

Traceability Report for Project Score 1.1.0

Author	Jan Würthner
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Table of Contents

1. Project Definition.....	1
2. Scope.....	1
3. Model.....	1
4. Use Cases.....	2

1. Project Definition

This library converts music score, given in an abstract data tree-structre (made of arrangements, tracks, voices, events), into a music sheet with a set of coordinates. Based on this output, any simple drawing tool can be used to display a full music score.

2. Scope

The scope of this document is a description of system requirements in combination with the test cases and their traceability.

3. Model

This chapter describes the data model

Requirement	Testcase
RQ-002 : The metric element defines the metric structure of a bar.	TC-001 : Create a two-level metric '2*2/4'. The 1st level submetrixes (amount 2) are of duration 1. The 2nd level submetrixes (amount 2) are of duration 0.5. The 3rd levelsingle events are of duration 0.25. TC-002 : Create a metric '3+1/4'. The 1st level submetrixes (amount 2) are of duration 1. The 2nd level are of duration 0.75 (amount 3) and 0.25 (amount 1). TC-003 : Create a two-level metric '3*3/4'. The 1st level submetrixes (amount 3) are of duration 2.25. The 2nd level submetrixes (amount 3) are of duration 0.75. The 3rd level single events are of duration 0.25. TC-004 : Create a two-level metric '4/4'. The 1st level submetrixes (amount 2) are of duration 1. The 2nd level submetrixes (amount 2) are of duration 0.5. The 3rd levelsingle events are of duration 0.25.

Requirement	Testcase
	<p>TC-005 : Create a composite metric '$3 \times 2 \times 3/16 + 1/8$'. The 1st level submetrics (amount 2) are of duration 1.25. The 2nd level (of $3 \times 2 \times 3/16$) are of duration 1.125 (amount 3) The 3rd level are of duration 0.375, 4th level of duration 0.1875 and last level 0.0625. The 2nd level of the $1/8$ metric is of duration 0.125.</p> <p>TC-006 : Test the depth level of the submetrics for a metric '$3 \times 2 \times 3/16 + 1/8$'.</p> <p>TC-007 : Create a composite metric '$5/4$'. The 1st level submetrics (amount 2) are of duration 1.25. The 2nd level submetrics (amount 3 and 2) are of duration 0.75 and 0.5.</p> <p>TC-008 : Test invalid metrics regarding the pattern given.</p> <p>TC-009 : Test the validity of metrics regarding the pattern: $\backslash s^*(\backslash d+)(?:\backslash s^*(\backslash \backslash *)\backslash s^*(\backslash d+))\backslash s^*/\backslash s^*(\backslash d+)\backslash s^*(?:\backslash (+ \backslash -)\backslash s^*(\backslash d+)(?:\backslash s^*(\backslash + \backslash *)\backslash s^*(\backslash d+))\backslash s^*/\backslash s^*(\backslash d+)\backslash s^*)^*\\$</p> <p>TC-010 : Create a two-level metric '$2 + 2/4$'. The 1st level submetrics (amount 2) are of duration 1. The 2nd level submetrics (amount 2) are of duration 0.5. The 3rd level single events are of duration 0.25.</p>

4. Use Cases

This chapter describes integration tests and use cases