

**TAB2XML**

## **User Manual**

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**Version 1.0**

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# 1. Introduction

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This User Manual (UM) provides the information necessary for product owners and stakeholders to effectively use TAB2XML release version 1.0.

## 2. Overview

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TAB2MXL is a standalone desktop application designed to convert different formats of ASCII music tablatures to a popular music description file format called MusicXML. This software can convert different types of tablature (guitar, drums, and bass) into platform and instrument independent MusicXML.

TAB2XML provides an easy-to-use user interface compatible with most operating systems. Both file processing and direct text input methods are available to users. Translated MusicXML files are accessible through both the interface and the file output.

### 2.1 Conventions

The term 'user' is used throughout this document to refer to a person who requires and/or has acquired access to the TAB2XML.

The term 'action' is used throughout this document to refer to a mouse click on a menu or button, and typing in the text area while interacting with the graphic user interface of TAB2XML.

### 2.2 Cautions & Warnings

Current release of TAB2XML is only intended for the project manager, product owners, and stakeholders. This application may not be distributed or referenced without the team's consent.

## 3. Getting Started

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### 3.1 Set-up Considerations

TAB2XML release 1.0 (TAB2XML) requires Java to be installed. To optimize your access to the TAB2XML:

1. Please download and install the newest version of Java at <https://www.java.com/download>.
2. Do not resize the application window. The resizable window has yet to be implemented in this release.

### 3.2 User Access Considerations

All users have full access to TAB2XML.

### 3.3 Accessing the Application

Two options are provided for accessing TAB2XML. Directions for both options are specified in our repository under README.md.

1. Access through .jar file

The user must have Java installed on their local computer. The .zip file is 80 MB, and uncompressed content requires 200 MB disk space.

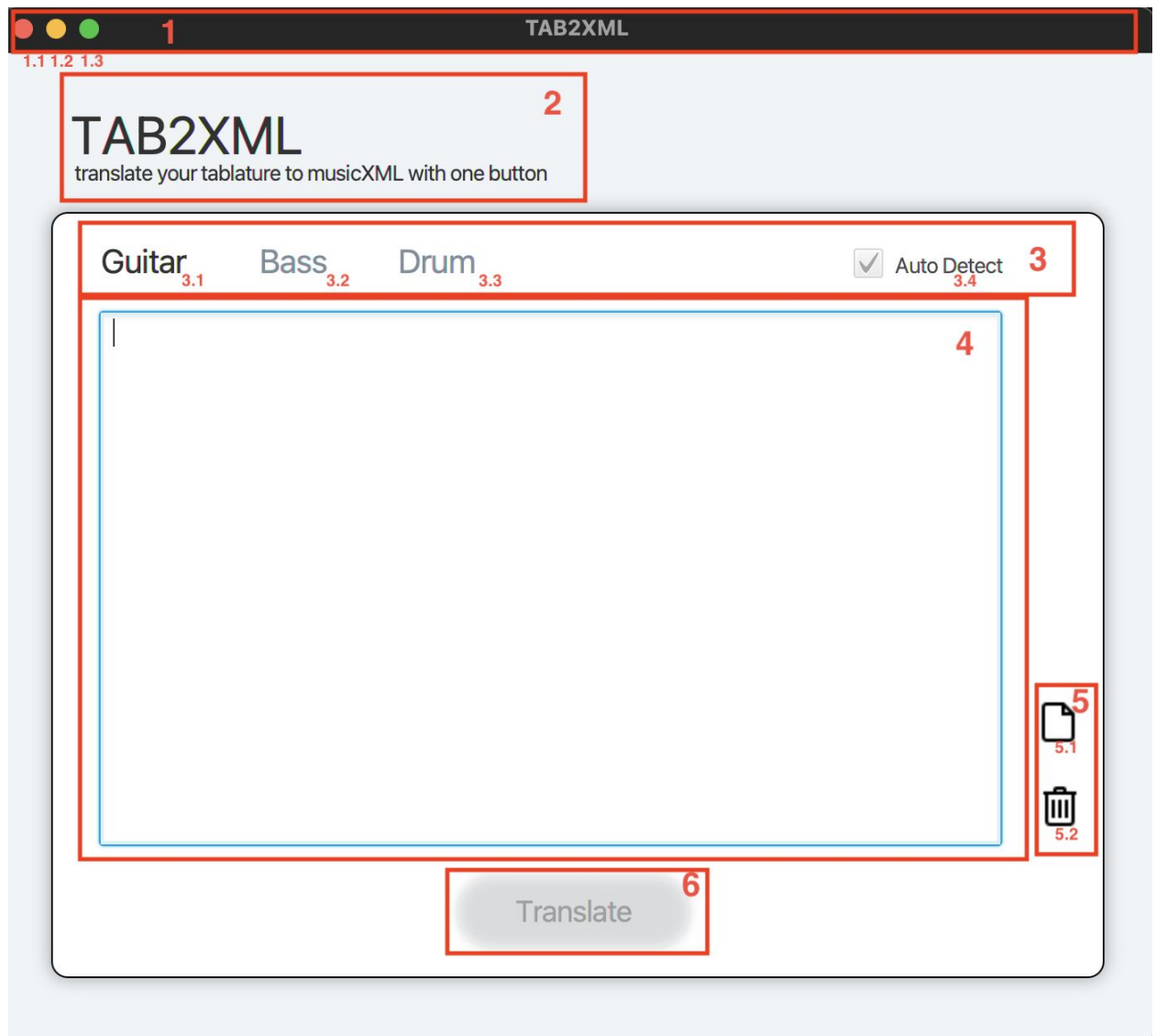
2. Access through repository

The user must have Eclipse, Gradle, and Java installed on their local computer.

### 3.4 Application Organization & Navigation

#### 1. Startup screen

Figure 1 - Screenshot of the startup screen



#### Section 1. System title bar

The system title bar is provided by the user's computer system. The figure above captures the system behavior of macOS Big Slur. This section contains a title text "TAB2XML" and three system buttons:

- Section 1.1. Close button: close the application
- Section 1.2. Expand button: expand the application (currently not recommended)
- Section 1.3. Minimize button: minimize the application

**Section 2.** Title: contains the title and a brief introduction of TAB2XML

**Section 3.** Instrument selection

This section details the instrument selected for MusicXML translation. Upon startup, Guitar is selected as default. The selected instrument will appear in a darker font, while unselected instruments remain in grey. Only one instrument can be selected.

