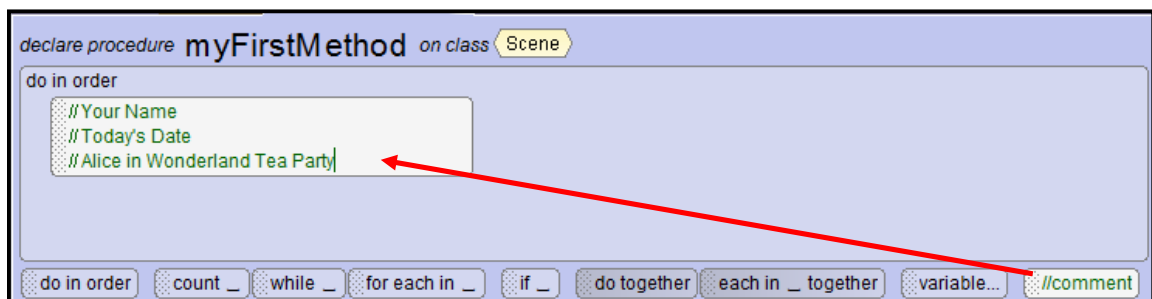


Alice in Wonderland Tea Party Coding Animation

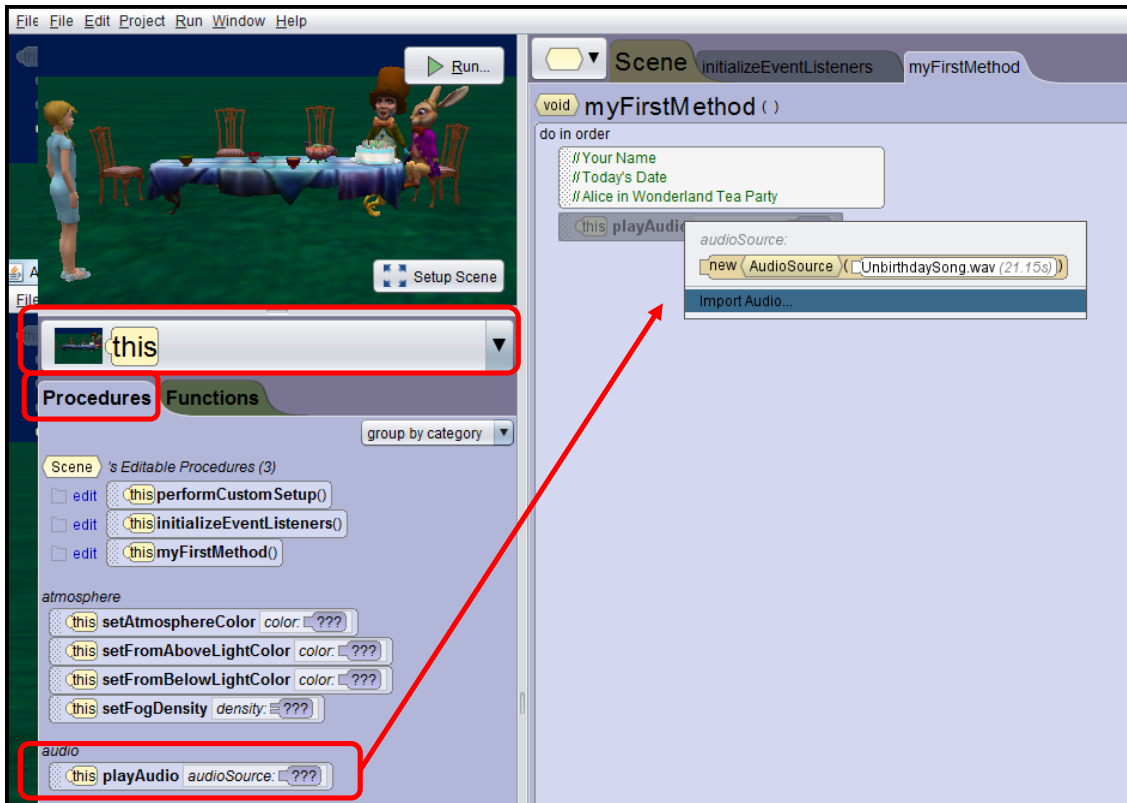
1. You will need the TeaParty.a3p file from lab 2 to complete this exercise.
2. Open up Alice 3.
3. Click on the **File System** tab, then choose **browse...** and locate your file. Select the file and click the **Open** button and then the **OK** button.
4. Before writing the code for our animation, we should first create a storyboard of what we wish to accomplish.

