



Modifying Elements of Some Tools in the Finale Music Program to Produce A Template to Write Numerical Notation

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Abstract

The Finale is a music notation program used to write music, typically in block notation or standar music notation. However, the default document in this program cannot be used to directly write the Indonesian numerical music notation system. This article aims to produce a new template that includes the Indonesian numerical music system for direct use with the Finale music program. Using an action research method, this research modifies elements of some tools in the default document such as Staff Attribute and Alternation Notation, Document Options (Alternate Notation, beams, Flags, Stems), Line Thichkness at Word Exttensions, Create and Setting New Chord Suffix, Smart Slur Contour, Smart Shape Pacement, Font and Position at Expression Designer, Articulation Symbol Position at Articulation Designer, and Adding and Positioning Score Identity. The result of this research is a new template for easily and directly writing numerical music notation in Finale Music program. This involves the following steps: writing the music identity, rhythm, melody, lyrics, expression, articulation, and chord.

Keywords:

Finale Music Program, Numerical Notation, Modifying Elements of Some Tools, A Template to Write Numerical Notation, Steps to Write Numerical Music Notation.

Introduction

Music notations is a crucial tool for musicians to preserve and share their musical creations. Finale Music, as one of the world's most powerful music notation programs, provides an easy-to-use platform for editing, listening, printing, and sharing music.¹ It is important to recognize that musical notation plays and active role in shaping the interpretation of musical events, and a critical engagement with its communication is necessary for a deeper understanding and interpretation of musical works.² There are various ways of musical notation. One of them is numerical notation.

The Numerical notation is one of musical writing system in indonesia as well as several countries in Asia with special characters or roles. According to Yamuger, song with numerical notations was initiated by Jean Jacques Rousseau (1712-1778), then it was developed by Pierre Galin (1886-1821) and Aime Paris (1798-1866) and lastly by Emile J. M. Cheve (1804-1864).³ In Indonesia's oral tradition,

¹ <https://www.finalemusic.com/> access 24 February 2023; cf. <https://online.berklee.edu/courses/music-notation-and-score-preparation-using-finale#> access 24 February 2023.

² James Grier, *Music Notation in The West* (United Kingdom: Cambridge University Press, 2021), 4, 7.

³ Yayasan Musik Gereja, *Kidung Jemaat Empat Suara* (Jakarta: Yamuger, 2011); Cf. Nice, 2017. Nice give some interseting information about numerical notation. He said that Jean Jacques Rousseau proposed a numerical notation system in 1742. Rousseau later published in his Disertation on Modern Music in 1743 and presented to the French Academy of Sciences. Nice also said that the usage of numerical notation has beneficial for student in reading and transposing Standard Music Notatio. https://medium.com/@info_70544/the-case-for-numerical-music-notation-part-1-introduction-and-history-5f1543ca8a95, access 24 February 2023.

notation has a relatively minor role. Currently, chipper notations (broadly referred to as “not angka”) are the most commonly used notation system.⁴

These notations represent pitches with as subset of numbers 1 to 7, with 1 corresponding to the highest note of a particular octave. Dots above or below the numbers represent notes in ranges outside of the central octave. Chipper notations are primarily used to notate the skeletal melody and vocal parts, although transcriptions of elaborating instrument variations are occasionally used for analysing and teaching. Chipper notation has also been extended to other oral traditions, and a diatonic scale chipper notation is commonly used for notating western-related genres such as church hymns and popular song. Indonesian diatonic chipper notation is a “movable-Do” notation. Therefore, scores must indicate which pitch corresponds to the number 1 (e.g., “1 = c” or “do = c”).⁵

Although Finale Music is one of world’s most powerful music notation program and one of the world's best selling music notation software, as mention before, the default of this program can not used directly to write numerical music notation after we open this program an chose to use default. Here the default worksheet of Finale Music Program ver. 27.



Figure 1. Finale Music default document worksheet.
Source: Finale Music Software ver.27 Trail

Until now, many people in Indonesia still use numerical or number music notation, both to write, read, play and sing music. Here an example of numerical music notation in Indonesia. This song was written by Branckly Egbert Picanussa.⁶

⁴ https://www.classiccat.net/dictionary/musical_notation.php#Indonesia, access 23 February 2023.

