

CE Design Projects I User Manual v1.0
RIT Dance Tutorial

I.	Introduction	3
II.	System Requirements	3
III.	Welcome Screen	3
	Figure 1: Welcome Screen	3
IV.	About Screen	4
	Figure 2: About Screen	4
V.	Sign In or Register Screen	4
	A. Chose One	4
	Figure 3: Chose One Screen	5
	B. Sign In	5
	Figure 4: Sign In Screen	5
	C. Sign In Error	6
	Figure 5: Sign In Error Box	6
	D. Register	6
	Figure 6: Register Screen	6
	E. Register User Name Error	6
	Figure 7: Register User Name Error Box	7
	F. Register Name Error	7
	Figure 8: Register Name Error Box	7
	G. Register Duplicate/Entry Error	7
	Figure 9: Register Duplicate/Entry Error Box	7
	H. Tutorial or Score Reports Choice	7
	Figure 10: Tutorial or Score Reports Screen	8
VI.	New Tutorial	8
	A. Music Option	8
	Figure 11: Tutorial Music Screen	9
	B. Role Option	9
	Figure 12: Tutorial Role Screen	10
	C. Scoring Option	10
	Figure 13: Tutorial Scoring Screen	11
	D. Video Option	11
	Figure 14: Tutorial Video Option	12
VII.	Play Video	12
	Figure 15: Play Video Screen	13
VIII.	Dance Tutorial	13
	A. Tutorial with Scoring	13
	Figure 16: Dance Tutorial Screen	14
	Figure 17: Score - Dance Tutorial Done Screen	14
	Figure 18: No Score - Dance Tutorial Done Screen	15
	B. Nothing to Score	15
	Figure 19: Nothing to Score Screen	15

IX. Scoring	15
A. Current Tutorial Completed Score	16
Figure 20: From Tutorial - Current Score Screen	16
B. Previous Scores	16
Figure 21: From Tutorial - Previous Scores Screen	17
Figure 22: View Scores - Previous Scores Screen	17
Figure 23: Full Score Report	18
D. All Tutorials Score Report	18
Figure 24: From Tutorial - All Scores Screen	19
Figure 25: View Scores - All Scores Screen	19
E. All Tutorials Score Report	19
Figure 26: All Tutorials Score Report	20
F. Final Options	20
Figure 27: From Tutorial - Options Screen	21
Figure 28: View Scores - Options Screen	21

I. Introduction

This document is here to display the different functionality of each of the screens in the tutorial. This document will provide detailed information and screen shots for Version 1.0 of the product. There is information regarding the next screen to be shown or the result of clicking buttons, menu items, etc. For a faster reference see the Quick Guide. More information about the tutorial, the project and the products used can also be located and the RIT Dance website: http://www.ce.rit.edu/research/projects/2005_winter/rt_waltz/ . Any questions can also be sent to RITDance@gmail.com and they will be answered as quickly and efficiently as possible.

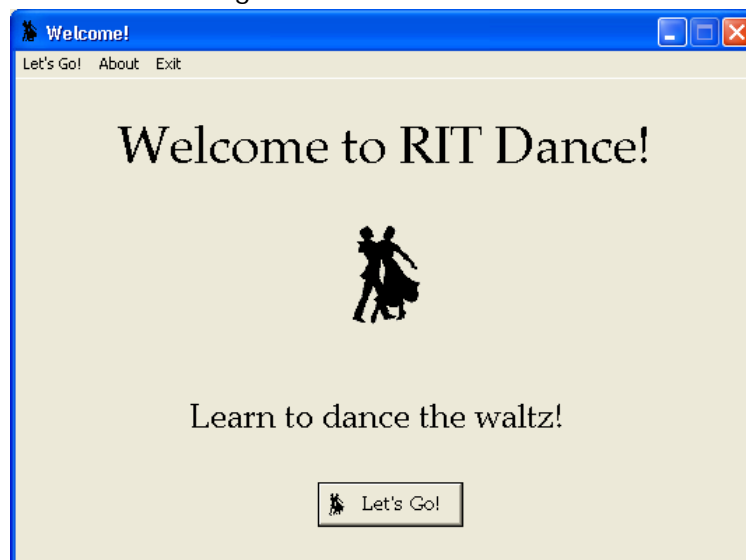
II. System Requirements

In order to run this tutorial it must be installed using the Windows Installer package provided on the CD. It is recommended that it is installed on a machine running Windows XP. See the installation guide for more information. In order to view any of the reports the user must have Microsoft Word installed and have followed the installation steps or the report will not be viewable. It is also necessary to have the mat and appropriate board connected to the computer via the USB port.

III. Welcome Screen

This screen is used to welcome the user to the tutorial. The next step can be reached by clicking the Let's Go button on the form or the Menu Item. By clicking this button the user will proceed to Figure 3: Chose One Screen to Sign In or to Register. For all of the screens throughout the tutorial the About option on the Menu will display more information about the tutorial as shown in Figure 2: About Screen and the Exit on the Menu will Exit the application completely.

