

**TAB2XML**

Design Document

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# **Visualization of MusicXML**

Based on the instrument specified in the input tablature, three different objects are created: guitar, drum, and Bass. In the following section we look at different diagrams related to creation and relationships of these classes.

Diagram

Description automatically generated

Figure #. Overall activity diagram of the visualizing a tablature as a music sheet.

### **Instrument: Guitar**

If the input tablature is a guitar tablature, then a Guitar class is instantiated. The creation and displaying the elements of the tablature in form of music sheet is done through the drawGuitar method. In the section 1.1.1 you can find two sequence diagrams. An overall view of the steps taken to display the music score elements to the user followed by a more detailed sequence diagram on steps taken to actually create the elements.

In section 1.1.2, we will discuss a UML Class diagram of the Guitar class and its interactions with various classes and finally in section 1.1.3 we end section 1.1 with an activity diagram of the visualizing guitar tablatures.

#### **Overall Sequence Diagram**

Diagram, text

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Figure#. Overall Sequence diagram of displaying guitar tablature.

#### **UML Class diagram**

Graphical user interface, application

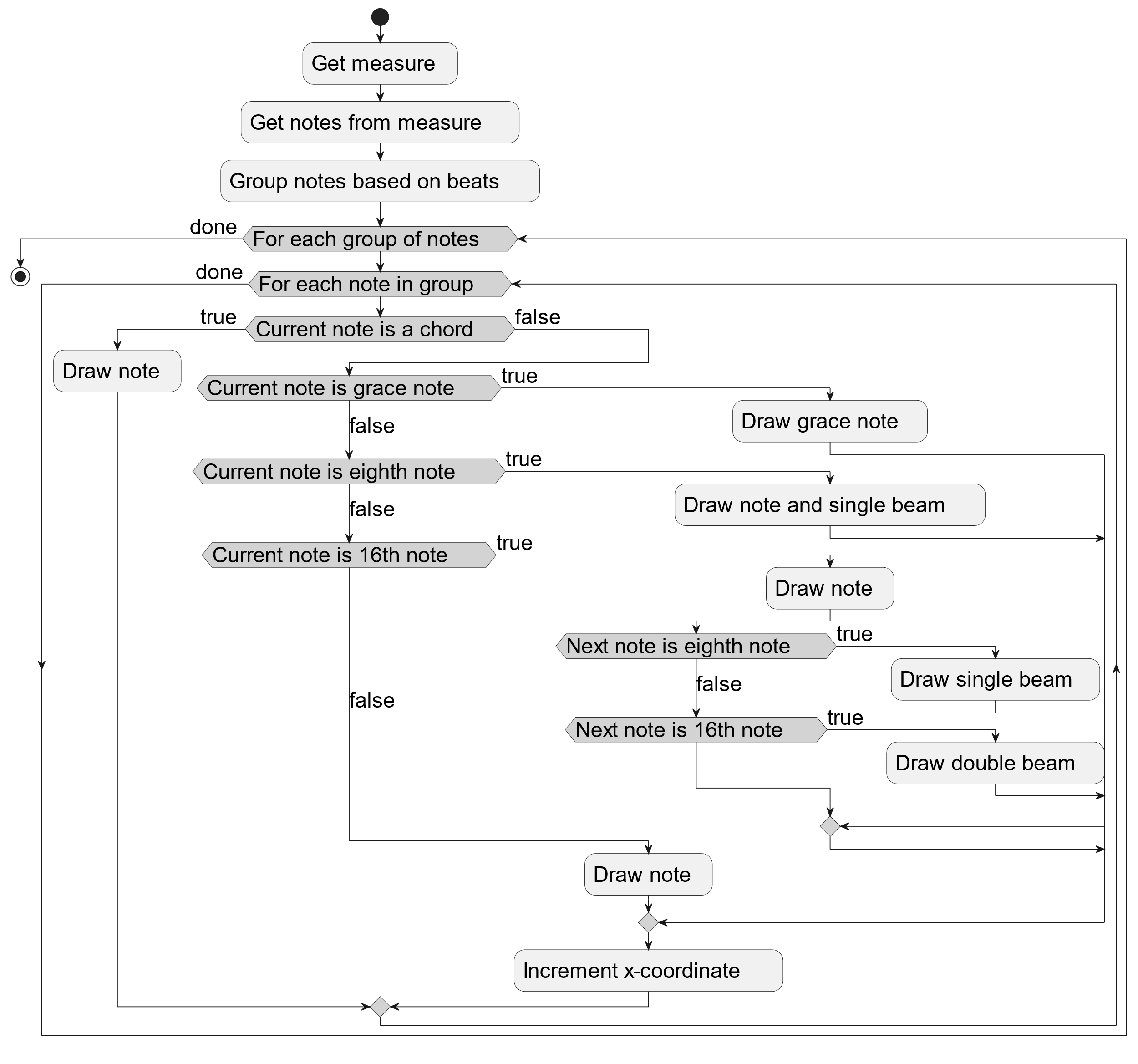
Description automatically generated

Figure 2. Class diagram of the Guitar class and it interactions.

### Instrument: Drum

(I think this diagram may be too cluttered, so I made a second version below)







### Instrument: Bass

# **Playing the tablature**

### Instrument: Guitar

2.1.1 UML class diagram

Graphical user interface, application

Description automatically generated

### Instrument: Drum

2.2.1 UML class diagram

Graphical user interface, application

Description automatically generated

2.1-2.2 Activity diagramA screenshot of a computer screen

Description automatically generated with low confidence

### Instrument: Bass

# **Printing the Music sheet**

Printer Sequence Diagram

A picture containing diagram

Description automatically generated

Printer Activity Diagram

Diagram

Description automatically generated

# **Go to measure**

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