⁵ https://www.classiccat.net/dictionary/musical_notation.php#Indonesia, access 23 February 2023.

⁶ Hymn by Branckly Egbert Picanussa 2022 003, <http://www.youtube.com/@branckly> access 23 February 2023

The image shows a musical score for the song "Kami Bersyukur". At the top, it specifies "do = f 4 ketuk" and a tempo of "♩ = ± 75". The score is written in numerical notation with lyrics underneath. The first line of music has notes 0, 5, 1, 2, 2, 3, 3, 0, 3, 2, 3, 4, 3, 2, 1, 3, 2, 2. The lyrics are "Ka-mi ber-syu - kur, ka-mi ber-syu-kur pa-da-Mu, Tu-han". The second line of music has notes 5, 0, 6, 7, 1, 3, 2, 2, 0, 2, 1, 7, 2, 1, 7, 6, 6, 5, 5. The lyrics are "s'bab ha - ri ba - ru Tu-han be-ri-kan ba-gi ka - mi." The notes are connected by horizontal lines, and some have dots above them, indicating specific rhythmic values.

Figure 2. Example of Indonesia numerical music notation

The purpose of this research is to create a new template to write numerical music notation directly with Finale Music without copy a set of notation after some bars was written. To reach the purpose, researcher will modification of default setting of elements in some tools in Finale default document in Finale Music version 27.

Method

To get the aim of this research, I used action research method. Because action research is done by the practitioner, it is often referred to as practitioner research, or a similar name such as practitioner-led or practitionerbased research. It is a form of research which can be undertaken by people in any context, regardless of their status or position. It involves you thinking carefully about what you are doing, so it can also be called a kind of self-reflective practice.⁷ In this reserach, researcher make self-reflective to modificate some elements of tools in finale default document to get the new template to write Indonesian Numerical Music notation directly with Finale Music.

Action research involves learning in and through action and reflection, and it is conducted in a variety of contexts.⁸ Action research is a form of enquiry that enables practitioners everywhere to investigate and evaluate their work. They ask, 'What am I doing? What do I need to improve? How do I improve it?'⁹ The process of 'observe – reflect – act – evaluate – modify – move in new directions' is generally known as action–reflection, although no single term is used in the literature. The process is ongoing because as soon as we reach a provisional point where we feel things are satisfactory, that point itself raises new questions and it is time to begin again.¹⁰

There are some steps in action research: Planning and Implementing the action plan, Evaluating the impact and its significance, validating the claim to improvement, modification of practice, evaluation

⁷ Jean McNiff, Jack Whitehead, *Action Research: Principles and Practice*, Second Edition (London and New York: RoutledgeFalmer, 2002), 15.

⁸ Ibid.

⁹ Jean McNiff, Jack Whitehead, *All You Need To Know About Action Research* (London-California-India: Sage Publications Ltd., 2006), 7.

¹⁰ Ibid., 9.

of doing project.¹¹ Application of these steps in this research is After make a focus on research, this research continue with observation to default document of Finale Music then make planning and implementing actions to produce a new Finale Music template to write Indonesia Numerical Music Notation diricetly in Finale Music. Evaluating was made in every act and cycle and validating result to Indonesian Numerical Notation general. Modification of elements of default document will make to some tools till get the new template is needed.

Modifying Elements of Some Tools in Default Document of Finale Music

To obtain a template for writing – Indonesia – numerical music notation directly in the Finale Music, several modifications need to be made to the default document provided by Finale Music.

1. Staff Attribute and Alternate Notation

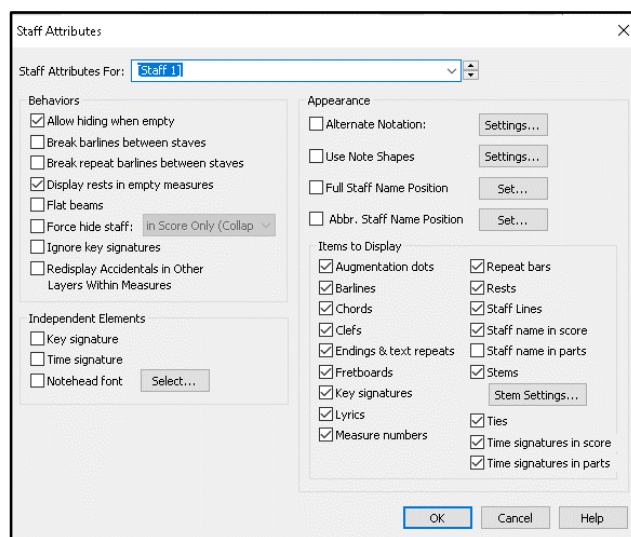


Figure 3. Staff Attributes of Finale Music
Source: Finale Music Software ver.27 Trail

