

A JAVASCRIPT LIBRARY FOR COLLABORATIVE COMPOSITION OF LEADSHEETS

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Leadsheet

- Melody (monophonic)
- Chord grid
- Used in Real Books:
 - Jazz
 - Bossa-nova
 - Pop

202

(MED. BALLAD)

ALONE TOGETHER

-HOWARD DIETZ/ARTHUR SCHWARTZ

D-6 E-7(b9) A7(b9) D-9

E-7(b9) A7(b9) D-6 A-7(b9) D7(b9) G-7 D7(b9)

G-7 B-7 E7 G-7 C7 F

E-7(b9) A7(b9) Dm7(b9) 1. E-7 A7(b9) 2.

A-7(b9) D7(b9) G-7

G-7(b9) C7(b9) Fmaj7 E-7(b9) A7(b9)

D-6 E-7(b9) A7(b9) D-6 E-7(b9) A7(b9)

D-6 B-7(b9) Bb9 A7(b9) D-6 Bb9 A7(b9)

Goals

- **Collaborative composition**

- PRAISE project

- <http://www.iiia.csic.es/praise/>

- social network for music education with tools for giving and receiving feedback



- **Database of Leadsheets**

- Flow Machines project

- <http://flow-machines.com/>

- Automatic music generation "in the style " of arbitrary composers



Leadsheet Editor

- Edit and share leadsheets → Collaborative composition
- Create and save leadsheets → Leadsheet database

Leadsheet Editor

- Edit and share leadsheets → Collaborative composition
- Create and save leadsheets → Leadsheet database
- Machine-readable leadsheets
- Web-based
 - Collaborative
 - Easily accesible for several users
- Embeddable
 - used in different project with different platforms

Format for Leadsheets

222

(MED. BALLAD)

ALONE TOGETHER

- HOWARD DIETZ / ARTHUR SCHWARTZ

Handwritten musical score for "Alone Together" by Howard Dietz and Arthur Schwartz. The score is in B-flat major, 4/4 time, and is marked "MED. BALLAD". It consists of 22 measures. The notation includes a treble and bass staff with various chords and melodic lines. Chords are written above the notes, including D-6, E-7(b9), A7(b9), D-9, E-7(b9), A7(b9), D-6, A-7(b9), D7(b9), G-7, D7(b9), G-7, B-7, E7, G-7, C7, F, E-7(b9), A7(b9), Dmaj7, E-7, A7(b9), A-7(b9), D7(b9), G-7, G-7(b9), C7(b9), Fmaj7, E-7(b9), A7(b9), D-6, E-7(b9), A7(b9), D-6, E-7(b9), A7(b9), D-6, B-7(b9), Bb9, A7(b9), D-6, Bb9, and A7(b9). The score ends with a double bar line.

Structure

- Title
- Composer
- Style
- Time signature
- Key Signature
- Sections
 - Name
 - Number of Bars
 - Repetitions
 - Bars
 - Chords
 - Melody

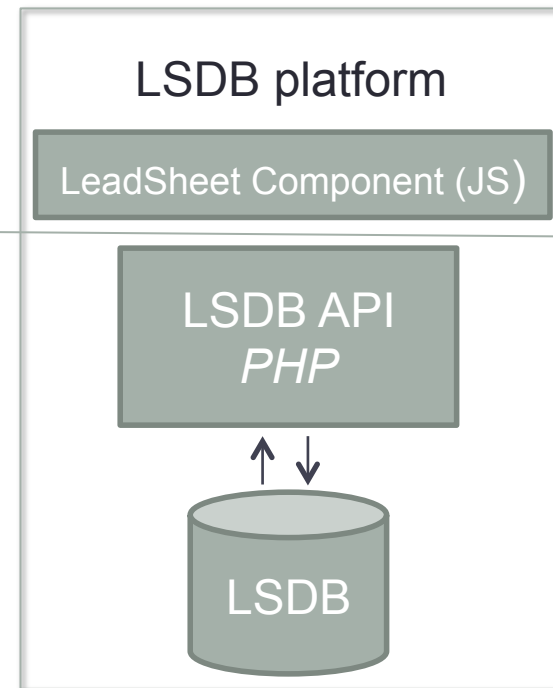
JSON format

```
"title": "Alone Together",
"composer": "Howard Dietz \\/ Arthur
"time": "4\\4",
"style": "Medium Ballad",
"changes": [
{
  "id": "0",
  "name": "Pickup",
  "numBars": "1",
  "repeat": "0",
  "endingNumBars": "0",
  "timeSignature": "",
  "style": "",
  "bars": [
    {
      "chords": [
        {
          "p": "NC",
          "beat": 1
        }
      ],
      "melody": [
        {
          "keys": [
            "B\\4"
          ],
          "duration": "hr"
        }
      ]
    }
  ]
}
```

