

```
1 {
2 {
3   Initialize "(){ AddToPluginsMenu('Rhythm Paste','Run'); }"
4   Run "()" {
5
6   //Sets the current selection to a variable
7   thisscore = Sibelius.ActiveScore;
8   selection = thisscore.Selection;
9
10  //Creates all the necessary arrays for our pitch, articulations, tuplets and ties
11  sourcePositions = CreateSparseArray();
12  sourceDurations = CreateSparseArray();
13  sourceNoteCounts = CreateSparseArray();
14  sourceArticulations = CreateSparseArray();
15  sourceTupletLeft = CreateSparseArray();
16  sourceTupletRight = CreateSparseArray();
17  sourceTupletPosition = CreateSparseArray();
18  sourceTupletUnit = CreateSparseArray();
19  sourceTies = CreateSparseArray();
20  destinationPositions = CreateSparseArray();
21  destinationNoteCounts = CreateSparseArray();
22  destinationPitches = CreateSparseArray();
23  isFirstLoop=1;
24
25  //Sets the information needed to determine how many times to run the plugin (once per stave)
26  topStaff = selection.TopStaff;
27  bottomStaff = selection.BottomStaff;
28  firstBar = selection.FirstBarNumber;
29  lastBar = selection.LastBarNumber;
30
31  //Checks to see if more than one measure is selected. This plugin is only designed to copy one measure at a time
32  if (lastBar-firstBar>0)
33  {
34    Sibelius.MessageBox('Please copy only one measure. ');
35    ExitPlugin();
36  }
37
38
39  numberOfStaves= bottomStaff-topStaff+1;
40  staveIncrementer = 0;
41
42  //Everything after this is inside this while loop. It resets for each new stave
43  while (numberOfStaves>staveIncrementer)
44  {
45    {
46      //selects the next stave
47      selection.SelectPassage(firstBar,lastBar,topStaff+staveIncrementer,topStaff+staveIncrementer);
48
49      //Fills the arrays with the necessary note information from the destination measures
50      x = 0;
51
52      for each NoteRest n in selection
53      {
54        if (n.NoteCount>0)
55        {
56          destinationPositions[x] = n.Position;
57          destinationNoteCounts[x] = n.NoteCount;
58          x=x+1;
59        }
60      }
61
62
63      x=0;
64
65      for each Note o in selection
66      {
```

```
67     destinationPitches[x] = o.Pitch;
68     x=x+1;
69 }
70
71 selection.Paste(0);
72
73 //Checks again to see if multiple measures have been selected in the source bar after it is pasted in
74 sourceLastBar = selection.LastBarNumber;
75 sourceFirstBar = selection.FirstBarNumber;
76 if (sourceLastBar-sourceFirstBar>0)
77 {
78     Sibelius.MessageBox('Please copy only one measure.');
```

79 ExitPlugin();

80 }

81

82 x=0;

83

84 //Copies the source material on the first instance of the loop to avoid recopying the source arrays.

85 if (isFirstLoop=1)

86 {

87 for each NoteRest n in selection

88 {

89 sourcePositions[x] = n.Position;

90 sourceDurations[x] = n.Duration;

91 sourceNoteCounts[x] = n.NoteCount;

92 sourceArticulations[x] = n.Articulations;

93 if (sourceNoteCounts[x]>0)

94 {

95 topNote = n.Highest;

96 sourceTies[x] = topNote.Tied;

97 }

98 }

99

100 x=x+1;

101 }

102

103 x=0;

104 for each Tuplet n in selection

105 {

106 sourceTupletLeft[x] = n.Left;

107 sourceTupletRight[x] = n.Right;

108 sourceTupletPosition[x] = n.PositionInTuplet;

109 sourceTupletUnit[x] = n.Unit;

110 x=x+1;

111 }

112 isFirstLoop=0;

113 }

114

115 //Clears the destination measure to allow for populating it with new information

116 for each Bar n in selection

117 {

118 n.ClearNotesAndModifiers();

119 barRhythmLength = n.Length;