- Section 3.1.* Guitar selected: on action, Guitar is selected as translation instrument
- Section 3.2.* Bass selected: on action, Bass is selected as translation instrument
- Section 3.3.* Drum selected: on action, Drum is selected as translation instrument
- Section 3.4.* Auto Detect: on selected, auto instrument detection will be activated and triggered after each text input and file upload. On unselected, no detection will be activated. Default selected.

**Section 4.** Text input: The user may use this section to paste in tablature text. The content of an uploaded file also appears in this section.

**Section 5.** Action menu

- Section 5.1.* File input: on action, a file selection screen allows the user to select a text file to be processed as input.
- Section 5.2.* Clear: on action, any input content (file or manual input) will be cleared. Disabled if no content.

**Section 6.** Translation button: Disabled if no input content is present. On action, it triggers the translation process and an option screen (See 2) will pop up.



## 2. Option screen

Figure 2 - Screenshot of the option screen



### Section 1. System title bar

The system title bar is provided by the user's computer system. The figure above captures the system behavior of macOS Big Slur. This section contains a title text "Translation Options" and three system buttons (Detailed in 3.4 Part 1 Section 1). The expand button is disabled.

### Section 2. Title text: contains the title for this screen.

### Section 3. Time signature selection: On action, 4 options are available for selection: 1/4, 2/4, 3/4, 4/4. Only one option can be selected.

### Section 4. Exit option

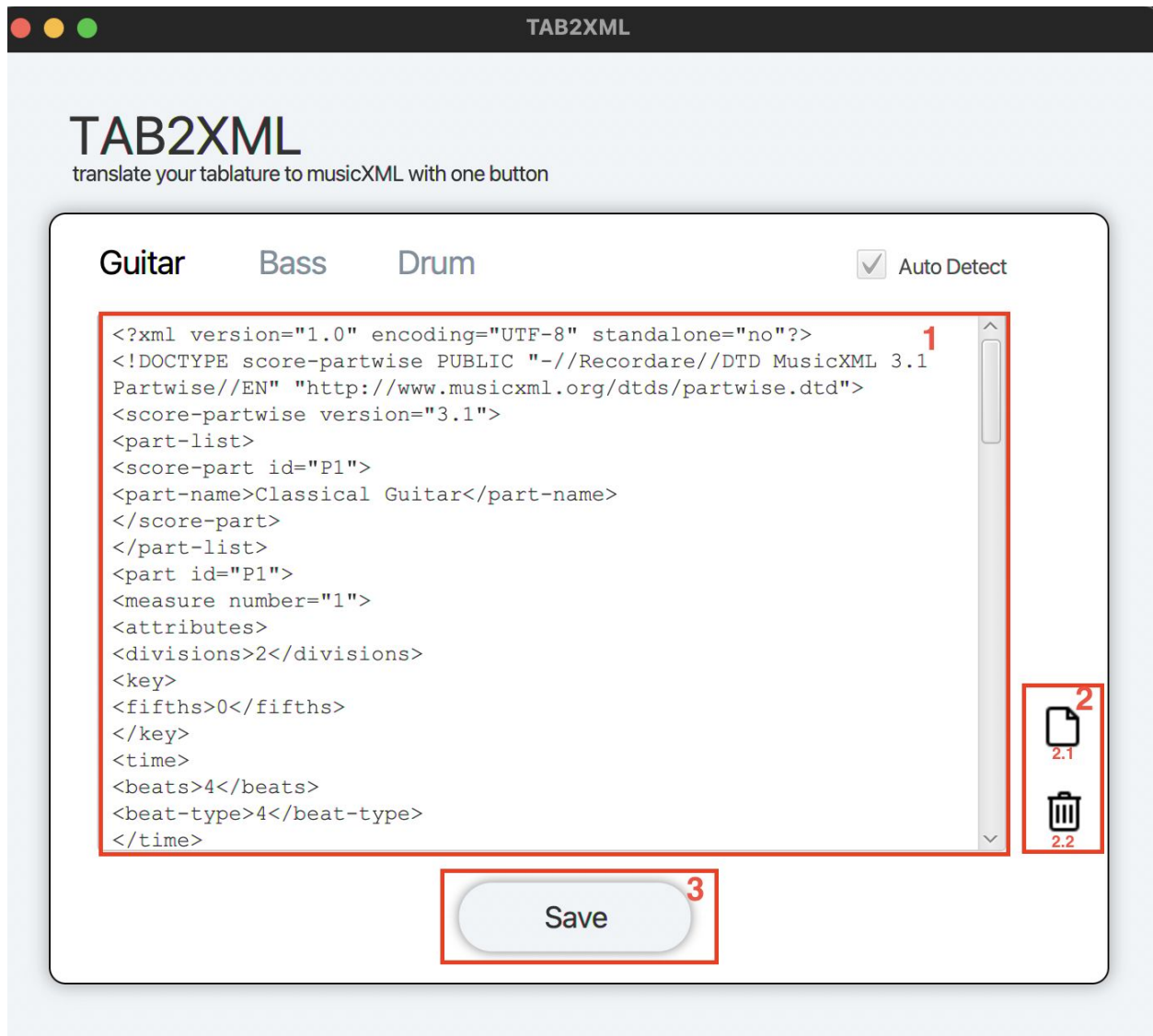
*Section 4.1.* Cancel: On action, the option screen will be exited. The translation process is aborted.

*Section 4.2.* Confirm: On action, the selected translation options will be saved, and the option screen is exited. The translation process will be executed.

### 3. Save screen

The save screen has many similar functionalities as the startup screen. This part will only introduce sections different from the startup screen.

Figure 3 - Screenshot of the save screen



**Section 1.** Text input/output: This section displays translated MusicXML content. The user can edit the content in this section. The generated MusicXML file will be generated based on the text in this section.

