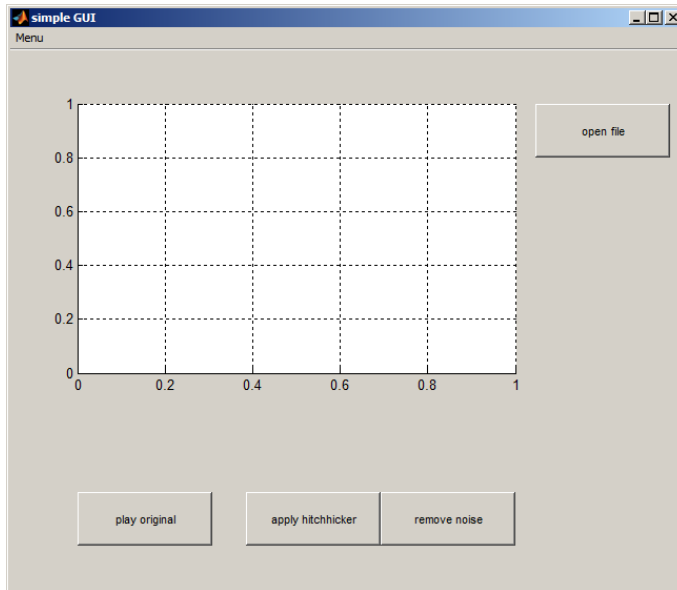


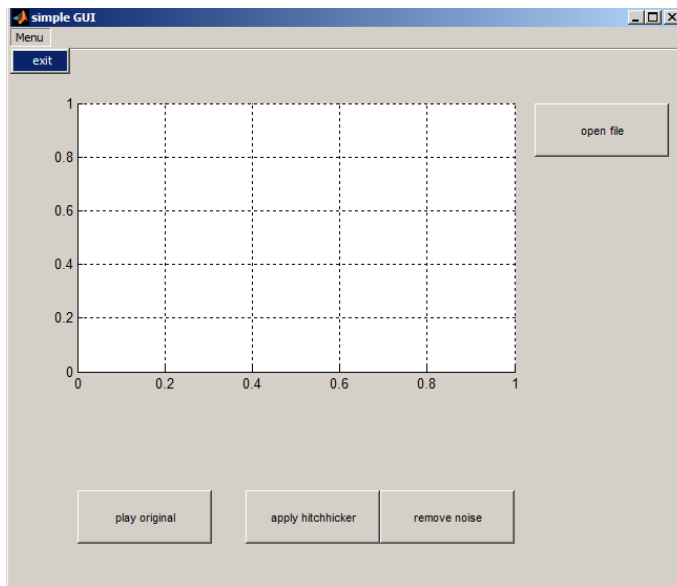
# Run the program

When the executable loads the below GUI is displayed on the screen.

All the “uimenu” that we have initialized on the coding section have generated visual components that are incorporated in the main window labeled as “simple GUI”.

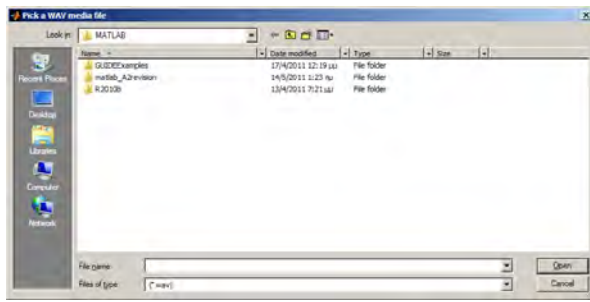


The whole window and all components are adjustable and constraint to maintain their proportions while the user adjusts with the mouse the size of the window.

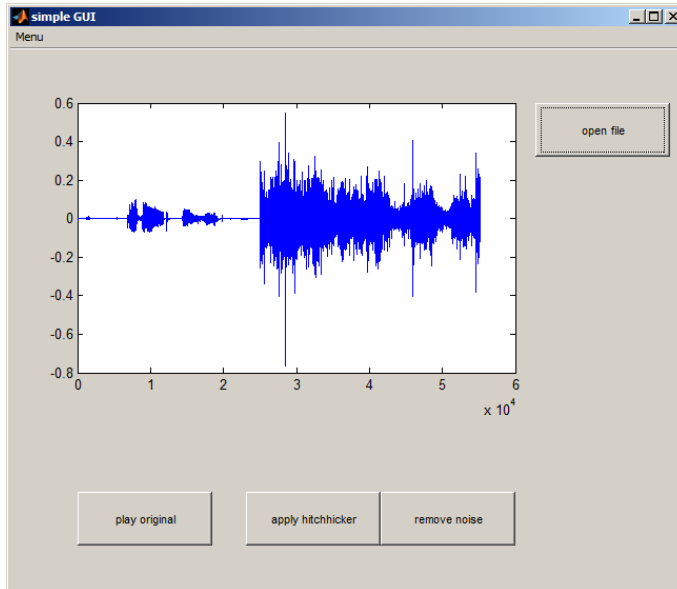


The Menu that is incorporated on the main window generates a drop down menu on user's click and displays an exit dialog that will close the program if it is invoked.

