Kapelle Scales 1.0

Tutorials

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I. Introduction

What is Kapelle Scales?

Kapelle Scales is an application for working with scales and modes of all kinds. Unlike applications which may be limited to a few activities or just very basic scale types, Kapelle Scales is capable of handling an infinite variety of scales and modes.

Currently Kapelle Scales supports not only major and the three forms of minor, but also the medieval church modes, pentatonic, hexatonic, and octatonic scales, both standard and synthetic. Any scale or mode (that does not require microtones) can be supported by the application and easily incorporated.

Kapelle Scales Exercises

Kapelle Scales does not "hard-wire" the exercises into the program. Instead, exercises are small text files. Each line in the file contains an instruction which the application uses to construct an exercise. For example, one line might specify how many individual scales should be created for a particular exercise.

The Varieties of Scale-Related Exercises

The number of activities that can be done to work with scales and modes is surprisingly large. Kapelle Scales identifies no less than 12 separate activities, with some of those activities having a number of options. Instead of listing all of those activities, here is a rundown of the fundamental types of scale-related activities that the application supports.

Writing

Writing scales and modes is obviously fundamental to learning scales. Scales may be written with or without key signatures, ascending or descending, starting on and ending with any particular scale degree. The first note may be given, or the exercise may specify to start on a scale degree.

Hearing

Hearing scales is also fundamental. Scales and modes may be required to be identified by both tonic and mode, or by mode only. Hearing scales is not limited to starting on the tonic pitch—the well-trained ear recognizes scales starting from all degrees.

Identifying

Identifying scales consists of recognizing a scale at sight with or without a key signature, starting from any particular scale degree. This can also include identifying a scale when given a single degree of that scale and its mode.

Key Signatures

Key signatures may be added to a set of pitches to create a particular scale or mode. In addition, key signatures may also be created—that is, the sharps or flats required to create a particular scale or mode can be assembled, rather than the key signature's being selected from a list.

Correcting

Error-correction is always a good way to learn to write scales or modes. Scales may be presented with one note incorrect, all the way through to every note incorrect.

Playing

Playing scales is excellent practice. Kapelle Scales supports playing scales from a particular scale degree, or starting from a given note.

About the Tutorials

These tutorial exercises do not cover every single activity offered by Kapelle Scales. The tutorials cover just those skills which you will need to use the program.

For example, once you know how to notate a scale, then you also have the skills necessary to add accidentals to scales or error-correct scales. Thus adding accidentals and error correction is

skipped in the tutorials.

Also, the tutorial exercises are generally much shorter than "real" exercises you will do.

Finally, don't worry about the grade you get on a tutorial exercise. The idea here is to learn to use the program.

II. Tutorial 1: Basics

Tutorial 1 covers the notational system in Kapelle Scales. As such it is the longest of the tutorials.

If you are already familiar with other Kapelle-series programs that use notation (in particular, *Kapelle Dictation*) then you may skim this tutorial quickly. You will find that the notation system in Kapelle Scales is a subsystem of that used in Kapelle Dictation and will be very easy to understand.

However, you should go through the tutorial briefly, just to note any differences that exist between the two applications.

A Note About Exercise Length

Most exercises consist of a number of scales that are presented to you. The exercise requires that you finish all of the presented scales before your grade is permanently recorded.

However, for the purposes of these tutorials, most exercises will consist of one single scale, or just a few.

Opening the Exercise

All of the exercises available to you are located in a standard treetype control on the left side of the main window:

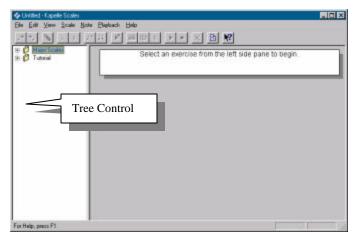


Figure 1: The Main Window

This pane contains both folders and exercises.

To expand a folder, click on the plus sign (+) to the left of the folder. It will expand to show its contents—which can be more folders as well as exercises.

Open the **Tutorials** folder by clicking once on the plus sign:

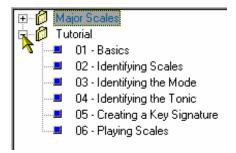


Figure 2: Opening the Tutorials Folder

Then open the first exercise, **01 – Basics**, by **double-clicking** on the exercise icon.

In a moment, the exercise will be presented to you.

Since this is a tutorial exercise, it has been limited to one single ascending A-Major scale to write.

Before starting to work on the scale, take a look at the parts of the screen before you.

