

BubbleMachine™ Tutorial

Installing the Program

1. Install the Macromedia Flash plug-in for your preferred browser:¹
<http://macromedia.com/products/flashplayer/>
(you should be running the latest version of the Flash plug-in)
2. Download the appropriate BubbleMachine file from the web site below.
 - BubbleMachine.zip (Windows) or BubbleMachine.sit (Mac):
<http://faculty-web.at.northwestern.edu/music/lipscomb/bubblemachine/>
 - These are “archive” files containing all of the files you need to run BubbleMachine.
3. Extract the files for use on your computer. In order to extract the files from the archive file, you will need to use one of the following programs:
 - ZIP archive:
 - WinZip (Windows): <http://winzip.com>
 - ZipIt (Mac): <http://www.maczipit.com>
 - StuffIt archive (Windows or Mac)
 - Aladdin Software: <http://www.stuffit.com>
4. Place the extracted folder named “bubblemachine” in your preferred location on your computer hard drive. You will “open” the file from this location using your Internet browser.

To get started with BubbleMachine:

1. Start your Internet browser (do not use Safari).
2. Select File → Open... from your browser’s main menu.
3. Browse to the folder you extracted following the instructions above, then select the file named “bubblemachine.htm”.

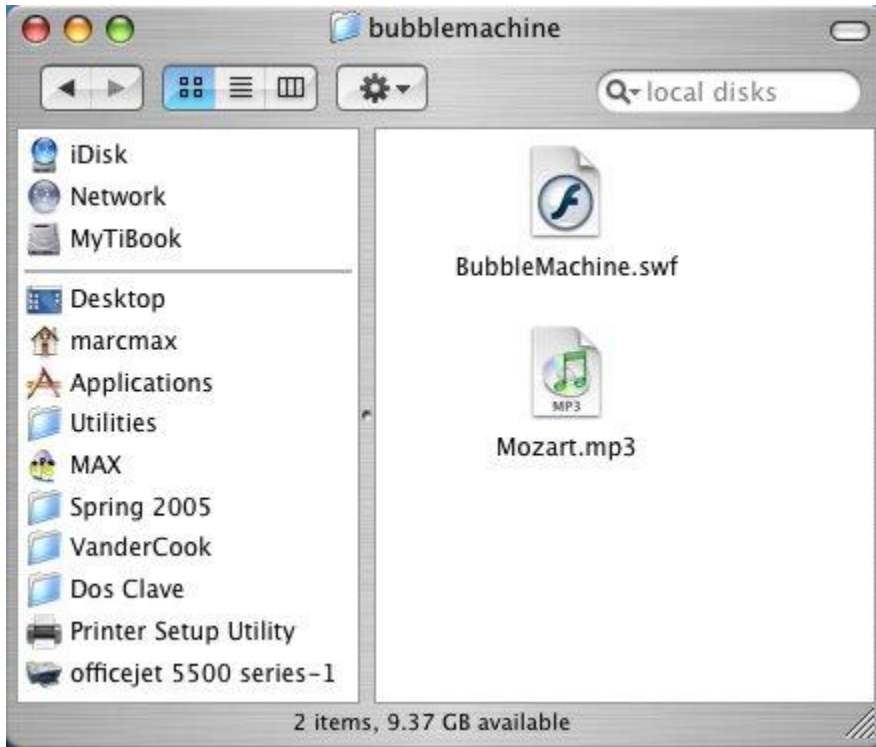
You should now see the BubbleMachine interface contained in your browser window.

¹ Internet Explorer, on both the Windows & Mac platforms, is the preferred browser for BubbleMachine. Other browsers should work, as long as the Flash plug-in is installed. However, there are known problems with Safari on the Mac platform ... at present, this browser should not be used with BubbleMachine. You can perform most of the program’s capabilities, but it will not allow you to save the data for your bubble graph for viewing at a later time (very inconvenient!!).