#### Section 2. Action Menu

**Section 2.1.** File input: on action, a file selection screen allows the user to select a text file to be processed as input. Section 1 is replaced with new

input content. Any unsaved change will be lost. The translation process restarts. The startup screen appears.

**Section 2.2.** Clear: on action, Section 1 is cleared. Any unsaved change will be lost. The translation process restarts. The startup screen appears.

**Section 3.** Save: On action, content under Section 1 is output to a MusicXML file. A file location selection screen will pop up. The user can choose the desired location and file name for the generated MusicXML file.

## 3.5 Exiting the Application

On the Startup screen, click on the system close button (Section 1.1) to exit the application.

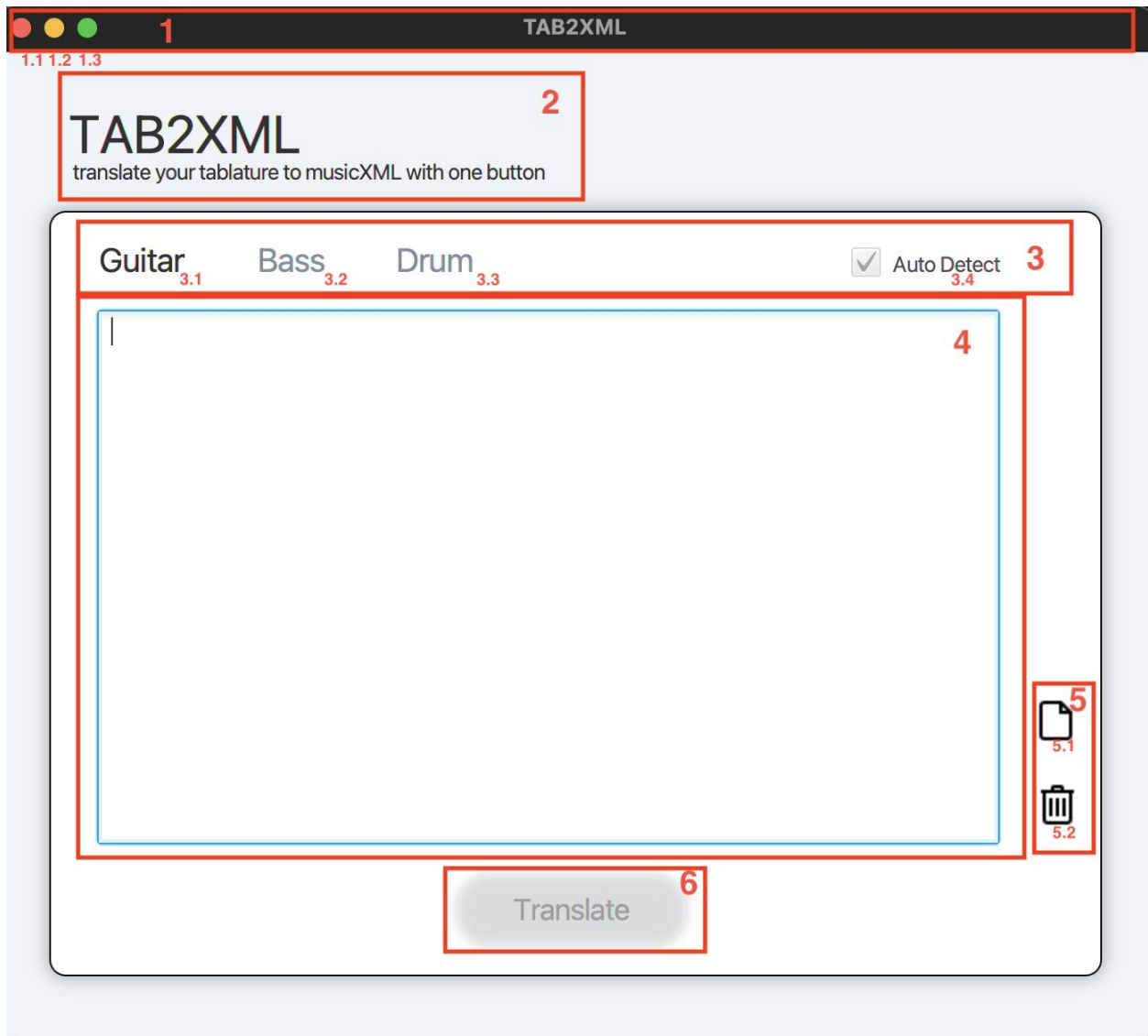
On the Option screen, click on cancel (Section 4.1) , then click on the system close button (Section 1.1) to exit the application.

On the Save screen, click on the system close button (Section 1.1 under Startup screen) to exit the application.

