You can download Audacity from: [http://audacity.sourceforge.net/](http://audacity.sourceforge.net/)

There are versions for Windows and for Mac.

Create a folder for your iTongue products and all the related files e.g. iT_products

Create subfolders for your audio files in each language.

**To record an audio file in Audacity:**

When you load Audacity it will open a new working space which looks like this:

![Audacity interface](image)

To start recording your spoken words, click on the red circle, then speak the words clearly, giving a long pause in between each phrase.

When you have finished speaking, click the beige square (stop button).

To play back your recording click on the recorded track at the beginning and then press the green triangle (play button).

To record a new track:

Open a new file (File, New from the pull down menus)

When you are happy with the track, click File, then Export to export the file to the mp3 format.

Give your sound file a name and choose file type mp3.
You don’t need to fill out all the ‘metadata’ for this purpose. I just fill out the Artist name and the Track name.
For the first time you export as an mp3 file.

If you have just installed your audacity program, the first time you export to mp3 files, you may need to download the lame_enc.dll file at this stage. Audacity will open a pop-up window that will enable you to download the file from the Internet.

Click the download button, follow the instructions on the Audacity website and install the file. Then you can re do the export smoothly.

NOTE: Because audacity ‘projects’ are made of a number of files linked to an information file, they are not as easy to manage: to copy, to backup, to move etc. That’s why it is best to export your recordings to mp3 as soon as you are happy with them. Mp3 files are much easier to copy, move, backup, share etc, because all the information is in just one file.

When you have created your recordings and saved them as mp3 files, you can send the mp3 files to other partner organisations to use and you can use them for your own iTongue projects.

How to cut and mix a sound track for iTongue in Audacity

Open up audacity. Import your mp3 recordings – File, Import, Audio and select you first language track. Then import your second language track.

You can magnify the file by clicking on the magnifying glass with the plus sign. If you make the file bigger it is easier to see exactly where you need to cut the pieces of the recording to drop into your iTongue sound file.
When using more than one sound track in the same Audacity window you need to mute the tracks you are not using, otherwise when you press play all the tracks will play simultaneously. (see red arrow)

Open a new Audacity window (File, New) for your iTongue mixed track. You need to open a new ‘Audio Track’. (Track, Add New, Stereo Track). NB use stereo track if you recorded in stereo.

Go to your imported audio tracks.
By listening back to the audio track, choose the first piece of audio that you want in your final track. To play a track use the cursor to mark the place along the track that you want to start to play from and left click to move the play line to that place. You then use the green triangle (play button) to start playing from that line. Use the beige square (stop button) to stop at the end of the part you want to listen to.

To select the first piece of speech that you want to put into your iTongue track, you need to highlight the piece. To do this, you need to locate the start and left click, hold down then drag the resulting highlight along to the end of your required text.

You can then copy the highlighted text using CTRL-C or Edit, Copy from the pull down menu.

Switch to your new track and paste your clip into the new track with CTRL-V or Edit, Paste.

NOTE: You will be using the ‘Select Tool’. This tool should be automatically selected when you open audacity, but if it isn’t then click the ‘Select Tool’ icon, which looks like this: 

Then repeat with the first clip from the second language. Go to your recordings, select the section of the second language speech, place the cursor (or play line) at the start of the clip with a left click, hold and drag to the end of the clip, then copy. Move to your iTongue audio track and left click to mark the point where you want your second language to play and paste in the clip.

The two language clips will need to play close together so the sound in both languages is stored in the same “Mexican Hat” and therefore can be recalled together.
Left click your cursor at the beginning of your track and then click the play button to listen to the two languages together. If you have space in between them, left click the beginning of the space, hold and drag the highlighting to just before the start of the next bit if speech and then cut that bit of the track out by pressing CTRL-X of Edit, Cut from the pull down menu.

Left click to place the cursor at the start of the two language clips and play it back.

If you have cut too much then you can use the undo button (undo) or Edit, Undo Cut from the pull down menu.

You will then leave a longer gap before you repeat your phrases.

Keep building your languages track by copying and pasting in the desired phrases. You can put recordings closely together to build up complete sentences. Paste the sections together, go back to the start and listen back to the track to see if you need to finely cut any pauses. For this stage you may find it easier to use the space bar to stop and start the track. The space bar acts as the play button and the stop button. You can use the arrow keys to go back or forward slightly to accurately locate sections that need cutting. Remember that you can enlarge the track to make it easier to see the exact sound waves for more accurate cutting.

When you have built your audio track you can import a music track.

There’s lots of royalty free music available on the Internet at sites such as http://incompetech.com/music/royalty-free/
To import a music track click File, Import, Audio then select your music file. It will import the music track placing it below the language track you have just made.

Play the two tracks together. This will allow you to find a starting volume for the music track. To adjust the volume, move the volume marker towards the minus sign.

So far everything we’ve been doing involves the ‘Select Tool’.

To adjust the volume of the music track up and down to be louder when you have no speech and to be quieter while the speech is being played, you can use the ‘Envelope Tool’, which looks like this:

Click on your music track, then click on the ‘Envelope Tool’ icon and then you will see a blue line appear around your music track. This will allow you to click along parts of the track to mark it with white dots, like this:

You can then drag the top blue line down towards the middle (or the bottom blue line up) to lower the volume between two dots.

Your music track will then look like this:
Here’s a good video that shows you how to adjust volume in Audacity.
http://www.youtube.com/watch?v=vlKtCb88LW4

When you have finished creating your sound track save it as an mp3 file, by using File / Export from the pull down menus as before.

You can then put this together with images in a tool like iMovie or Windows Movie Maker.