Audio Cataloger Project
Test Result Report

Project Documentation

Field	Description
Background	Information needed to assess the effectiveness of the testing process and the current state of the Audio Cataloger project.
Purpose	To provide the key information about the testing process and testing results for the Audio Cataloger application.
Scope	Testing process description, test results, metrics, timetable, recommendations.
Audience	Management staff, QA team, project team.
File	Practice Task 6 - Test Result Report - Yana Baidiuk.pdf

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1. Summary

During the testing period, the Audio Cataloger application underwent comprehensive testing including smoke tests and critical path tests across Windows 11 and Linux platforms. The application successfully passed **100% of the smoke test** cases and **74% of the critical path test** cases.

Key Findings:

- 6 defects were identified during testing, with severities ranging from Minor to Major
- The application demonstrates good basic functionality for audio file cataloging
- Critical issue with duplicate detection algorithm affects accuracy
- Exception handling needs improvement for broken audio files
- Output file generation works correctly but lacks proper file extension handling

Overall Assessment: The application meets most core requirements but requires fixes for identified defects before production release. The stability issues with broken files and duplicate detection accuracy are the primary concerns.

2. Test Team

Name	Role	Responsibility
Yana Baidiuk	QA Engineer	Test planning, test case implementation, smoke test execution, critical path test execution, defect verification, defect reporting, test result reporting

3. Testing process description

The Audio Cataloger application was tested using manual testing approach:

Smoke Testing: focused on basic application start/stop functionality, parameter validation, and core output generation.

Critical Path Testing: Performed manually across different scenarios including various parameter combinations, file format support, platform compatibility, and error handling situations.

Test Environment:

- Windows 11 Enterprise x64
- Linux Ubuntu 18 LTS x64
- JRE 8.0.60+
- Test data included various audio file formats (mp3, flac, wav, ogg, wma) with different sizes and conditions

Test Coverage: The testing covered all major functional requirements including file cataloging, duplicate detection, output generation (HTML/CSV), cross-platform compatibility, and exception handling.

4. Timetable

Name	Date	Activity	Duration (hours)
Yana Baidiuk	Day 1-7	Test planning and environment setup	5
Yana Baidiuk	Day 8-14	Test case design and test data preparation	12
Yana Baidiuk	Day 15	Smoke test execution	1
Yana Baidiuk	Day 16-17	Critical path test execution	4

Yana Baidiuk	Day 18-21	Defect reporting	7
Yana Baidiuk	Day 22	Test result analysis and reporting	4

5. New defects statistic

Status	Quantity	Severity			
		Minor	**Medium**	**Major**	**Critical**
Submitted	6	1	1	4	0
Fixed	0	0	0	0	0
Verified	0	0	0	0	0
Reopened	0	0	0	0	0
Declined	0	0	0	2	0

6. New defects list

ID	Severity	Summary
1	Medium	Application fails to automatically append file extensions to output files
2	Major	Incorrect accepting of incomplete mandatory parameters when optional StartingDirectoryN parameter is provided
3	Minor	Missing error message in the log for empty directories
4	Major	Unhandled exception in the app log for broken audio files (WMA format)
5	Major	The app incorrectly identifies different audio files as duplicates when they have missing Artist, Album, and Track metadata fields
6	Major	Incorrect including of broken/non-audio files in HTML and CSV output

7. Overall defects statistic

Status	Quantity	Severity			
		Minor	**Medium**	**Major**	**Critical**
Submitted	6	1	1	4	0
Fixed	0	0	0	0	0
Verified	0	0	0	0	0
Reopened	0	0	0	0	0
Declined	0	0	0	2	0

Test Execution Results:

- Smoke Test Success Rate: 100% (3/3 test cases passed)
- Critical Path Test Success Rate: 78% (17/23 test cases passed)
- Requirements Coverage: 100% (covered 17/17 testable requirements)

8. Recommendations

Immediate Actions Required:

1. **Fix duplicate detection algorithm** (ID #5) - This is critical for the core functionality of the application

2. **Implement proper exception handling** for broken audio files (ID #4) to prevent application crashes
3. **Add automatic file extension handling** (ID #1) to improve user experience
4. **Improve parameter position validation** (ID #2) to make sure that all mandatory parameters are passed

Medium Priority:

1. Enhance logging for empty directories (ID #3)
2. Improve file validation to exclude broken/non-audio files from output (ID #6)

Testing Recommendations:

1. Execute regression testing after defect fixes
2. Perform additional stress testing with large file sets
3. Validate duplicate detection with comprehensive test data set

Release Readiness: The application should **NOT** be released until at least the Major severity defects are resolved, as they significantly impact core functionality and reliability.

9. Attachments

Test Metrics Summary:

- Total Test Cases Executed: 26
- Test Cases Passed: 20
- Test Cases Failed: 6
- Requirements Tested: 17/17 (100% coverage)
- Platforms Tested: Windows 11, Linux Ubuntu 18 LTS
- Audio Formats Validated: mp3, flac, wav, ogg, wma

Test Environment Configuration:

- JRE Version: 8.0.60+
- Test Data Size: ~50 audio files of various formats and sizes
- Maximum File Size Tested: Up to 2GB (as per requirements)

Files Generated During Testing:

- Test plan
- Smoke test checklist
- Smoke test cases documentation
- Critical path test checklist
- Critical path test cases documentation
- Defect report