GX Toolkit Introduction
Version 1.0

Description
The GX Toolkit is compiled as a set of static libraries. The tools implement a set of helper functions for graphics, user input, and audio. The application interface to the tools is a set of regular C functions and data structures.

The specific libraries are listed here.

Library	Description
clib	Misc. functions including random number generation, dynamic memory checking and Windows file management
dqueue	Data structure
dstack	Data structure
duplexbuffer	Data structure
dx9	Interface to Microsoft Direct3D and DirectInput
ev_w7*	Event processing (application interface)
gx_w7*	Graphics (application interface)
gxt_w7*	Graphics (application interface)
hashtable	Data structure
list	Data structure
ms_w7	Mouse (application interface)
queue	Data structure
snd8*	Audio interface to Microsoft DirectSound/DirectSound3D (application interface)
stack	Data structure
tts_w7*	Text-to-Speech interface to Microsoft SAPI 5.1 (application interface)

*An application program will generally interface only with these libraries. The other libraries are used internally by the GX Toolkit.

Architecture
The GX Toolkit is built on top of the Microsoft DirectX SDK. Functionality for graphics is built on top of the Direct3D 9 fixed-function pipeline. Functionality for input is built on top of DirectInput. For audio, the tools build on top of the DirectSound and DirectSound3D interfaces.

Application Structure
The GX Toolkit can be linked to a Win32 or Win32-MFC application. The sample code (demos) are built using the Microsoft MFC framework. This is for convenience since the MFC framework abstracts away details of the underlying Win32 framework such as the message pump. There is no advantage or disadvantage in terms of application performance to use MFC or not use MFC.

Applications should use the primary thread to run the message pump only and to execute specific Windows functions that are required to be run on the primary thread. All other application code, including the main rendering loop, should be run in a separate worker thread. The demos are set up in this manner.