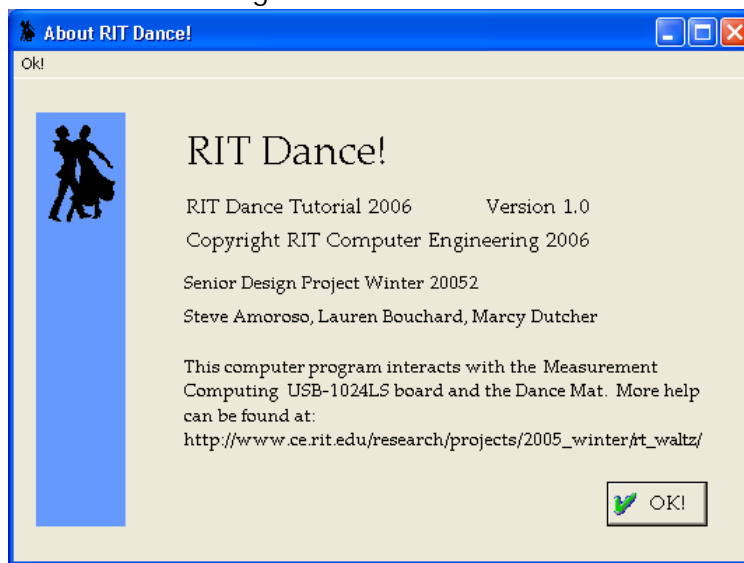
Figure 1: Welcome Screen



IV. About Screen

The screen below will show more information to the user about the RIT Dance tutorial. This screen will display version information (currently version 1.0), development information (developed for RIT Computer Engineering Senior Design Winter 20052 by Steve Amoroso, Lauren Bouchard and Marcy Dutcher), product information (requires the Measurement Computing USB-1024LS Board) and a product URL (http://www.ce.rit.edu/research/projects/2005_winter/rt_waltz/) for more information. By clicking the Ok button or Ok on the Menu this form will close. The application can continue running with this screen open, though it is optimal to close the screen before running the tutorial.

Figure 2: About Screen



V. Sign In or Register Screen

All users must be registered in order to continue using the application. When the application begins there is an option to sign in or to register. The information is stored for future use. Users may not use the same User Name as another registered user.

A. Chose One

This is the next screen that the user will see upon clicking Let's Go. The user can sign in if they have already registered or the user can register if they are a new user. Clicking the buttons, the tabs or the options on the menu will bring the user to the corresponding screen. The Sign In screen can be shown in Figure 4: Sign In Screen below and the Register screen can be shown in Figure 6: Register Screen below. An option must be selected in order to continue.

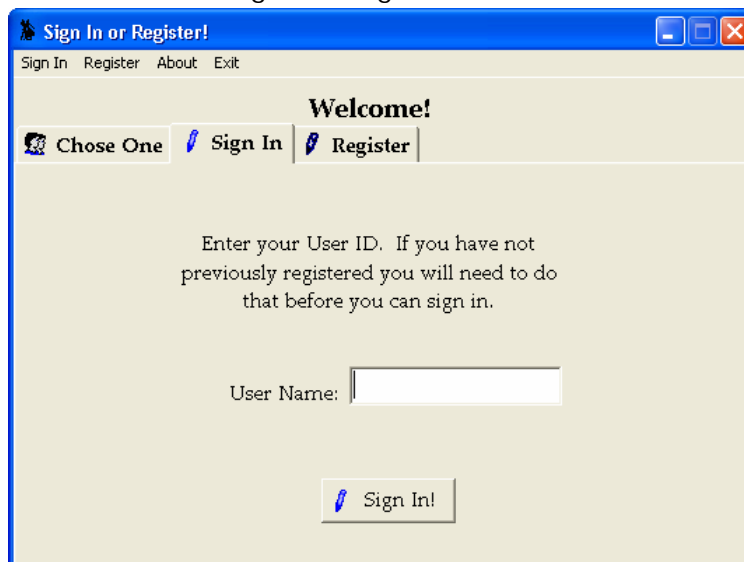
Figure 3: Chose One Screen



B. Sign In

The screen below is the sign in screen for users that have previously registered. Type the User Name in the appropriate box below to sign in a previously registered user and to proceed to the next step. Clicking the Sign In button will check the User Name given to make sure that there is a user registered with that name. Following signing in, if the name is valid the application will redirect to Figure 10: Tutorial or Score Reports Screen to make the choice of that should happen next.

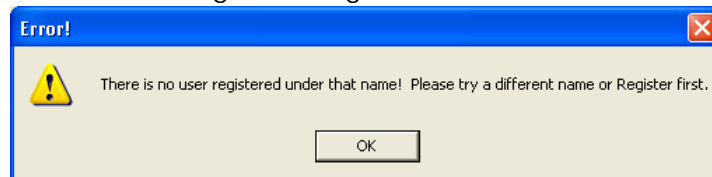
Figure 4: Sign In Screen



C. Sign In Error

If this message box is received the reason is that the name entered is not registered. The User Name provided could possibly not be one of a registered user. Another reason for the error is that the user has inappropriately typed their User Name. Once OK is clicked Figure 4: Sign In Screen will appear again.

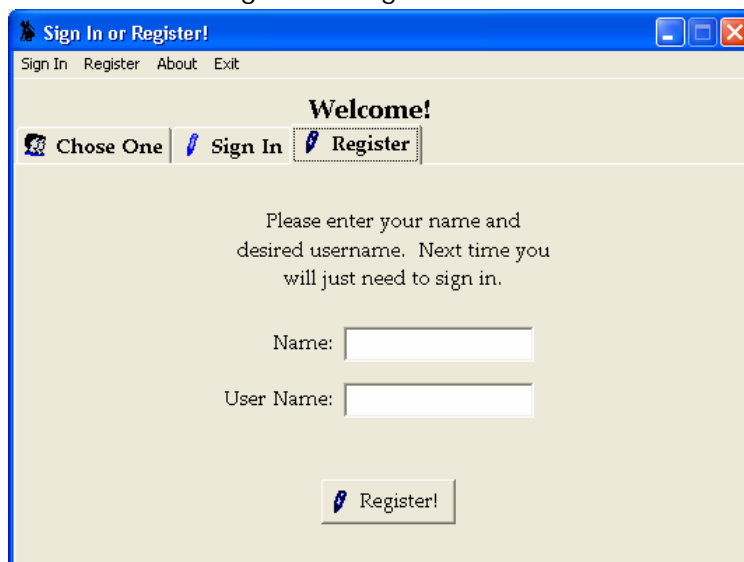
Figure 5: Sign In Error Box



D. Register

All new users must register. In order to register a desired User Name and Name must be entered into the text boxes shown in the screen below. Simply enter these values and click Register. The information will be checked and recorded and a new tutorial will begin. Upon validation the application will be redirected to Figure 11: Tutorial Music Screen to make the selections for starting a new tutorial.

