A javascript library for collaborative composition of leadsheets

Daniel Martín
Sony CSL

François Pachet
Sony CSL

Abstract

The Leadsheet Editor is a web-based application for editing and displaying music leadsheets. It is designed to support collaborative edition by allowing users to comment and make suggestions about various components of a leadsheet.

1. Introduction

A leadsheet is score composed by a melody (most of the times monophonic) and a grid of chord labels. Leadsheets are widely used to represent popular music songs as found in jazz and bossa nova song books.
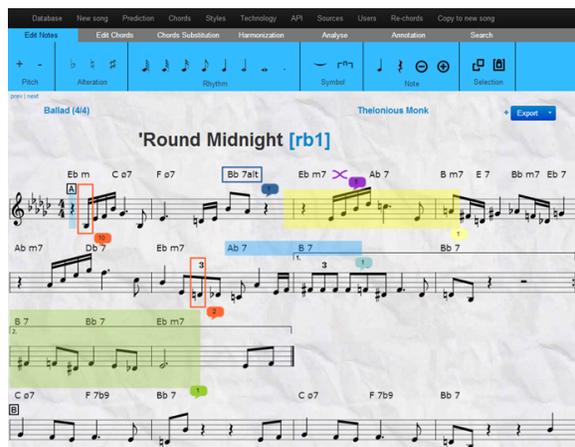
Existing score editors can be divided into desktop-based for individuals [1] (e.g. *Sibelius* and *Finale* [2], and web-based social oriented ones like *NoteFlight* (www.noteflight.com) which is a social network in which users can create and share scores. NoteFlight has a web friendly score editor with which users can comment and recommend scores, and edit them when they have the permission. *Chromatik* is a social network to share scores, where scores can be uploaded in PDF format and users can make annotations in it. However, these systems cannot be easily embedded in other applications or easily extended. Furthermore, the considered systems, do not provide annotation tools for commenting on specific parts of the score.

2. The Leadsheet Editor

2.1 Description

The Leadsheet Editor (LE) enables users to edit and play leadsheets intuitively. The LE provides an interface to edit melodies and chord progressions, as well as a Json format for representing and storing leadsheets.

Users can make suggestions of modifications on the most critical parts of leadsheets, such as notes, chords, bars, chord transitions and structure (see figure). The LE is implemented in javascript and can be easily embedded in any web-based application, such as MusicCircles, developed in the Praise project. It has also been used in the FlowMachines project to enter over 10,000 jazz and Bossa nova songs [3].

The modifications made by users are stored as *suggestions* that the original author can later visualize and apply or discard. They can be accompanied by text or audio examples.

2.2 Requirements

A demo of the Leadsheet Editor requires a computer with internet connection, Firefox or Chrome installed and a projector.

The LE also proposes features to edit a lead sheet collaboratively.

2.3 Links

<http://flow-machines.com/leadsheet_editor>
<http://www.iiia.csic.es/praise/>

3. References

[1] KUZMICH, J. Music notation programs: *The new generation.School Band & Orchestra magazine*
(August 2008).

[2] KUZMICH, J. The two titans of music notation. *School Band & Orchestra magazine*
(September 2008).

[3] Pachet, F., Suzda, J., Martin, D. "A Comprehensive Online Database of Machine-Readable Lead Sheets for Jazz" *Standards. ISMIR, pages 275-280*, Curitiba (Brazil), November 2013