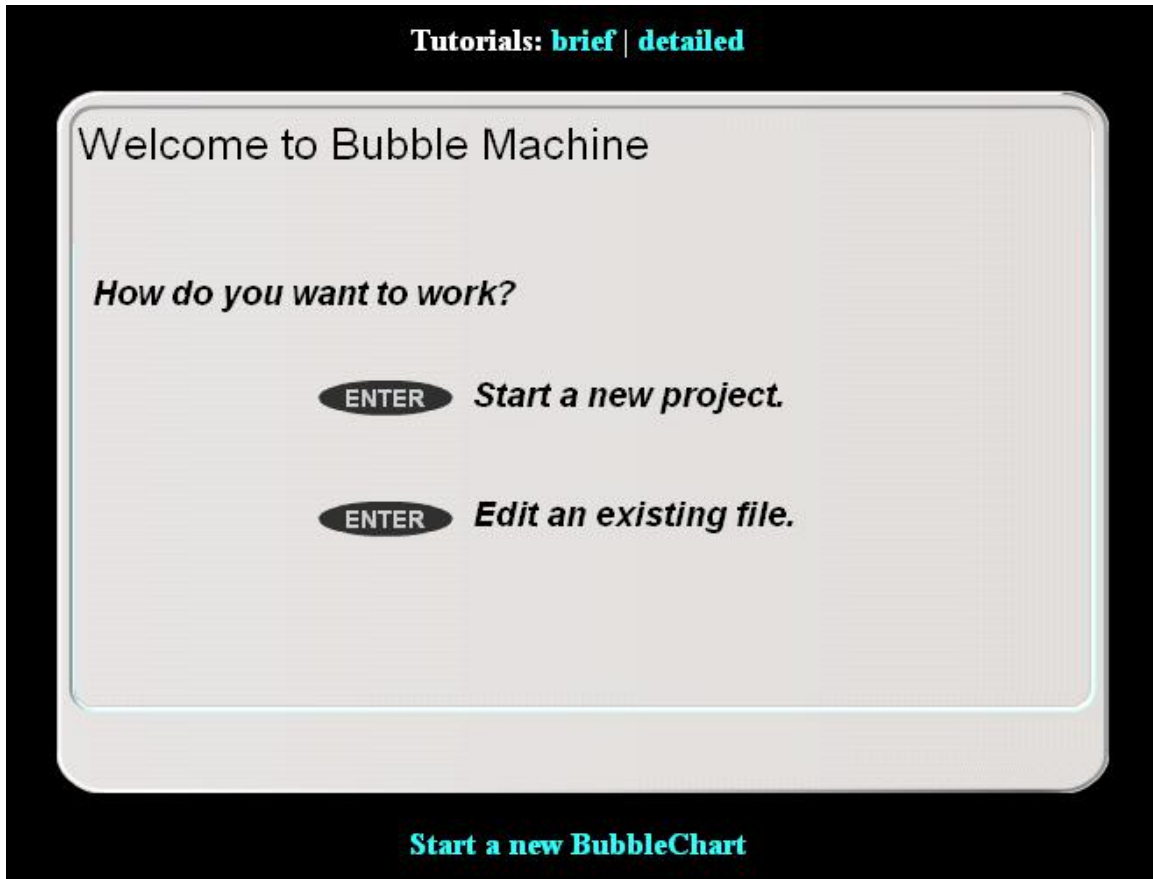
Creating a BubbleChart

Step-by-step instructions for creating a “BubbleChart” using BubbleMachine™ are provided in the following pages.

1) The MP3 files you use as the basis for your BubbleCharts *must* reside in the same folder as BubbleMachine.swf and bubblemachine.htm files.