## 4. Using the Application

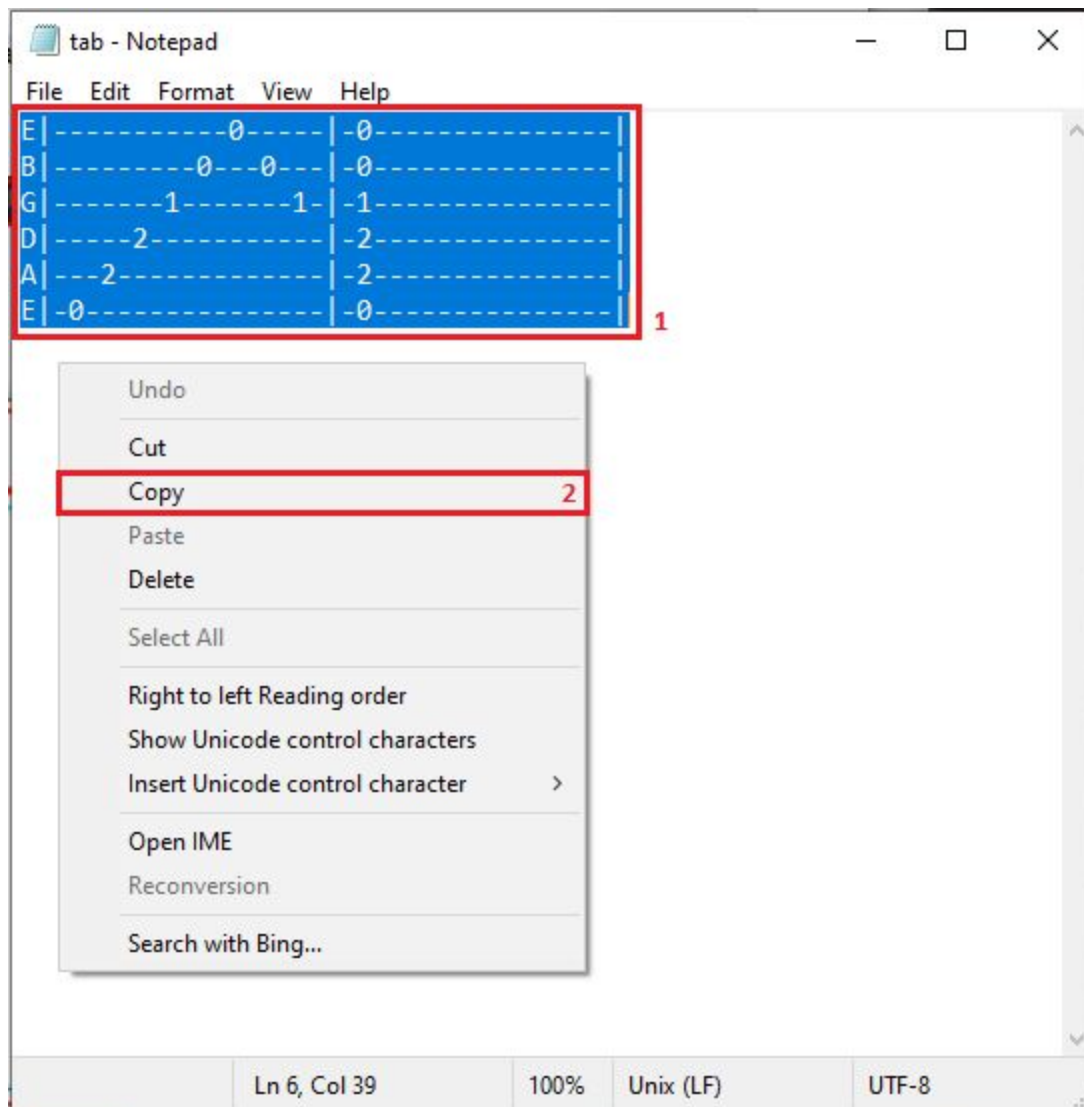
The Startup screen all the necessary buttons that are required to successfully convert ASCII music tablatures to the MusicXML file format.

Figure 4 - Screenshot of the startup screen



### 4.1 Conversion using the in-built text editor

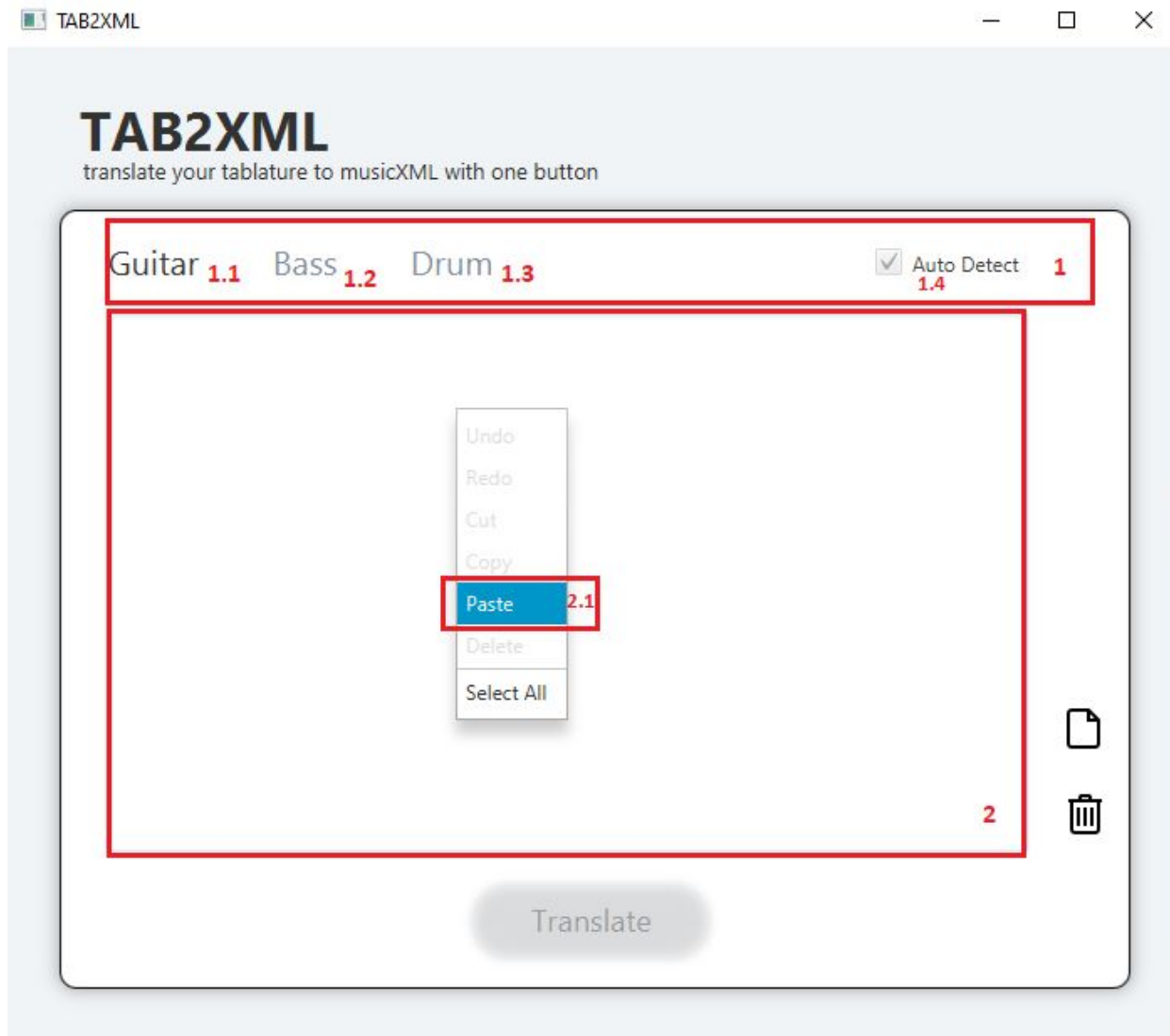
The user can copy the ASCII music tablatures directly from a text editor of his choosing (e.g., Notepad, Notepad++, or Atom) and paste the content directly in the Text Input(Section 4) of the application.