120 }

121

122 x=0;

123

124 //Copies in the tuplets first, if there are any

125 numberOfTuplets = sourceTupletLeft.Length;

126

127 for each Bar n in selection

128 {

129 while (x<numberOfTuplets)

130 {

131 n.AddTuplet(sourceTupletPosition[x],1,sourceTupletLeft[x],sourceTupletRight[x],sourceTupletUnit[x]);

132 x=x+1;

```
133     }
134 }
135
136 //Creates a set of incrementer for use in the measure creation
137 currentPlayhead=0;
138 sourceIncrementer=0;
139 destinationIncrementer=0;
140 pitchIncrementer=0;
141
142
143 //Creates the new notes by moving through the bar one position at a time. Checks to see if the source position requires a note and applies the destination pitches.
144 while (currentPlayhead<barRhythmLength)
145 {
146     if (currentPlayhead=0)
147     {
148         //Checks to see if the source is a rest. If it is, it will skip this part, not creating any notes
149         if (sourceNoteCounts[sourceIncrementer]>0)
150         {
151             //Makes notes if the source NoteRest is a note or chord
152             while (pitchIncrementer<destinationNoteCounts[destinationIncrementer])
153             {
154                 n.AddNote(sourcePositions[sourceIncrementer],destinationPitches[pitchIncrementer],sourceDurations[sourceIncrementer],sourceTies[sourceIncrementer]);
155                 pitchIncrementer=pitchIncrementer+1;
156             }
157             //Resets the pitch incrementer after creating notes
158             pitchIncrementer=pitchIncrementer-destinationNoteCounts[destinationIncrementer];
159         }
160         //Move the playhead and source incrementer ahead. Position 0 must contain a NoteRest, but other positions may be empty
161         currentPlayhead=currentPlayhead + 1;
162         sourceIncrementer=sourceIncrementer + 1;
163     }
164     else {
165         //Checks to see if the destination notes have changed
166         if (currentPlayhead = destinationPositions[destinationIncrementer+1])
167         {
168             //Move to the next set of notes
169             pitchIncrementer=pitchIncrementer+destinationNoteCounts[destinationIncrementer];
170             //Move the destination incrementer forward
171             destinationIncrementer=destinationIncrementer+1;
172         }
173         if (currentPlayhead = sourcePositions[sourceIncrementer])
174         {
175             //Checks to see if the source Note Rest is a rest or chord
176             if (sourceNoteCounts[sourceIncrementer]>0)
177             {
178                 //Sets the current pitch incrementer to create the number of notes equivalent to the destination note count
179                 currentPitchIncrementer=pitchIncrementer;
180                 while(pitchIncrementer<(destinationNoteCounts[destinationIncrementer]+currentPitchIncrementer))
181                 {
182                     n.AddNote(sourcePositions[sourceIncrementer],destinationPitches[pitchIncrementer],sourceDurations[sourceIncrementer],sourceTies[sourceIncrementer]);
183                     pitchIncrementer=pitchIncrementer + 1;
184                 }
185                 //Reset the pitch incrementer
186                 pitchIncrementer = pitchIncrementer - destinationNoteCounts[destinationIncrementer];
187             }
188             sourceIncrementer=sourceIncrementer+1;
189         }
190         currentPlayhead=currentPlayhead + 1;
191     }
192 }
193
194
195 //Now we add the articulations
196 sourceIncrementer = 0;
197
198
```

```
199   for each NoteRest n in selection
200     {
201       n.Articulations = sourceArticulations[sourceIncrementer];
202       sourceIncrementer = sourceIncrementer + 1;
203     }
204
205   //resets the destination arrays to prepare for copying on the next stave
206   x=destinationNoteCounts.Length;
207   while (x>0)
208     {
209       destinationNoteCounts.Pop();
210       destinationPositions.Pop();
211       x=x-1;
212     }
213
214   staveIncrementer=staveIncrementer+1;
215   }
216 }
217
218
219
220
221
222
223 }"
224 }
```