

# WebGL in GWT

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# GWT - Google Web Toolkit

- ✦ Toolkit for creating RIAs
- ✦ Java syntax
- ✦ Compiled to JavaScript
- ✦ JavaScript is optimized, minified and obfuscated
- ✦ Comes with widgets
- ✦ Ajax enabled

# WebGL in GWT

gwtgl

quake2-gwt-port

gwt-g3d

gwto3d

WGT

gwt-webgl?

# 1. GwtGL

- ✦ GWT widget
- ✦ Direct WebGL binding in Java
- ✦ Apache 2.0 license
- ✦ Version 0.2
- ✦ <http://code.google.com/p/gwtgl/>

# The Promise

*“Type safety and the Java Toolset help you to write your apps in less time compared to plain JavaScript development”*

*“The GWT compiler generates optimized JavaScript code, so you will achieve higher frame rates”*

# Summary

- ✦ Immature (announced 24th of February 2010)
- ✦ Missing documentation
- ✦ Missing and broken tutorial
- ✦ No forum
- ✦ Actively developed by 2 developers
- ✦ Clear goal
- ✦ Looks promising

## 2. gwt-g3d

- ✦ GWT widget
- ✦ Custom, low-level API for WebGL
- ✦ Apache 2.0 license
- ✦ <http://code.google.com/p/gwt-g3d/>

# The Promise

*“This project seeks to provide a type-safe, easy to use wrapper of WebGL in GWT (inspired by OpenTK [1])”*

[1] The Open Toolkit is an advanced, low-level C# library that wraps OpenGL, OpenCL and OpenAL. It is suitable for games, scientific applications and any other project that requires 3d graphics, audio or compute functionality.



# Summary

- ✦ Not very actively developed
  - ✦ Last commit in 23rd of October 2010
- ✦ One developer
  - ✦ Same dev does gwt-g2d, which seems more active
- ✦ No forum
- ✦ No documentation or proper tutorial
- ✦ Some examples

# 3. gwto3d

- ✦ GWT widget?
- ✦ Java bindings for the O3D browser plugin
- ✦ BSD License
- ✦ <http://code.google.com/p/gwto3d/>

# The Promise

*“The first goal is to provide a full JSNI wrapping for the low level O3D API”*

*“The second goal is to create a practical high level 3d API without any non-gwt dependencies (except, of course, for o3d)”*

# Summary

- ✦ Not actively developed
  - ✦ Last commit in 26th of December 2009
- ✦ One developer
- ✦ Forum with 15 messages (last one March 3, 2010)
- ✦ No documentation or tutorial
- ✦ One sample zip bundle

# 4. WGT

- ✦ GWT widget?
- ✦ WebGL Toolkit Module for GWT
- ✦ GNU General Public License, Version 3
- ✦ <http://sourceforge.net/projects/wgt/>

# The Promise

*“Besides the WebGL-Wrapper it does provide an Wrapper for Canvas2D, several math classes, a resource manager, an input manager, a simple scene manager framework and some other useful tools”*

# Summary

- ✦ Not actively developed
  - ✦ Project zip file uploaded in 18th of January 2010
- ✦ One developer
- ✦ No forum
- ✦ No documentation or tutorial
- ✦ Project contains couple of examples

- ✦ <http://code.google.com/p/gwt-webgl/>
- ✦ <http://code.google.com/p/quake2-gwt-port/>
- ✦ <http://playwebgl.com/games/quake-2-webgl/>



# Conclusions

- ✦ No official support for WebGL in GWT
- ✦ Currently one project (gwtgl) which seems active
- ✦ No high level API for WebGL
- ✦ Is somebody using these toolkits?