# TAB2XML

# User Manual

**Version 2.0**

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# 1. Introduction

This Testing Document (DT) provides the information necessary for quality to effectively use TAB2XML release version 2.0.

# 2. Overview

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, QA testers, and stakeholders. This application may not be distributed or referenced without the team’s consent.

# 3. Getting Started

## 3.1 Set-up Considerations

TAB2XML release 2.0 (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.

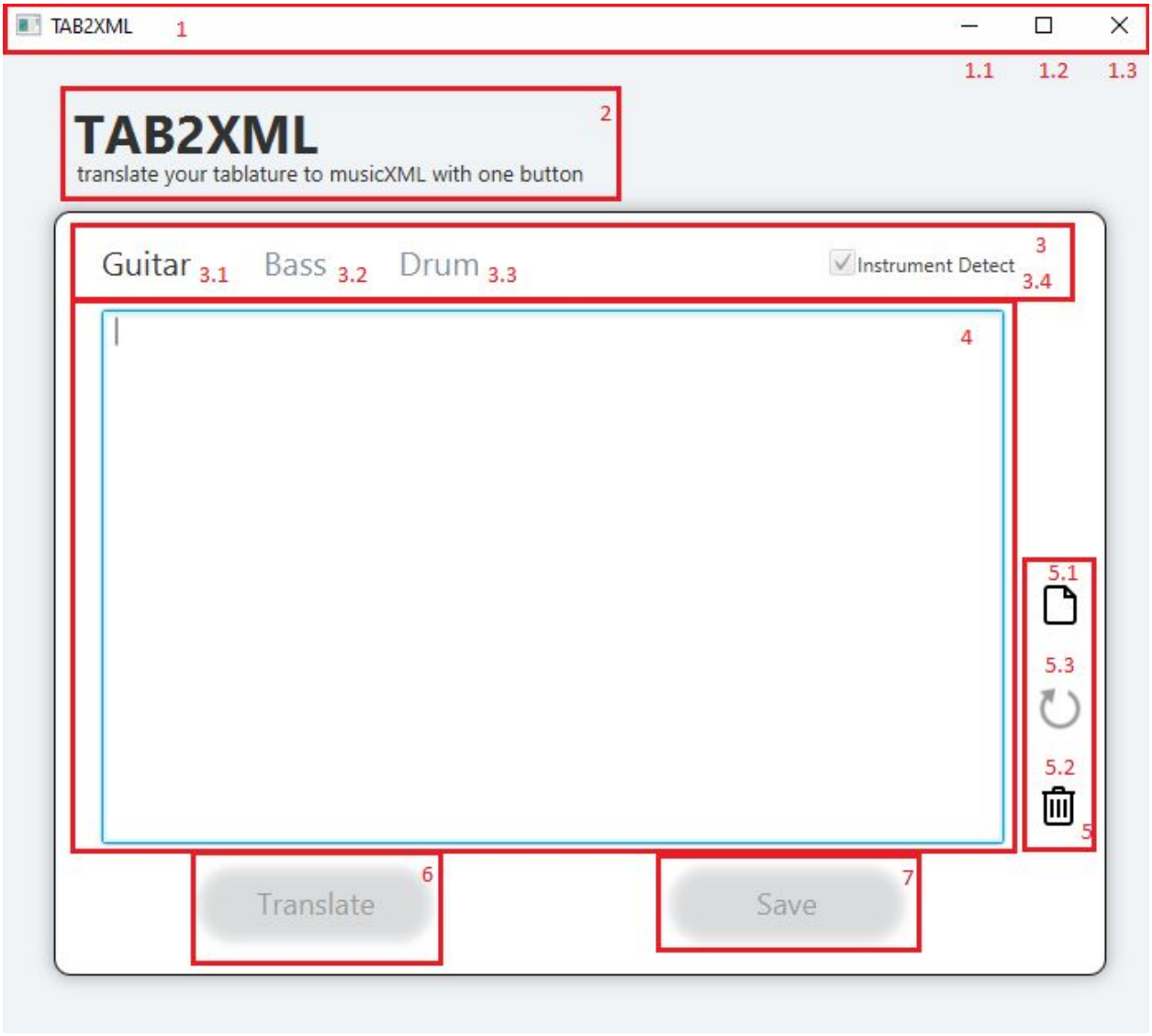
## 3.3 Accessing the Application

The user must have Eclipse, Gradle, and Java installed on their local computer. The step-by-step access guide is listed under our repository README.

## 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, a clear alert screen (See 4) pops up. Disabled if no content.

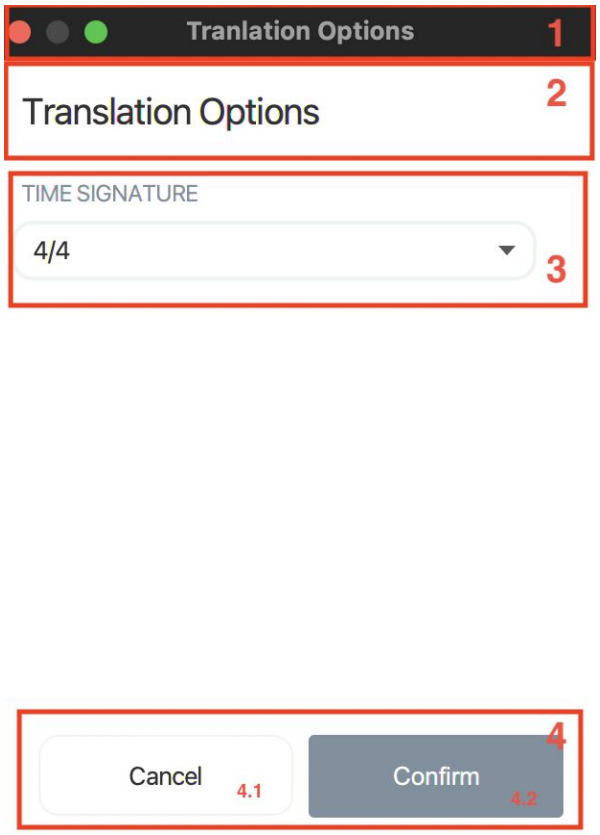
*Section 5.3.* Restart: By default, the restart button is disabled until a translation has been performed. On action, a restart alert screen (See 5).

**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. Disabled if a translation process has

**Section 7.** Save button: Disabled if no input content is present. On action, it triggers the save process and a save option screen (See 3) 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.