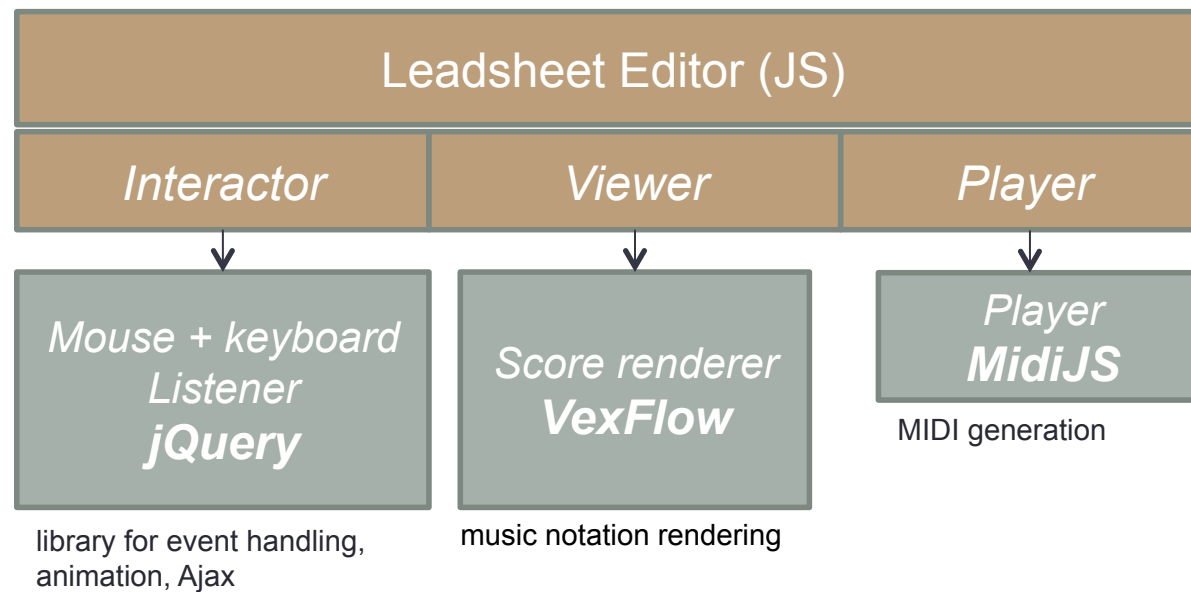
Web-based

- Client
 - JavaScript (JS)

