## 54231 Design For The Stage - SnD

## Editing project

Due September 22 at 9am.

## Project:

Learn basic functions in PEAK sound editing software. You will need a CD from your collection or the library to complete the final section. Read all the directions before you do the project.

Process:

1. Plug a pair of headphones into the appropriate DIGI interface card for your computer.
2. Log onto the computer using the CMU STUDENT account. The password is sound. Pull your cursor to the bottom of the screen to make the Dock appear if it's not already visible - select PEAK and click to open.
3. Pull down the FILE on the menu bar to OPEN (or Command+O). Navigate to PROJECT DRIVE and into the D4TS folder to find the sound file with your name.

OR
On the desktop, open PROJECT DRIVE >D4TS > YOURNAME $f$ > yourname soundfile. Drag the audio file to the Dock and drop it on the PEAK icon.
4. Arrange your screen by dragging the TRANSPORT bar all the way to the bottom edge of the screen; drag the corner of the waveform window to the top of the TRANSPORT bar. Pull the corners to make each segment fill the screen right to left. The entire screen is now full of PEAK - the TOOLBAR is at the top, directly under that is the WAVEFORM window, under that at the bottom is the TRANSPORT bar.
5. Before you do any editing, you need to save a copy of your original file so if there is a catastrophe, you can start over. Go up to the FILE menu at the top and select SAVE A COPY AS... (Option + Command + S). Navigate in the SAVE window into YOURNAME folder and change the file name to <yourname-origfile>. Select FILE TYPE >WAVE. Make sure AUTO FILE TYPE EXTENSIONS is checked. Click SAVE.
6. Hit the SPACEBAR to play the entire sound file to the end. Hit RETURN to go back to the beginning of the file.
7. Move your cursor up to the Overview, which is the picture of the entire sound file at the section of the Waveform window. If you don't see an overview, type COMMAND + , (comma) to make it appear. When you move your cursor over the overview section, it will change into a little speaker; if you click the insert point of the program will jump to that point and begin playback to the end of the file. Try it a few times to get the hang of moving around a file. Remember the SPACEBAR will pause the playback and RE-

TURN will stop and take you back to the beginning of the sound file. On the TOOLBAR, probably left of center, you will see a PLUS in a circle, a MINUS in a circle and a PERIOD in a circle. These buttons change the view of the actual edit window, which is the waveform under the Overview. If you click on the MINUS sign (ZOOM OUT) you will eventually make the Edit waveform identical to the Overview. If you click on the PLUS sign (ZOOM IN), you can take the waveform down to the sample level. Notice as you ZOOM IN the waveform changes and eventually you get a single wavy line - this is the sample level and you can also get here directly by clicking the PERIOD button. You can actually zoom in a little farther than this. ZOOM OUT now so that you have about 4 seconds of the file in the edit window - if you watch the bottom of the edit window you'll see the timeline change from milliseconds to seconds.
8. Click on DSP at the main menu and pull down to NORMALIZE. The will bring up the Normalize window. Make sure it is set to $100 \%$ and then click OK. The computer will begin to normalize your file - this brings all the samples up to the relative maximum level for the file - you'll see it finish by redrawing the waveform. After the computer is done normalizing, SAVE your file : FILE > SAVE (or Command+S). Play the file again with the spacebar - it should be slightly louder.
9. Hit RETURN to go back to the beginning. Dragging with your SELECTION TOOL (it's the thing that looks like an "l" when you move your cursor over the waveform window). Edit off the silent space at the beginning of the file - you can find the start of the music by looking for the point where the waveform begins. Put your SELECTION TOOL at the point you think the music starts and click on the waveform. This will give you a Screen Cursor Line at the start of the music. Hit the SPACEBAR to start playing at that point and see if you are actually at the start and haven't cut any of the music off. Hit RETURN to stop. If it is incorrect, try again until you find it.
NOTE: Every time you hit the RETURN key, the computer goes back to the beginning of the sound file. To start playback where you just were, you need to re-click on the insert point (it's a faint dashed line).
10. Once you're satisfied, click and hold on the insert point and drag back to the left with your trackball (to the beginning of the file) - this will capture the dead space in the file in a black box. Make sure you capture both tracks of the stereo file -- if you only have one of the tracks, move your cursor down or up to snag the other one. .
11. If you are satisfied with your accuracy, EDIT>CUT ( or Command+X). When it is done, the beginning of your file will move to the zero point of the window. Hit RETURN and SPACEBAR to check your work. Save your work - FILE>SAVE (or Command+S). If it is not correct go to EDIT>UNDO (or Command+Z) and try again.
12. Click and hold on the Window Position Bar arrow in the lower right hand corner of the Edit window (it's the trough with the little blue glob in it) and scroll through the file notice the time markers on the bottom of the window change as you move. Go to somewhere around 20 seconds and stop. Click somewhere on the window and look at the display in the lower left corner of the screen (on the TRANSPORT BAR). It will
change to indicate the exact location in the sound file of the line you just inserted. It measures in HOURS:MINUTES:SECONDS:FRAMES. Click somewhere else on the screen to see it change.
13. Double-click on the TIME DISPLAY window and a screen will pop up - enter 20.25 seconds. Click OK and the insertion point will move to that time. Now, click and hold the SELECTION TOOL exactly on the line you just set and forward (right) to capture five seconds of data - you watch the TIME DISPLAY for this. When you have exactly five seconds, release the mouse button to capture that region - it will be highlighted.
14. If you hit the SPACEBAR now it will play only the highlighted selection. Pull down to DSP> REVERSE from the main menu to reverse the section of audio you just captured. After the computer finishes, hit the SPACEBAR again to hear it - the section you just chose should be reversed.

