MusicFormats API guide

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Minimal score


```
1   S_lpsrScore translateMsrToLpsr (
2     const S_msrScore&        originalMsrScore,
3     const S_msrOahGroup&     msrOpts,
4     const S_lpsrOahGroup&    lpsrOpts,
5     mfPassIDKind             passIDKind,
6     std::string              passDescription,
7     const S_mfcMultiComponent& multiComponent)
8   {
9     // ... ... ...
10
11    // create an msr2lpsrTranslator
12    msr2lpsrTranslator
13      translator (
14        originalMsrScore);
15
16    // build the LPSR score
17    S_lpsrScore
18      resultingLpsr =
19        translator.translateMsrToLpsr (
20          originalMsrScore,
21          multiComponent);
22
23    // ... ... ...
24
25    return resultingLpsr;
26  }
```

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Acknowledgements

Many thanks to Dominique Fober, the designer and maintainer of the `libmusicxml2` library. This author would not have attempted to work on a MusicXML to LilyPond converter without his work being already available.

In particular, the conversion of MusicXML data to a tree is extremely well done directly from the MusicXML DTD, and that was a necessary step to produce LilyPond code. Dominique also provided a nice way to browse this tree with a two-phase visitor design pattern, which this author uses extensively in his own code. The interested reader can find information about that in `libmusicxml2.pdf`, and more technical details in `MusicFormatsMaintainanceGuide.pdf`.

`xml2ly` and some of the specific examples presented in this document started as this author's contribution to `libmusicxml2`, and was later moved to a separate GitHub repository for practical reasons.

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