**Figure 5 - Screenshot of Notepad containing a guitar ASCII music tablature****Step 1.**

Open the ASCII music tablature using a text editor of your choosing (e.g., Notepad, Notepad++, or Atom). Figure 5 (Section 1) is an example of an ASCII music tablature opened with Notepad. Select the desired tablature using the right-click feature of your mouse or alternatively pressing Ctrl+A.

**Step 2.**

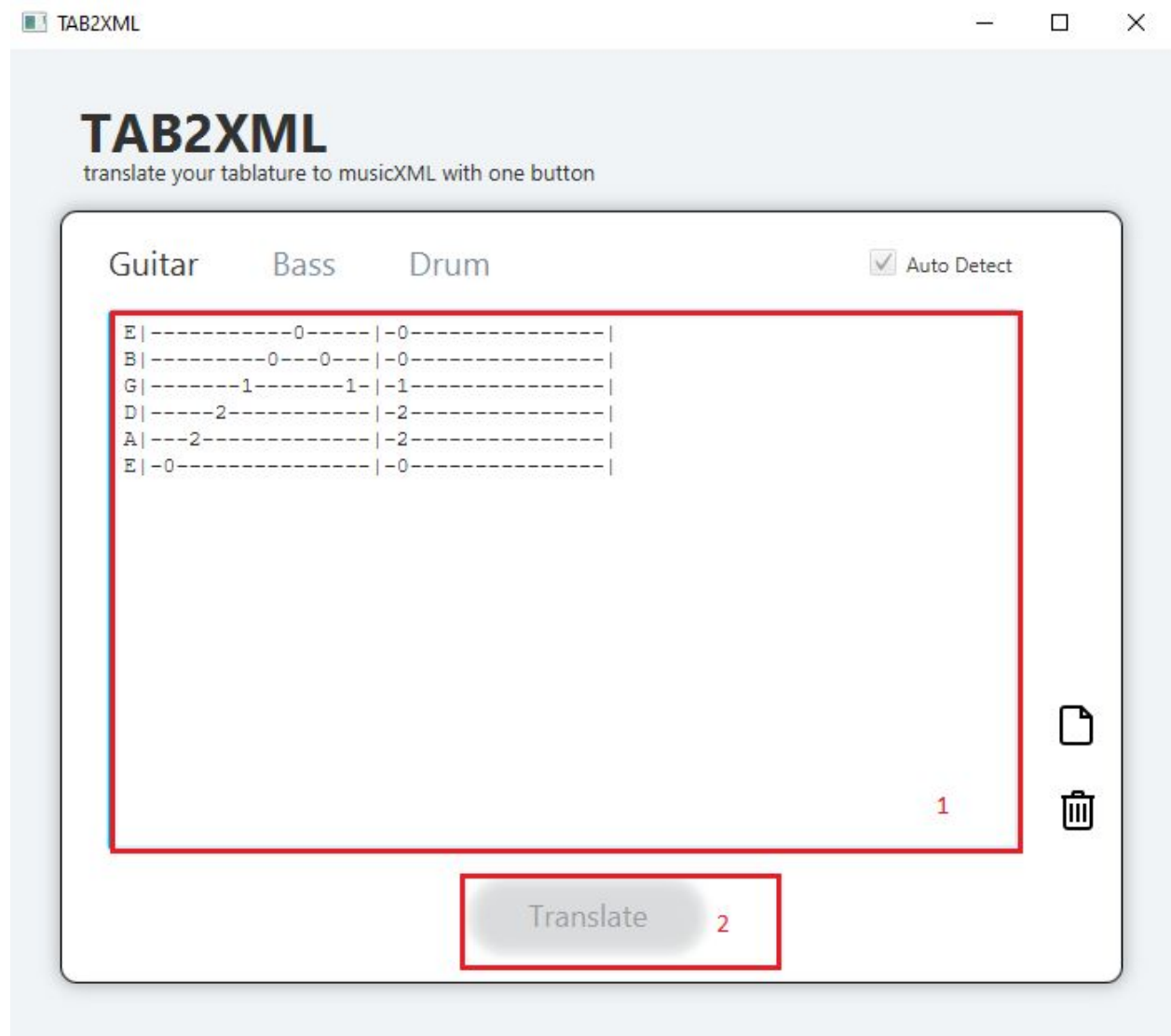
Right-click anywhere inside the notepad window and select the copy option as shown in Figure 5 (Section 2).

**Figure 6 - Pasting the tablature****Step 3.**

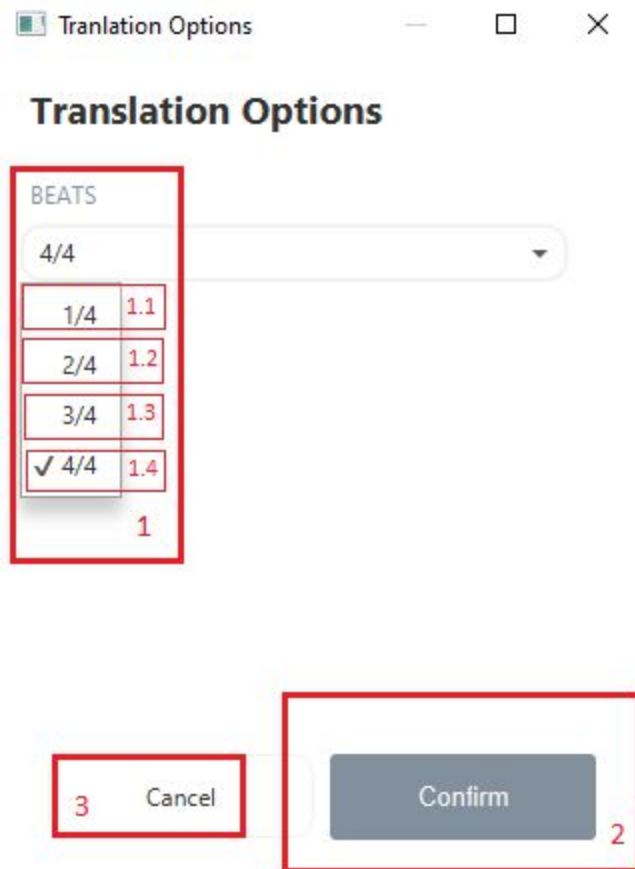
The application provides the user to manually choose the ASCII music tablature instrument as shown in Section 1 of Figure 6. Alternatively, we may use the Auto-Detect feature as shown in Section 1.4. For the purpose of this example, we will select 'Section 1.1' as we are going to be converting guitar music tablature.