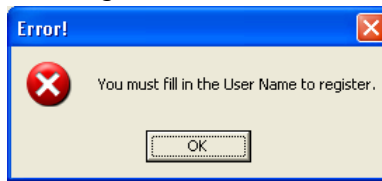
Figure 6: Register Screen



E. Register User Name Error

If the User Name text box is left blank the following error message box will appear. In order to proceed, OK must be clicked to continue with registration and Figure 6: Register Screen will appear again. All text boxes must be completed to register.

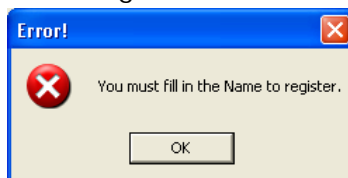
Figure 7: Register User Name Error Box



F. Register Name Error

If the Name text box is left blank the following error message box will appear. In order to proceed, OK must be clicked to continue with registration and Figure 6: Register Screen will appear again. All text boxes must be completed to register.

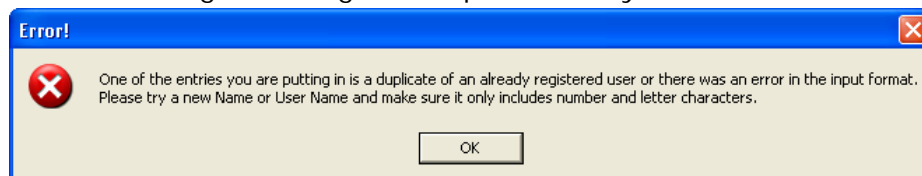
Figure 8: Register Name Error Box



G. Register Duplicate/Entry Error

If the User Name or Name entered already belongs to a registered user the following error message will appear. There is also the possibility of an error in the format of the entry which will result in the following error message box. In order to proceed, OK must be clicked to continue with registration and Figure 6: Register Screen will appear again.

Figure 9: Register Duplicate/Entry Error Box



H. Tutorial or Score Reports Choice

The screen below is shown to a registered user who signs in and has previously completed scored tutorials. There is the option to start a new tutorial or to view score reports of previous tutorials. If Tutorial is chosen the application is redirected to Figure 11: Tutorial Music Screen so choices for a new tutorial can be made and a new tutorial can be performed. If Score Reports is shown the application is redirected to Figure 22: View Scores – Previous Scores Screen. Previous scores can be viewed from there and the application can proceed from there as well.

Figure 10: Tutorial or Score Reports Screen



VI. New Tutorial

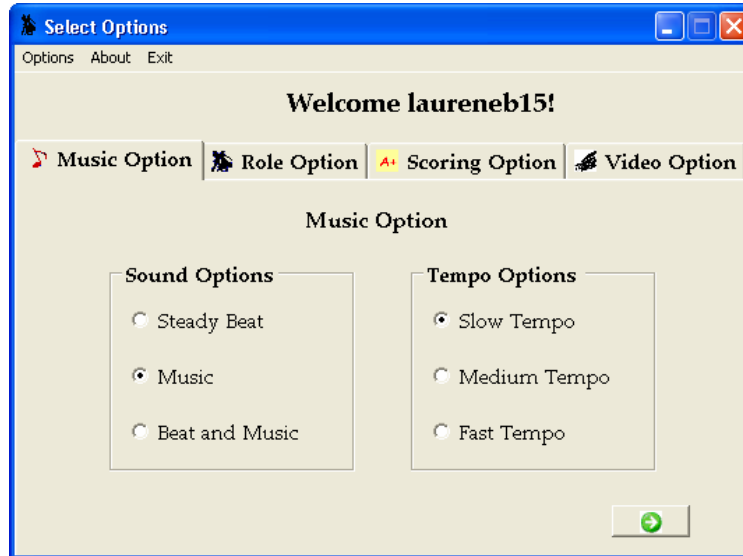
In order to create a new tutorial there are a series of questions that must be answered in order to proceed. There is the Music Option, the Role Option, the Scoring Option and the Video Option. The following screens show all of the options and will walk through creating a new tutorial and performing the tutorial.

A. Music Option

There are 9 different possible choices for the Music to perform the tutorial to. The first selection is the music option. There is a Sound option, where there are three different options to choose from. There is a Steady Beat option which is a metronome of a steady beat playing. The second is Music where the tutorial can be performed to a song. The last option is the Beat and Music option which is a combination of the Steady Beat and the Music. The Music is being played with the Steady Beat of the song pronounced and easily recognized when listening to the Music. For each of these Sound Options there is a Tempo Option. There are three different tempos to choose from. The slow tempo, the medium tempo and the fast tempo are available. The Steady Beat for the slow tempo has the same timing as the Slow Music, and so on. It may be ideal for a new dancer to start with the slower tempo to get started. As well the Steady Beat makes it easy to pick up the tempo of the song when first learning to dance. The default option is the Steady Beat and the Slow Tempo. When the options have been selected the button with the arrow to the right will proceed with the next step. By clicking the arrow to the right the application will proceed with the tutorial to Figure 12: Tutorial Role Screen to choose the next option for the tutorial. Clicking on one of the tabs will also allow a new option screen to be shown to choose the options from. Under the Options selection on

the menu the different options can be chosen as well to display the other screens and to choose the options from.

Figure 11: Tutorial Music Screen



B. Role Option

There are 2 different possible choices for the role to perform the tutorial. There is a Lead Role and a Follow Role. Ideally a male should choose the Lead option and the Female should choose the Follow option. The default option is the Lead Role. The Lead Role will start on the footprints labeled 5 and 6 in blue. The first step will be forward with the left foot to the footprint with a blue 1. The Follow Role will start on the footprints labeled 5 and 6 in purple. The first step will be backwards with the right foot to the footprint with a purple 1. When the option has been selected the button with the arrow to the right will proceed with the next step and the arrow to the left will return to the previous option. Clicking on one of the tabs will allow a new option to be chosen as well. By clicking the arrow right the application will proceed with the tutorial to Figure 13: Tutorial Scoring Screen to choose the rest of the options for the tutorial. By clicking the arrow left the application will move to the previous option of Figure 11: Tutorial Music Screen. Under the Options selection on the Menu the different options can be chosen as well to display the other options.