Modifications to the Staff Attributes were made to obtain a suitable format for placing notes and rests in numerical notation. To achieve this, uncheck the boxes for Display rest in empty measures, Clefs, Fretboards, Key Signatures, Rests, Staf Lines, Staff Name in Parts, Time Signatures in Score, and Time Signatures in Parts. Then modifcate alternate notation to Rhythmic Notation and Stems Up.

¹¹ Jean McNiff, Pamela Lomax, Jack Whitehead, *You and Your Action Research Project* (London and New York: Routledge, 1996), 48-69.

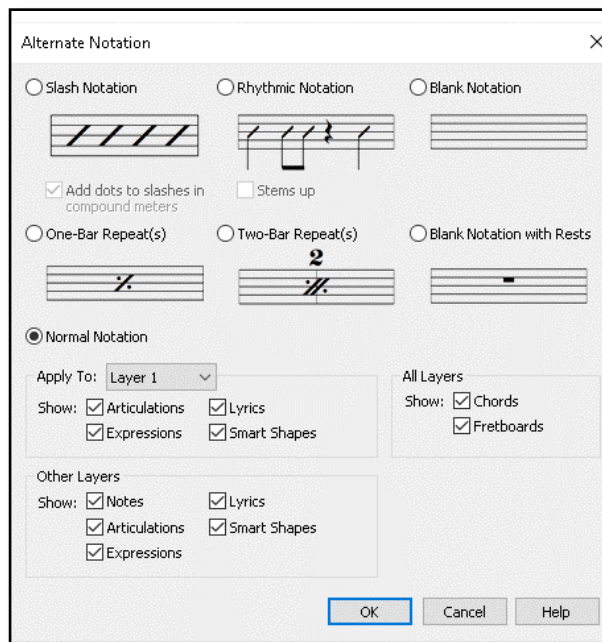


Figure 4. Alternation Notation of Finale Music
Source: Finale Music Software Trail ver.27

2. Document Options – Alternate Notation

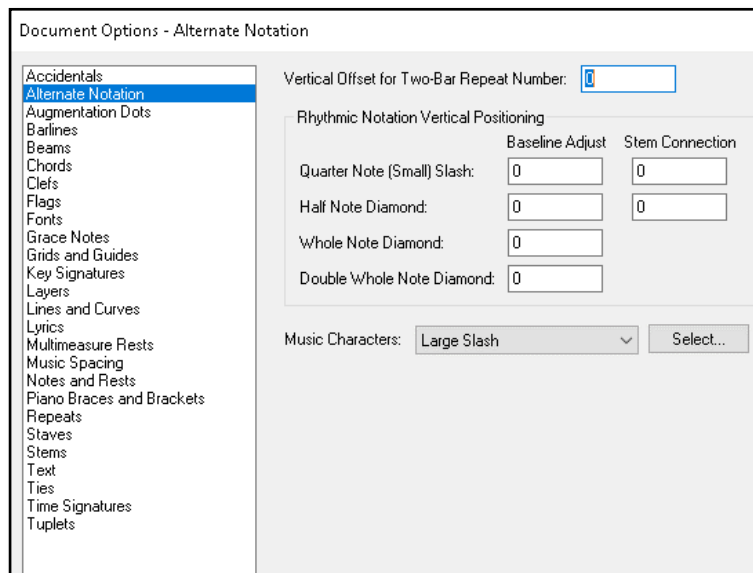


Figure 5. Staff Attributes of Finale Music
Source: Finale Music Software ver.27 Trail

At the “Alternate Notation” dialog box, modifications are made to the shape of the notehead. To do this, select the empty option from the various choices provided by Finale Music.