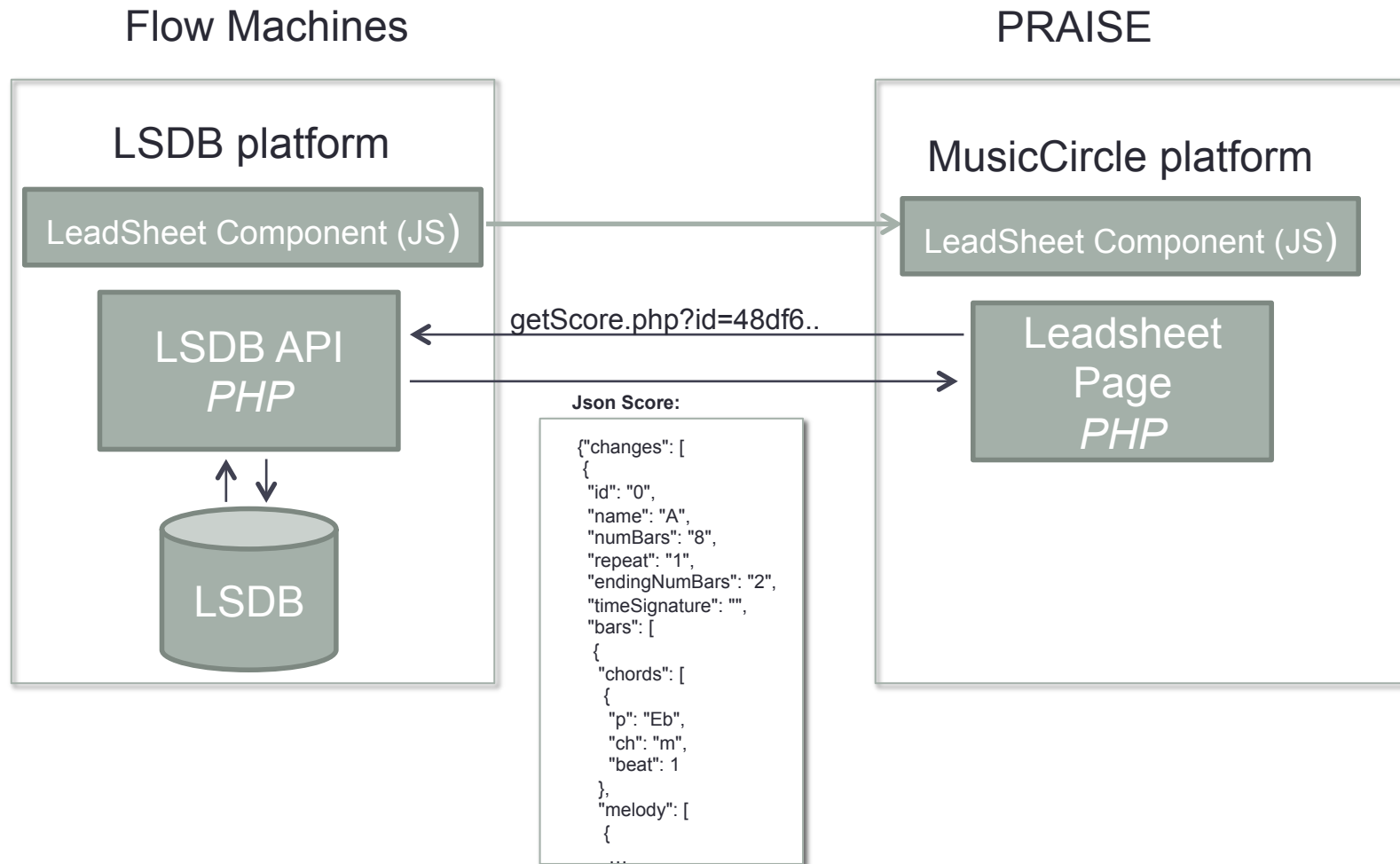
- Server (Persistence)



JavaScript code



Embeddable



Embeddable

The screenshot shows a web browser window with the URL `dev2.musiccircleproject.com/scores.php`. The page features the Music Circle logo and a navigation bar with links for Tracks (172), Lead sheets, Profile, Communities, Users, Help, Feedback, and Logout. The main content area is titled "Jazz lead sheets" and includes a search bar with the text "blue". Below the search bar, the title "Blue Room by Rodgers-Hart" is displayed, followed by a dropdown menu showing "I have played this:". The lead sheet itself is written in 4/4 time and consists of three staves. The first staff contains the melody for the first line, with chords F6, Dm7, Gm7, C7, FM7, Dm7, Gm7, and C7. The second staff contains the melody for the second line, with chords FM7, FM7, F7, Bbm7, Gm7, F6, G7, Gm7, and C7. The third staff contains the melody for the third line, with chords F, Gm7, C7, and F. The lead sheet is presented in a clean, professional layout with a white background and black text.

localhost:8888/~matthew x Jazz lead sheets x dev2.musiccircleproject.co x

dev2.musiccircleproject.com/scores.php

Music Circle Tracks 172 Lead sheets Profile Communities Users Help Feedback Logout

Jazz lead sheets

blue

Blue Room by Rodgers-Hart

I have played this:

F6 Dm7 Gm7 C7 FM7 Dm7 Gm7 C7

FM7 FM7 F7 Bbm7 Gm7 F6 G7 Gm7 C7

F Gm7 C7 F

Viewing - Flow Machines x Viewing - Flow Machines x Viewing Alone Together - x

lsdb.flow-machines.com/view.php?id=5230ff7e58e3383d76000005

Applications Viewing A Night In ... Viewing - Flow Mac...