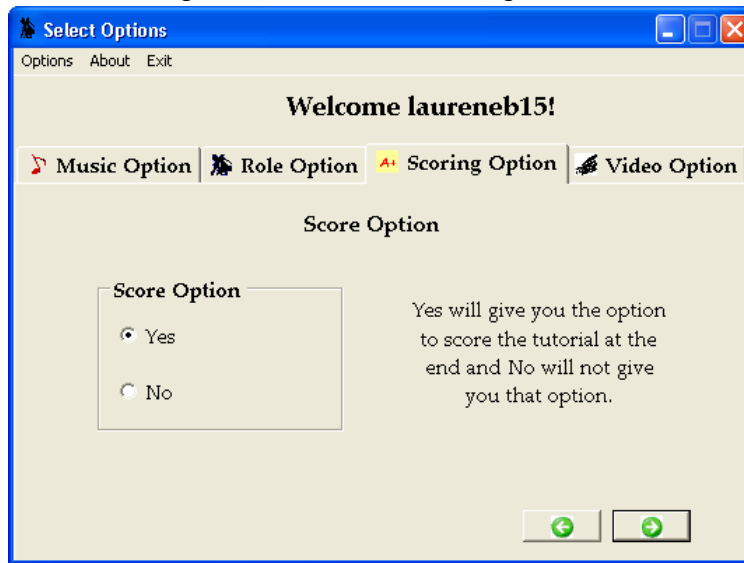
Figure 12: Tutorial Role Screen



C. Scoring Option

There is an option to have scoring on or off. The default option is Yes. When a tutorial is finished if scoring has been turned on there will be an option to score the tutorial that was just performed. When the option has been selected the button with the arrow to the right will proceed with the next step and the arrow to the left will return to the previous option. Clicking on one of the tabs will allow a new option to be chosen as well. By clicking the arrow right the application will proceed with the tutorial to Figure 14: Tutorial Video Option to choose the rest of the options for the tutorial. By clicking the arrow left the application will move to the previous option of Figure 12: Tutorial Role Screen. Under the Options selection on the Menu the different options can be chosen as well to display the other options.

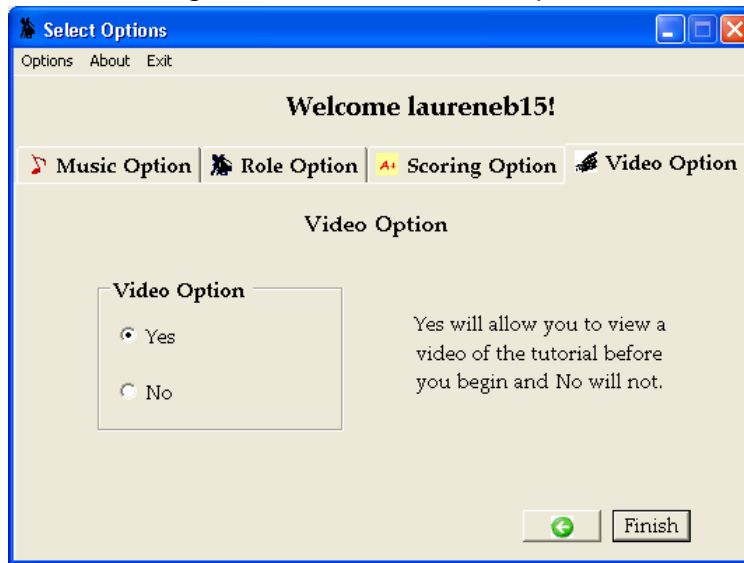
Figure 13: Tutorial Scoring Screen



D. Video Option

There is an option to view a demo video before the tutorial is performed. The default option is Yes. When yes is chosen by clicking finish the next screen will allow for the video to be played. The video that is played will correspond with the options chosen before, playing to correct sound/tempo, as well as beginning in the correct role. When the option has been selected the finish button will proceed to showing the video and the arrow to the left will return to the previous option. Clicking on one of the tabs will allow a new option to be chosen as well. By clicking finish the application will proceed with the tutorial to Figure 15: Play Video Screen to choose the rest of the options for the tutorial. By clicking the arrow left the application will move to the previous option of Figure 14: Tutorial Scoring Screen. Under the Options selection on the Menu the different options can be chosen as well to display the other options.

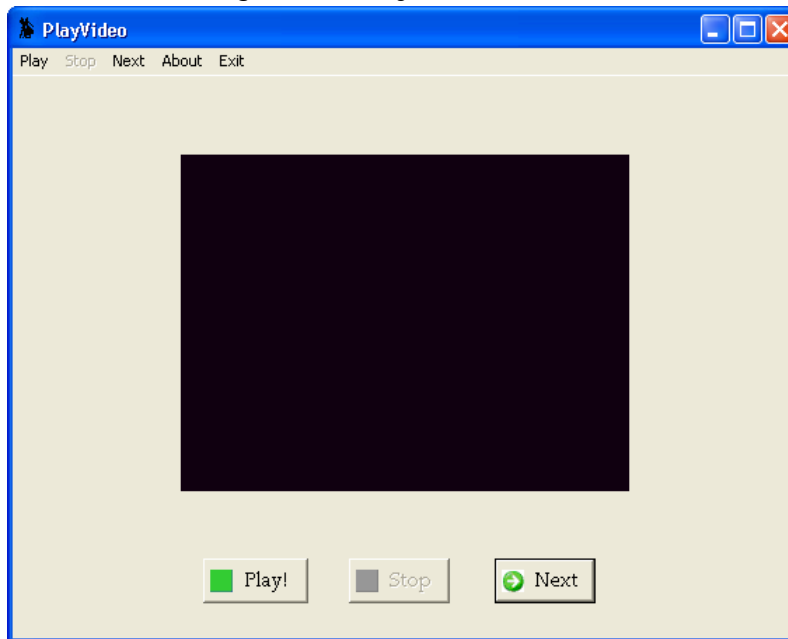
Figure 14: Tutorial Video Option



VII. Play Video

If Yes is chosen in the Video Option the screen below will be seen. This screen will allow for the appropriate video to be played. The video will appear in the black box on the screen below. The video will play the song chosen in the tutorial options and will show a demonstration of how arms should be held when dancing the Waltz as well as the proper location to start. The Play and Next buttons will initially be functioning. By clicking Play the video will begin playing. When the Video is playing the Stop button will be enabled and there is the ability to stop playing the video. When the video has finished playing the Play and Next buttons will be enabled again. The Next button will proceed with tutorial and show Figure 16: Dance Tutorial Screen.