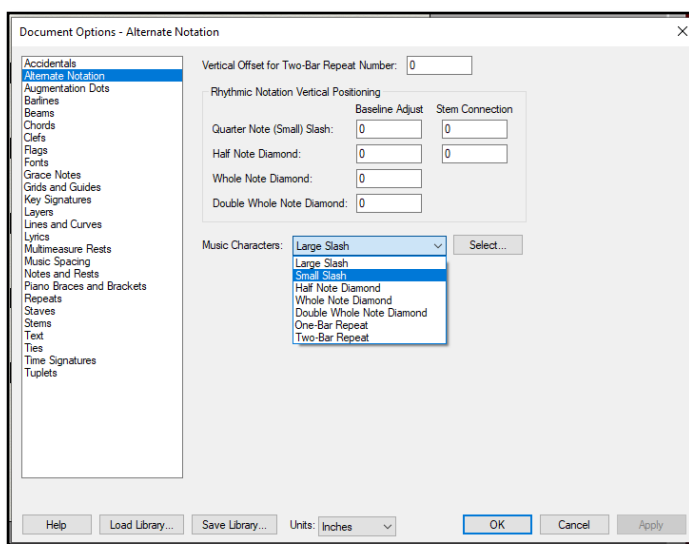


Figure 6. Document Option – Alternate Notation
Source: Finale Music Software ver.27 Trail

3. Document Options – Beams

The modification of Beams in the Document Options aims to obtain the desired shape of beams. The modification is done on the Beam Thickness: 0,02002.

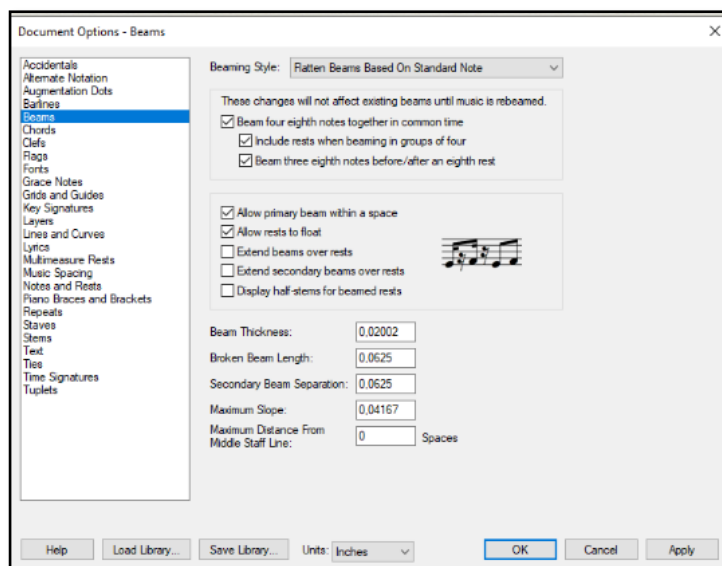


Figure 7. Document Options - Beams
Source: Finale Music Software ver.27 Trail

4. Document Options – Flags

Modification of flags in Document Options aims to obtain the desired form of beams, in this case, straight flags.

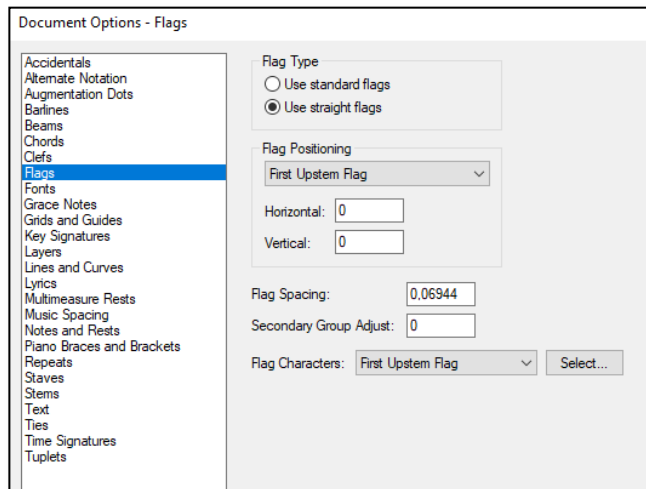


Figure 8. Document Options - Flags
Source: Finale Music Software ver.27 Trail

5. Document Options – Stems

The modification of stems is related to the desired Normal Stem Length: 0, and Stem Line Thickness: 0.