**Step 4.**

Right-click anywhere in the text area (Section 2) and select the option 'Paste' from the drop-down menu as shown in 'Section 2.1'. Alternatively, the shortcut Ctrl+V may be used as well.

**Figure 7 - Text Input containing the tablature****Step 5.**

The text input window as shown in Figure 7 Section 1 should now contain the tablature. You may use the in-built text editor to make any desired last-minute changes to the tablature. After you are done with the changes, you may simply click on the 'Translate' button (Section 2) to start the conversion process.

**Figure 8 - Translation pop-up window****Step 6.**

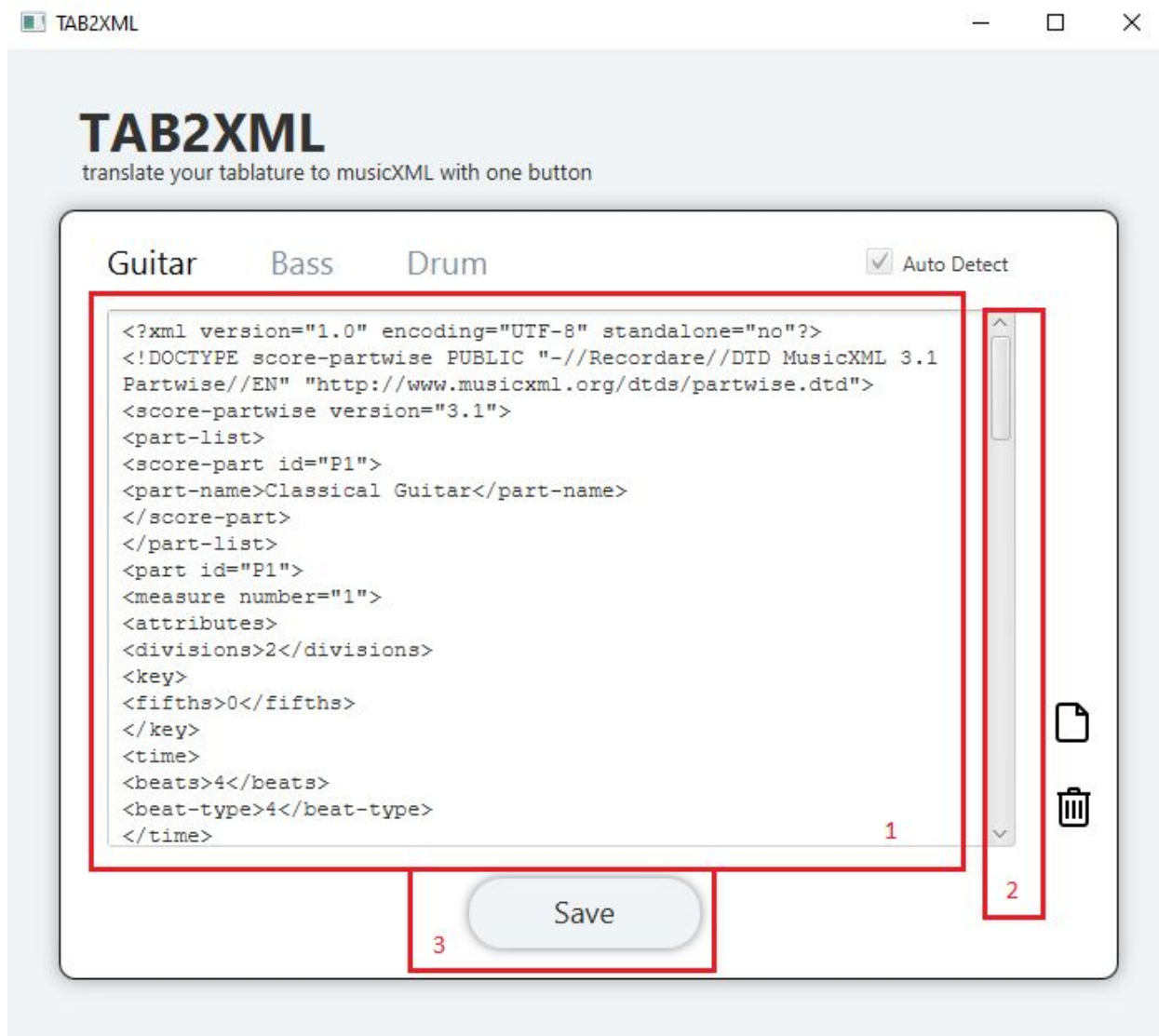
The 'Translation Options' should pop up as shown in Figure 8 after you press the 'Translate' button. The user will be able to pick the Time signature for the translation from the drop-down menu as shown in Section 1. The selected time signature should have a '✓' character in front of it as shown in Section 1.4 and should also be displayed under the 'BEATS' heading.