- Scene opens with the Mad Hatter and the March Hare gathered around a table with tea and a birthday cake
- The unbirthday song plays
- Alice approaches the table
- Alice tells the characters that she enjoyed their singing
- They tell her that nobody ever compliments their singing and insist that she has a cup of tea
- She apologizes for interrupting their birthday party
- They explain that it isn't their birthday; it is their "unbirthday"
- Alice then asks them to explain an "unbirthday"
- They then tell her that everyone has 364 "unbirthdays" each year
- Alice realizes that it is her "unbirthday" too

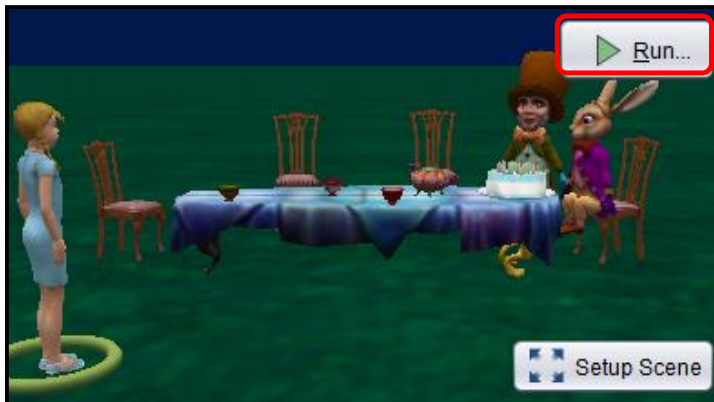
5. Drag the **//comment** block to the editor and enter your comments. You need to put your name, the date, and a description of the program in comments at the top of all of your programs.



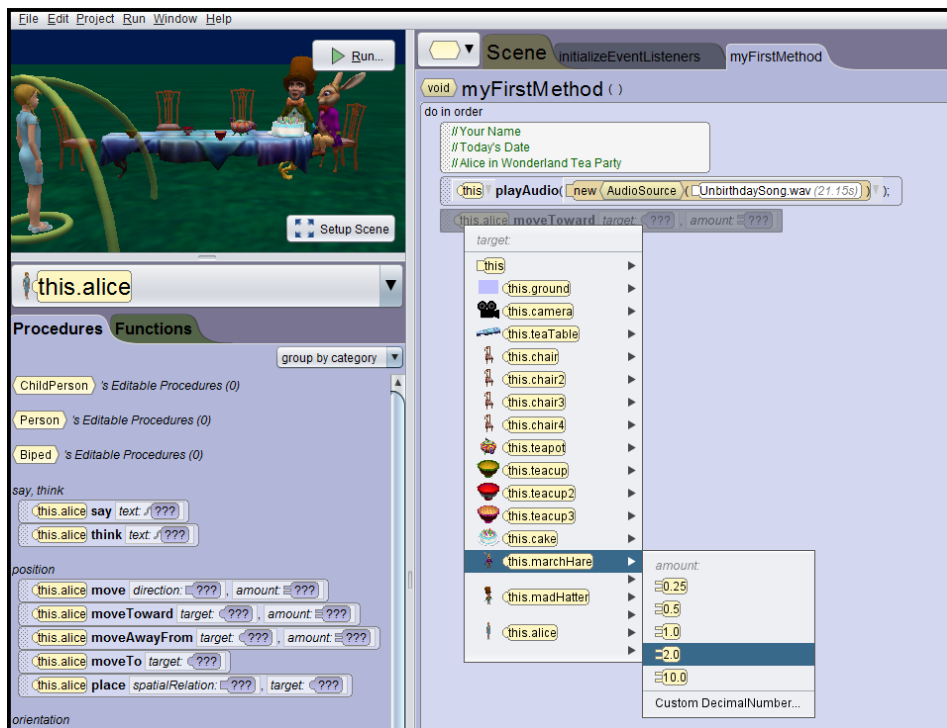
6. Click on the **this**, make sure that the **Procedures** tab is selected, drag the **playAudio** method to the editor, select **Import Audio**, use the **Unbirthday Song** file. Procedural methods are actions that objects can do. The word "this" refers to the scene and we are telling the scene to play the audio.



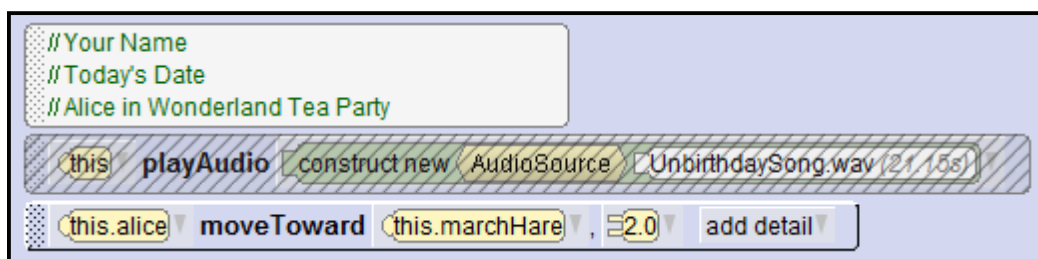
7. We need to test the program by clicking the **Run** button to play the animation. You should hear the song play but nothing else happens yet.



