

# Alignment User Interface (UI)

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## 1 Preparation

To use the alignment user interface (UI), the following programs are necessary to be installed:

- Qt <https://www.qt.io>
- Finale <http://www.finalemusic.com>

To use the UI, please compile the Qt file with the Qt Creator. You will have `AlignmentUI.app` or `AlignmentUI.exe`, etc. depending on your computer environment.

## 2 UI Usage

### 2.1 Input Files

Two files are used as inputs to the UI.

**Match file** The file extension is ‘`_match.txt`’. This file describes the alignment result. For each performed note, an ID of the corresponding note in the score is indicated.

**Score `fmt3x` file** The file extension is ‘`_fmt3x.txt`’. This file is obtained from a musicXML file and describes the score information.

### 2.2 Main Window

When input files are set, the main window looks as in Fig. 1 The upper staves indicate the score information and the lower staves indicate the performance information.

### 2.3 Button Actions

File manipulations are mainly done by button actions. For playing back the input data, please see Sec. 2.6.

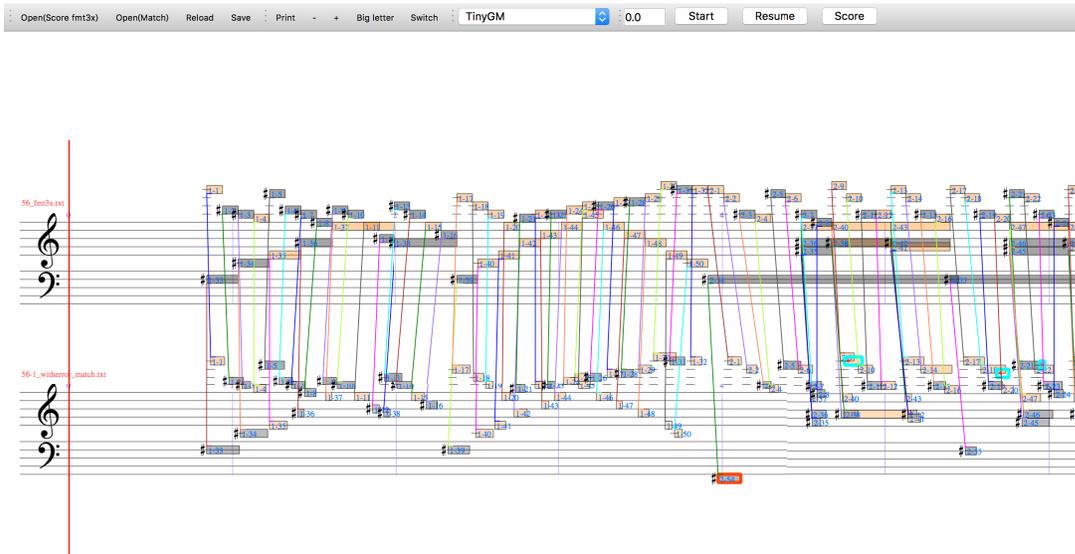


Figure 1: Main window.

**Open file** The input files, a score `fmt3x` file (e.g. `YY_fmt3x.txt`) and a match file (e.g. `XX_match.txt`), can be opened by pushing ‘Open(Score `fmt3x`)’ and ‘Open(Match)’ and selecting files.

**Remark** The `fmt3x` file and the match file should be opened in this order.

**Reload the match file** When you want to update the match file after editing it with another editor etc., push the ‘Reload’ button. If the file name changes, open it with ‘Open(Match)’ button.

**Save the match file** To save the corrected result of alignment to a match file, push ‘Save’ button.

**Save the current screen to a PDF** Push the ‘Print’ button.

**Enlarge or shrink the time axis.** Push ‘+’ or ‘-’ button to enlarge or shrink the time axis.

## 2.4 Matching Lines and Labels

The alignment UI displays the matching lines and labels and the performance errors (Fig. 2).

- **Correct note** A performed note without errors is displayed with the corresponding note ID and a matching line.
- **Pitch error** A performed note with an erroneous pitch is displayed with a red bold box.
- **Extra note** Displayed with a cyan bold box.
- **Missing note** Displayed with a pink bold box.

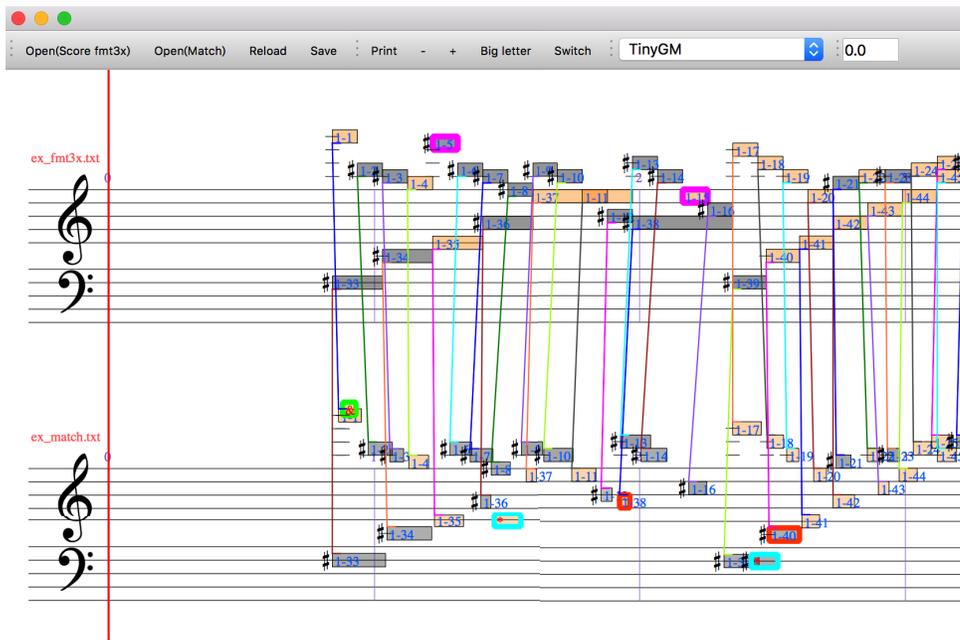


Figure 2: Examples of performance errors.

## 2.5 Keyboard Actions

Manipulations related to examining and correcting alignment results are mainly done with the keyboard and the mouse.

**Updating the matching lines** The matching lines are *not* automatically updated when you correct them. To update, use ‘Command+S’ to save the matching file.

**Stress particular note** If a performed note is clicked, the note and its matching line are stressed. If ‘Tab’ or ‘Shift+Tab’ is pushed afterwards, the note just after or just before the current stressed note will be stressed.

**Edit the matching information** If the label of a performed note is clicked, the text will be editable.

**Save the match file** The match file will be saved by ‘Command+S’.

**Enlarge or shrink the display** This can be done by ‘Shift+<’ or ‘Shift+>’.

**Correcting an oblique matching line** In case you want to correct an oblique matching line, select the performed note and then push ‘Command+D’.

## 2.6 Sound Playback

The score notes and performance notes can be played back. To use this function, you need to choose a MIDI sound source with the bar at the upper centre of the main window.