ARCHITECTURE OVERVIEW

- Entity Relationship Diagram turned into tables that contains all of our data
- Provides efficient metadata-based search
- Lets us build a user-friendly interface that communicates effectively with the database
- Lets us serve the application over the Web

Diagram:
- Web Server
- Web Framework
- Search Engine
- Database
INTERFACE OVERVIEW

Search
Powerful content based search for scores in symbolic notation with metadata.

Upload
Upload your symbolic music files!
# INTERFACE OVERVIEW (BROWSING)

## Persons (20)

<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Works Composed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alighieri, Dante</td>
<td>1265–1321</td>
<td></td>
</tr>
<tr>
<td>Bembo, Pietro</td>
<td>1470–1547</td>
<td></td>
</tr>
<tr>
<td>Compère, Loyset</td>
<td>1440-1445–1518</td>
<td>6 Works Composed</td>
</tr>
<tr>
<td>Bruhier, Antoine</td>
<td>1470–1521</td>
<td>3 Works Composed</td>
</tr>
<tr>
<td>De Silva, Andreas</td>
<td>1475–1530</td>
<td>1 Works Composed</td>
</tr>
<tr>
<td>Festa, Sebastiano</td>
<td>1495–1524</td>
<td>8 Works Composed</td>
</tr>
<tr>
<td>Isaac, Heinrich</td>
<td>1450–1517</td>
<td>2 Works Composed</td>
</tr>
<tr>
<td>Mouton, Jean</td>
<td>1459–1522</td>
<td>3 Works Composed</td>
</tr>
<tr>
<td>Obrecht, Jacob</td>
<td>1457–1505</td>
<td>1 Works Composed</td>
</tr>
<tr>
<td>Pesenti, Michele</td>
<td>1470–1528</td>
<td>2 Works Composed</td>
</tr>
<tr>
<td>Petrarca, Francesco</td>
<td>1304–1374</td>
<td></td>
</tr>
<tr>
<td>Pipelare, Matthaeus</td>
<td>1450–1515</td>
<td>1 Works Composed</td>
</tr>
</tbody>
</table>
INTERFACE OVERVIEW (DETAIL)

**F164_09_Pisano_Amor_se_OMRcorrIL.sib**
*File Type:* sibelius  
*Source:* Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 9.0

**F164_09_Pisano_Amor_se_OMRcorrIL.midi**
*File Type:* midi  
*Source:* Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 9.0

**F164_09_Pisano_Amor_se_OMRcorrIL.xml**
*File Type:* xml  
*Source:* Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 9.0
INTERFACE OVERVIEW (SEARCH)

Filter results by

Search
 amor

Sacred/Secular
☐ Sacred(27)

Instrument Or Voice
☐ Voice(27)

Composer
☐ Bernardo Pisano(15)
☐ Sebastiano Festa(12)

Genre (Type)
☐ Madrigal(27)

Genre (Style)
☐ Renaissance(27)

Attribution
☐ Certain(24)
☐ Uncertain(3)

File Format
☐ midi(9)
☐ sibelius(9)
☐ xml(9)

FILTER

Chords and Vertical Interval Features

Second Most Common Vertical Interval:
0 - 6.93

Second Most Common Vertical Intervals:

Most Common Vertical Interval:
0.259

Relevance of Second Most Common Vertical Interval:
0.1765 - 0.2064

Relevance Ratio of Two Most Common Vertical Intervals:
0.8582 - 0.9938

Vertical Unisons:
0.0145 - 0.06296

Vertical Minor Seconds:
Interface Overview (Search)

Filter results by

Search
- amo

Sacred/Secular
- [ ] Sacred(2)

Instrument Or Voice
- [ ] Voice(2)

Composer
- [ ] Bernardo Pisano(2)

Genre (Type)
- [ ] Madrigal(2)

Genre (Style)
- [ ] Renaissance(2)

Attribution
- [ ] Certain(2)

File Format
- [ ] midi(2)

2 results for “amo”

Amore amor quando io speravo

- File Type: midi
- Source: Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 8.0
- File: F164_08_Pisano_Amore_quando_OMRcorrIL.mid

Tanta pietà cor mio talhor m'assale

- File Type: midi
- Source: Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 16.0
- File: F164_16_Pisano_Tanta_pieta_OMRcorrIL.mid
INTERFACE OVERVIEW (INPUT)

Upload a Musical Work

Title: e.g., Symphony No.3, Op. 55

Composer: e.g., Ludwig van Beethoven (1770-1827)

Certainty of attribution: 

Date: YYYY

Location:

Additional Information

These fields make it easier to find the piece using the database search engine.

Sources: e.g., The Nine Symphonies by Beethoven, published by Baerenreiter

Genres as in type: e.g., Symphony

Genres as in style: e.g., Classical music

Sacred/Secular:

Instrumentation: e.g., Flute

Portions: e.g., pp. 37-42

Sections

If the musical work is divided into sections, declare them in this table. Please enter titles for all sections, even if you will not be uploading files for all of them.

Title: e.g., Allegro con brio

Ordering: e.g., 1

Files

Upload files with acceptable formats here. If the file is for a specific act or section as entered above, select that entry from the drop-down menu in the "Attach To" column. The files you upload will be renamed automatically.

Upload: No file chosen

Attach To: MUSICAL WORK

SUBMIT
INTERFACE OVERVIEW (INPUT)

Upload a Musical Work

Title: e.g., Symphony No.3, Op. 55

COMPOSER: Beethoven, Ludwig van 1770–1827

Certainty of attribution □

Date YYYY

YYYY

Location

TRANSCRIBER: Yao

Given name

Surname

Range date birth

Range date death

Birth location

Death location

Authority control url

Certainty of attribution □

Date YYYY

YYYY

Location e.g., Vienna
## Interface Overview (Input)

### Sections

If the musical work is divided into sections, declare them in this table. Please enter titles for all sections, even if you will not be uploading files for all of them.

<table>
<thead>
<tr>
<th>Title</th>
<th>Ordering</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g., Allegro con brio</td>
<td>1</td>
</tr>
</tbody>
</table>

### Files

Upload files with acceptable formats here. If the file is for a specific act or section as entered above, select that entry from the drop-down menu in the "Attach To" column. The files you upload will be renamed automatically.

- Upload: Choose File
- No file chosen

- Attach To: MUSICAL WORK
FUTURE WORK

- Linked Open Data
  - RDF (Resource Description Framework), JSON-LD (JavaScript Object Notation for Linked Data)
- Ontology
- Authority control
  - VIAF (Virtual International Authority File), WikiData, etc.
- Other File Formats
THANK YOU!

SIMSSA DB team: Cory McKay, Gustavo Polins Pedro, Yaolong Ju, Emily Hopkins, Ichiro Fujinaga, and Julie Cumming

@simssapproject

https://github.com/ELVIS-Project/simssadb