Parts of the Screen

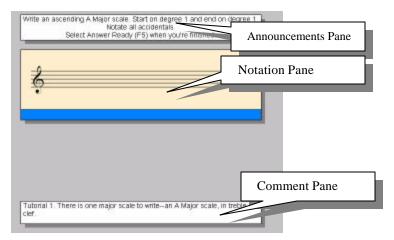


Figure 3: Parts of the Screen

Announcements Pane

The Announcements Pane contains the instructions for you to follow for this particular exercise. Always read it carefully: it will tell you what kind of scale to write, whether the scale is ascending or descending, and what to do after you've written the scale.

Notation Pane

The Notation Pane is the onscreen area in which you actually notate the exercise. There is a color bar on the bottom of the Notation Pane which might act as a double-clickable button in some cases, or will serve to identify the scale for you in others.

Comment Pane

Every exercise contains a comment of some sort. This comment was written by the author of the exercise and contains extra information about the exercise.

Notating the Scale

Moving the Cursor

The cursor is a rectangular blinking black object:



Figure 4: The Cursor

The cursor may be moved vertically or horizontally. (Horizontal motion is only possible when there are multiple notes within a measure.)

To move the cursor **vertically**, press the **up arrow** or the **down arrow** keys.

To move the cursor **horizontally**, press the **right arrow** or **left arrow** keys. (Note that the cursor will not move horizontally until you have inserted some notes.)

Entering Notes

Since we are going to notate an A-Major scale, move the cursor so that it is positioned directly over the second space of the clef:



Figure 5: The Cursor Positioned Over 'A'

To enter a note at this location, press the **Enter** key. The note is entered:



Figure 6: Note Entered

Alternate Techniques to Enter Notes

If you prefer to enter a note with the mouse, you may do any of the following:

• Select **Enter Note** from the Note Menu:



Figure 7: Enter Note from the Note menu

- Click the Enter Note icon on the Toolbar.
- Right-click on the cursor, then select Enter Note from the context menu:



Figure 8: Using the Context Menu

Editing Notes

Deleting Notes

To delete a note, make sure that the cursor is positioned directly over the note head, then press **Backspace**.

Moving Notes

To move a note, make sure that the cursor is positioned directly over the note head, then press **Ctrl+Up Arrow** to move the note upwards, or **Ctrl+Down Arrow** to move the note downwards.

Adding Accidentals

To add a sharp or flat to a note, make sure that the cursor is positioned directly over the note head, then press **F7** to flat the note or **F8** to sharp the note.

Editing Notes Using the Mouse

The techniques outlined above for note editing all use the keyboard, which is the quickest way to handle these actions. However, you may also use the mouse to edit or enter notes. The section on entering notes illustrated alternate techniques. Those same basic techniques exist for all other note-editing commands as well.

Using the Menu Bar

The Notes Menu contains all commands for editing notes. Make sure that the cursor is positioned over the note head you wish to edit, then select a command from the Notes Menu:



Figure 9: The Notes Menu

Using the Toolbar

The left-most portion of the Toolbar contains note-editing commands:



Figure 10: Note-Editing Toolbar Commands

TIP: if you're not sure what the icon means, hold the mouse over the icon for 1 second and a little window will pop up telling you what it does.

Using Context Menus

You may also right-click at the cursor's location, and a context menu will pop up containing only those commands which are pertinent to the current situation:

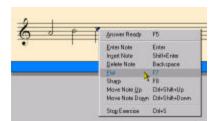


Figure 11: A Context Menu for Note Editing

Undo and Redo ("Taking Back") Actions

You may undo, or take back, any editing action up to the time you began to work on this scale.

To Undo a single action, select **Undo** from the Edit Menu. (The name of the **Undo** command will reflect the action—such as **Undo Add Note**.)

To Undo multiple actions, select **Undo Multiple** from the Edit Menu. You may select any actions you wish to undo from the dialog box that comes up.

To **Redo** actions (that is, to "take back" the Undo), use the **Redo** and **Redo Multiple** commands on the Edit Menu.

Making Multiple Selections

You are not limited to editing one note at a time. You may select a group of notes for editing as follows:

- Press down and hold the left mouse button
- Drag the mouse from top-left to bottom-right of the notes you wish to edit: make sure that their noteheads are included in the area.
- Release the mouse button. The area you have selected will be highlighted in inverse video:



Figure 12: Multiple Selection

Finishing the Notation

Go ahead and notate the A-Major ascending scale using the techniques outlined above: add notes, delete them if you want, move them around, add and remove accidentals.