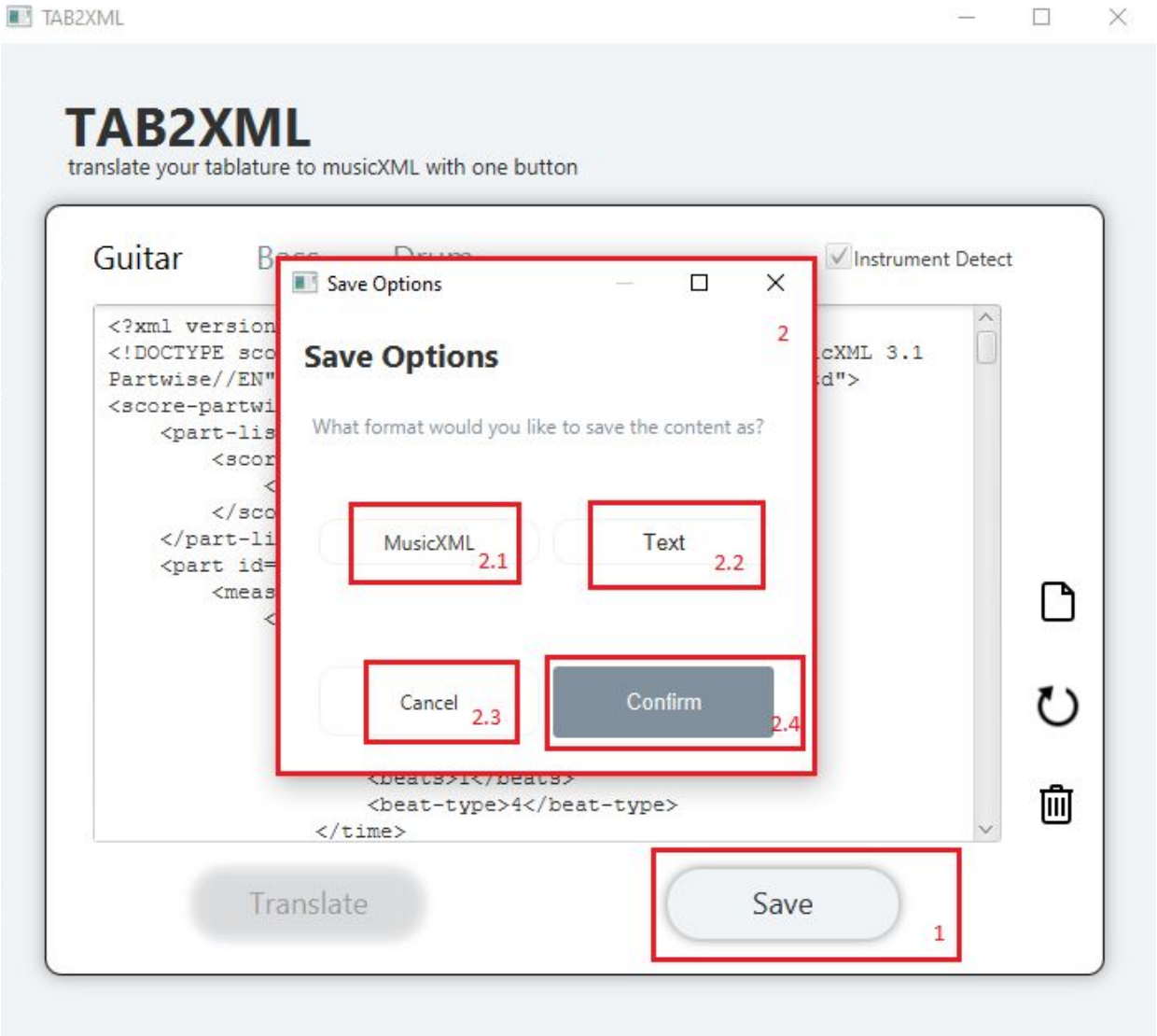
**Section 4.** Exit option

*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 Option Screen

**Figure 3 - Screenshot of the save option screen**




**Section 1.** Save format selection: The section provides users with two available file formats.

*Section 1.1.* Text File: On action, the selected file format will be plain text.

*Section 1.2.* MusicXML: On action, the selected file format will be MusicXML.

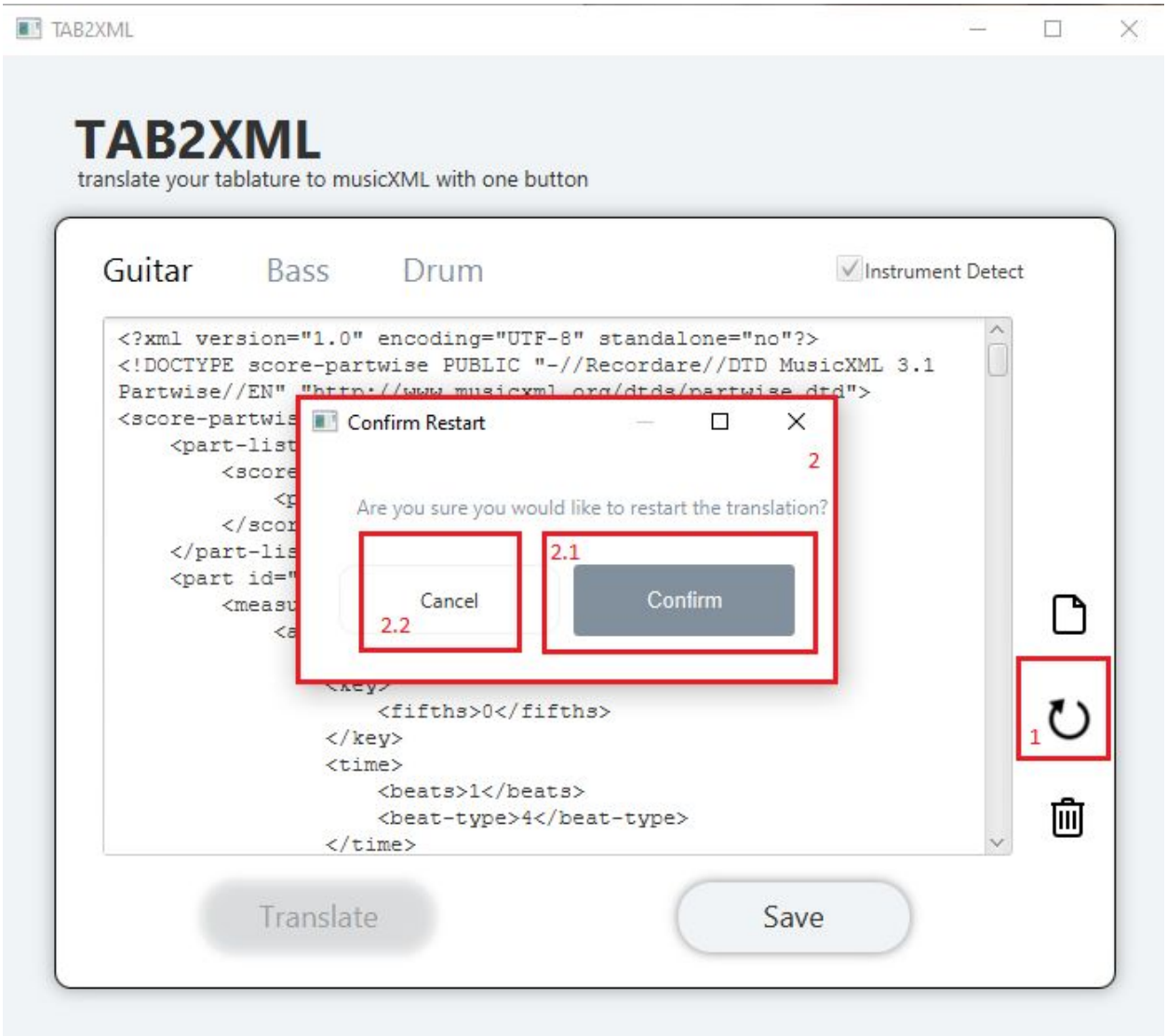
**Section 2.** Action Menu

*Section 2.1.* Cancel: on action, the process is cancelled. No file will be saved. The application returns to the translate screen (Section 1).

*Section 2.2.* Confirm: on action, a filechooser screen with the chosen file format will pop up. The user can save the display content as a file at their desired location.