Figure 15: Play Video Screen



VIII. Dance Tutorial

The following sections describe what is seen when a tutorial has been created. The tutorial screen is the same during the tutorial depending on the options chosen. Depending on whether scoring is on or off there is a difference in the final screen of the tutorial and the options following.

A. Tutorial with Scoring

When a tutorial is created the screen shown below shows what is displayed. The image on the left shows the same pattern of footprints as the mat. The red footprints indicate that is where the feet should be currently. The green footprint and arrow indicate where the next step should be at the next beat in the song. The right hand side shows the options that were chosen to create the tutorial. The music tempo and type as well as the role and whether or not the score will be calculated afterwards. By clicking on the Play button or option on the menu the music will begin. After a few measures have been played, 'Ready', 'Set', and 'Go' will be shown on the footprints. The beat after 'Go' is when the tutorial will start and scoring will begin. Following 'Go', move foot to the footprint that is green and the image will change. The footprint that was just moved will turn red and the next step in the dance will be green. When the tutorial is running a Stop button and Stop item on the menu will be shown to stop the tutorial from running. When Stop is clicked Figure 17: Score – Dance Tutorial Done Screen or Figure 18: No Score – Dance Tutorial Done Screen will be shown, the music will stop and footsteps will not be recorded. There is the option to restart the tutorial by clicking the Restart button. There is also the option to score what was done. This same screen will be shown when

the tutorial is finished. When restart is clicked Figure 16: Dance Tutorial Screen will appear. When Score (if the scoring option has been enabled) is clicked Figure 20: From Tutorial – Current Score Screen will be displayed.

Figure 16: Dance Tutorial Screen

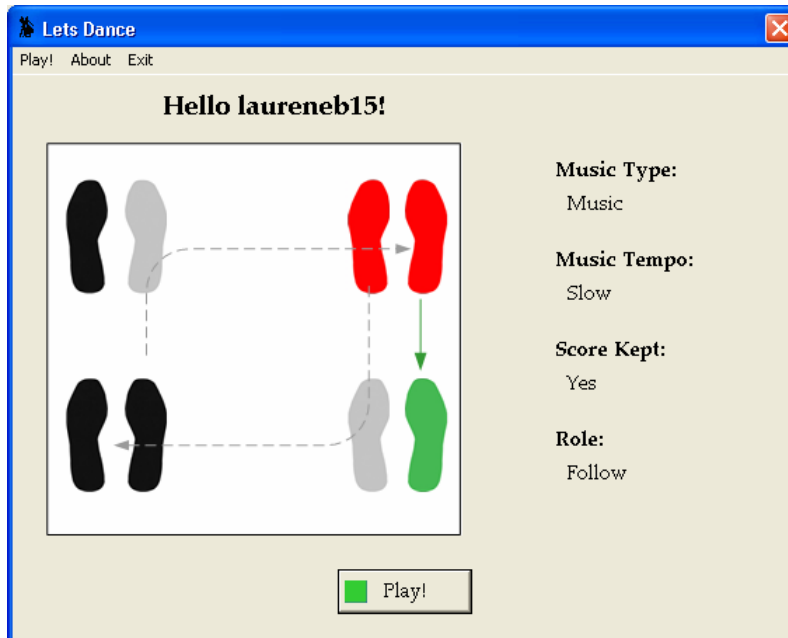


Figure 17: Score - Dance Tutorial Done Screen



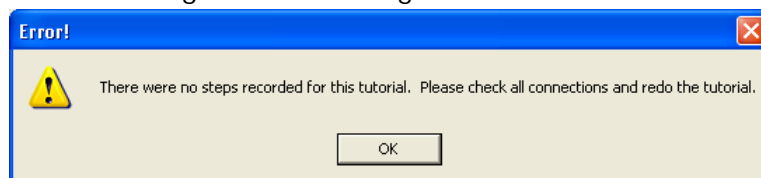
Figure 18: No Score - Dance Tutorial Done Screen



B. Nothing to Score

When the tutorial has finished if no steps were taken, then it is not possible to score the performance. Figure 19: Nothing to Score Screen will be shown to indicate that no steps were recorded. If this message appears and the mat was stepped on, then make sure that the mat is properly connected to the board and that the board is connected to the computer correctly. It is also important to make sure that the mat is located on a hard surface or scoring will be not be 100% accurate.

Figure 19: Nothing to Score Screen



IX. Scoring

The following section shows the scoring screens as they are shown at the completion of a tutorial or when selecting the Scores option for a registered user. Samples of the reports are also shown depending on the report that was chosen to be displayed. The reports will be opened in Microsoft Word.

If previous tutorials have not been performed then the Previous Scores and All Scores Tabs will not be available as there are no old scores to be viewed.

A. Current Tutorial Completed Score

At the completion of the tutorial there is the option to score the tutorial. If the Score button or menu is clicked then the following screen will be displayed. This screen will show the score that was achieved on the tutorial that was finished. The screen shows the score achieved and the rating of the score. The ratings are based on a percentage of the highest possible score. There is also the option to view a complete report in Microsoft Word. By clicking the Report button the document will open up in Word as shown in Figure 23: Full Score Report with that information of the tutorial that was just performed. Clicking on the arrow to the right will change the screen to Figure 21: From Tutorial – Previous Scores Screen or Figure 22: View Scores – Previous Scores Screen. If the screen is shown from a tutorial, then the arrow to the left will change the screen to Figure 20: From Tutorial – Current Score Screen. Clicking on menu items under Scores and clicking on the individual tabs will change the screen to the selection. If this is the first tutorial performed under this user name the arrow to the right will display Figure 27: From Tutorial – Options Screen or Figure 28: View Scores – Options Screen and the other tabs/screens will not be available via the tabs, the buttons or the menu items.