When you're finished, this is how it should look:



Figure 13: A Completed Scale

Signifying Your Answer is Ready

When you are sure you have completed the scale, give the **Answer**

Ready command by pressing F5.

Of course you may give the **Answer Ready** command with the mouse as well:

- Select Answer Ready from the Scale Menu.
- Right-click and choose Answer Ready from the Context menu.
- Click the Answer Ready icon on the Toolbar.

Once you tell Kapelle Scales that your answer is ready, it will evaluate your work. The screen will change to look like this:

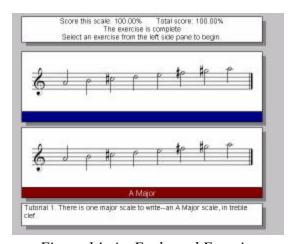


Figure 14: An Evaluated Exercise

Your score for this particular scale is shown in the Announcements Pane, as well as your score for the entire exercise. (Normally an exercise will present you with more than one scale to work with—but this is a tutorial exercise which contains only one scale.)

The correct notation is shown below your notation. Note that if you notated the scale in a different octave than the one shown, you will not be counted as incorrect.

You've finished Tutorial 1!

III. Tutorial 2: Identifying Scales

You're going to be listening to scales in this tutorial, so be sure to turn on your computer's speakers or put on your headphones.

Opening the Exercise

Open the exercise **Tutorial 02 – Identifying Scales** from the tree control on the left of the main window.

In addition to double-clicking on the exercise to open it, you may also:

- Left-click once to select it, then right-click and select
 Open Exercise from the Context Menu.
- Left-click once to select it, then select **Open Exercise** from the File Menu.

TIP: you can resize the horizontal of the tree pane by dragging on the split bar between it and the main window:

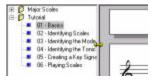


Figure 15: Resizing the Tree Pane

Playing the Scale

The scale was played for you as soon as it was presented. You may play it as many times as you like.

To play the scale again:

- Press the Spacebar.
- OR: select Play Scale from the Playback Menu.

OR: right-click in the notation pane and select Play
 Scale from the Context Menu.

To stop playback early:

- Press the Spacebar.
- OR: select Stop Playback from the Playback Menu.
- OR: right-click in the notation pane and select Stop Playback from the Context Menu.

Identifying the Scale

You will note that the bar underneath the notation pane has acquired some text:

Double-click here to identify the scale

Figure 16: The Double-Click Bar

This is a convenient way to carry out the task assigned to you in this exercise, which is to identify this scale by tonic and mode.

The Announcements Pane lists another way to identify the scale:

Identify the scale you hear (Ctrl+I).

Figure 17: Announcement Pane's Instruction

Also, check on the Scale Menu, and you'll see yet another way to carry this out:



Figure 18: Identify Scale From the Scale Menu

In short, there are lots of ways to get the same thing done.

By whatever method you choose, give the command. You'll be

presented with the Identify Scale dialog box:



Figure 19: Identify Scale Dialog Box

Select the tonic and mode for the scale from the **Key** and **Mode** drop-down list boxes. (It's D Harmonic Minor).

TIP: just type in the first letter of the key and it will be selected automatically. If it isn't the key you want, just keep typing the letter over and over until you get the one you want. In this exercise, typing 'D' once will get you **Db**, so type it again and you'll get **D**.

Once you're finished, click OK or press **Enter** to leave the dialog box.

The area immediately below the Notation Pane will now show your identification:



Figure 20: An Identified Scale

Signifying Your Answer is Ready

Give the **Answer Ready** command by pressing **F5**, or using any of the other techniques outlined in the previous tutorial.

Your work will be evaluated, and you will see the full scale:

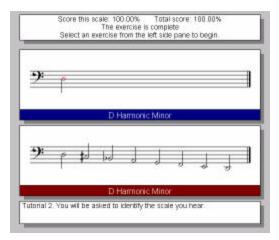


Figure 21: After the Scale is Identified

Since this was a one-scale exercise, like Tutorial 1, you've finished this exercise.

You may be wondering what's been happening to your scores. They're being recorded for you automatically. You may view them, print, export, and manage them using your progress report.

We'll take a first look at your progress report now.

NOTE: if you have used Kapelle Dictation, Kapelle Clefs, or Kapelle Intervals you are already fully familiar with the operation of a Progress Report dialog box and so you can probably skip this next passage.

About Your Progress Report

Opening Your Progress Report

To open your progress report for viewing, select **Show Progress Report** from the File Menu.