## 4. Restart Alert Screen

**Figure 4 - Screenshot of the restart alert screen**




**Section 1.** Warning text: Alerting the user that an unrecoverable action is about to take place.

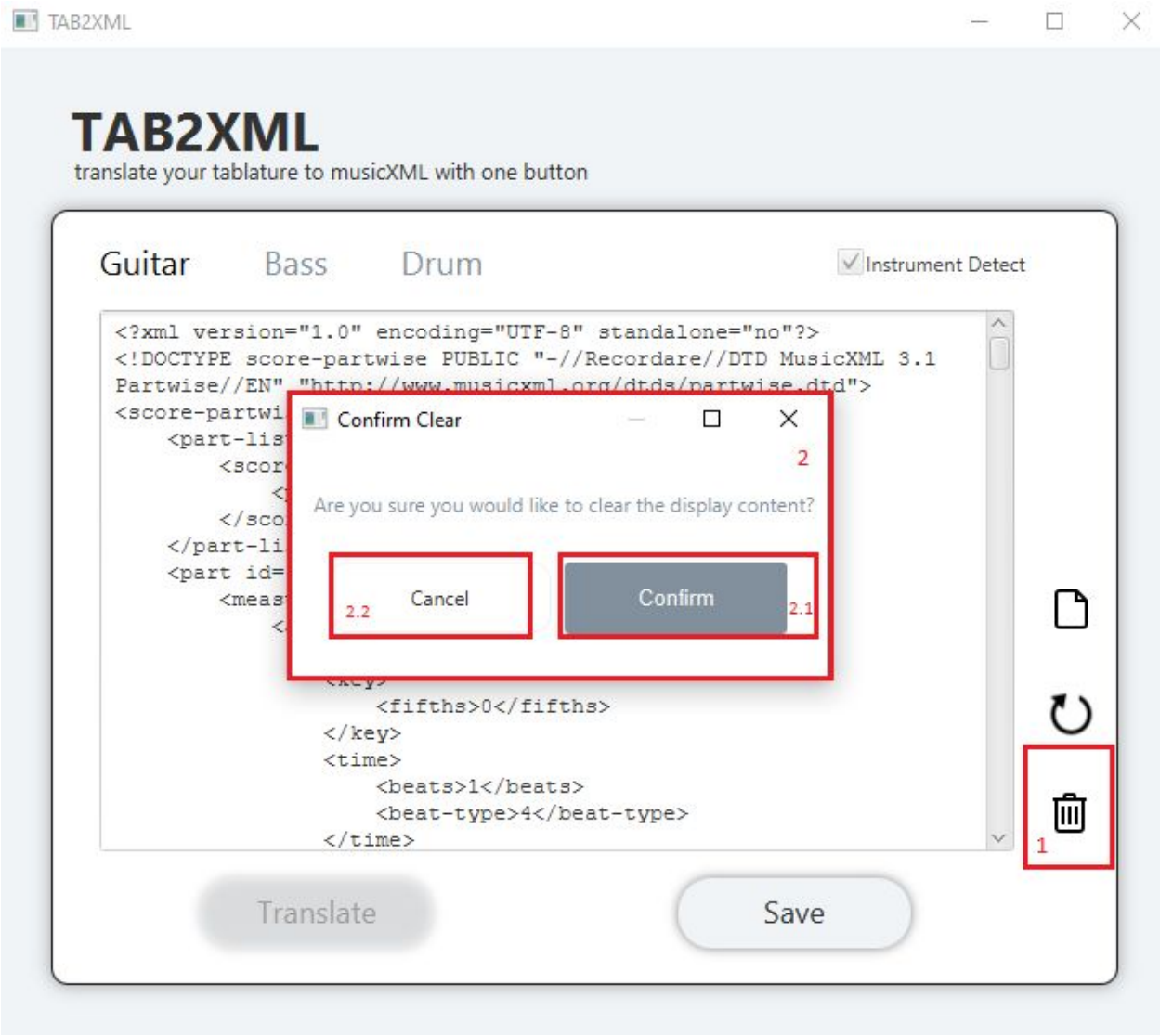
**Section 2.** Action Menu

*Section 2.1.* Cancel: on action, the process is cancelled. The content displayed in the translate screen (See 1) will be left unchanged.

*Section 2.2.* Confirm: on action, the content under Section 1.4 is cleared. All unsaved change will be lost.

## Section 3. Clear Alert Screen

**Figure 5 - Screenshot of the save option screen**




**Section 1.** Warning text: Alerting the user that an unrecoverable action is about to take place.

**Section 2.** Action Menu

*Section 2.1.* Cancel: on action, the process is cancelled. The content displayed in the translate screen (See 1) will be left unchanged.

*Section 2.2.* Confirm: on action, the content under Section 1.4 is cleared. All unsaved change will be lost.

## 3.5 Exiting the Application

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

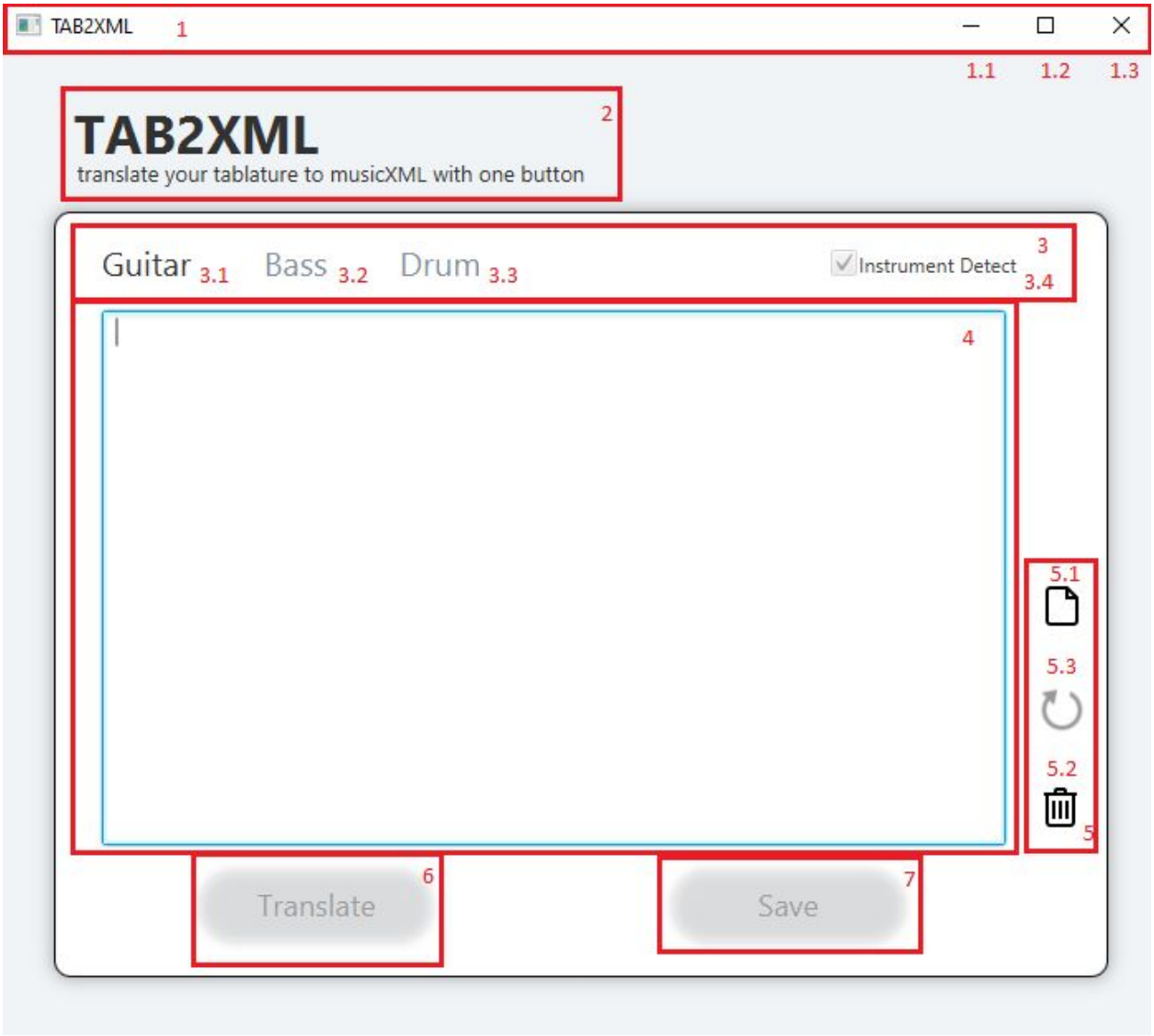
On the Option screen, click on cancel (Section 4.1) , then click on the system close button (Section 1.1) to exit the application.

