

Playing Sound and Music

As it turns out, it is really easy to play sound and music. There's a really handy Windows API function, `PlaySound`:

```
BOOL PlaySound(  
    LPCTSTR pszSound,  
    HMODULE hmod,  
    DWORD   fdwSound  
);
```

Check out the Windows Dev Center for detailed documentation. I'm going to give you the CliffNotes version here. You probably only need to worry about `pszSound` and `fdwSound` parameters, you can pass 0 (NULL) for `hmod` most likely. The `pszSound` parameter takes the filename/pathname for a .wav file (only works with that format). This should be a null terminated string. If you are looking for free .wav files, I highly recommend <http://www.wavsource.com> for tons of clips from movies and a decent collection of sound effects (all free). You can probably waste too much time there. Anyway, copy all of your .wav files into the same directory with the rest of the game files. The `fdwSound` parameter is really important. This DWORD value takes flags that you can use to control how the sound is played. Each of these flags have values that are powers of two. You can therefore OR them (or add them) to simultaneously enable multiple attributes. Here are a few useful ones:

`SND_FILENAME` - means that you are specifying the file via filename (likely mandatory)

`SND_ASYNC` - sound should be played asynchronously (don't pause)

`SND_LOOP` - play the sound repeatedly...as in a loop

You will also need to have a few files included to make this work, so place this near the top of your source file:

```
include \masm32\include\windows.inc  
include \masm32\include\winmm.inc  
includelib \masm32\lib\winmm.lib
```

Let's say that I had named a file in my data section like:

```
SndPath BYTE "shining_heres_johnny.wav",0
```

Then you could play said sound with something like this:

```
invoke PlaySound, offset SndPath, 0, SND_FILENAME OR SND_ASYNC
```