**Step 7.**

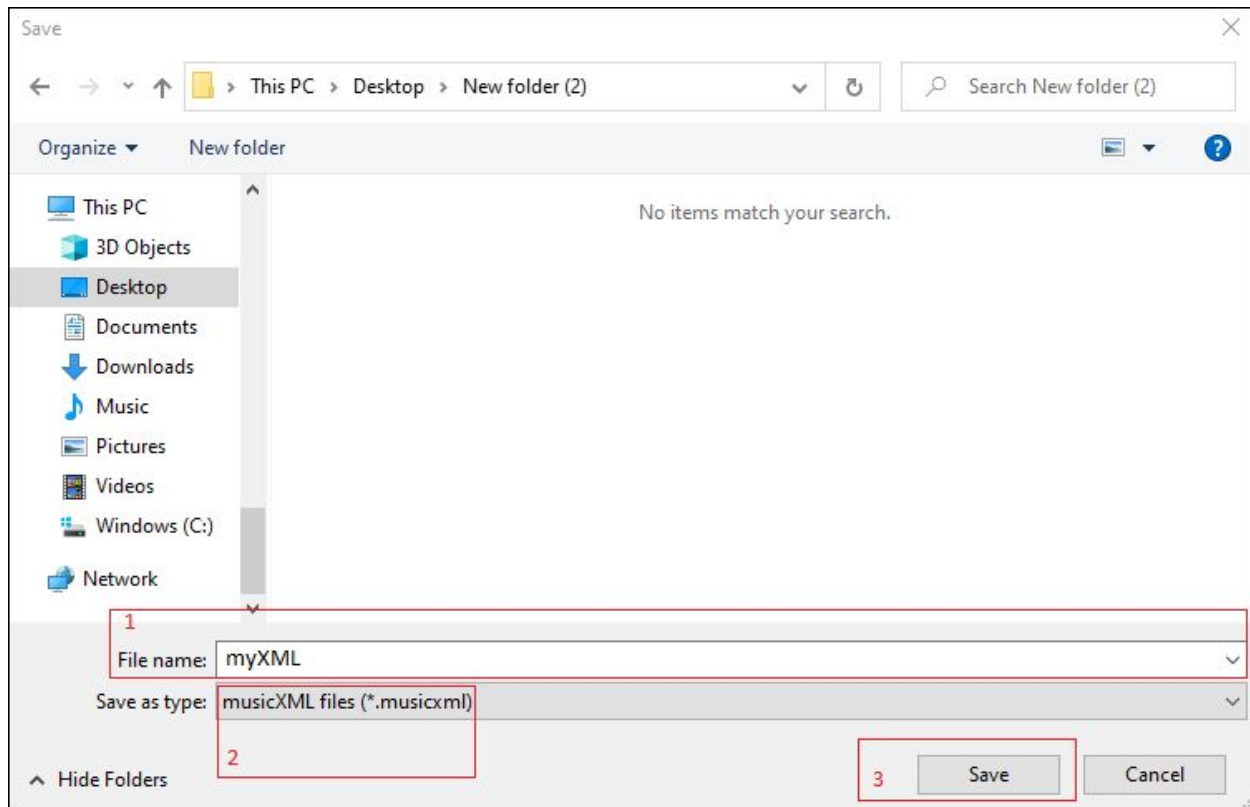
The user may now confirm his selection by pressing the 'Confirm' button as shown in Section 2. The user can also press the 'Cancel' button as shown in Section 3 if they wish to revert back to Step 5.



Figure 9 - Translation pop-up window

**Step 8.**

The text input window as shown in Figure 9 Section 1 contains the desired contents of a MusicXML file. You may use the scroll bar to browse through the window as shown in Section 2. Once you are satisfied with the output, you may use the 'Save' button to extract the file with a \*.musicxml extension as shown in Section 3.

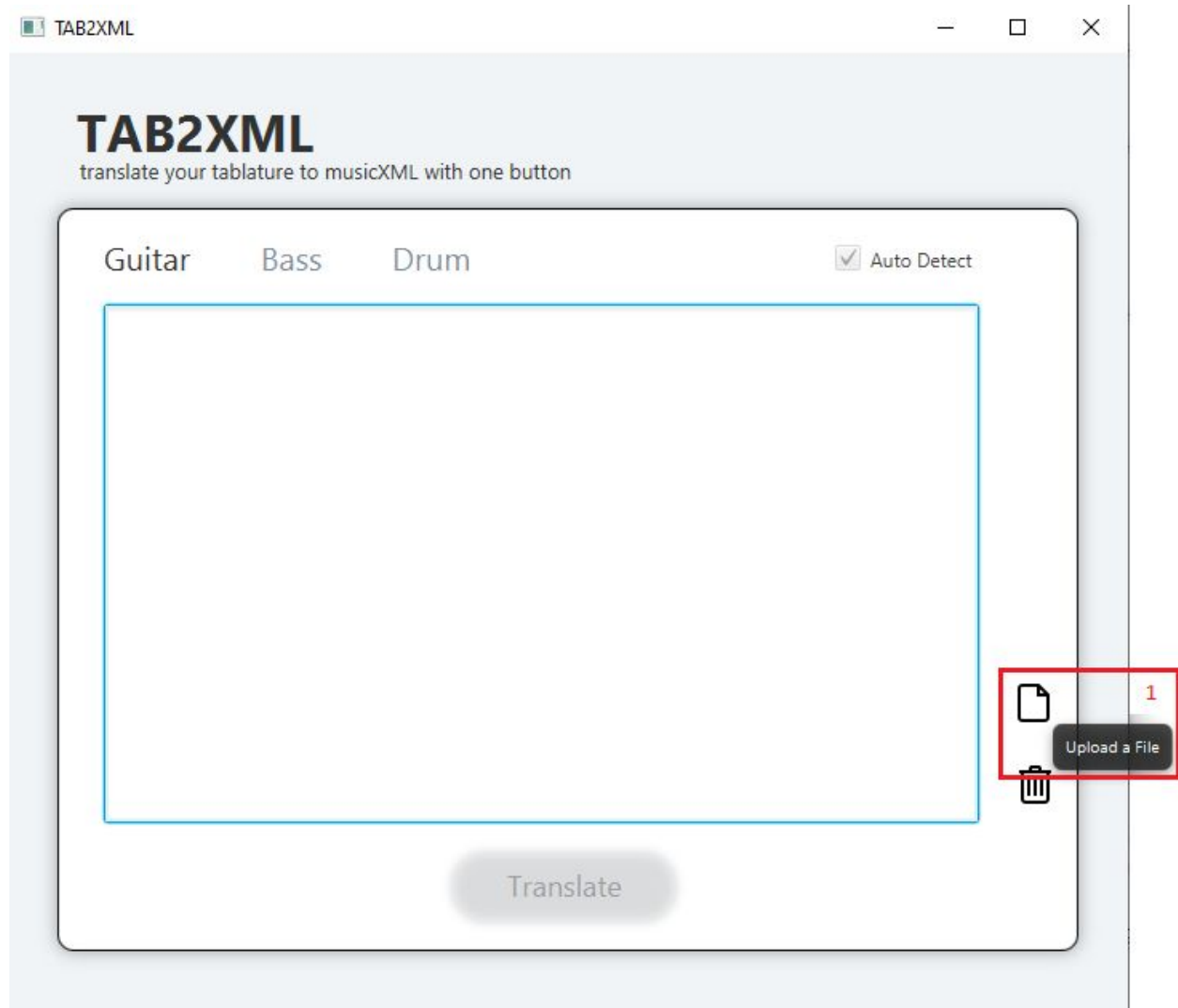
**Figure 10 - Save As popup Window****Step 9.**