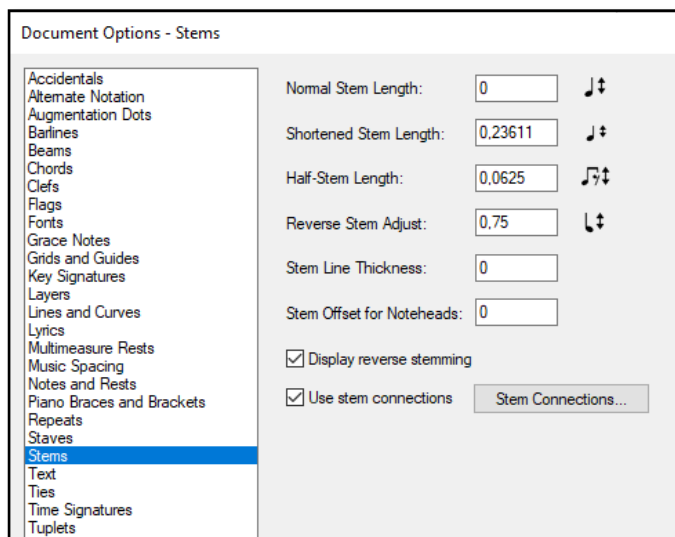


Figure 10. Document Options - Stems
Source: Finale Music Software ver.27 Trail

6. Modification Line Thickness at Word Extensions

Set Line Thickness on Word Extension at Document Options – Lyrics to “0”

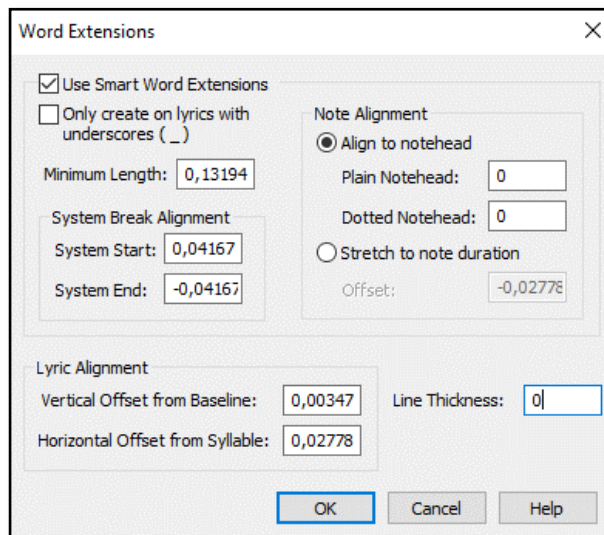


Figure 9. Word Extensions

Source: Finale Music Software ver.27 Trail

7. Create and Setting New Chord Suffix

As this template will utilize the Chord Tools as a way to write numerical notation with their respective pitches, modifications need to be made to the Chord suffix.

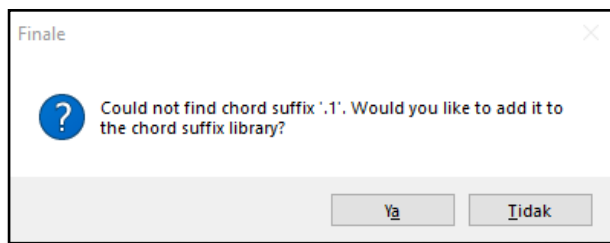


Figure 11. Adding chord suffix library

Source: Finale Music Software ver.27 Trail

Since the high-low notes in numerical notation are indicated by dots above and below the notes, a new chord suffix needs to be arranged in the Chord Suffix Editor.

