Installation instructions for xkl on macOS

Prerequisites
The installation of xkl on macOS requires the following software packages to be installed on macOS:
- Xcode Command Line Tools
  - Update/install them by opening a Terminal and typing `xcode-select --install`
- Xquartz (http://www.xquartz.org): download the installer and follow the instructions
- Homebrew (https://brew.sh/): copy the command given on their webpage and paste it in a Terminal window; follow the instructions provided in the Terminal window at the end of the execution of the installation command
- Using homebrew, from a Terminal:
  - openmotif   (command: `brew install openmotif`)
  - x11   (command: `brew install xquartz --cask`)
  - sox   (command: `brew install sox`)

Installation procedure
- Unzip the source code archive ***xkl_3.2.zip*** in the desired folder, such as ***/Applications***. This will create a ***/Applications/xkl_3.2*** folder
- Open a new Terminal window and move to ***/Applications/xkl_3.2*** with the command:
  ```
  cd /Applications/xkl_3.2
  ```
- Execute the following commands:
  ```
  make clean
  make
  ```
- The executable, named ***xkl_3.2***, will be placed in ***/Applications/xkl_3.2/xkl***, and can be opened by issuing the commands
  ```
  cd /Applications/xkl_3.2/xkl
  ./xkl-3.2
  ```
  but it is preferable to open it by directly providing an input .wav file (see *Notes and caveats* for the reason) by typing (e.g. for the file ***heavens.wav***)
  ```
  ./xkl-3.2 heavens.wav
  ```

Notes and caveats
- The above procedure has been tested under macOS 12 (Monterey), macOS 11 (Big Sur) macOS 10.15 (Catalina) and macOS 10.14 (Mojave): it may or may not work on previous macOS versions.
- .wav files generated by most acquisition programs (e.g. Audacity) adopt MS headers, while xkl requires Klatt headers. MS .wav files can be converted by using the ms2kl program, that is generated during the compilation in the ***/Applications/xkl_3.2/utils*** folder. Just copy the MS .wav file (e.g. ***test.wav***) in the ***utils*** folder, and in a Terminal type the commands
  ```
  cd /Applications/xkl_3.2/utils
  ./ms2kl test.wav
  ```
  that will generate in the same folder a new .wav file named ***test_kl.wav*** that can be opened with xkl.
- If the application does not start from Terminal, returning the error message "`ERROR trying to open DISPLAY (null)`", open the Terminal shell configuration file (***~/.bash_profile*** or ***~/.zprofile*** depending on the macOS version) and comment the line "`export DISPLAY=:0`". Then open a new Terminal window and try again.

- Some of the windows are hidden at random when xkl is opened without providing an input file, and when it happens windows stay hidden even when a file is opened. However, the issue does not seem to appear when an input file is provided at launch.
- The play function uses the *sox* tool and two scripts in the *utils* subfolder. This is transparent to the user, provided that the internal folder structure under *xkl_3.2* is not changed, and the application is launched in a Terminal or x11 shell from directory */Applications/xkl_3.2/xkl*.
- The record function also uses the *sox* tool and two scripts in the *utils* subfolder. When a recording is started, the user is required to provide a file name that is used to save the recorded waveform in the *xkl* folder using the Microsoft (MS) .wav format. A version of the waveform is also saved in the Klatt format with the same name extended with the suffix _kl, and automatically opened in *xkl*.

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