

Group 5

TAB2XML Design Document

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EECS 2311

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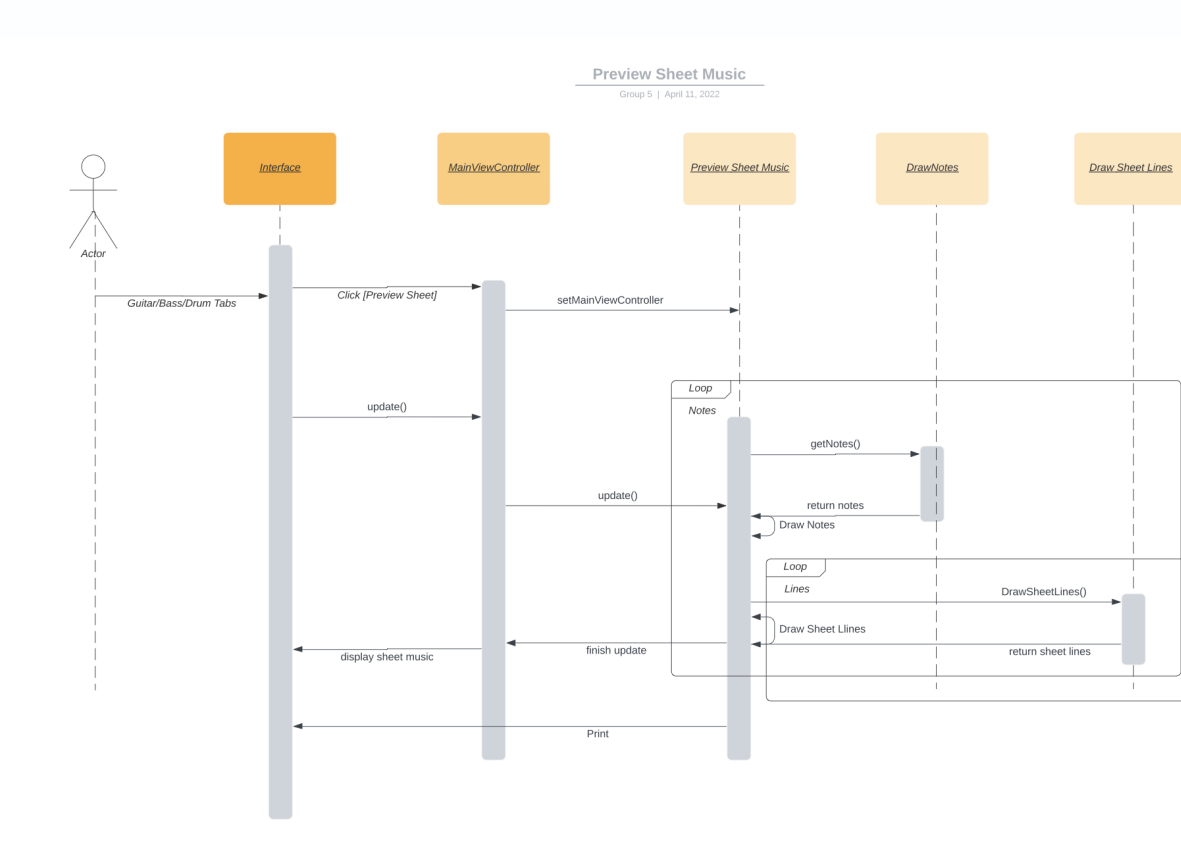
1. Introduction

This file documents the design implementation done for the TAB2XML application. It highlights the majority of the important interactions between the implemented packages, classes, methods, and objects.

