Creating songs using online software

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Abstract. In an era of social distancing due to the Covid-19 pandemic, a method is needed for music educators to remain productive in creating and fulfilling music teaching materials without involving other parties. One feasible solution is to use online software to compose music or songs. This article elaborates a method to easily compose musical accompaniments and melodies using an online software, Hookpad. There are six steps in composing a song melody and its accompaniment: (1) preparing a music sheet online via a browser, (2) setting meters, keys, and tempo, (3) selecting musical instruments or sound patches, (4) selecting the chords pattern, (5) filling in the melody, and (6) exporting to a WAVE/MP3/MIDI file. Creating songs using online software is very effective in terms of processing time and can minimize the number of people involved in the work and can produce good quality sounds. In conclusion, Hookpad online music software can be a solution for working in solitary with satisfying music sound quality.

1. Introduction

Producing new songs is a continuing demand for music educators [1], as songs need to be made contextually based on the needs of the school environment, learner characters, and curriculum [2]. Especially for the researchers, the creativity of making songs is a sustainable activity that is carried out every year to meet the various needs of teaching materials in the school. Usually making songs is done by way of collaborating through meeting in person for the process of creating song works. However, pandemic conditions require music creators and even educators in general to work independently in order to maintain social distancing [3]. Therefore, for music educators it is necessary to update the ways of making songs, among others through the creation of music composition independently by engaging the touch of technology through online music software. In this study, researchers attempted to implement a way to work through online Hookpad music making software.

The previous research to create songs involving the role of technology touches has been conducted by several researchers. For example, the researchers wrote the song composition by employing Sibelius notation music software [4], and redesigned angklung musical instrument by implementing technology into a touch-angklung [5]. The researchers also created a music controller with the Scratch app [6]. Outside of the process of making music, there are also researchers who apply technology into music learning. Like learning music with Pazia Angklung app [7] and various digital music applications [8].

We have not found any research specifically discussing the use of Hookpad music creation software. Therefore, this study aims to explore the use of Hookpad music creation software in making song compositions both melodies and accompaniment songs online and independently. The study was...
conducted from the initial stage of song composition to the finishing stage of the song to be an MP3 or MIDI file.

2. Methods
This study explores the creation of virtual music composition by utilizing online music software. The study was conducted using a qualitative approach with the following research procedures: (1) preparing music papers online through a browser, (2) setting up meters, keys, and tempos, (3) selecting musical instruments or sound patches, (4) selecting chords, (5) filling melodies, and (6) exporting into wave/MP3/MIDI files. The online music software used is a premium Hookpad or a paid version with a webpage address https://hookpad.hooktheory.com/.

3. Results and discussion
Hookpad music creation software is an online music software specifically designed to create professional online music compositions [9], so the software is not available in the desktop version. Nevertheless, this software provides enough facilities to create quite complete and also supported by a good sample sound. Here are the stages in creating work instantly through Hookpad software.

3.1. Setting up music paper online through a browser
The first stage as shown in Figure 1, is to open a new page online from Hookpad that is ready for various settings to arrange music. The new page comes with menu categories for music play, meter settings, keys, and tempos, chords patterns, instrument selections, and tabs for writing melodies and musical accompaniment.

![Figure 1. New page in Hookpad app.](image)

3.2. Setting meters, key, and tempo
In the second stage, as shown by Figure 2, it is to set the rhythm of the song indicated by the Beats menu, choose the tonality with Maj menu, and determine the tempo of the song with BPM menu. The three menus are the most important to set in the early stages of composing the song.
3.3. Choosing musical instruments or sound patches

In the third stage, as shown in Figure 3, it is to select a musical instrument consisting of at least four layers. The instrument layer appears by pressing the Band menu in Figure 2. The first layer selects the musical instrument for the main melody. The second layer selects the instrument and the harmony style for song accompaniment. The third layer selects the instrument and the bass style. The fourth layer selects the drum accompaniment style. Each of these layers can be added into doubles so that it can add layers for all instruments.

3.4. Selecting chords patterns

In the fourth stage, as shown in Figure 4, it is either selecting chords in units or you may also select the chord patterns that have been provided. Chord patterns can be searched from popular menus (chords) that are widely used by users or composers or can be selected from the Magic menu which provides chord patterns with specific grooves.

3.5. Filling in melodies

In the fifth stage, as shown in Figure 5, it is to fill in the tones for both the song and the accompaniment. The tones are inputted by clicking on the available tabs in the form of small, coloured squares. The order of tones from high to low starts from the bottom tab to the top. These tabs can be added with low octaves or high octaves. For chords, it is specially inputted on a single tab section that is in the bottom-most position that is grey. It is in this section that the ideas of a composer are required to determine the novelty of building a series of song melodies.
3.6. Exporting into WAVE/MP3/MIDI files
In the sixth stage, as shown in Figure 6, it is exporting music and song creations into an audio file. It can be exported as needed, e.g., exported into WAVE, MP3, or also into a MIDI file if the work will be opened in music notation software such as Sibelius or MuseScore. This means that even if songs and music are created by tabbed clicks, the output can also appear in the form of musical notation. This is one of the advantages of Hookpad software because it can make effective time in making music notation. In other words, technology has helped music creators to be more productive and make it easier to create their work [10-15].

![Hookpad interface]

Figure 6. Export work into an audio file.

4. Conclusions
Based on the results of this study, it is concluded that music educators or songwriters can use Hookpad as one of the software to create music or songs online independently. Hookpad provides convenience by providing a variety of facilities to write song melodic ideas instantly and provides a selection of popular chords that can be input promptly, so song makers do not have to input notes one by one to create accompanying music. Hookpad also provides song notation or accompanying music if needed to be opened in music notation software.

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