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.

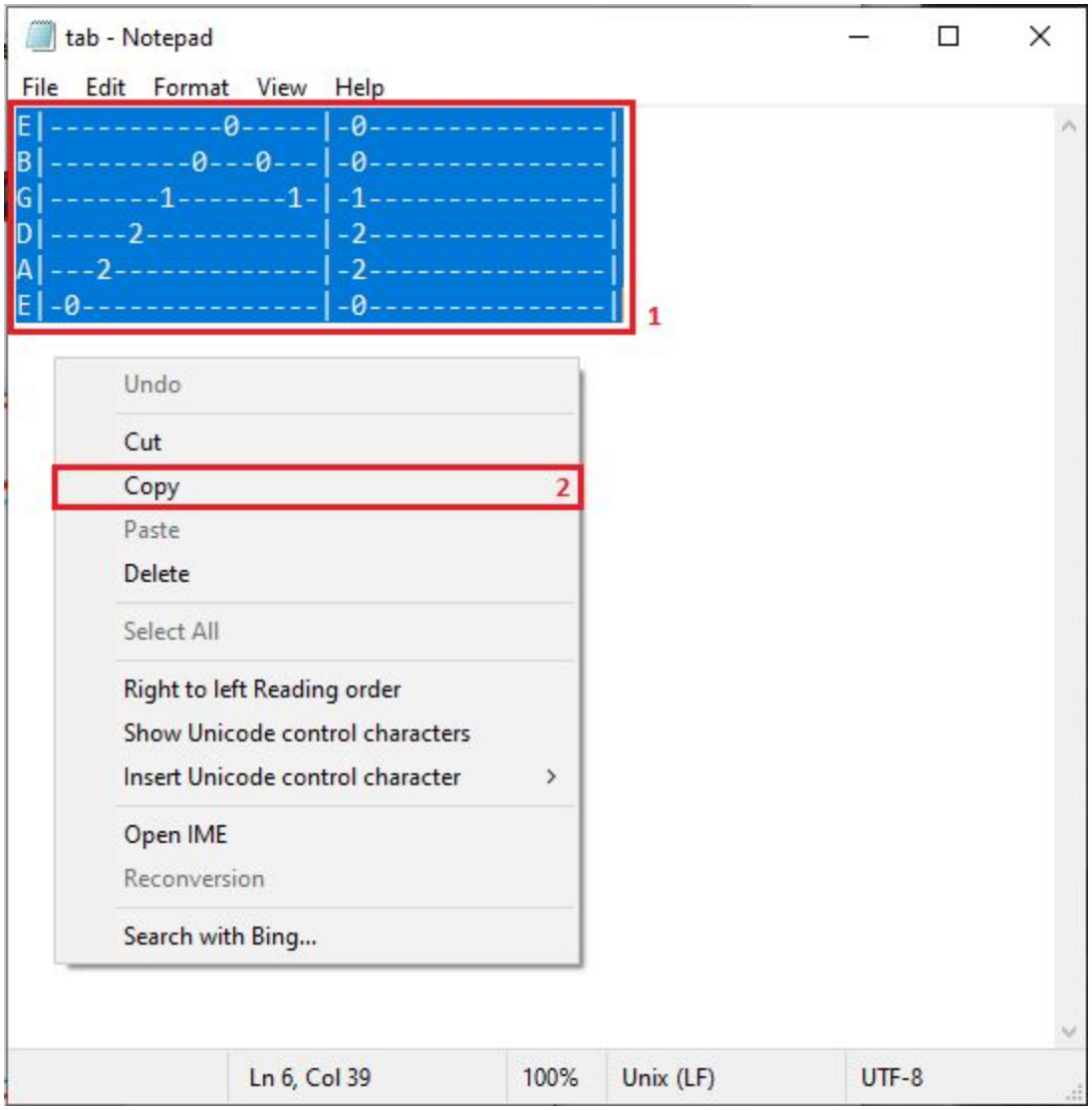
**Figure 6 - Screenshot of the startup screen**




## 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 7 - Screenshot of Notepad containing a guitar ASCII music tablature**