The Save as popup Window provides the user the ability to save the file at his desired location. The default 'Save As type' should be selected to \*.musicxml as shown in Figure 10 Section 2. The user may enter the desired name of the file in Section 1 of the popup window and press the 'Save' button (Section 3) to successfully save the MusicXML file.

## 4.2 Conversion using the Import feature

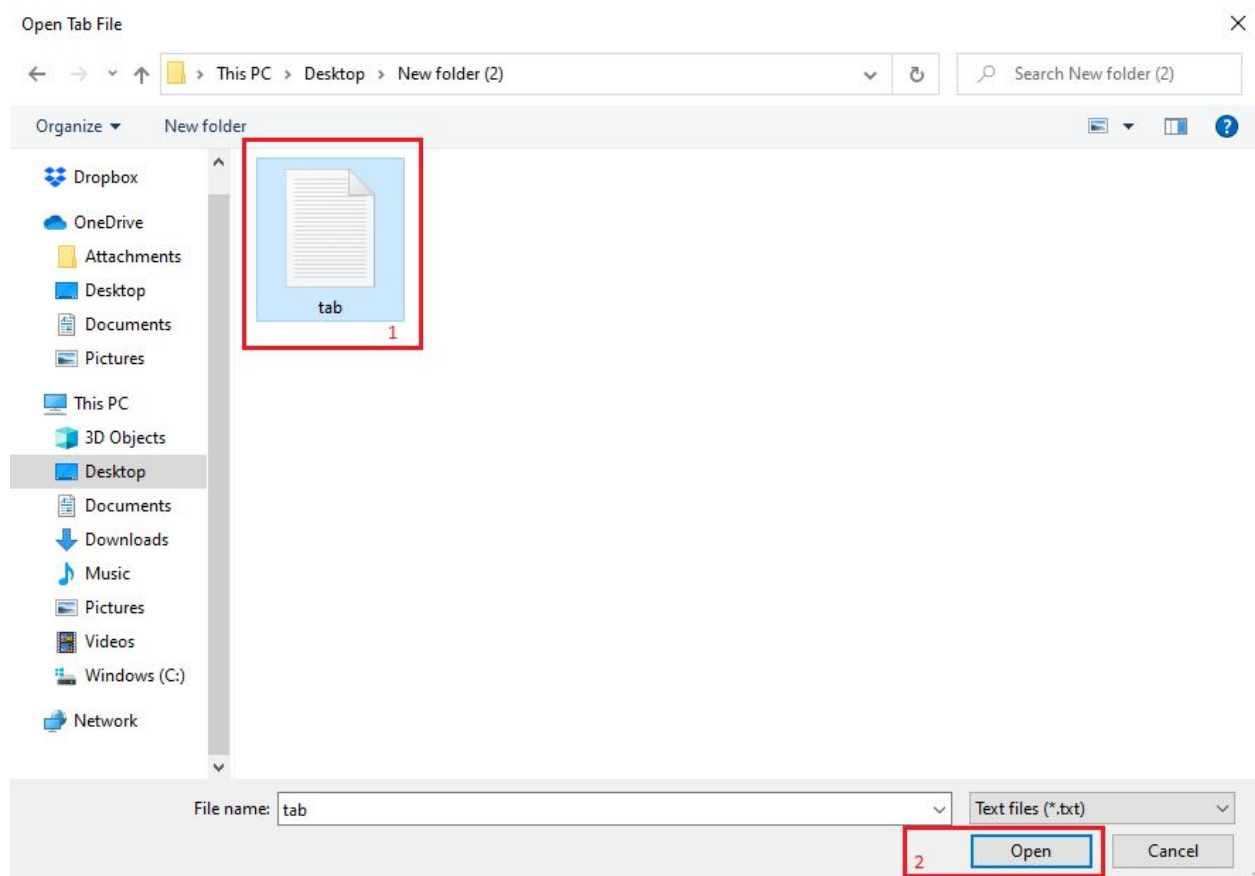
The user can also import an ASCII music tablature instead of copying and pasting it in the Text Input window of the application.

Figure 11 - Upload Feature



### Step 1.

Open the TAB2XML application and select the 'Upload a File' option as shown in Figure 11 Section 1.

**Figure 12 - Open popup window****Step 2.**

Select the desired \*.txt file from the 'Open Tab File' popup window as shown in Figure 12 Section 1. Once you are done selecting the file, press the 'Open' button at the bottom right of the window as shown in Section 2.

**Step 3.**

After reaching this stage, you may continue from Step 4 of Section 4.1 (Conversion using the in-built text editor) as they are identical in nature.

## 5. Troubleshooting & Support

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### 5.1 Error Messages

No error message has been implemented for TAB2XML release 1.0.

### 5.2 Special Considerations

All files uploaded to be processed must be in plain text (.txt) format.

TAB2XML release 1.0 only recognizes guitar, drum, and bass tablatures.

### 5.3 Support

Table 1 - Support Points of Contact

Contact	Organization	Phone	Email	Role	Responsibility
Ziqi Zhou	EECS 2311	8881234567	group13@gmail.com	Developer	Support for common software design failure and access difficulties