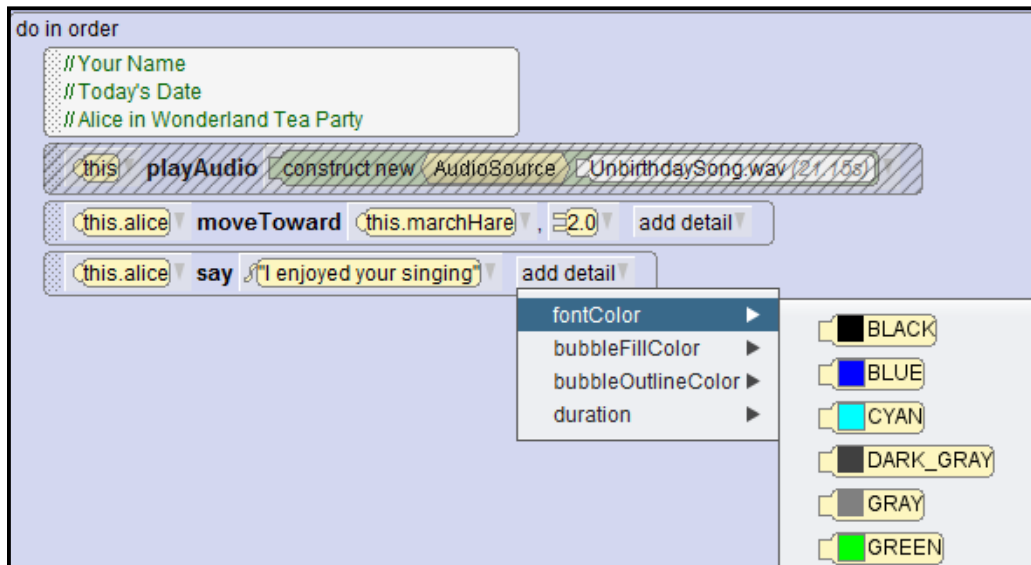
- Next, we will select alice, make sure that the procedures tab is selected, and drag the **moveToward method** onto the editor underneath the playAudio method. When you release the mouse, you will be prompted to select the target that you want alice to move toward and the amount that you want her to move. Select **marchHare** as the target and **2.0** as the amount. If you wanted a number that isn't on the list, you would select Custom DecimalNumber and type in your own number. These choices (target and amount) are known as arguments in programming. Run the animation to see if alice moves toward the marchHare; you will have to wait until the song finishes to see her move. The program happens in order line by line. The next line doesn't execute until the previous line is finished.



- If you don't want to wait for the song to finish every time you want to test out your animation, you can disable lines of code and enable them later. To do this, you would need to right click on the **playAudio** line and **uncheck Is Enabled**. You will see the line will now have gray lines over it.



10. Now, we want alice to praise their singing. You will need to select alice and then drag the **say** method onto the editor underneath the moveToward method. When you do this, you will be prompted (argument) to enter the text of what you want alice to say. You should select **Custom TextString...** and then enter **I enjoyed your singing**. You can select **add detail** if you want to make adjustments such as text color, speech bubble color, outline color, or the duration that the bubble stays on the screen. You can leave the default settings if you want. The duration is defaulted to 1 second.



11. Create the following dialog between the characters:

madHatter – We never get compliments, you must have a cup of tea.
alice – Sorry for interrupting your birthday party.
marchHare – This is not a birthday party, this is an unbirthday.
alice – Unbirthday?
madHatter - Statistics prove, prove that you've got one birthday. One birthday every year, but there are 364 unbirthdays. That's exactly why we are gathered here to cheer.
alice – Well I guess it's my unbirthday too!

12. You will need to adjust the duration on some of the statements so that you have more time to read the messages. The default duration is 1 second.

13. Have Alice joyously jump up and down at the end. Your code should look similar to the following:

```
void myFirstMethod ( )
do in order
  //Your Name
  //Today's Date
  //Alice in Wonderland Tea Party
  this.playAudio( new AudioSource ( UnbirthdaySong.wav (21.15s) ) );
  this.alice.moveToward( this.marchHare , 2.0 , add detail );
  this.alice.say( "I enjoyed your singing" , add detail );
  this.madHatter.say( "We never get compliments. You must have a cup of tea." , add detail );
  this.alice.say( "Sorry for interrupting your birthday party." , add detail );
  this.marchHare.say( "This is an unbirthday party." , add detail );
  this.alice.say( "Unbirthday?" , add detail );
  this.madHatter.say( "Statistics prove, prove that you've got one birthday." , add detail );
  this.madHatter.say( "One birthday every year, but there are 364 unbirthdays." , add detail );
  this.madHatter.say( "That's exactly why we are gathered here to cheer." , add detail );
  this.alice.say( "Well, I guess it's my unbirthday too!" , add detail );
  this.alice.move( MoveDirection.UP , 0.5 , Move.duration( 0.5 ) , add detail );
  this.alice.move( MoveDirection.DOWN , 0.5 , Move.duration( 0.5 ) , add detail );
  this.alice.move( MoveDirection.UP , 0.5 , Move.duration( 0.5 ) , add detail );
  this.alice.move( MoveDirection.DOWN , 0.5 , Move.duration( 0.5 ) , add detail );
```

14. Challenge: Make this your own by adjusting it how you want. For example, you may want to challenge yourself and make the Mad Hatter and the March Hare dance to the unbirthday song. This would require that you use the **Do Together** block to make the dancing happen while the song is playing.

15. Save your work and exit Alice.