Your Progress Report is a dialog box that looks like this:

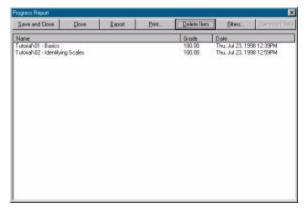


Figure 22: Progress Report Dialog Box

Note that the two tutorial exercises you have done are already listed in this window.

Printing Your Progress Report

For this tutorial, try printing your progress report. Click on the **Print...** button. In a moment, your progress report will be printed.

IV. Tutorial 3: Identifying the Mode

In this tutorial, you will identify the mode of several scales. There is no notation involved in this tutorial.

Opening the Exercise

Open the Tutorial exercise **Tutorial 03 – Identifying the Mode**.

As soon as you open the exercise, the first scale will be played. Notice that you won't see any notation onscreen this time—in this kind of exercise, you identify only the mode, and not the tonic.

You may play the scale as many times as you wish. See the previous tutorial for information about playing scales.

Identifying the Mode

Note that you may double-click on the color bar immediately below the Notation Pane (which in this style is the only thing showing) to identify the mode.

Note also that the Announcements Pane offers another way to do it (press Ctrl+D).

Note that you can also select **Identify Mode...** from the Scale Menu.

Go ahead and give the command to identify the mode, using any of the proferred techniques. You are presented with the Identify Mode Dialog Box:

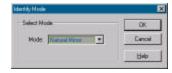


Figure 23: Identify Mode Dialog Box

You may select the correct mode for this scale from the list of choices.

TIP: type the first letter of the mode's name to select it more quickly. Repeated typing of the letter will result in the selection of any mode name beginning with that letter.

Click OK (or press **Enter**) when you've selected the mode.

Signifying Your Answer is Ready

Signify your answer is ready by pressing **F5** or using any of the other techniques for accessing the **Answer Ready** command (outlined in earlier tutorials.)

The window will change to look like this:

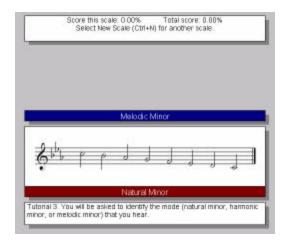


Figure 24: After Identifying the Mode

Note that this illustrates an incorrect answer!

Up to this point in the tutorials you've been finished at this point. But this exercise contains more than one scale! You have to answer them all before you have finished the exercise.

Obtaining Another Scale

To obtain another scale, select **New Scale**. This command can be

accessed by any of the following techniques:

- Press Ctrl+N.
- Select New Scale from the Scale Menu.
- Right-click in the notation area and select New Scale from the Context Menu.
- Click on the New Scale icon en the Toolbar.

Identify the mode of this scale as you identified the previous scale. Since this exercise contains two scales, at this point you're finished.

Let's take another look at your progress report at this point.

If you're already experienced using a Kapelle Progress Report, you may skip this next section.

More About Your Progress Report

Open your Progress Report, and click on the **Filters**... button:



Figure 25: The Filters Button

This will present you with the Filters Property Sheet, a set of three related *property sheets* (dialogs) that allow you to restrict the items in your Progress Report to a selected set.

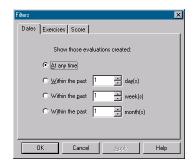


Figure 26: Filters Property Sheet

Filtering Your Progress Report By Date

The topmost property sheets is the *Dates* property sheet. You may select to restrict the displayed items to those appearing within the past day or multiple of days, week or multiple of weeks, or month or multiple of months.

Filtering Your Progress Report By Exercise

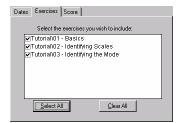


Figure 27: Filter by Exercise Property Sheet

You may select individual exercises for inclusion or exclusion. Click on the check to the left of the exercise's name to select it. You may select all (or clear all) of the check marks by using the buttons for that purpose.

Filtering Your Progress Report By Grade



Figure 28: Filter by Grade Property Sheet

You may display only those exercises which have final grades between a range of values, from 0 to 100.

V. Tutorial 4: Identifying the Tonic

In this tutorial, you will be shown a single scale degree, given the mode, and asked to identify the tonic.

Opening the Exercise

Open the exercise **Tutorial 04 – Identifying the Tonic**. You will be shown something similar to this:



Figure 29: Identifying the Tonic

Identifying the Tonic

To identify the tonic for the above scale (which would be G), you may:

- Double-click on the color bar below the Notation Pane
- Press Ctrl+Y
- Select **Identify Tonic** from the Scale Menu.
- Right-click in the Notation Pane and select Identify
 Tonic from the Context Menu.