## 15. FILE>SAVE (or Command+S).

16. Scroll farther into your file to 30 seconds. Again, use the TIME DISPLAY window to set your insert point to 32.53 seconds. Capture the next 3 seconds but this time only capture the upper part of the stereo waveform. You should have a highlighted box with 3 seconds of data on the upper half only. Go to EDIT>SILENCE (or Command +E ). This will remove all the data in that segment. Hit the SPACEBAR and you should only have sound from one channel.
17. Put your selection tool at the end of the blank space you just created and drag/ capture the next three seconds of the lower part of the waveform. EDIT>SILENCE (or Command+E). You now have a section starting at 32.53 seconds with three second silence in the left channel followed by three second silence in the right channel.
18. RETURN and SPACEBAR to listen the the file. After you get past the section with the two blank edits (around 39 seconds), hit the SPACEBAR to pause playback. Hit the SPACEBAR and listen to the end of the piece. It currently cuts off at the end so put a Fade Out on it. Put your selection tool at the very end of the sound file and drag backward 8 seconds. This will highlight the last 8 seconds of the file.
19. DSP >FADE OUT from the Menu Bar. OR go to the toolbar and look for the button with the ramp that points to the right. The file will redraw its overview when done and you'll see a nice smooth fade out. Hit the SPACEBAR to listen to your fade out.
20. FILE > SAVE (or Command+S). Make sure you have captured the entire end of the file when you faded, otherwise there will be a little pop at the end of your file, and this is very bad.
21. RETURN. Put a 2 second fade in at the top of the file. Same as above - drag from the top of the file in 2 seconds. DSP>FADE IN from the Menu Bar OR the left pointing triangle from the toolbar. RETURN and SPACEBAR to listen to the entire piece.
22. FILE>SAVE (or Command+S). Make sure you have captured the entire top of the file when you faded, otherwise there will be a little pop at the beginning of your file, and this is also very bad.
23. Look at the File Overview - it's the picture of the entire file that is between the stereo waveform you've been editing and the toolbar. Find a spot where either the music drops out (a pause or beat between sounds) or where there is a slight pause - you'll see a wave fadeout and then a large wave where the music comes in again. Click on the overview at this spot to jump there.
24. Put a Marker here - Click the insertion tool on the spot in the Edit window - use the ZOOM IN button if needed to place the selector accurately. ACTION>NEW MARKER (Command +M ) will put a marker on the file. Name the marker after your first pet (or if you've never had a pet, after a friend's pet). The naming window will open after you create the marker or you can open it later by double clicking on the little triangle at the bottom of the marker. Click anywhere else in the overview window after Marker \#1 and repeat to add a Location Marker \#2. Name this one after your favorite fast food item. If you don't eat fast food now, put your favorite back when you did. If you never ate fast food in your life, put your favorite thing to drink.
25. Type <the first letter of the name of marker \#1> and the window will jump to that point. Note that if you use numbers, all you have to do is type the number on the Number Keypad on the right of the computer keyboard to jump there. Jump to Marker \#2 (fast food name), click the selection tool on the marker and hit SPACEBAR to play from that point.
26. Determine your favorite part of this little sound file and put a marker there titled <my favorite moment.
27. At Marker \#3 (fave moment), drag left two seconds (-2.0 back toward the beginning of the file) and capture both channels of audio. Go to the Menubar to DSP>CHANGE PITCH. This opens the Pitch Shift window. Change the INTERVAL to read -500 cents. Make sure PRESERVE DURATION is checked and click OK.
28. SPACEBAR to listen to the pitch change file.
29. Select the middle one second of this section and Pitch Shift it up $\boldsymbol{+} \mathbf{2 5 0}$ cents
30. FILE>SAVE (or Command + S)
31. Save a Copy of this file in your folder. FILE>SAVE A COPY... then name the file <(your name)-Part One> You now have a copy of the the original sound file you made at the beginning of the assignment, your working file and the final file with all the processing and editing.
32. Drag a song from your CD to your folder. Then OPEN it in PEAK. If you try and double click it ITUNES will open, so you will need to drag and drop or open from the Peak menu.