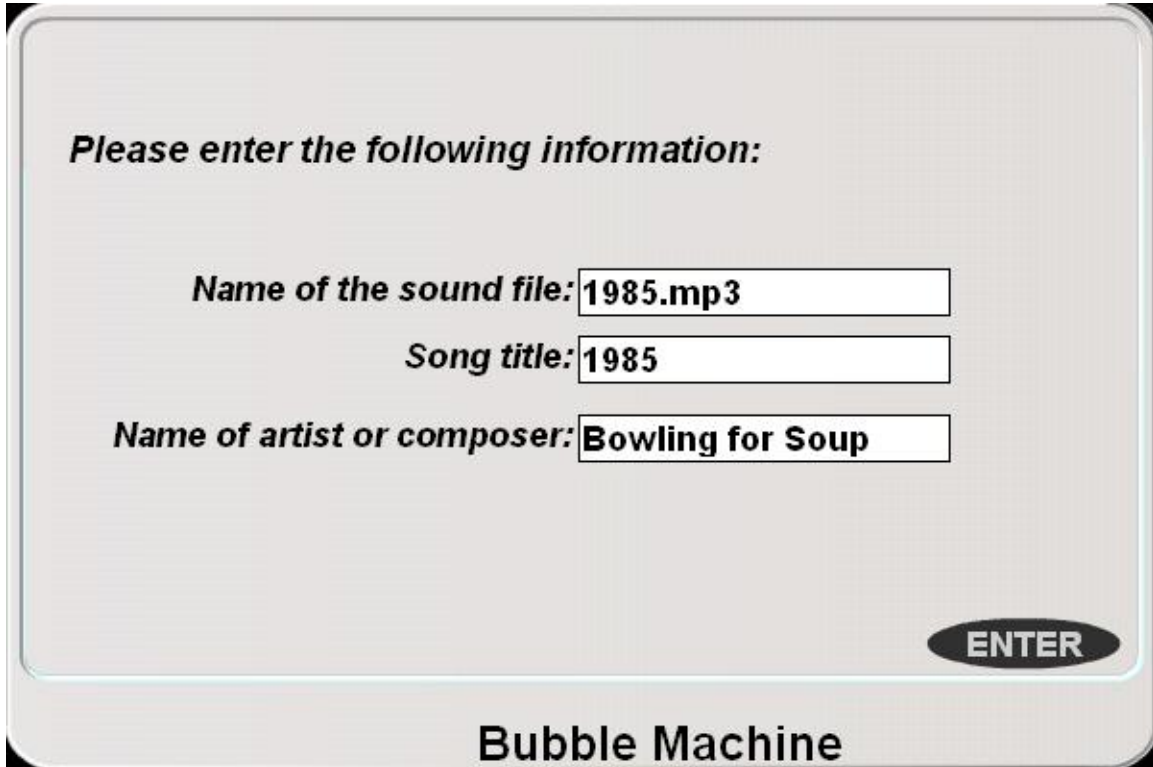


2) To create a new bubble chart, when you see the “Welcome” screen below, simply click on the ENTER button next to "Start a new project". You can return to this “Welcome” screen at any time by clicking on the “Start a New BubbleChart” link at the bottom of the page. If you want to open and/or edit a BubbleChart created previously, click the ENTER button next to “Edit an existing file.”



3) Enter basic information about your sound file. Pay close attention to the MP3's file name, since BubbleMachine™ is case sensitive. However, the song title and artist name fields will appear exactly as you type them with mixed upper- & lower-case characters.

Please note that currently *only* MP3 files can be used as sound files with BubbleMachine.



Please enter the following information:

Name of the sound file:

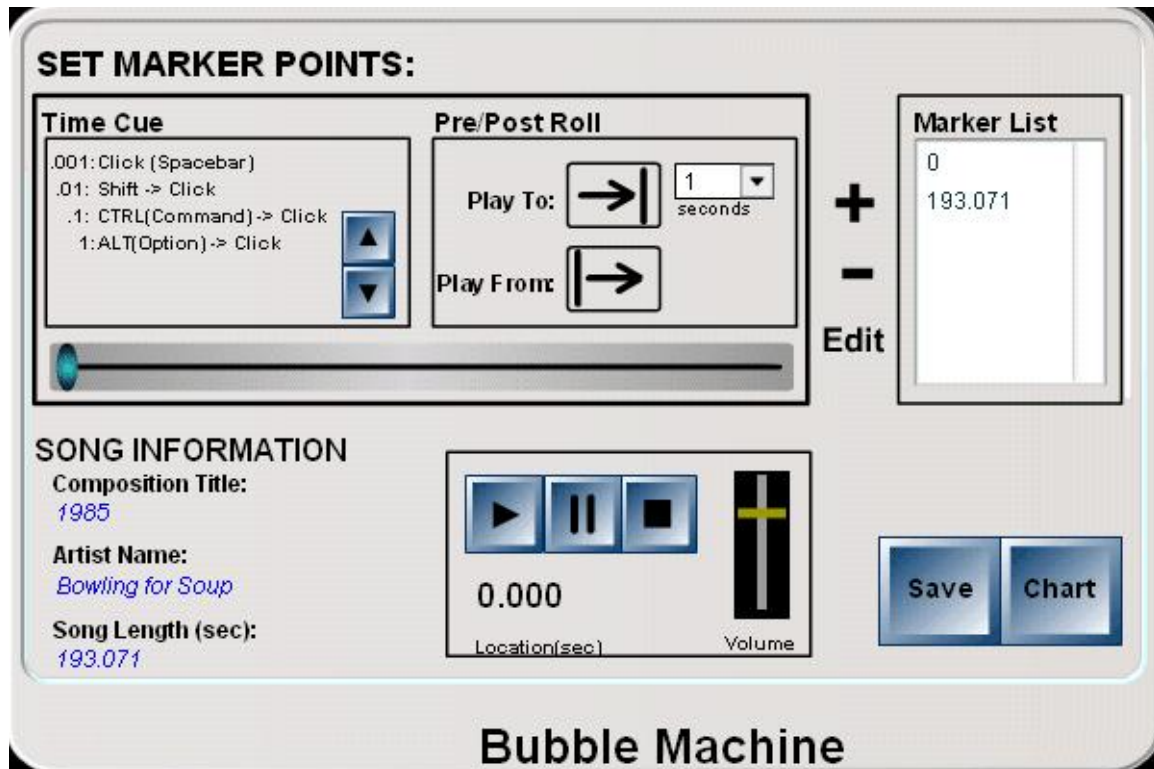
Song title:

Name of artist or composer:

ENTER

Bubble Machine

4) Depending on the speed of your computer, the load time may vary as the sound file loads into your computer's memory. When loading is complete, you should see something like the representation below. [Note especially the Song Information in the bottom left area of the screen and the values in the Marker List in the upper right area, representing the beginning (0 seconds) and end (193.071 seconds) of the song.]