The Identify Tonic dialog box is presented:



Figure 30: Identify Tonic Dialog Box

Select the tonic note from the drop-down list box. As with other list boxes, you may type in the letter of the tonic to select it: repeated typings of the same letter will select those tonic pitches beginning with that letter.

For example, repeatedly typing 'g' will result in the selection of **Gb**, then **G**, then **G#**, then rotating back to **Gb**, and so forth.

Click OK when you're finished, then give the **Answer Ready** command. The screen will look like this:

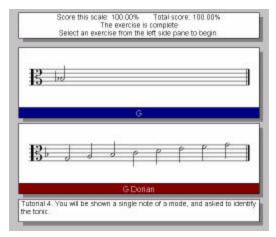


Figure 31: After Identifying the Tonic

That's it for this kind of exercise, so let's go on and take some more looks at your Progress Report.

NOTE: experienced users of Kapelle programs may skip this next passage

More About Your Progress Report

Sorting the Entries In Your Progress Report

You may sort the entries in your progress report by the exercise's

name, the score you received, or the time/date the exercise was done.

To sort the entries, click on the column header:

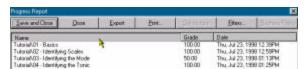


Figure 32: Sorting Entries By Name

Deleting Entries From Your Progress Report

To delete entries from your Progress Report, select the entries by clicking on them.

Select multiple entries by Shift-clicking (to select a range of entries) or Control-clicking (to select discontiguous entries).

Then click on the **Delete** button to delete those entries.

Exporting Your Progress Report

You may export your Progress Report as a tab-delimited plain text file. This can be imported into any database or spreadsheet program.

To export your Progress Report, click the **Export...** button. You will be presented with a standard Windows file dialog box:

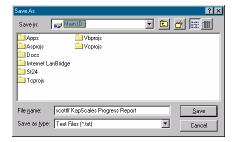


Figure 33: Windows File Save Dialog Box

Navigate to the location where you wish to save the file, and click **OK**. (You can give the file a name other than the default, if you wish.)

VI. Tutorial 5: Creating a Key Signature

In this exercise, you will create a key signature.

Opening the Exercise

Open the exercise **Tutorial 05 – Creating a Key Signature**. It will open showing you a scale without a key signature or accidentals, but will identify the tonic and mode:

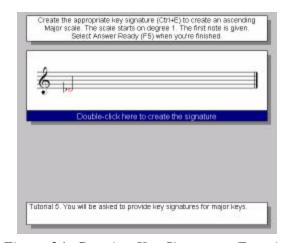


Figure 34: Creating Key Signatures Exercise

In the above illustration, the given note is the first degree—Db—of a major scale. Therefore we may conclude that the scale is to be Db Major.

Opening the Create Key Signature Dialog

To open the Create Key Signature Dialog, use any of the following techniques:

- Double-click on the color bar below the Notation Pane
- Press Ctrl+E
- Select Create Key Signature... from the Scale Menu.

 Right-click on the Notation Pane and select Create Key Signature from the Context Menu.

Using the Create Key Signature Dialog

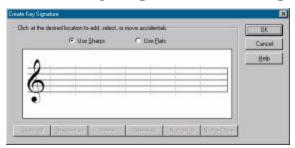


Figure 35: Create Key Signature Dialog Box

The Create Key Signature Dialog Box allows you to put together a key signature by placing sharps or flats into the staff.

Selecting Sharps or Flats

Start by selecting whether your key signature will contain sharps or flats (it must contain one or the other, but not both). Use the radio buttons on the top of the dialog box for this purpose. In this illustration we will be creating a Db Major key signature (your exercise may be different!) so we'll choose flats:



Figure 36: Selecting Flats

Adding Accidentals to the Signature

Add accidentals to the signature by clicking in each of the columns. There are seven columns in all—one for each potential accidental.

The vertical location of your click will determine the positioning of the accidental. In this illustration, a B-flat is added:



Figure 37: Adding a B-Flat

Selecting Accidentals

If you want to select an accidental (to be deleted or nudged), then click directly on it. The accidental will change to red:



Figure 38: Selected Accidental

In the above illustration, the E-flat is selected (black-and-white printing may not show this).

You may select all accidentals by clicking on the **Select All** button, and clear all selections by clicking on **Clear All**.