You are going to make a 90 second version of your song (plus or minus 5 seconds). You can do this any number of ways - you can capture all the choruses and string them one after the other; you can gather one verse, one chorus and the bridge and sequence them together. You can cut out all the singing (or cut out all the instrumental sections); you can cut the first half of verse one into the second half of verse two followed by a guitar solo.

THE RULES are that no section of the song can be connected to any section it is connected to in the original song, i.e. you can't do something like INTO/VERSE2/
CHORUS2/ENDING if verse 2 and chorus 2 are connected to each other in the original. Likewise you couldn't put the ending after chorus 2 if that's the way it is in the recorded version.
33. First, divide the song into parts: Introduction, Verses, Choruses, Bridge, Solos, Ending, etc. Note that not every song has every one of these parts. Play through the song and drop a marker at each section of the song, including a maker at the top and the end of the song. FILE>SAVE and name it <your name - song title>.
34. Now, capture the entire sound file (command +A) - the entire file should be shaded. Go to ACTION>MARKERS TO REGIONS and all your markers will be changed to regions. Now go back and change the names of the regions to reflect what part of the song they are. For example the song might be structured:
ex. > introduction, verse 1 , chorus, verse 2, chorus, bridge, guitar solo, verse 3, chorus, chorus.

While you are doing this, adjust your region start and end points to make them accurate. If you just want to hear the region you are working on, (Command+click) on the waveform and that region will be highlighted. Then hit SPACEBAR to listen it will stop at the end.
[NOTE: Regions can also be created by Click>Dragging over the waveform and using the keystroke <Command+Shift +R>]

When everything is exactly right, FILE>SAVE.
35. Open a Playlist. Go to FILE>NEW > PLAYLIST DOCUMENT (Shift + Command + P). Bring up the Contents Window via WINDOW>CONTENTS. You will see your file name and if you click the little triangle on the left it will open and show you all your regions. If you don't see them, click the REGION button on the bottom right of this window - it's the center button.

Start arranging them into unique and interesting constructions, deleting the ones you don't need and creating new ones if you need them. Adjust transitions back at your region markers. When you have something about 90 seconds long and you're happy with how it sounds:
36. Click on the last button on the left of the PLAYLIST - it looks like a folded over piece of paper - BOUNCE PLAYLIST TO NEW AUDIO DOCUMENT. Save it into your folder and name it <your name-mixdowns.
37. Open the newly mixed file and put a three second fade out at the end. SAVE.
38. Close program. It will ask you to save the playlist - go ahead and call it yournameplaylist and put it in your folder.

If you're tentative, pick an easy classic pop tune, like a Beach Boys or Beatles song and just focus on making a short version that has one verse, one chorus and the bridge (for example).

## Deliverables:

When you are finished you should have in your folder:

- the original song I assigned to you, which became your working copy
- your backup copy of the song <yourname-origfile>
- your final copy with the edits and markers <yourname-Part One>
- the original file of the song you picked
- your song with markers <your name - song title>.
- the playlist <yourname-playlist>
- your bounced mix of the playlist <your name-mixdown>


## IF YOU DON'T HAVE ALL THESE FILES, YOU DID SOMETHING WRONG ALONG

 THE WAY. Double check your files by opening them to make sure they are the files you think they are and to verify that they will open.Due Monday 9.22 at 9am