Figure 20: From Tutorial - Current Score Screen



B. Previous Scores

There is the option to view the score report of previously performed tutorials. The screens below show the box containing the dates which the previous tutorials were performed on. Figure 21: From Tutorial – Previous Scores Screen shows the screen following clicking the Score button after a tutorial, and Figure 22: View Score – Previous Scores Screen shows the screen following clicking View Reports from the beginning screen. Clicking on a date in the list box and then clicking View Report will cause the

Report to open in Microsoft Word. The report will have the format shown in Figure 23: Full Score Report. Clicking on the arrow to the right will change the screen to the Figure 24: From Tutorial – All Scores Screen of Figure 25: View Scores – All Scores Screen. If the screen is shown from a tutorial, then the arrow to the left will change the screen to Figure 20: From Tutorial – Current Score Screen. Clicking on menu items under Scores and clicking on the individual tabs will change the screen to the selection. This screen will not be shown if this is the first tutorial that is being performed under this user name.

Figure 21: From Tutorial - Previous Scores Screen

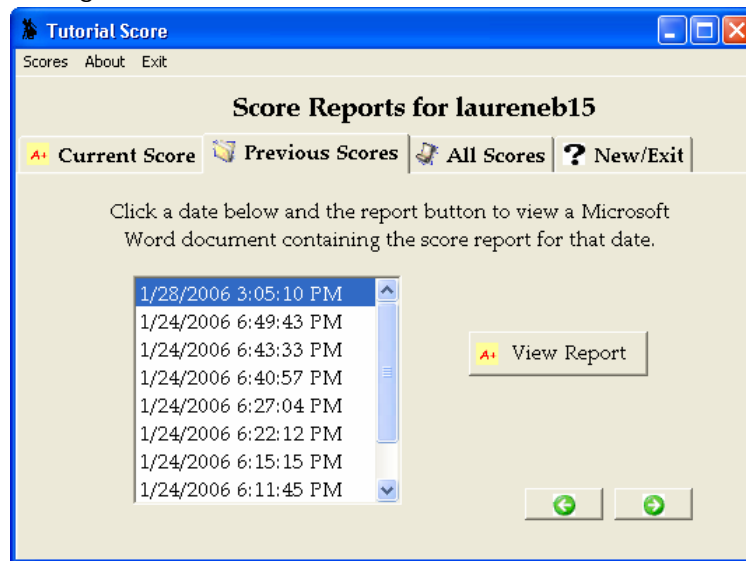
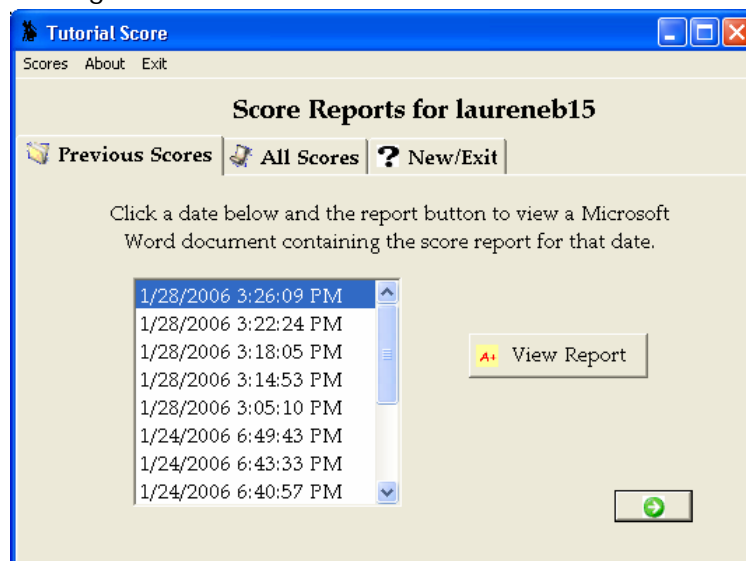


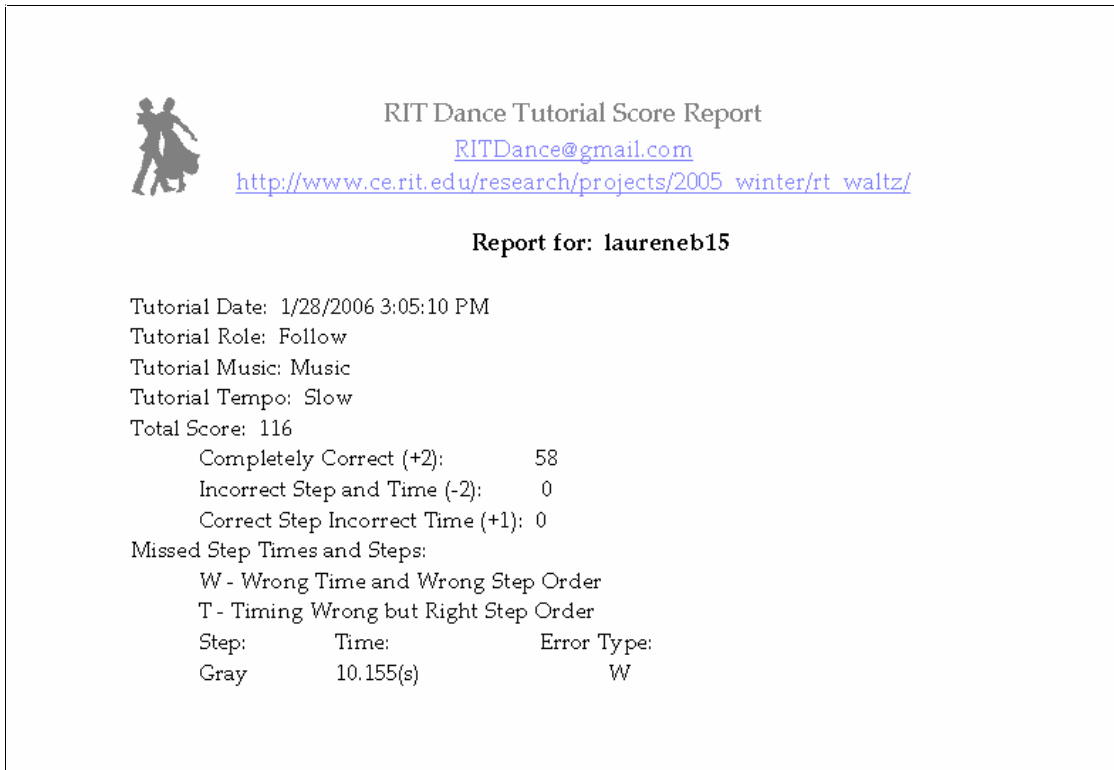
Figure 22: View Scores - Previous Scores Screen




