Abstract
Music can be represented in many different ways. In particular, audio and sheet music renditions are of high importance in Western classical music. For choral music, a sheet music representation typically consists of several parts (for the individual singing voice sections) and possibly an accompaniment. Within a choir rehearsal scenario, there are various tasks that can be supported by techniques developed in music information retrieval (MIR). For example, it may be helpful for a singer if both, audio and sheet music modalities, are present synchronously—a well-known task that is known as score following. Furthermore, listening to individual parts of choral music can be very instructive for practicing. The listening experience can be enhanced by switching between the audio tracks of a suitable multi-track recording. In this contribution, we introduce a web-based interface that integrates score-following and track-switching functionalities, build upon existing web technology.

Web-Based Interface

Functionality
- Score following combining audio and sheet music
- Track switching between musical voices
- Additional voice-based highlighting in score

Technical Realization
- Standard web-based techniques
- Trackswitch.js [3] for switching between the multitrack recordings
- Verovio [2] to dynamically render sheet music (given as MEI)

Data Set

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Parts</th>
<th>Dur.</th>
</tr>
</thead>
<tbody>
<tr>
<td>044</td>
<td>Abends, will ich schlafen gehen</td>
<td>SA</td>
<td>02:45</td>
</tr>
<tr>
<td>056</td>
<td>Der Ring</td>
<td>SS</td>
<td>01:15</td>
</tr>
<tr>
<td>079</td>
<td>Schwesterlein, wann gehen wir nach Haus</td>
<td>SAA</td>
<td>02:52</td>
</tr>
<tr>
<td>081</td>
<td>Un poquito cantas</td>
<td>SSA</td>
<td>01:29</td>
</tr>
<tr>
<td>105</td>
<td>Greensleeves</td>
<td>SSA</td>
<td>04:18</td>
</tr>
</tbody>
</table>

Practical Relevance?
- For a music publisher, visual appearance of sheet music is of top priority
- Professional sheet music engraving is an art
- Tweaking within music notation software to optimize visual appearance (e.g. creation of dummy objects)
- Problem of conversion between data formats (Sibelius, MEI, MusicXML)
- Specific requirements for technical reasons (e.g. separation of voices in sheet music)
- Automated rendering procedures do not suffice publisher’s needs

Literature & Acknowledgements


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