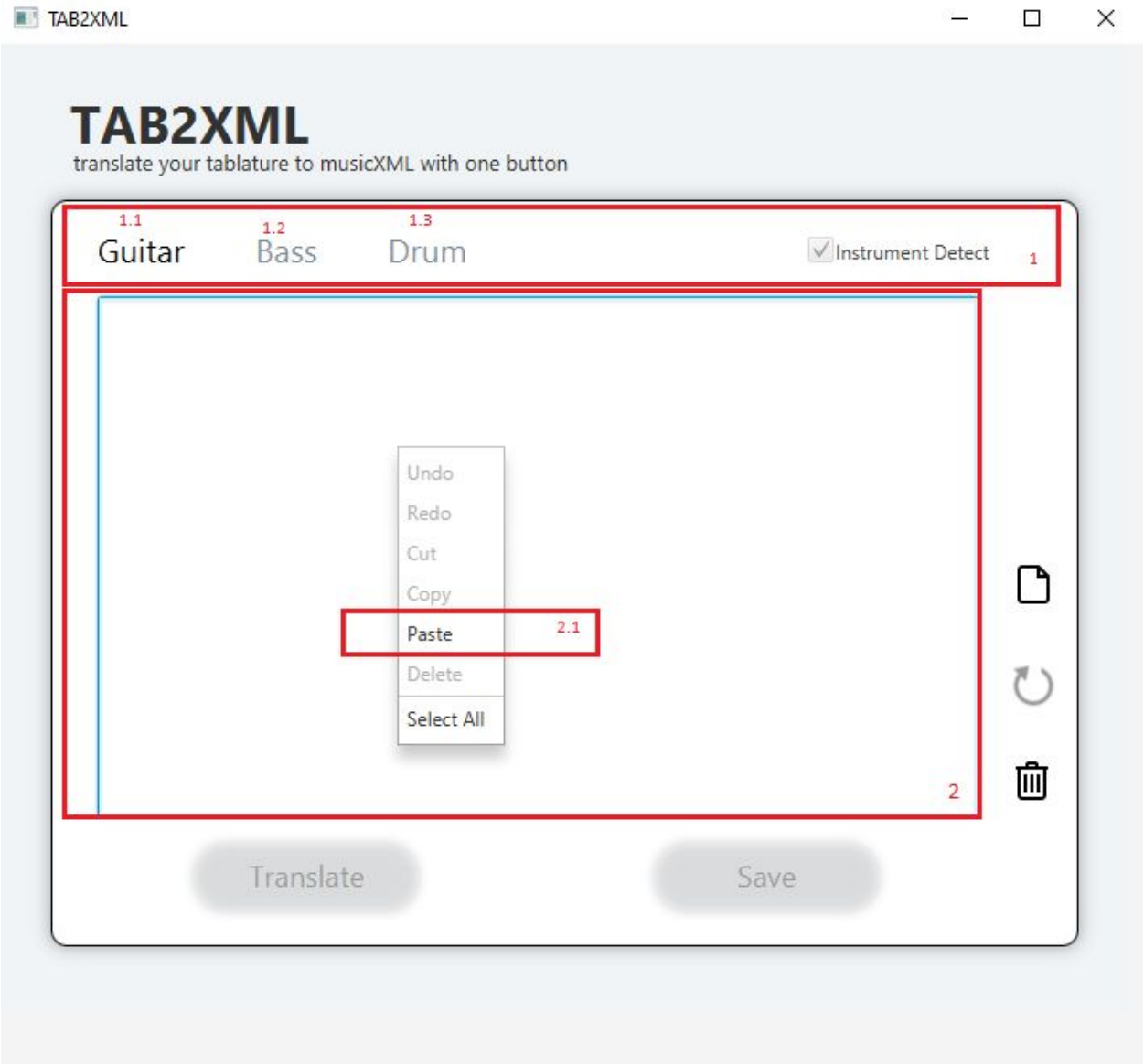

## Step 1.

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 8 - Pasting the tablature**



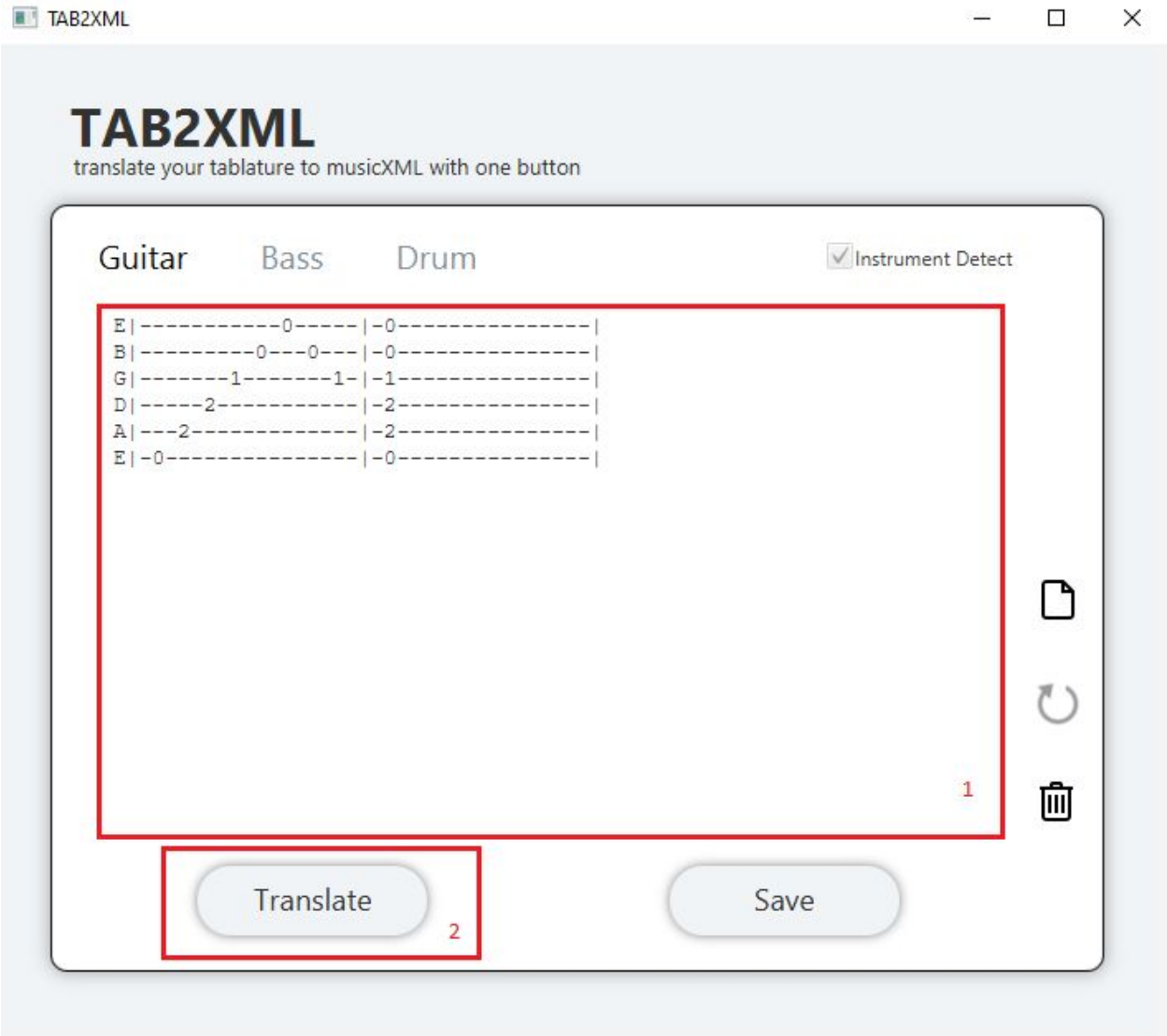

**Step 3.**

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.

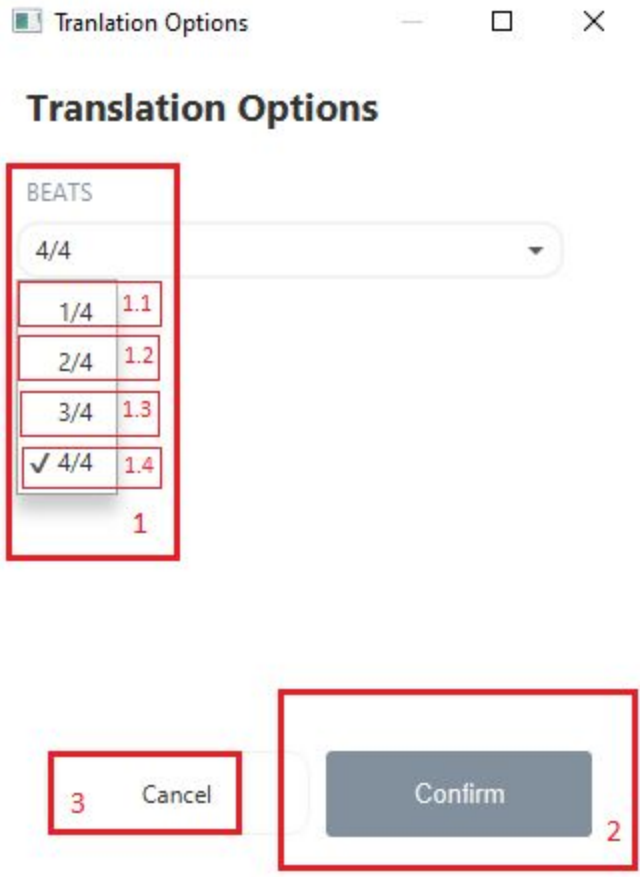
**Figure 9 - Text Input containing the tablature**




