

Edukitty.org

Open-Source Application Framework and Network Environment for Schools

# PROJECT INFORMATION 2006 FOR DEVELOPERS



# “WHAT IS EDUKITTY?”



## AT A GLANCE

Edukitty is the first comprehensive Open-Source solution for education. Currently, we aim only at primary education but we don't rule out other educational purposes as well. Our goal is to create a platform independent development framework for C++-programmers to develop applications for schools, that answer to today's demands for media-rich software.

Besides an application development framework, Edukitty covers the needs for an easy-to-use, attractive and child-friendly desktop environment. It incorporates a replacement for the standard desktop on Microsoft Windows or Linux operating systems that can be configured to offer pupils available Edukitty-modules as well as the school's own preferred applications like wordprocessors and such.

## OPEN-SOURCE

Edukitty is entirely Open-Source and may be used free of charge. We believe that because every school has its own approach and requirements, educative software has to be easily adaptable. Because of Edukitty's open character is it very easy for schools to have changes made to Edukitty to fit their needs. This way schools don't have expensive licenses to pay and save money that could be spend to hire programmers to write specific Edukitty applications for their lessons – something that isn't possible with commercial software at all.

## MODULARITY AND INTEROPERABILITY

Applications inside Edukitty are written as special modules rather than normal applications. Modularity is found throughout the entire project: the GUI, server and window-manager are separate modules for example. Using this approach has great advantages over normal, application based methods. Modules are to develop easily and can communicate with one another because they're inside the same process. A modular approach also makes it possible to customize and expand Edukitty easily through the use of plug-ins.

## NETWORK-READY

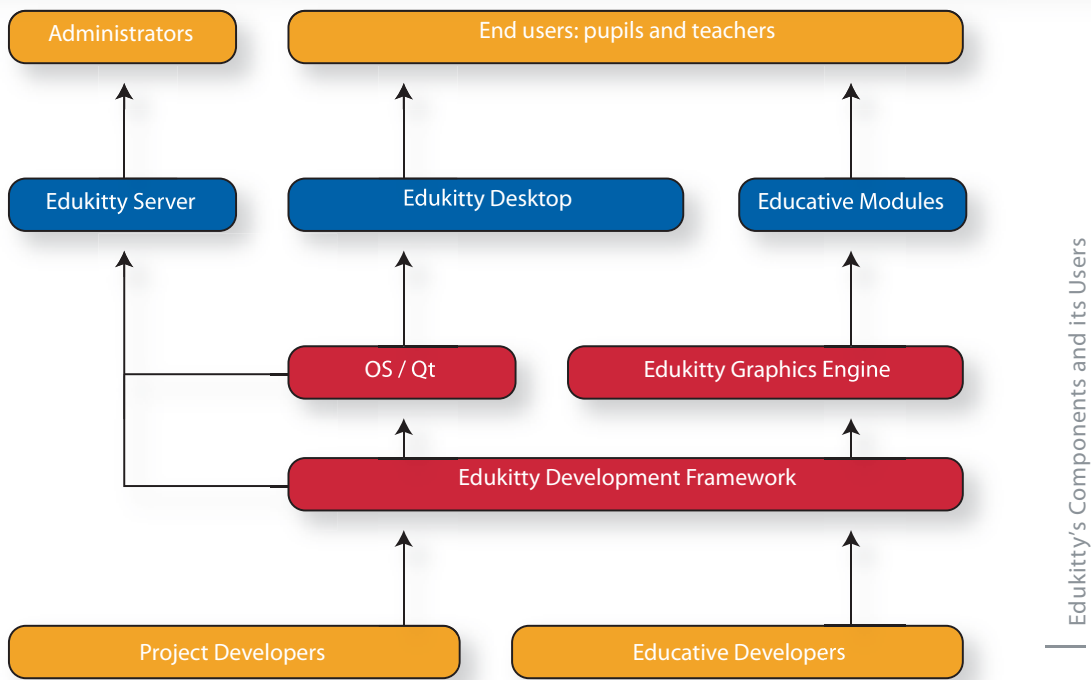
Edukitty was designed for network usage. It comes with a network server that has built-in support for databasing and complete user-management. Every single pupil has his or her own user-name on the Edukitty network so everyone's preferences and collected results are carried from computer to computer throughout the network. Each pupil also has a private database on the server that can be manipulated by application programmers by means of a very easy-to-use API. This offers a great freedom for developers to create intelligent applications.