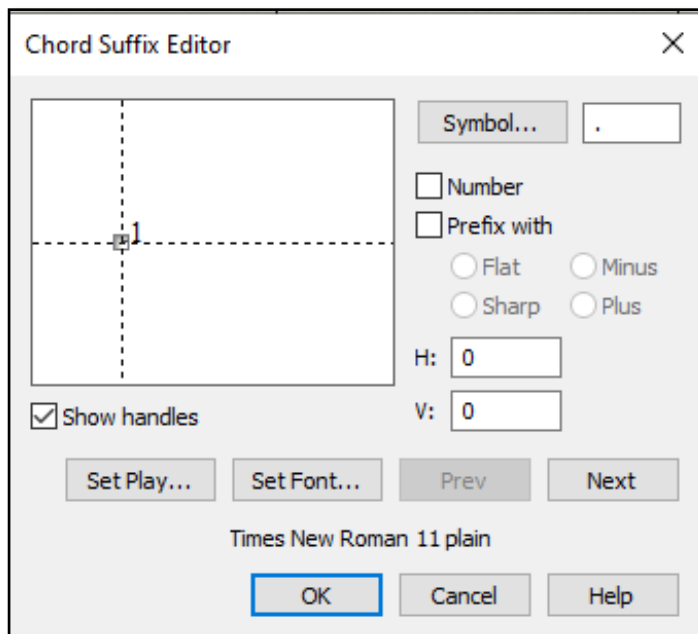


Figure 12. Chord Suffix Editor
Source: Finale Music Software ver.27 Trail

8. Smart Slur Contour

The modification of Smart Slur Contour is done to obtain the appropriate thickness of Slur in numerical notation writing. In the Thickness option: 0.

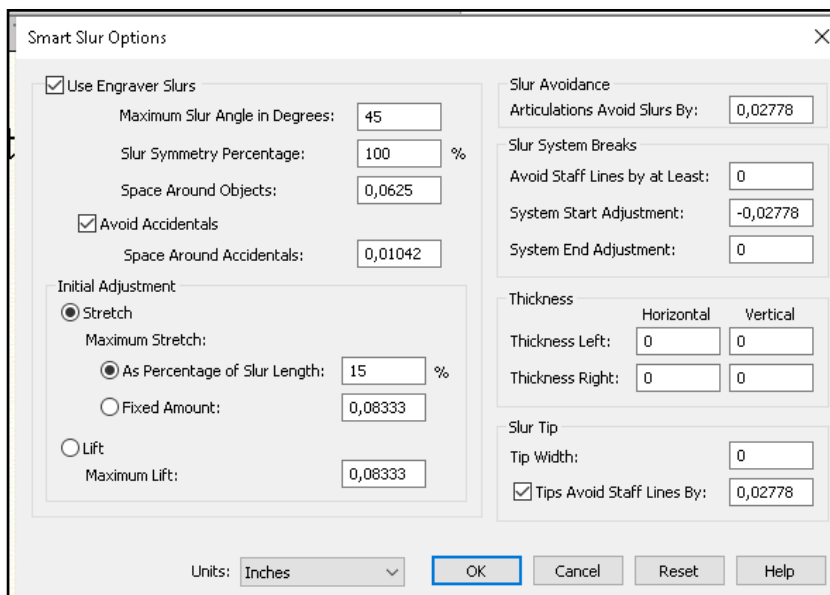


Figure 13. Smart Slur Options
Source: Finale Music Software ver.27 Trail

9. Smart Shape Placement

The modification of Smart Shape Placement is done to obtain the correct position and distance according to the needs. On the Start Point H: 0,13542, V: -0,13889. Meanwhile on the End Point H: 0,03819, V: -0,13889.

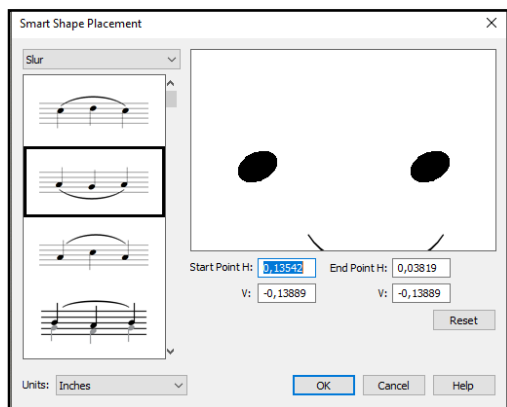


Figure 14. Smart Shape Placement
Source: Finale Music Software ver.27 Trail

10. Modification of Expression Designer

The purpose of this modification is to adjust the font size and placement of dynamic expression in numerical notation writing. The font size for dynamic expression is modified according to the specific needs. For this template, the font size is set to 16.

