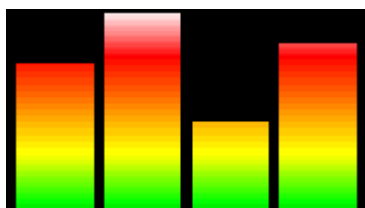


Tutorials Listed By Subject

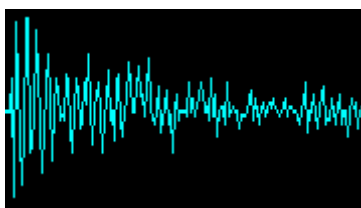
This section contains all tutorials indexed by subject for [orx](#), an opensource, portable, lightweight, data-driven & 2D-oriented game engine.

Contributions are very welcome.

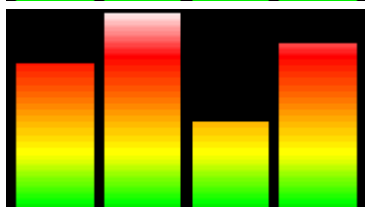
Audio



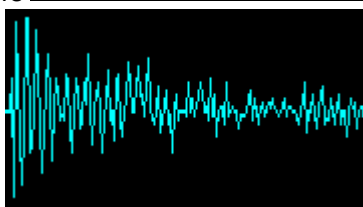
Sound & Music



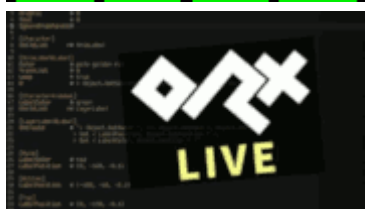
Sound Recording



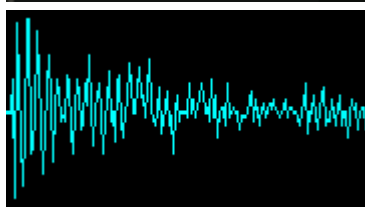
Sound Buses



Audio Filters



Audio filters, miniaudio & audio extensions Video



Sound Spatialization

Android



Working with Android (new users start here!)



Android Studio, NDK, and Orx library



Compiling Orx Library & Demo



Project

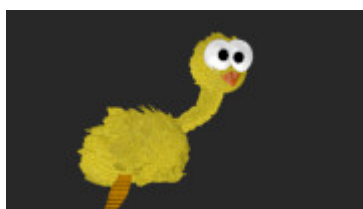
Android Demo as a template project



Using SWIG to talk to Java on Android continued deployments

Android Packaging Scripts for

Animation



New Animation System Walkthrough



Basic

Animation



Animation and Clearing Targets



Animation Inheritance with Prefixes



Text Animation

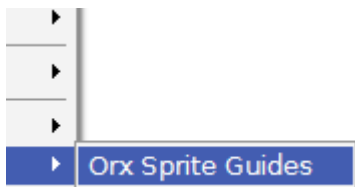


Realistic Walk Movement



Creating Particle

Explosions



Addin for The Gimp to Extract Guides for Configuration



Mouse over effect for buttons



Creating an

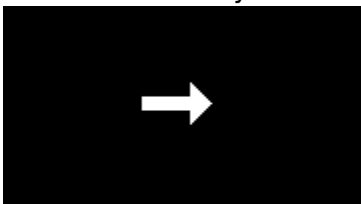


Insect Object (Animation)