## 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 10 - Translation pop-up window**



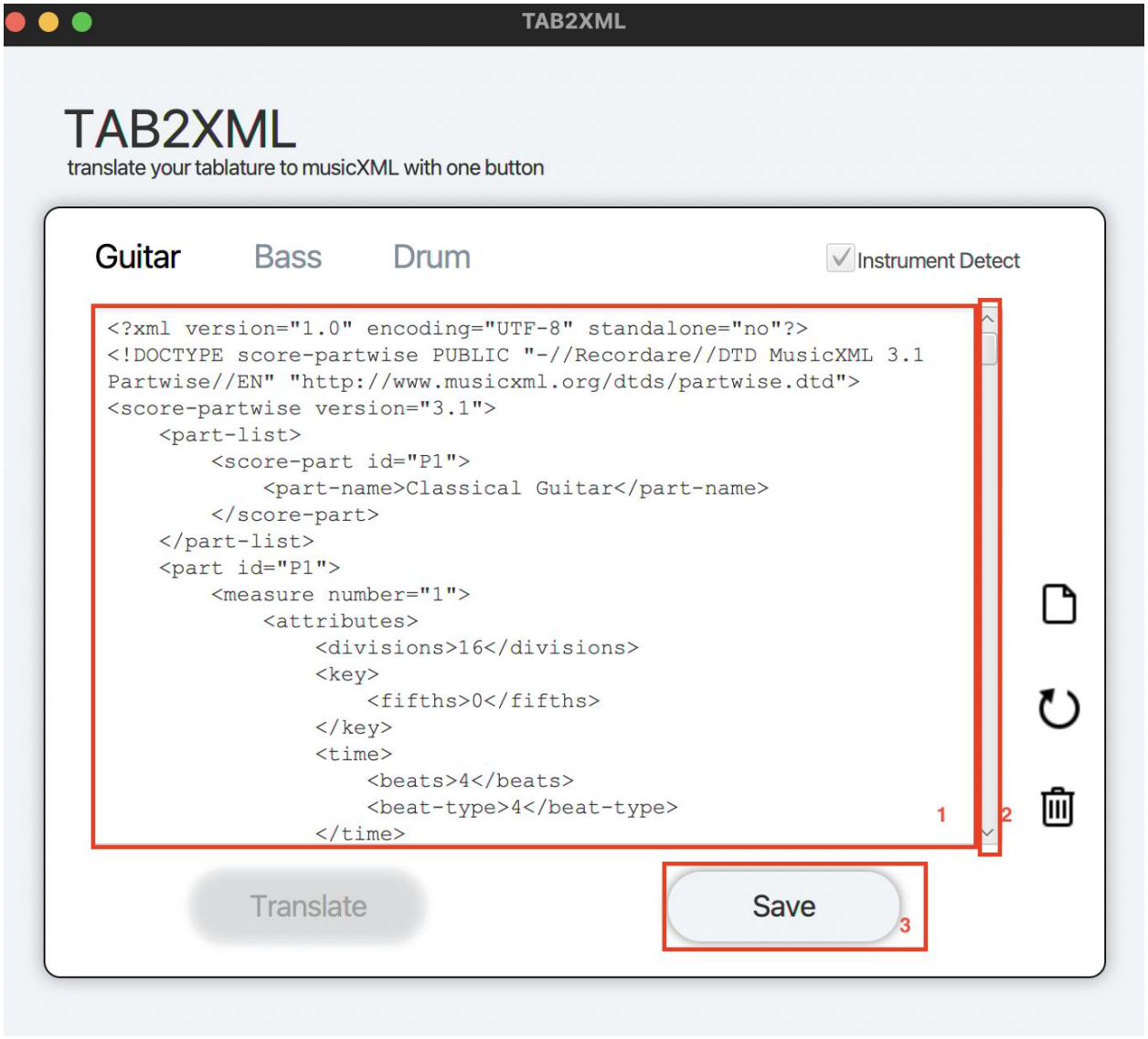

**Step 6.**

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.

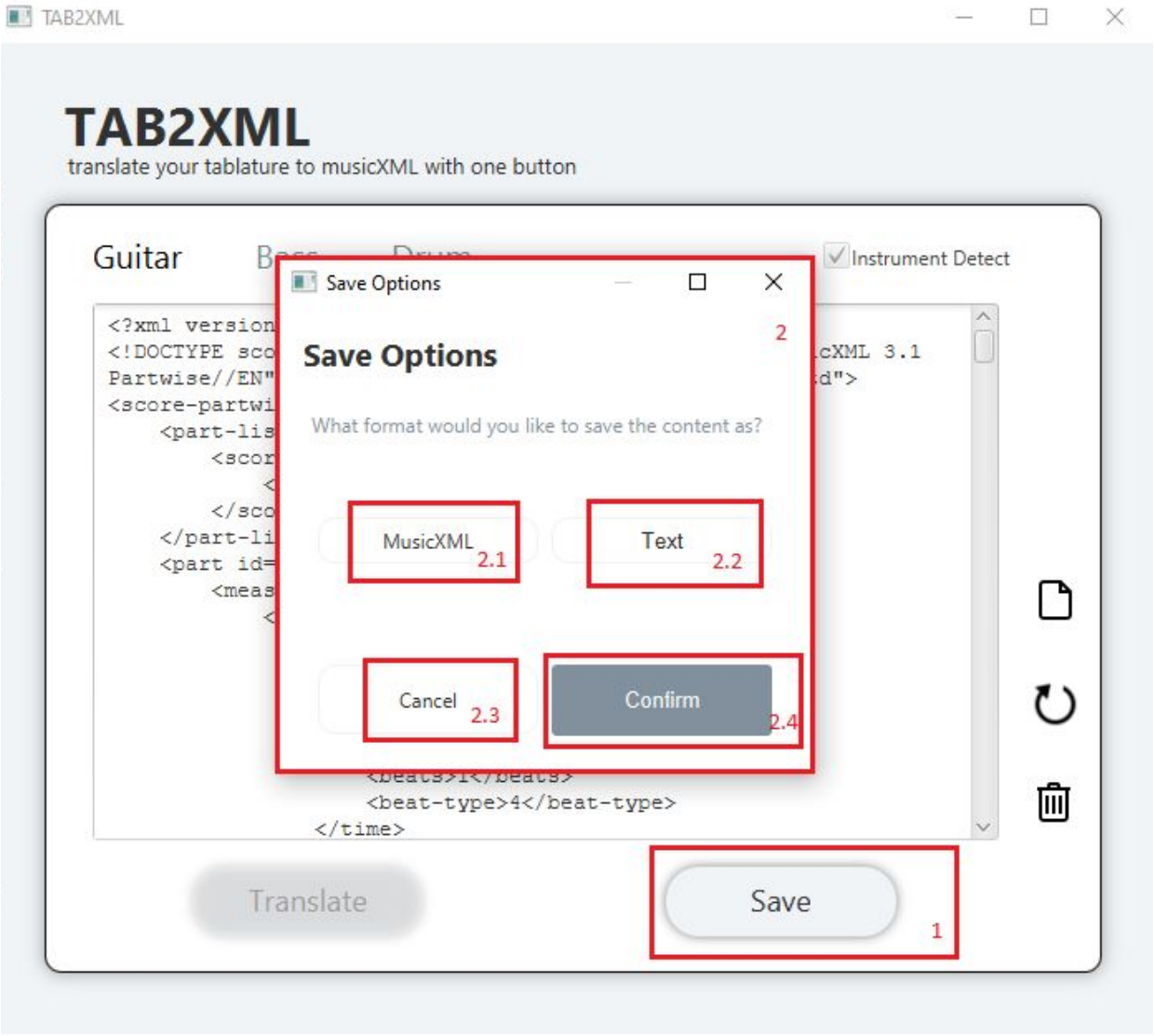
**Figure 11 - Text Input containing the translation**