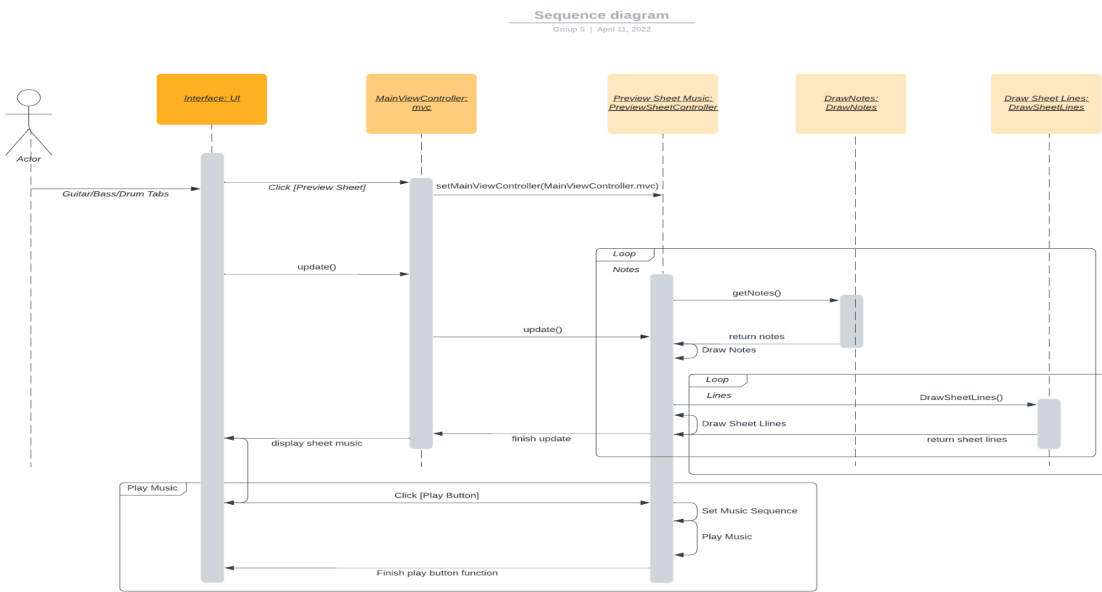
2. System Design

2.1 Sequence Diagrams

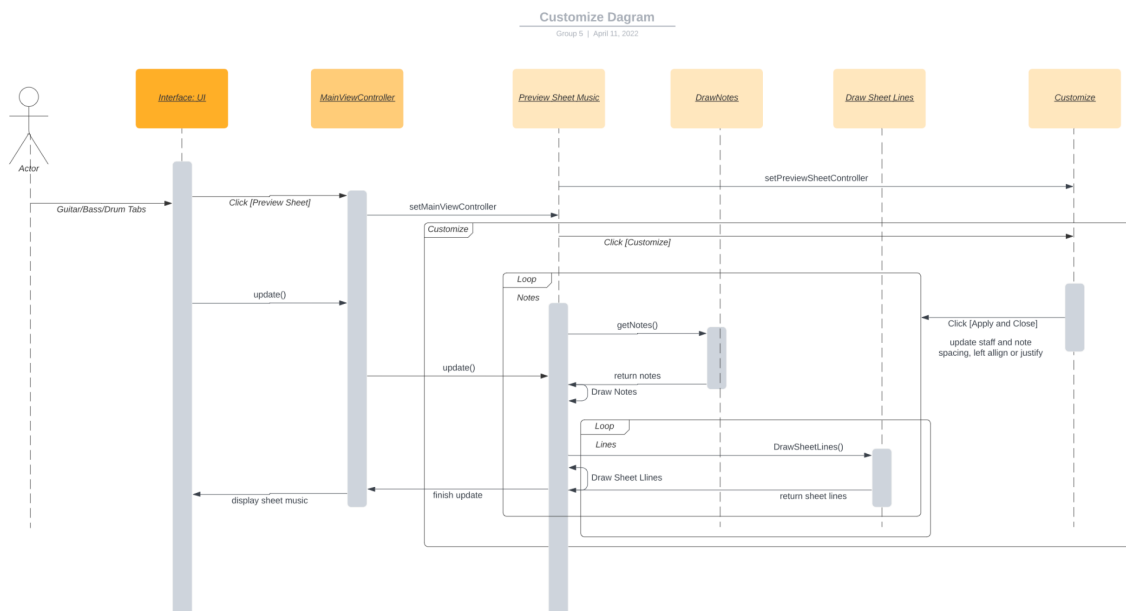
2.1.1 Preview Sheet Music



2.1.2 Play Button

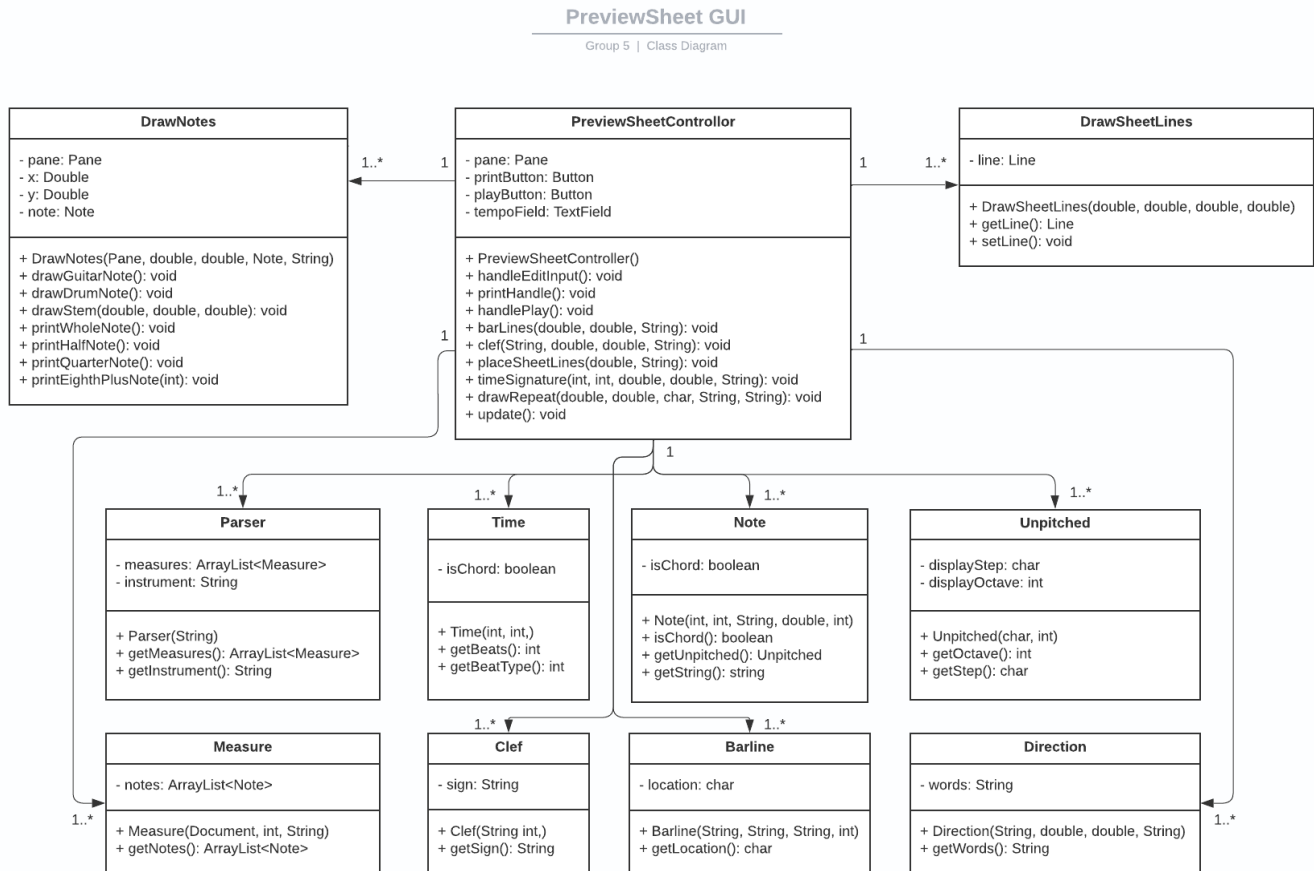


2.1.3 Customise

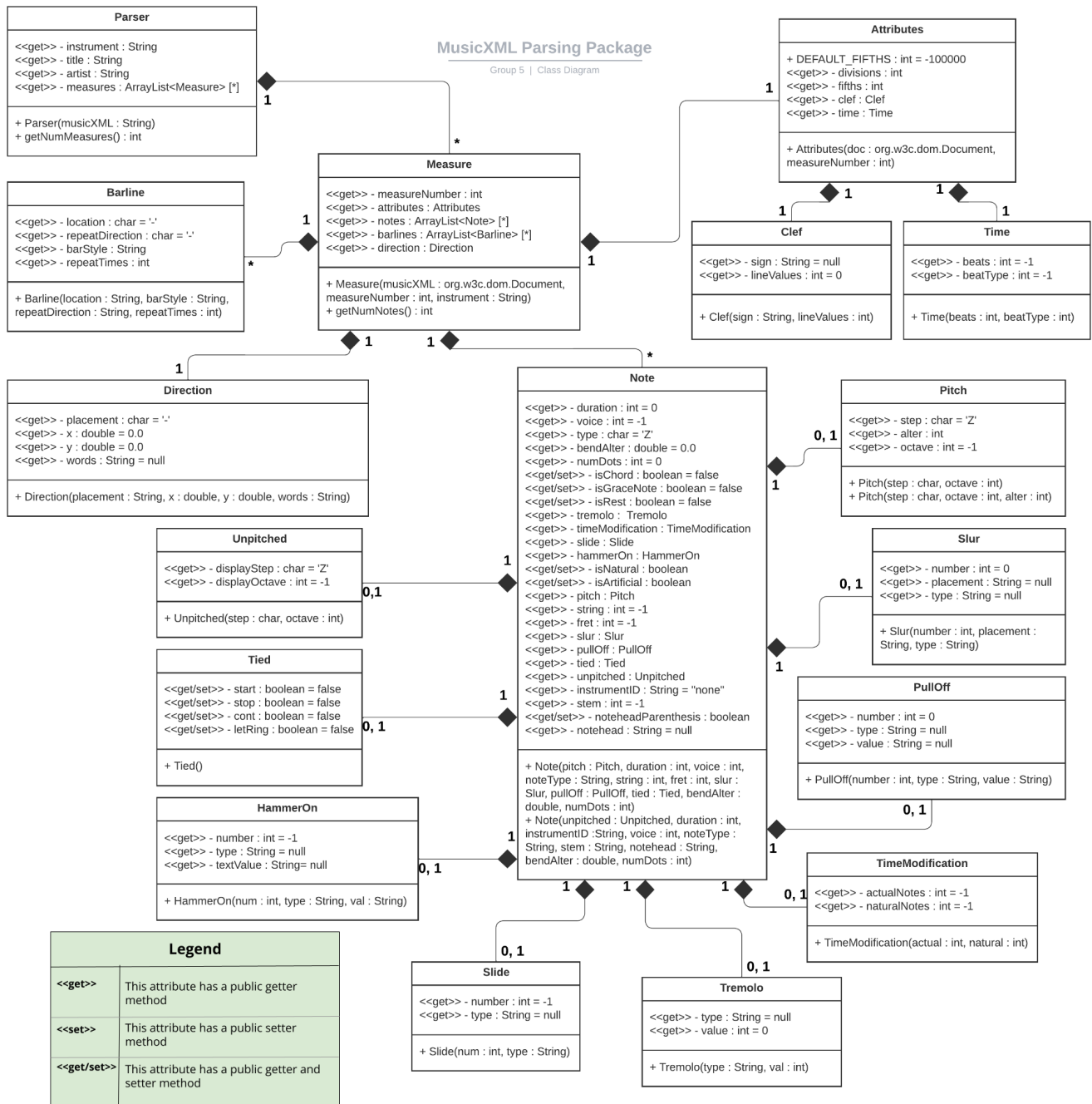


2.2 Class Diagrams

2.2.1 Preview Sheet Controller



2.2.2 Parser

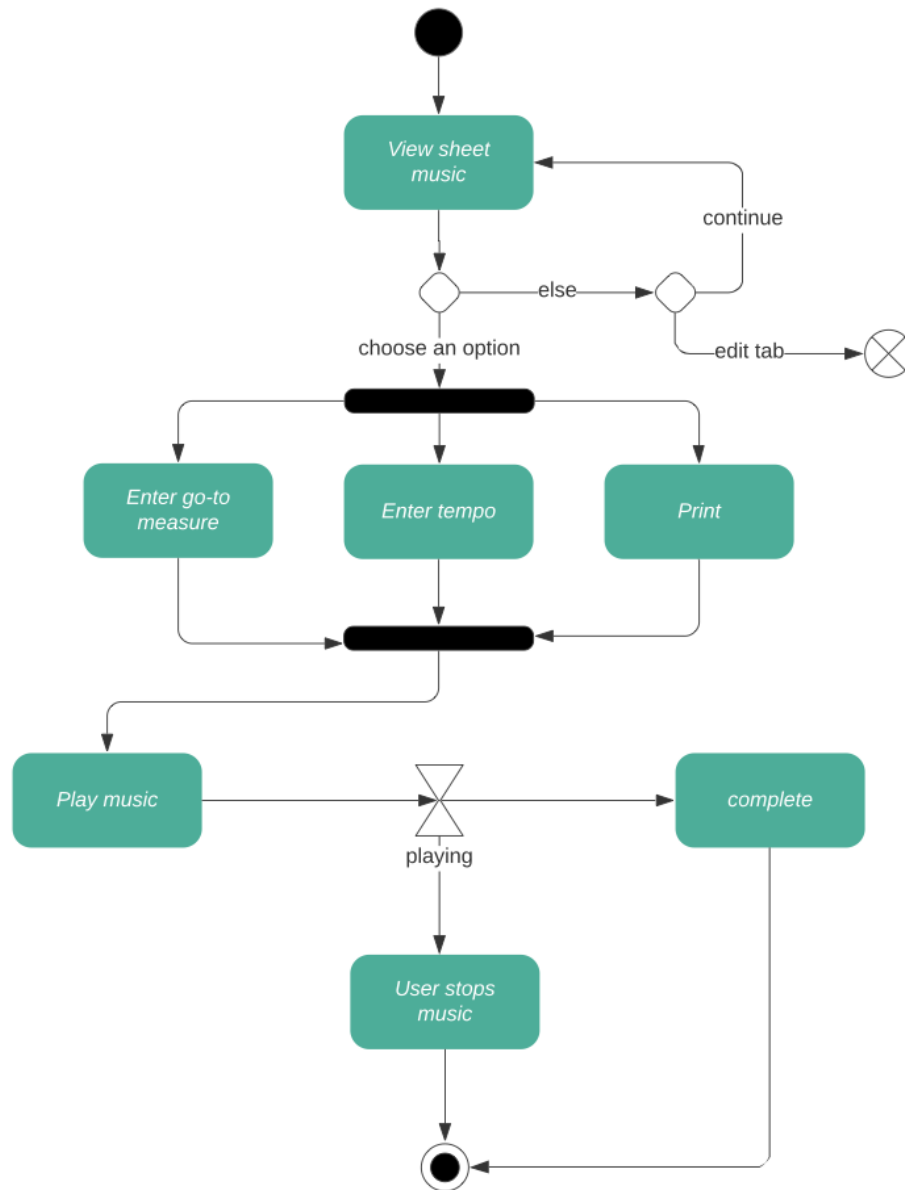


2.3 Activity Diagrams

2.3.1 Preview Sheet Music

Preview Sheet Music Activity Diagram

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After previewing the sheet music, the user can choose to highlight a measure number, adjust the playing speed, and/or print the file. Edit the inputted tablature to modify the sheet music. There is no limit to the amount of times a user wishes to play, print or highlight.

3. Maintenance Scenarios

3.1 Add Support for New Instruments

With our current program version, it supports 3 primary instruments: guitar, bass, and drums. If one needs to support a new feature of allowing other instruments to be played, then minimal adjustments are needed to satisfy this new requirement. This portion of code in the program is very easy to change, as the structure of this area is based around the selection of instruments. We could implement an edge case that satisfies the condition that if the tablature inputted was meant for an instrument other than guitar, bass, or drum, it would fall into this edge case and play this tablature with the instrument found in the musicxml text file.

3.2 Graphical User Interface

If the Graphical User Interface is not responding, refer to the package GUI where you can find the associated controllers for each window.

3.3 Add Playing Features to Supported Instruments

To add playing features to supported instruments refer to the following methods in the `PreviewSheetController` class under the GUI package.

- `setMeasureList()`: sets the measure list
- `setTempo()`: sets the tempo