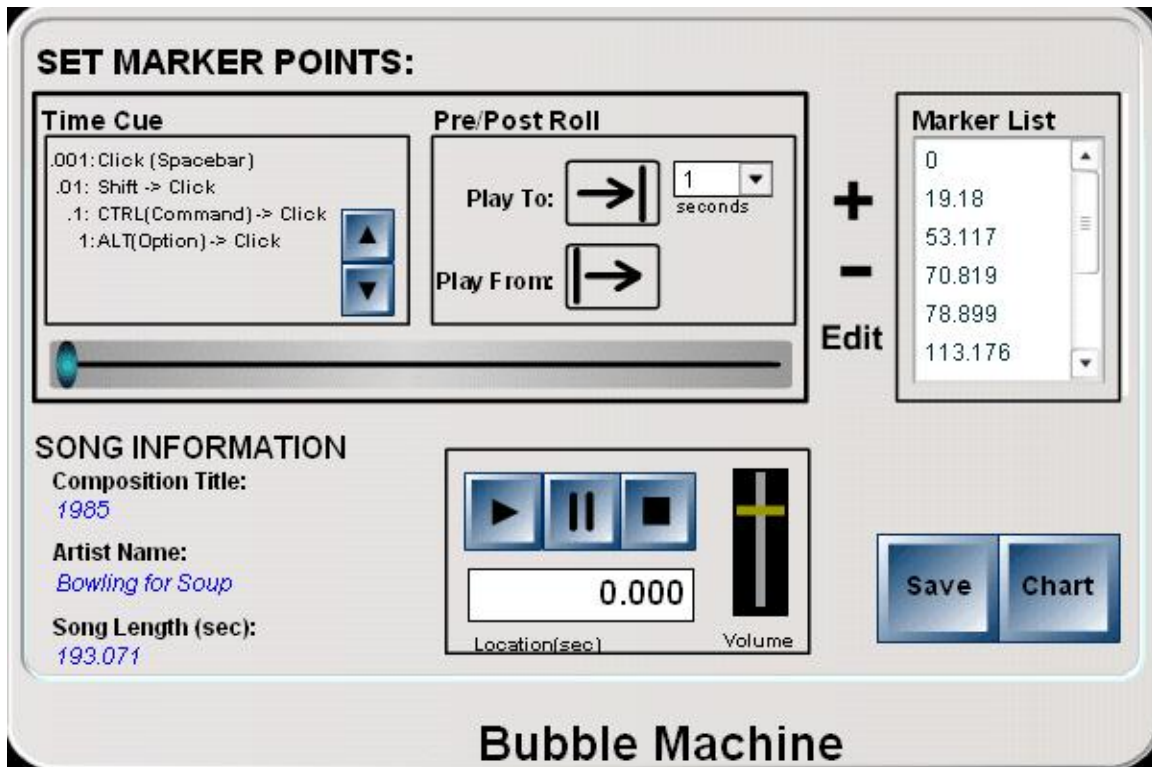


5) From this “Tools” page, you add your marker points by clicking on the “+” sign to the left of the “Marker List” panel. You can delete markers by clicking on the item in the list that you want to remove, then clicking on the “-” sign. You also have the option of editing markers by selecting the desired marker and clicking on “Edit”.

- very fine resolution (to the millisecond) edits of the markers can be made using the up and down arrow buttons in the “Time Cue” area of the page
 - using the spacebar, Shift key, CTL/Apple key, or Alt/Option key, you can toggle between the following adjustments with each click of the arrow buttons:
 - spacebar – 1 millisecond (1/1000th of a second)
 - Shift key – 10 milliseconds (1/100th of a second)
 - Control/Apple key – 100 milliseconds (1/10th of a second)
 - Alt/Option key – 1 second
- as you make adjustments, you can listen to a predetermined amount of music leading up to (“pre”) or following (“post”) the marker point by clicking on the “Play To” or “Play From” buttons located in the “Pre/Post Roll” area. The amount of time played before and after the marker is determined by selecting the

