4   Assignment 4: Files and loops

We want to use our scripts on all possible computers and other persons should be able to use them too. If we have to use files in our scripts, and most of the time this is the case, then we have to adhere to certain standards. That is why we will NEVER:

1. Use *absolute* file names in a script. For example on Windows we will NEVER refer to a file as `C:\Users\Me\My_data\somefile.wav`.

2. Use an operating system specific way to refer to a file. On Windows we will not refer to a file in a subdirectory as `my_dir\sub_dir\data.csv`.

We will use an URL type of file naming where we try to use only relative file names and separate directories (maps) with a / (slash). Relative names are always with respect to the directory in which the script is saved. For example we should use `my_dir/sub_dir/data.csv` instead.

1. No scripting: Create a new directory on your hard disk, name it `Test`. Create a subdirectory `Sounds` in this directory. Copy some audio files from your research to the Sounds directory (or create some fake audio file in it).

2. No scripting: Find out what the full path name of one of the sounds in the Sounds map is (I guess on Windows this is*Location* from **Properties**, on Mac this is the *Where* from **Get Info**).

3. The script you are going to make has to be saved in the `Test` map. First study the help from the New > Strings > **Create Strings as file list...** command in Praat. Use this command to get a list of the sound files in your `Sounds` map. Probably the files you are looking have `.wav` extension. The realtive file path in the form only works after you have saved the script because only after saving the script on disk Praat knows how to interpret relative file names!

4. You can query the Strings object how many strings it has. If everything is allright then this number equals the number of sound files in the map. Use a for-loop to print the names of the files. You can query the Strings object in the loop for a string at a certain position.

5. In order to find the duration of a sound we have to open the sound file and query for its duration. Write a new script in which you use the Strings object to open each sound file, query for its total duration, write the name of the sound file and its duration to the info window. For opening a sound file you use the **Read from file...** command. This command needs besides the name of the file also its relative position (see exercise day 1, part 10 for hints). You also have to find how to select explicitly the Strings object.

6. If your scripts are correctly written you can move you complete Test map with all its contents to another computer or another position in your file hierarchy and all scripts stiil work without needing to change a thing.