Overview

Simple Angle Library was initially developed as the GUI system for the Beyond 3D package, a specialized 3D application. As such, SAL offers unique features that many other UI solutions lack. The library includes all common controls with native data exchange and build-in support for animation of all available data types. Over the years, SAL has also expanded to offer a full range of more advanced UI features such as complex 3D-enabled viewports or specialized widgets for manipulating and adjusting animation curves. All of the features can be easily used to develop almost any application. Originally developed on Windows, SAL will soon support Mac OS X.

Features

SAL comes with a large selection of classes covering most aspects of application development and necessary OS interactions. The GUI aspect encompasses most of the common controls available on most native systems, and can be easily expanded with custom controls as needed. Some of the key components include the following:

- Resizable, manual, or automatic window layout.
- Icon and bitmap libraries with tools for easy manipulation and deployment.
- Support for loading and saving most common image formats.
- Multithreading and parallelization support.
- File and directory handling support.
- HTML view supporting interactions.
- Clipboard (linked to OS clipboard), drag & drop support.

Benefits

The benefits of using our library include:

- A faster development cycle with the focus on core functionality rather than the mundane tasks of creating interface, data exchange and storage, localization and other OS related tasks such as file manipulation.
- A large collection of classes and data structures that simplify the development and enhance performance while utilizing all available processing power in a simple manner.
- Enhanced functionality from a wide selection of controls, often unavailable in the native OS interfaces. High level of customizations that allows the developer to create a look and feel that's unique for the application.
- A uniform look across platforms for a better and more predictable user experience. The look and behavior of the application do not change based on the platform and allow the user to migrate seamlessly between platforms.

Learning SAL in C++?

SAL comes with a complete reference available online and for download. The source code for all the examples is provided and should give developers an intuitive starting point for most projects. Knowledge of Windows or Mac OS programming is helpful but not necessary, since the API is designed to be independent of the OS environment. Although a practical understanding of C++ is assumed, extensive experience is not required. SAL is designed to make the development process as simple as possible while remain highly robust and customizable.