Edit Notes Edit Bars Edit Chords Suggest Chords Harmonize Analyse Annotate

Search

Pitch Alteration Rhythm Symbol Note Selection

Medium Ballad (4/4)

Howard Dietz / Arthur Schwartz

Alone Together

NC
Pickup

D m6 E ø7 A 7b9 D m9 E ø7 A 7b9

A

D m6 A ø7 D 7b9 G m7 D 7b9 G m7

B m7 E 7 G m7 C 7 F E ø7 A 7b9b5

D M7 E m7 A 7b9

Midi player

Stop Play Loop Volume 120 Tempo Metronome

acoustic_grand_piano alto_sax

Chords Melody

Export

Leadsheet Database

- 7000 leadsheets
- 50 Real Books



Sources 7032 completed songs / 11424 songs

Anthologie Des Grilles De Jazz (0/1467)	Chico Buarque 2 (42/42)	João Bosco 1 (24/24)
Ary Baroso Songbook 1 (44/44)	Colorado Cookbook (275/277)	Latin Real Book (1/177)
Ary Baroso Songbook 2 (31/31)	Cuban Fake Book (0/121)	Leadsheets for comping project (33/33)
Bill Evans Fake Book (60/61)	Dorival Caymmi 2 (47/47)	Library of Musicians Jazz (327/331)
Bossa Nova 1 (62/62)	Generated LeadSheets (12/12)	New Real Book 1 (Sher) (190/237)
Bossa Nova 2 (59/59)	Gilberto Gil Songbook I (43/44)	New Real Book 2 (Sher) (201/218)
Bossa Nova 3 (56/57)	Gilberto Gil Songbook II (37/38)	New Real Book 3 (Sher) (182/198)
Bossa Nova 4 (62/62)	Hal Leonard Real Jazz Book (505/528)	Noel Rosa Songbook 1 (38/38)
Bossa Nova 5 (59/63)	Ivan Lins 1 (36/36)	Noel Rosa Songbook II (40/41)
Bossa Nova Tutorial (6/6)	Ivan Lins 2 (34/34)	Noel Rosa Songbook III (38/40)
Caetano Veloso 2 (66/66)	Jazz Fake Book (0/631)	Pepper Adams Songbook (40/43)
Charlie Parker Omnibook (53/53)	Jazz LTD (504/524)	Real Book (illegal 5th ed.) (400/444)
Chediak - As 101 melhores canções do século XX (50/51)	Joao Bosco 2 (1/1)	Real Book 2 (illegal) (422/426)
Chediak - As 101 melhores canções do século XX Vol 1 (49/50)	John Coltrane Songbook (96/98)	Real Book 3 (illegal) (0/292)
	Real Book Of Blues (214/227)	Tom Jobim Songbook II (24/24)
	Real Book Vol. 2 / 2nd Ed. - (legal) Hal Leonard (393/397)	Tom Jobim Songbook III (29/31)
	Real Book Vol. 3 / 2nd Ed. - (legal) Hal Leonard (388/395)	Vinicius de Moraes Songbook I (53/56)
		Vinicius de Moraes Songbook II (50/57)
		Vinicius de Moraes Songbook III (57/60)

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

Collaborative Composition

- Composers can provide feedback on:

- Notes
- Chords
- Bars
- Structure

- Types of feedback:

- Score
- Text comments
- Audio

The screenshot displays a music composition software interface. At the top, there is a navigation bar with tabs: Database, New song, Prediction, Chords, Styles, Technology, API, Sources, Users, Re-chords, and Copy to new song. Below this is a toolbar with buttons for Edit Notes, Edit Chords, Chords Substitution, Harmonization, Analyse, Annotation, and Search. The main workspace shows a musical score for 'Round Midnight' by Thelonious Monk, in 4/4 time. The score is divided into sections: A (marked with a red box), B (marked with a blue box), and C (marked with a green box). The score includes various chords (e.g., Eb m, C o7, F o7, Bb 7alt, Eb m7, Ab 7, B m7, E 7, Bb m7, Eb 7, Ab m7, Db 7, Eb m7, Ab 7, B 7, Bb 7, B 7, Bb 7, Eb m7, C o7, F 7b9, Bb 7, C o7, F 7b9, Bb 7) and musical notation (notes, rests, bar lines). The interface also includes a 'prev | next' button and an 'Export' button.

Collaborative composition

Passaran els anys

Jordi

Dani commented: (1 day ago) X
Just an ornament
Reply

Chords: C, E7, Am, Gm, FM7, E7, Am, G, C, E7, Am, Gm, FM7, E7, Am, FM7, Em7, Am7, D7/F#, FM7, Em7, Am7, G7.

Fingerings: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.