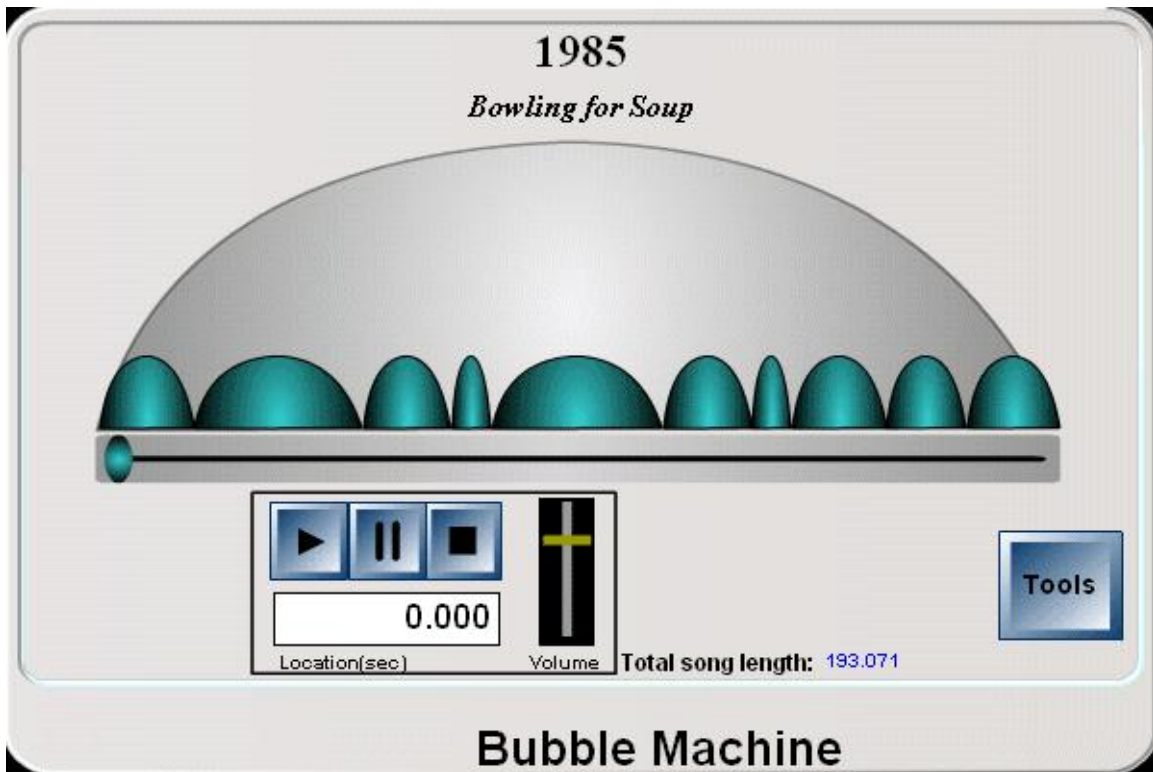
desired number of seconds from the drop-down box to the right of the “Play To” button.

Below is an image of the same Tool Page with additional Makers added (notice the numerous entries in the “Marker List” area)



6) You can control playback of the sound file by using the familiar Play, Pause, and Stop buttons found in the lower middle portion of the “Tools” Window. You can also drag-and-release the progress bar on the Timeline in the area below the Time Cue and Pre/Post Roll panels.

7) When you want to view the resulting interactive “BubbleChart,” simply click on the “Chart” button and play the sound file using the Play, Pause, & Stop buttons or clicking on the bubble that represents the section you wish to hear.



8) To save your chart data, return to the “Tools” page and click on the “Save” button. Carefully follow the instructions printed for you on the “Save Your Bubble Graph” page.

9) As mentioned previously, you can return to the “Welcome” screen to begin a new chart (all of your current data will be lost) by clicking on “Start a New BubbleChart” at the bottom of the “bubblemachine.htm” page.

Should you encounter any problem, please notify the creators of the program, so we can assist: Scott Lipscomb (lipscomb@northwestern.edu) or Marc Jacoby (mjacoby@wcupa.edu).

We offer this useful tool free of charge in the hope that you and your students will benefit from such an interactive tour of musical compositions. We hope you enjoy using this program and that it serves to enhance the music learning in your music classroom. Please send us reports of its use and innovative ways that you have integrated this tool into your teaching. Also, we will be updating the software continuously and would appreciate any suggestions, comments, or critiques you might have about the BubbleMachine™.

Sincerely,
Scott Lipscomb
Northwestern University
Evanston, IL

Marc Jacoby
West Chester University
West Chester, PA