
Subject: Clutter Graphics Library

Posted by [captainc](#) on Tue, 02 Sep 2008 15:09:33 GMT

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From: <http://www.clutter-project.org/>

Quote:Clutter is an open source software library for creating fast, visually rich and animated graphical user interfaces.

Clutter uses OpenGL (and optionally OpenGL ES for use on Mobile and embedded platforms) for rendering but with an API which hides the underlying GL complexity from the developer. The Clutter API is intended to be easy to use, efficient and flexible.

Clutter currently features the following:

- * Scene-graph of layered 2D interface elements manipulated in 3D space via position, grouping, transparency, scaling, clipping and rotation.
- * Frame based animation engine providing path interpolation, transitions and other custom effects via Behaviours and Timelines.
- * Scriptable JSON based layout and animation file support.
- * Advanced input event handling including multiple pointing devices.
- * Custom Pango renderer providing efficient internationalised UTF8 text rendering.
- * Support for high end Open GL features such as Shaders and FBOs.
- * Support for media playback with GStreamer, Cairo graphics rendering, GTK+ embedding, Box2D physics engine and WebKit web rendering are available via optional add-on libraries.
- * Object oriented design via GObject with a familiar GTK+ like API.
- * Runs on Linux, Windows and OSX with backend window system support for GLX, EGL, WGL, SDL and Cocoa.
- * Support for mobile devices with fixed point internals and portability across Open GL, OpenGL ES 1.1 and OpenGL ES 2.0
- * Developed in C, with language bindings for Perl, Python, C#, C++, Vala and Ruby.

Clutter aims to be non specific -- it implements no particular style, but rather provides a rich generic foundation that facilitates rapid and easy creation of higher level tool kits tailored to specific needs.