Using the 'open file' button the program will display a browse dialog that will provide the users with the potential to search for WAV files on the directories and load on demand.



The browse dialog initialize search from the current directory looking for “.wav” files



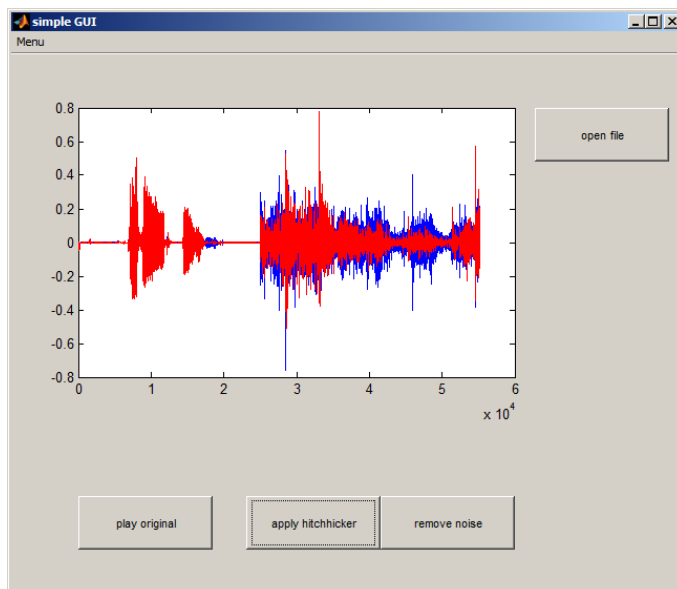
While the user loads a regarded sound file on the given criteria, this will be analyzed on the axes that exist within the ‘simple GUI’ window.

Now the user has given the capacity to generate three distinct functions with the given sound file.

- Listen to the original file
- Apply the hitchhiker filter
- Remove the noise

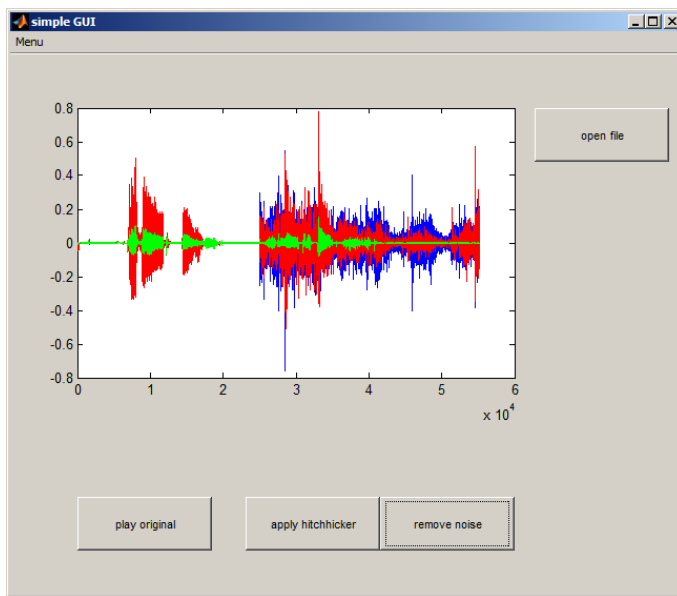
Of course for this specific occasion the ‘hitchhikerfiler.wav’ file should be loaded for the two filters to work properly.

a. Play file functionality will work effectively with all given WAV sound files since the function only loads and plays the original file as is.



b. The hitchhiker filter will append a filter to the original file and generate the prospect graphical analysis of the filtered sound on the axes area.

Though for this case the sound analysis is generated to display on a red output, hence differentiate from the original display.



c. The third button labeled as 'remove noise' will remove the noise from the original sound file and will enable the user to listen to a clear sound. At the same time a new graphical display is generated on the axes in a green color to distinguish from the previous displays.