## Step 8.

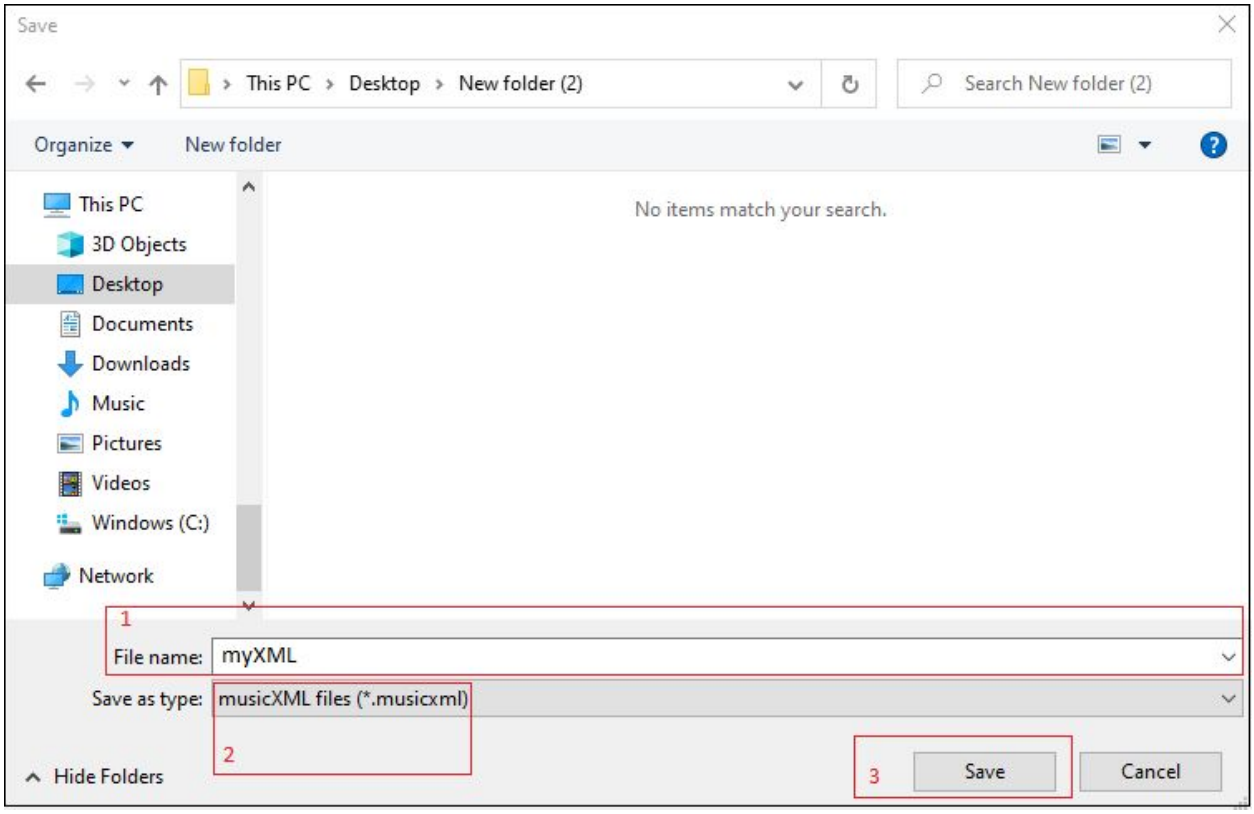
The text input window as shown in Figure 9 Section 1 contains the desired contents of a MusicXML file. You may use the scroll bar to browse through the window as shown in Section 2. Once you are satisfied with the output, you may use the 'Save' button to extract the file with a *.musicxml extension as shown in Section3.

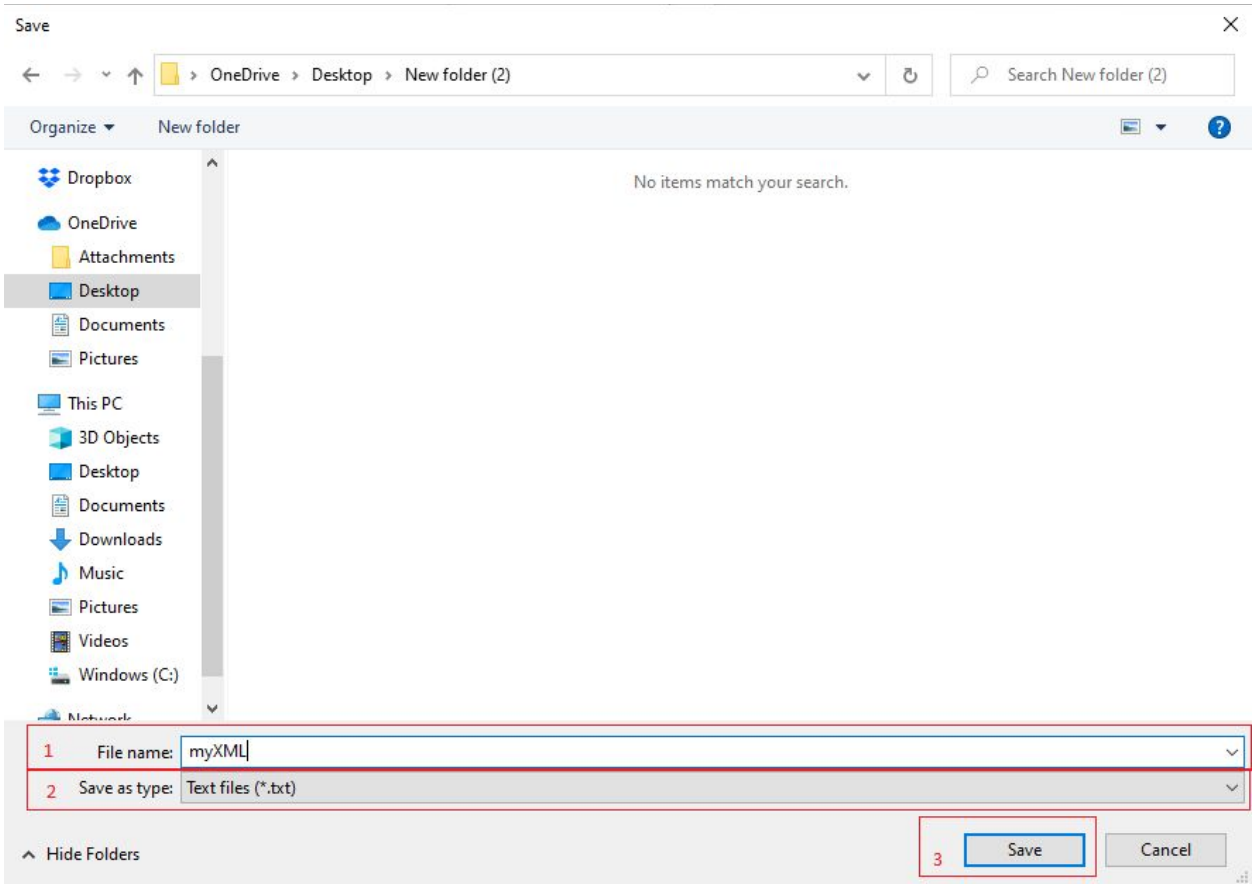
**Figure 12 - Save the translated content**




**Step 9.** The Save button (See 1) on action loads the popup screen, select MusicXML (See 2.2) , then click on Confirm. The user will be able to select the desired directory in the Save As pop up window.