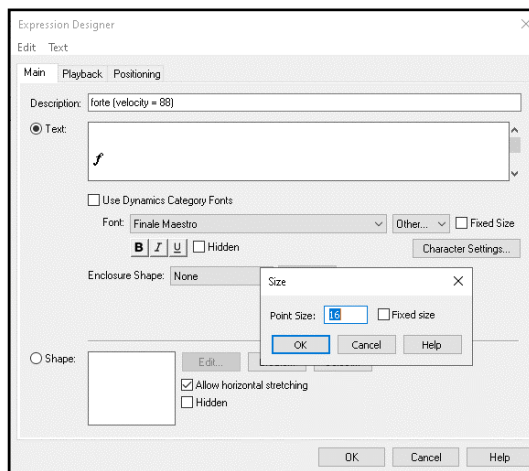


Figure 15. Expression Designer - Main
Source: Finale Music Software ver.27 Trail

On default setting, Finale music places dynamic expression at the bottom of the notation. In Indonesia numerical music notation, the dynamic expression is placed above the note. Thus modification is required to adjust the placement of The Additional Baseline Offset is 0,23958.

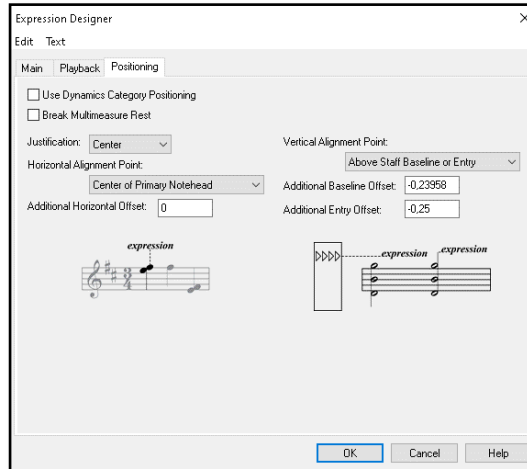


Figure 16. Expression Designer - Positioning
Source: Finale Music Software ver.27 Trail

11. Modification of Articulation Symbol Position at Articulation Designer

In the Articulation Designer, the modification is done to adjust the handle positioning, specifically on the Main Symbol H: 0,13542.

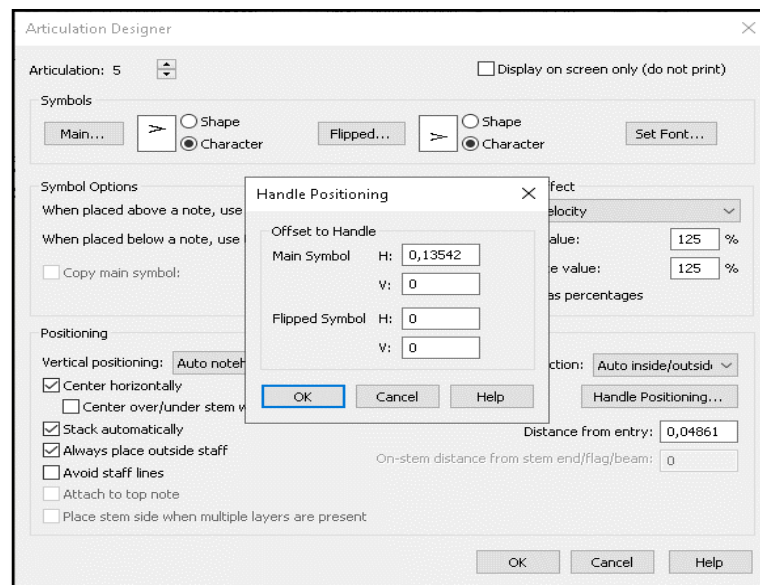


Figure 17. Articulation Designer – Handle Positioning
Source: Finale Music Software ver.27 Trail

12. Adding and Positioning Score Identity

Adding and positioning score identity elements such as title, subtitle, composers/music, arranger, lyrics or text writer, key signature (do = x), time signature (x beats), tempo, expression, and copyright can be achieved using the Text Tool.