Moving Accidentals

If you don't aim just right, you might need to move the accidental. That's easy: just keep clicking vertically until the accidental jumps to the location you want it to be.

You can also nudge an accidental up or down one line or space by selecting the accidental(s) you wish to move, and then using the **Nudge Up** and **Nudge Down** buttons.

Deleting Accidentals

To delete an accidental, select it and then click on the **Delete** button.

To delete all of the accidentals, click on the **Delete All** button.

Closing the Create Key Signature Dialog

To close the Create Key Signature Dialog, click the OK button.

If You Aren't Allowed to Close the Dialog

If the key signature you created is not a valid key signature, you

will not be allowed to close the dialog box:

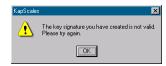


Figure 39: Invalid Key Signature Message

This can be caused by a number of factors:

A gap in your key signature

If you left a 'hole' or gap between two columns, you have an invalid key signature. Here's an example of one such signature:



Figure 40: Key Signature With Gap

Accidentals positioned on improper lines or spaces

If you have an accidental which is not positioned on the correct line or space, you have an invalid key signature. Here is an example of one such signature:



Figure 41: Key Signature With Invalid Position

Although the two flats specified are valid (B-flat and E-flat), the E-flat is positioned an octave lower than it should be.

Kapelle Scales follows the specifications for proper key signatures in the text *Music Notation, Second Edition*, by Gardner Read. (Boston: Crescendo Publishers, 1969).

Signifying Your Answer is Ready

Once you have completed creating the key signature, give the **Answer Ready** command to see if you were right or wrong:

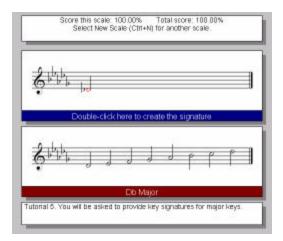


Figure 42: After Creating a Key Signature

This exercise contains multiple scales, so go ahead and practice a bit more.

VII. Tutorial 6: Playing Scales

In this final tutorial you will learn how to use Kapelle Scales for playing scales.

Because scale-playing exercise presuppose that the notation will not be visible as you play, Kapelle Scales uses a special dialog box for playback which allows you to control which note of the scale you are playing, but does not allow you to see any music notation—except for the first note in some kinds of exercises, which might specify that the first note be visible.

Opening the Exercise

Open the exercise **Tutorial 06 – Playing Scales**. When the exercise opens, you will see the Play Scale Dialog, which is positioned automatically directly over the Notation Pane:



Figure 43: Play Scale Dialog

Understanding the Play Scale Dialog

The Scale Degree Controls

There is a rectangular box for each degree in the scale. (Usually that means 8 boxes, but some scales might have more or fewer.) The boxes are numbered by their representative scale degrees.

Note that in this example, the leftmost box is scale degree 3: that's because this exercise begins and ends on the third scale degree, and not the first.

This box may take one of three different colors, depending on its state:

- A red-colored box means that it is the currentlyselected scale degree: any note you play will be recorded as this scale degree.
- A gray-colored box means that this particular scale degree has not yet been played.
- A white-colored box means that this particular scale degree has been played, but is not the selected scale.

Selecting a Scale Degree

If you prefer to select a scale degree manually, simply click on it and it will become selected.

Playing Your Scale

To play the scale, play the notes one by one on your attacked MIDI keyboard. The selected scale degree will jump ahead automatically after you have played the degree.

You may check your performance (once you have played all of the notes at least once) by clicking on the **Play My Input** button. You may stop playback by clicking on the **Stop Play** button.

Closing the Play Scale Dialog

Close the Play Scale dialog by clicking the OK button, or pressing Enter.

In addition to closing the dialog, it will also give the **Answer Ready** command for you automatically. The screen will change to allow you to see your performed scale as well as the "correct" scale:

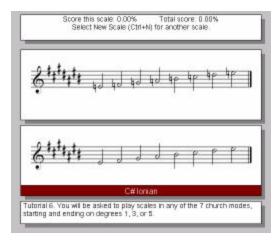


Figure 44: After Playing the Scale

If the Octave is Different Than Your Performed Scale

You might find that you played the scale an octave or two lower or higher than the scale you actually see notated in the Notation Pane. This is normal behavior for the application: it adjusts the scale you played to be as close as possible to the "source" scale (the one that you're supposed to play), in order to ensure that the notated scale will stay within the confines of the Notation Pane and will not be written with an excessive amount of leger lines, either up or down.