Networking has more advantages. Edukitty clients can be connected to the school's server over the internet too, so pupils who are to stay at home due to, for example, long-term illness, have the ability to communicate with their fellow pupils at school. It is also possible for developers to use the network to communicate between clients: this can be very useful for creating interactive, multi-user applications.

## “OPEN SOURCE”

Open-Source roughly means that the programming code of an application is freely available to others. In contrast with commercial applications, where the source-code is put away in a safe, you may download Edukitty's

source-code whenever you want, learn from it and contribute to its development. You may also 'fork' it into your own new project if you want. Ofcourse, any commercial use is prohibited. In addition to this, Edukitty.org does not charge license fees for its software. Therefore the project's income exists mainly of donations/sponsorship, custom assignments for schools and support contracts with schools.



Edukitty's Components and its Users

**TECHNICALLY**

Edukitty is programmed in C++ and features an easy-to-understand API that is very programmer-friendly. For the graphical interface, Edukitty is based on Qt – the well-known graphical toolkit by Trolltech. We attach a lot of importance to the use of open standards – for example XML, that is used for the entire project. Edukitty uses its own, yet open, network protocol and query language that is also based on XML.

**MEDIA-RICH**

One of Edukitty's major points of design is the extensive use of graphics and animation. We're putting a lot of time in graphics development, icons and of course in our mascot. A graphical-engine based on OpenGL is also planned and we're currently exploring the use of audio and video. Several other ideas like Free-Form Input (tolerant input parsing), Point 'n Feedback (animated mouse-feed-

back) and map-based navigation are also planned to make their way into Edukitty.

**LOGGING**

Thanks to Edukitty's database system, the results that pupils achieve with modules can be easily tracked. Teachers can monitor these results or even fetch them at home by using to the school server through the internet.

**"WHEN WILL IT BE DONE?"**



Currently, the project is slowly entering its beta-phase. For those who are not familiar with software development: this is usually a second phase of an application where its future end-users are given a chance to test it and give feedback. Edukitty is still far from usable: do not expect that it will reach a state of fair usability before the end of 2006.

**"HOW CAN YOU PARTICIPATE?"**

Being an Open-Source project we are always looking for new participants. Possible assignments include writing documentation, posting news on the website, advising

on the educational area and, of course, programming. With the last one experience with C++ and Qt is required. Since the project is slowly becoming 'useful' for application programmers, we are currently looking for new developers who want to experiment with Edukitty. If you are interested feel free to contact us and be sure to check our website, [www.edukitty.org](http://www.edukitty.org)! An SDK is planned for Q3.

## THE HISTORY OF EDUKITTY

The Edukitty project was founded by Barry Faas under the name of 'Educat' in September 2002, as a candidate for a programming contest by the Dutch Linux Magazine. Winning this contest one half year later simply gave enough motivation to continue on the project for about three additional years. After one year however, we had to change the project's name from 'Educat' to Edukitty due to issues with the legal owner of this name. In the past period of development Edukitty was sponsored by both the Open-Source community as well as its future users like the Dutch primary school 'Rosa Boekdrukker' for example.



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Our mascots were made using Blender3D, a free Open-Source modelling and rendering program. The sources and datafiles of Kitty and Caty are also freely available for download and with Blender you can make new renders, poses and even animations of them. We encourage developers of educative applications to use them in new applications they make with Edukitty.

### Kitty & Caty!