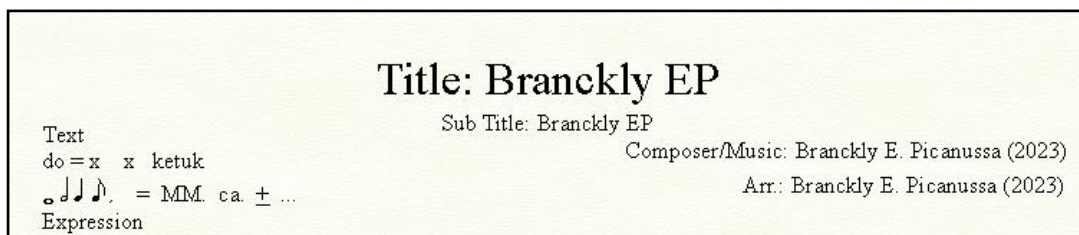


Figure 18. Score Identity

Source: Finale Music Software ver.27 Trail

A Finale Music Template and Steps to Write Numerical Notation

Following a series of modifications made to the default document in Finale Music, the resulting the new template for writing numerical notation using the Finale Music can be observed in the figure displayed below. I name this new template as *Finale Template by Branckly Egbert Picanussa* or *FITEMBEP Ch-Version 2023*.

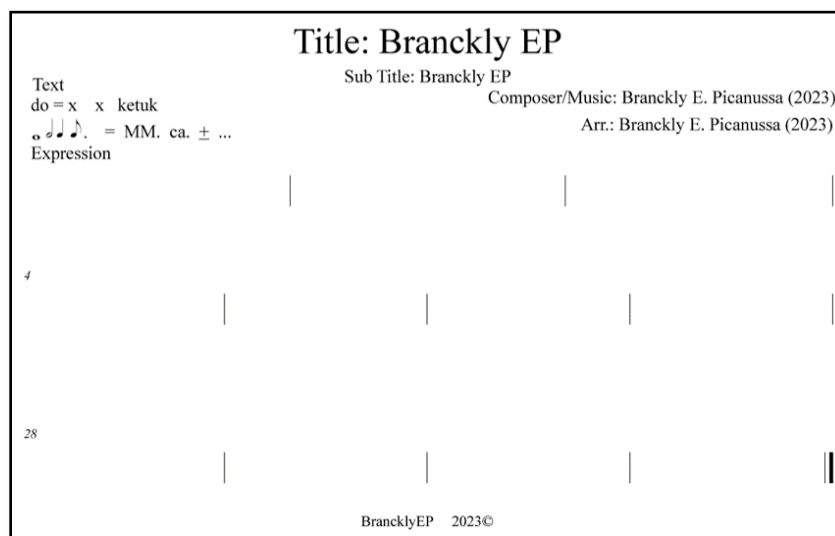


Figure 19. Workspace of Finale Template by Branckly Egbert Picanussa or FITEMBEP Ch-Version 2023.

Source: Finale Music Software ver.27 Trail

This template can be readily employed by users to write numerical notation using Finale Music. The following are the steps for writing:

1. Write the music identity including the title, subtitle (if any), composer/music, arranger, text, key, time signature, tempo, overall singing expression, and copyright.
2. Write the rhythm by selecting and using the rhythm values that have been provided by Finale Music.

3. Write the melody by activating the Chord Tools, placing the cursor where the notation will be written, and typing as needed. For low notes, type a period followed by the number, for example .1 to produce a low note. For middle notes, simply type the number. And for high notes, type the number followed by a period, for example 1. for high do.
4. Write the lyrics using the Lyric Tools function provided by Finale Music.
5. Write the expression by activating the Expression Tools provided by Finale Music.
6. Write the articulation by activating the Articulation Tools provided by Finale Music.
7. Write the chords (if needed) by activating the Chord Tools provided by Finale Music.

The steps are only suggestions. Users can develop their own steps to write numerical notation using this template, Finale Template by Branckly Egbert Picanussa (FITEMBEP) Ch-Version 2023.

Conclusion

Finale Music is recognized as one of the most powerful music notation software in the world, while numerical notation is a common music writing system utilized in Indonesia and several countries with special characters or roles. However, despite its powerful features, Finale Music's default settings cannot be used to write Indonesia numerical music notation system directly.

This research demonstrates that modifying specific elements of the default document in Finale Music program can generate a new template, facilitating the easy and direct writing of numerical notation, include Indonesia numerical music notation system, within Finale Music.

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