- BR-1, BR-2: Smoke test, Critical path test
- BR-3, BR-4: Extension test
- QA-2: Smoke test
- QA-3: Extension test
- DS-2.1: Smoke test, Extension test
- DS-2.2, 2.3, 2.4: Critical path test
- DS-3.*: Critical path test
- DS-4.*, DS-5.*: Extension test

3. Requirements NOT to be tested

See referenced sections in Audio_Cataloger_Requirements.pdf

- SC-1: Application is a console one by design
- SC-2, L-1, L-2: Redundant, covered under design specifications
- DS-1: Application developed with proper JRE version
- L-3: No implementation required
- L-4: Redundant, covered under design specifications
- UR-2.1: Redundant, covered under design specifications
- UR-3.*: Redundant, covered under design specifications

4. Test Strategy approach

General Approach:

The application is to be tested with a heavy emphasis on reliability and fault-tolerance. Certain non-functional tests, such as internationalization and localization, have been omitted due to their complexity.

Functional testing levels:

- Smoke tests: Some automated with batch files in Windows and Linux, others executed manually
- Critical path tests: executed manually

- Extended tests: executed manually

5. Criteria

- Acceptance criteria: 100% success of smoke tests, 90% success of critical path tests and 60% success of extension tests if 100% of critical and major tests are fixed. Final requirements coverage by tests should be at least 80%
- Testing start criteria: new build
- Testing pause criteria: Extension tests should only begin after smoke tests and critical path tests meet the success criteria. Test process should be paused if it fails at any point in the working process for any reason
- Testing resumption criteria: A majority of bugs, and all critical bugs that blocked the functionality of the application found during the previous iteration are fixed
- Testing finish criteria: more than 80% of test cases planned for the current iteration are executed

6. Resources

- Software: Four virtual machines: two with Windows (most recent version), two with Linux (most recent version) and Java Minimal JRE version – 8.0.60
- Hardware: Two standard work stations
- Personnel: one developer with testing experience,
- One tester with knowledge of Java, One tester with experience in Linux
- Time: one work week
- Finances: according to budget

7. Schedule

- 26.08 – Manual smoke tests with a focus on finding any bugs that may cause failure during the working process; making the checklist
- 27.08 – Making test cases and scripts for automated testing
- 28.08-29.08 – main testing stage (automated test execution, critical path tests, extension tests, defect reports creation).
- 30.08 – testing finalization, reporting.

8. Roles and responsibilities

- Developer: Participation in requirements testing, creating scripts and batch files for automated testing
- Tester: documentation creation, test-cases execution, participation in code-review.

9. Risk evaluation

- Personnel (low probability): If any team member is inaccessible we can contact the project manager to secure a temporary replacement
- Time (high probability): To meet the deadline a day was left aside (31.08) to solve any unexpected issues.
- No other risks specified

10. Documentation

- Checklist. Responsible persons – testers, deadline 26.08
- Test cases. Responsible persons – testers, deadline 27.08
- Defect reports. Responsible persons – testers, deadline 29.08
- Test results report. Responsible persons – testers, deadline 30.08

11. Metrics

Minimally acceptable borders for defects fixed:

		Defect Severity			
Project phase		Minor	Medium	Major	Critical
	Beginning	10%	40%	50%	80%
	Main	15%	50%	75%	90%
	Final	20%	60%	100%	100%

Minimally acceptable borders for test case execution:

		Defect Severity			
Project phase		Minor	Medium	Major	Critical
	Beginning	60%	60%	60%	60%
	Main	65%	70%	85%	90%
	Final	70%	80%	95%	100%

Minimally acceptable borders for test case success:

		Test type			
Project phase		Smoke Tests	Critical Path Tests	Extension tests	Total
	Beginning	80%	60%	20%	
	Main	90%	70%	50%	
	Final	100%	95%	60%	85%