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Basic Program Explanation – **SoundEnhance** for MatLab

- System last developed and tested on:

Intel Pentium 4, 1.9 GHz, 512 MB, Microsoft Windows 2000 Professional

MatLab 6.5

- Basic flow:

   The program starts with the SoundEnhance MatLab console command, which calls SoundEnhance.m's *Sounddemo* function. The main window and initial waveform are loaded. This main window is the launch pad for virtually all functionality of the program, delegating work through 'Callback' functions (Callback function a.k.a. event handler in Java).

   The main window uses the functions, *mclick*, *getkb*, and *showpt* to respond to GUI interaction. The various buttons and menus have their own GUI 'Callback' functions. These 'Callback' functions are set in the instantiations of the GUI objects (i.e. *uimenu*(…)).

   The *mclick* function responds to mouse clicks on the main window's waveform. It involves displaying the LPC Spectra chart (function *pllpc*) and its Controls window (function *drawctls*).

** See SoundEnhance/Contents.m for a listing of the primary functions used for the speech processing algorithms. These functions are called at some point during a 'Callback' for a GUI action.