**Figure 13 - Save As popup Window**





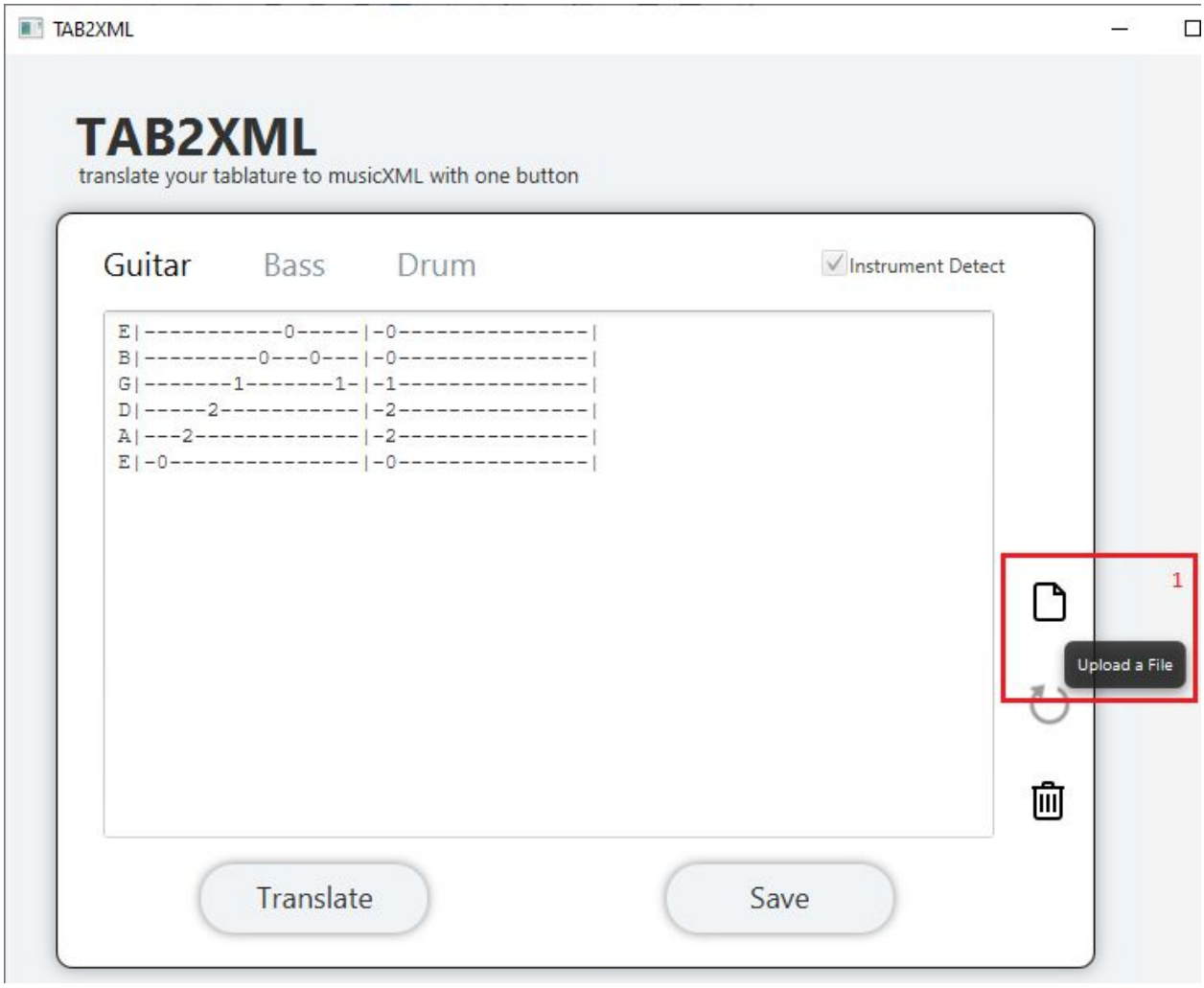

**Step 10.**

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.

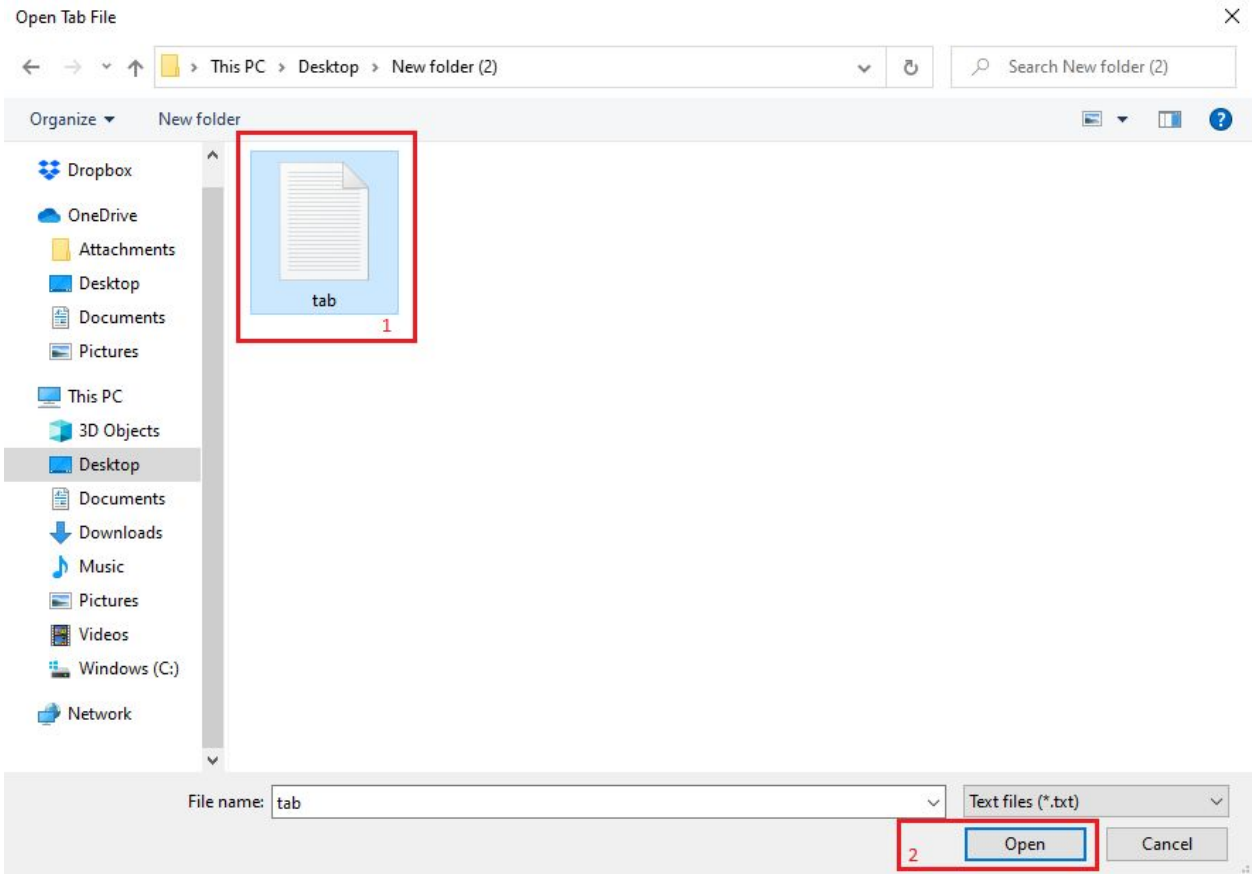
**Figure 14 - Upload Feature**




**Step 1.**

Open the TAB2MXL 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

## 5.1 Error Messages

No error message has been implemented for TAB2XML release 2.0.

## 5.2 Special Considerations

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

TAB2XML release 2.0 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 |