C. Full Tutorial Score Report

This report will show the score achieved as well as the options chosen for the performed tutorial. Each completely correct step receives 2 points, each right step with the wrong time receives 1 point, and completely incorrect steps are deducted 2 points. This report will also show the steps that were taken that were marked as being wrong. The report will indicate which step was wrong and the time in the song that the wrong step was taken. A 1 indicates that the step on the mat labeled 1 in the correct color is the step that was incurred and so on. The word 'Gray' indicates that the incorrect step was one of the gray footprints on the mat.

Figure 23: Full Score Report



The image shows a screenshot of a web-based score report for the RIT Dance Tutorial. It includes a logo of two dancers, contact information, a URL, and a detailed breakdown of the user's performance, including a table of missed steps.

 RIT Dance Tutorial Score Report
RITDance@gmail.com
http://www.ce.rit.edu/research/projects/2005_winter/rt_waltz/

Report for: laureneb15

Tutorial Date: 1/28/2006 3:05:10 PM
Tutorial Role: Follow
Tutorial Music: Music
Tutorial Tempo: Slow
Total Score: 116

Completely Correct (+2):	58
Incorrect Step and Time (-2):	0
Correct Step Incorrect Time (+1):	0

Missed Step Times and Steps:

W - Wrong Time and Wrong Step Order
T - Timing Wrong but Right Step Order

Step:	Time:	Error Type:
Gray	10.155(s)	W

D. All Tutorials Score Report

There is also an option to view a report of the compilation of the scores of all tutorials. In the screen below by clicking on View Report the report shown in Figure 26: All Tutorials Score Report will open as a Microsoft Word Document. Clicking on the arrow to the left will change the screen to Figure 21: From Tutorial – Previous Scores Screen or Figure 22: View Scores – Previous Scores Screen and clicking on the arrow to the right Figure 27: From Tutorial – Options Screen or Figure 28: View Scores – Option Screen will be seen depending on where the screen originated from. Clicking on menu items under Scores and clicking on the individual tabs will change the screen to the

selection. This screen will not be shown if this is the first tutorial that is being performed under this user name.

Figure 24: From Tutorial - All Scores Screen

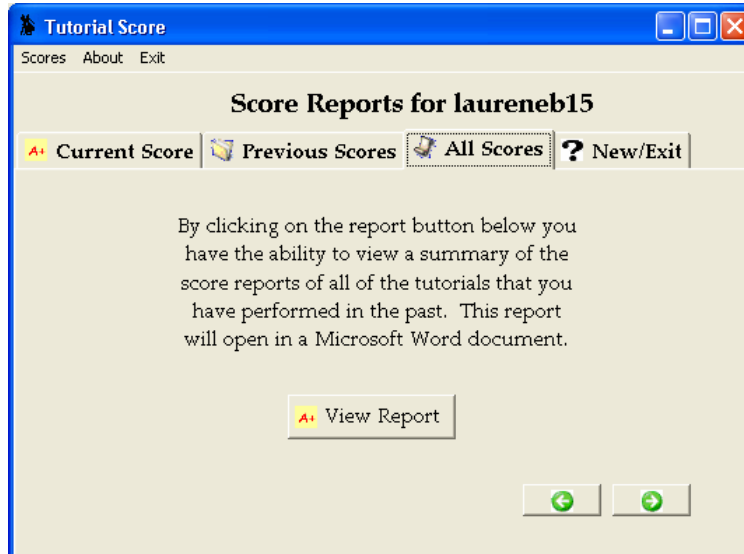
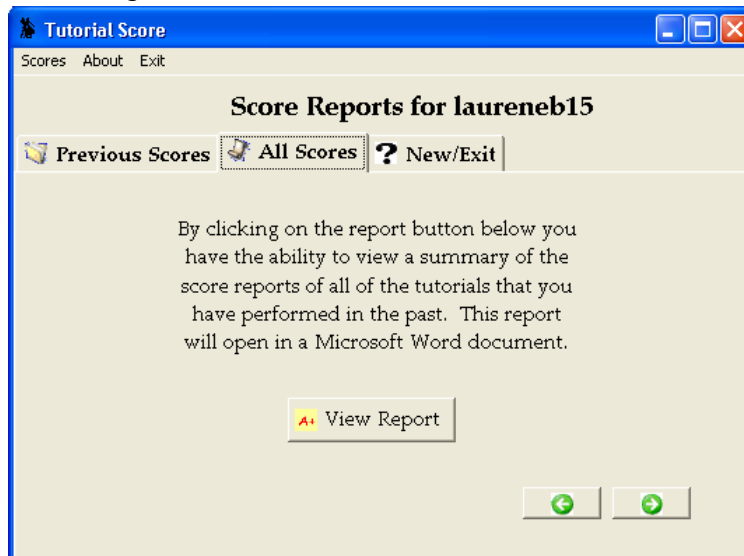


