

## In-Class exercise:

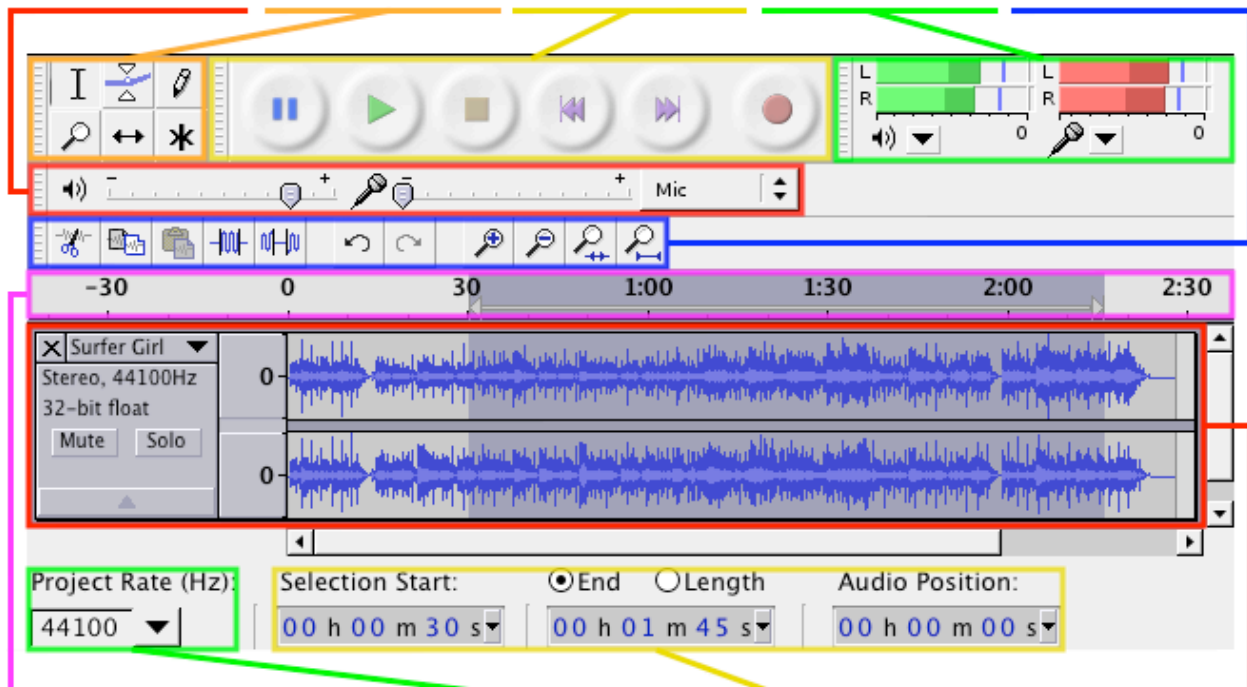
## Produce a Ringtone

### Overview

This ICE introduces the task of digital audio production by using Audacity, an open source audio editor, to create a ringtone. Ringtones are essentially brief “compositions” intended for a very specific purpose, much like “jingles” in advertising. While many ringtones can be labeled as traditional “music”, others are more sound effects or ambient sound. This ICE will skirt those aesthetic issues and focus on sound production itself. You will produce a 15-second (maximum) piece that could serve as a ringtone.

### Part 1: Audacity

Find Audacity and launch it. You should end up with the “Project Window”, which looks like the diagram below, minus the annotation boxes and the “Surfer Girl” track in the Track Panel. To get started, fill in the labels in the screenshot below for the annotations for each section of the Project Window by referring to the color version of this window from the lecture slides. There should be nine labels, five on the top and four on the bottom of the screen shot.



The Audacity Quick Guide, which gives concise info on all this functionality, is at:

[http://manual.audacityteam.org/index.php?title=Quick\\_Guide](http://manual.audacityteam.org/index.php?title=Quick_Guide)

This is where Audacity will take you if you do “Help>Quick Help”, and you should keep this site up on your browser as you do this exercise serve as a reference on how Audacity works.

This exercise is meant to be a semi-structured exploration of Audacity, so the “steps” in the exercise are a bit arbitrary. The overall goal is to start with at least three different tracks of original source audio, do some editing, apply some effects, flatten and mix down the resulting tracks, and render a 15-second monaural file as an mp3. How you get to your final piece, though, depends on your creative and/or pragmatic choices.

1. Generate, record or import audio source material as new tracks.
  - Generate waveforms from the Generate menu in a new empty track
  - Record with the big red dot on the control panel (new track will be created automatically)
  - Import audio files with File>Import>Audio (new track will be created automatically)
2. Trim tracks as appropriate
  - Select and then delete (with the delete key) unwanted portions of tracks
3. Move the tracks around in time to set up sequence/layers
  - Use the “Time Shift” tool to line up tracks in time
  - Insert silence if needed in the middle of tracks to space things out
4. Play with loops (you don’t need to retain a loop in your final mix)
  - Select part of a track
  - Click on the green Play control with the shift key down to loop on that selection
  - Once you have a good loopable selection
    - Copy it
    - Create a new track and go there
    - Paste the copied selection there multiple times in succession
5. Adjust levels, make transitions (with fades or envelopes)
  - Use the “Amplify” effect to change level for an entire track (or use the level slider for the track)
  - Use “Fade In” and “Fade Out” to smooth transitions and do cross fades
  - Use the “Envelope Tool” to draw a more complex envelope curve over a track for more control
6. Apply some effects (lots to choose from, remember the undo)
  - Can use Effects>Compressor to compress dynamic range (make loudness the same throughout)
  - Might try Effects>Equalization to see how it will sound on tiny speakers (choose the “amradio” curve)
  - There are several Reverbs to choose from – try the “Apple: AUMatrixReverb”, if present
  - Try some other effects that sound interesting and see what happens (don’t forget the undo)
7. When you’ve got something you want to save:
  - “File>Save Project As” to save the project file with all the tracks split out so that you can remix later
  - Flatten any stereo tracks to monaural by selecting them and doing Tracks>Stereo Track to Mono
  - Select tracks you want to include in the final mix by shift-clicking in their track headers on the left
  - Use Tracks>“Mix and Render” to mix the selected tracks down to a single track
  - With your mixed-down track selected, do File>Export Selection to export the final mix as an mp3

Don’t save before quitting (you want to retain the un-mixed project file with all the tracks).

Actually, you could save your project at this point, but if you do, save it to a new project name to avoid losing the tracks you flattened. Notice that when you save a project, a “.aup” file is created, along with a “\_data” folder containing the actual audio data for the various tracks in the project. Both the .aup file and the \_data folder are necessary to remix your project.

8. Drop your final mp3 file in the “Ringtone Homework” dropbox in our myCourses space.

Okay, I'm going to punt on this one. Different providers have different limitations and requirements for ringtone formats, and they also have different ways of getting things onto their phones. One resource that seems to be useful is: <http://www.myxer.com/make/>, which seems to provide ways of getting sound files onto phones from most providers.

If you can figure out what type of sound format and file type your phone will accept and how to get it to your phone, then you might end up going back to your saved project with the un-flattened tracks, re-rendering it to meet the phone's expectations, and exporting the result to create a file of the proper format.

As we've said several times in this course, YMMV (your mileage may vary)...