Figure 25: View Scores - All Scores Screen

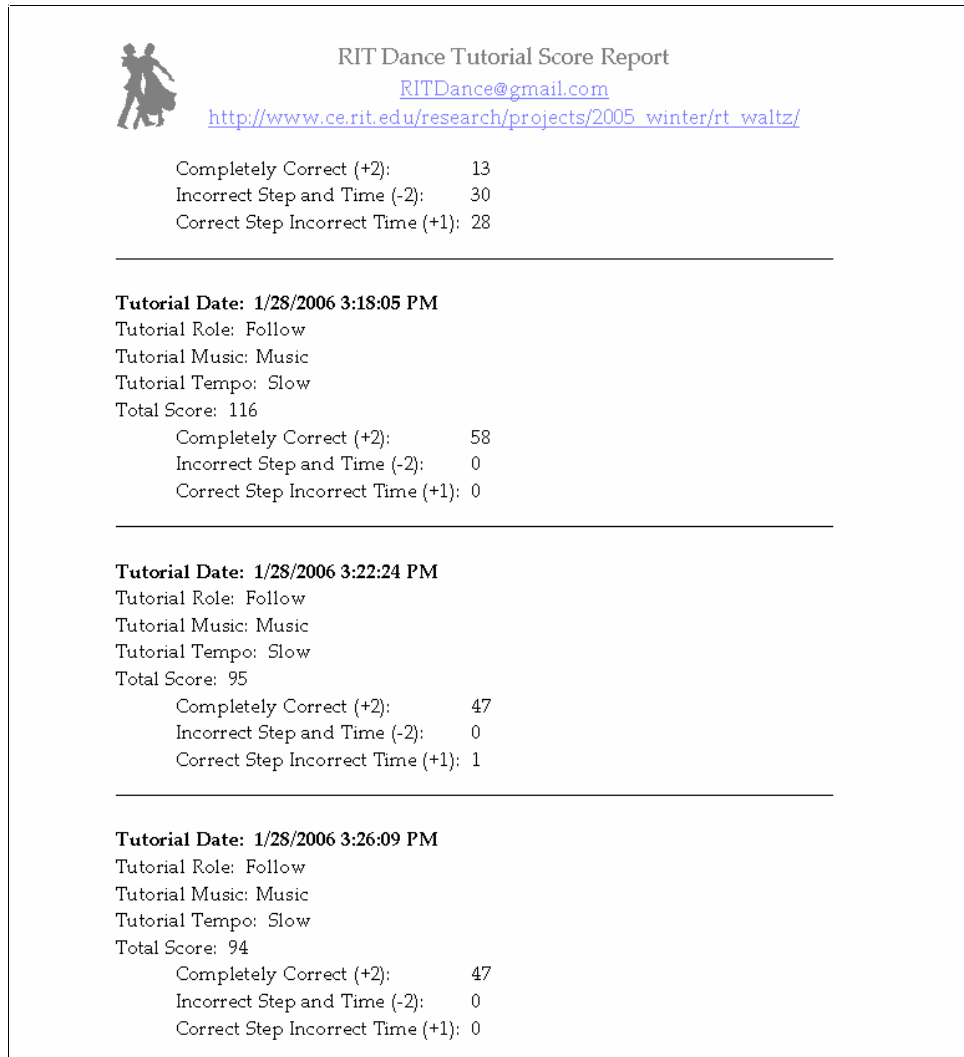


E. All Tutorials Score Report

The following is the report that is shown when clicking on the View Report button in the All Scores screen shown in Figure 24: From Tutorial – All Scores Screen or Figure 25: View Scores – All Scores Screen. The report displays the options that were chosen when the tutorial was performed. The report also shows the final score and the

simple breakdown of the score. This report varies in size depending on the number of tutorials that have performed.

Figure 26: All Tutorials Score Report



F. Final Options

Upon completion of looking at all the possible score viewing options the next option is to exit the application or to create a new tutorial. By clicking on the appropriate button in the screen shown below the program will stop execution or a new tutorial will start and new options can be chosen. Clicking New Tutorial will display the screen shown in Figure 11: Tutorial Music Screen. Figure 27: From Tutorial – Options Screen and Figure 28: View Scores – Options Screen show the screens as they would look depending on whether the scores were viewed from a tutorial or from the beginning. The arrow to the left will show Figure 24: From Tutorial – All Scores Screen

or Figure 25: View Scores - All Scores Screen. If this is the first tutorial performed the arrow will show Figure 20: From Tutorial – Current Score Screen as there are no other score reports to be displayed.

Figure 27: From Tutorial - Options Screen

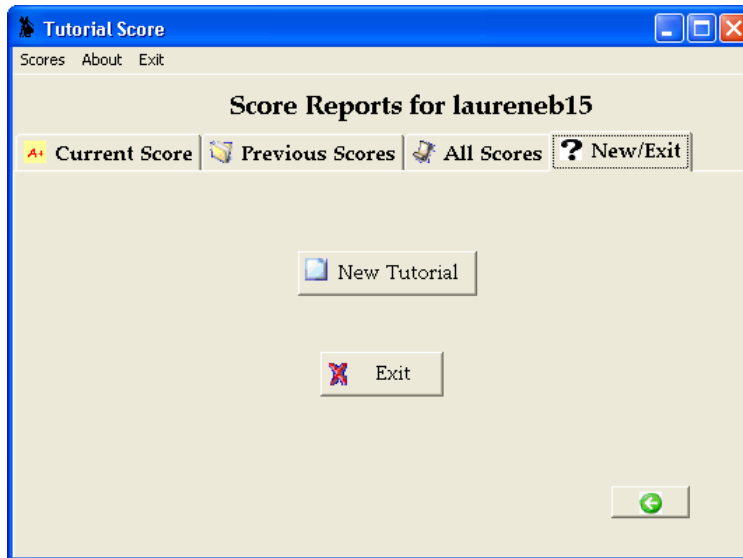


Figure 28: View Scores - Options Screen