Animation Synchronization



Zero Length Frames



See more Animation

Examples

C++



Localization



Stand Alone Application



Using orxObjects in Classes with an EventHandler



in a game

An Introduction to orx/Scroll



Compiling hidapi

Cameras



Viewport and Camera

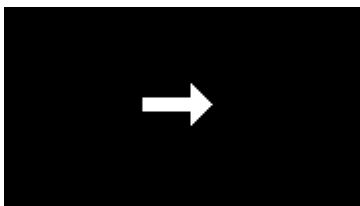


Cameras and Frustums



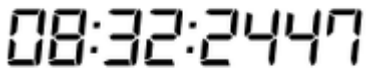
Camera Examples

orxScroll, Cameras and Viewports



See more

Clocks



Clock

Code::Blocks



Getting Code::Blocks for Windows



Building the



Orx Library with Code::Blocks on Mac OS X
Code::Blocks on Linux

Building the Orx Library with

Codelite



Getting Codelite for Windows



Building the Orx



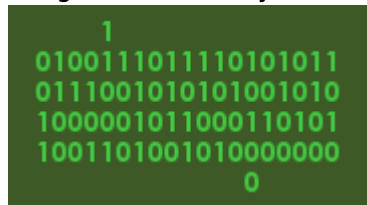
Library with Codelite on Mac OS X

Building the Orx library on Linux with

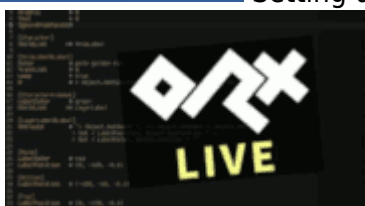


Codelite

Setting up Codelite on Linux



Stand



Alone Application

Codelite & Environment Variables Video

Color / Colour

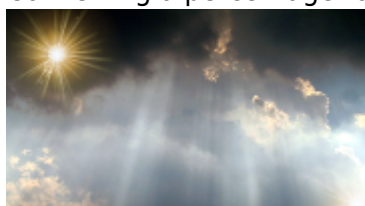


OrxCOLOR and how to colour an object

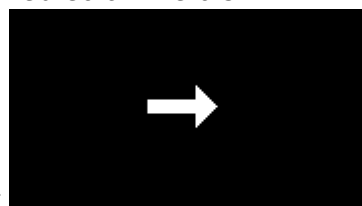


Converting a percentage to a color

Web Color Literals



A natural-looking glowing ball effect



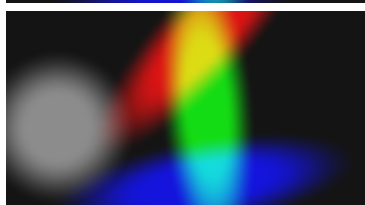
See more

Color Examples

Compositing

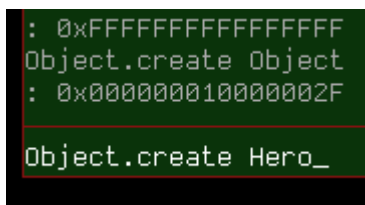


Compositing (2D lighting with offscreen rendering)



Viewport Render to Texture

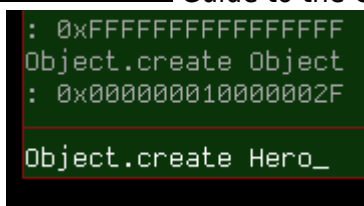
Console



Guide to the Orx Console and Commands



The



Bounce Demo

Custom Console Colors

Command Module

```

: 0xFFFFFFFFFFFFFFFF
Object.create Object
: 0x000000010000002F

Object.create Hero_

```

Command Module Syntax

```

: 0xFFFFFFFFFFFFFFFF
Object.create Object
: 0x000000010000002F

Object.create Hero_

```

Command and

Timeline Notes

Config

```

[ShipObject@ObjectDefaults]
Graphic = ShipGraphic
Position = (400, 550, 0)
Scale = (4, 4, 0)
Body = ShipBody

```

Encrypting Config Files

```

[ShipObject@ObjectDefaults]
Graphic = ShipGraphic
Position = (400, 550, 0)
Scale = (4, 4, 0)
Body = ShipBody

```

Saving information to a

config file

```

[ShipObject@ObjectDefaults]
Graphic = ShipGraphic
Position = (400, 550, 0)
Scale = (4, 4, 0)
Body = ShipBody

```

Changing the Default Config File



Config Values

```

[ShipObject@ObjectDefaults]
Graphic = ShipGraphic
Position = (400, 550, 0)
Scale = (4, 4, 0)
Body = ShipBody

```

Stepped Random Values

```

[ShipObject@ObjectDefaults]
Graphic = ShipGraphic
Position = (400, 550, 0)
Scale = (4, 4, 0)
Body = ShipBody

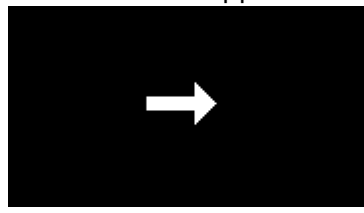
```

Retrieving and Updating



Local-

only Config Overriding Video

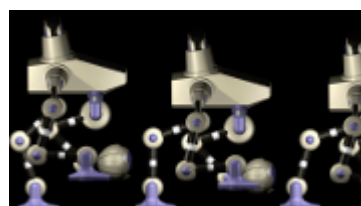


See more Config Examples

Controls



Interaction, Control and Physics



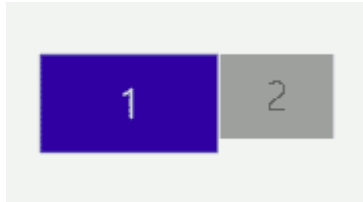
Realistic Walk



Movement

Creating Particle Explosions

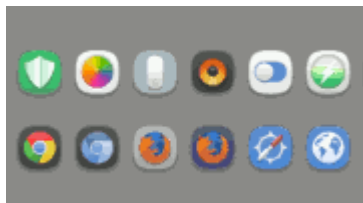
Display



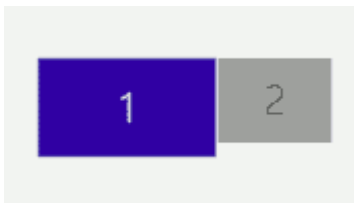
Multiple Monitors



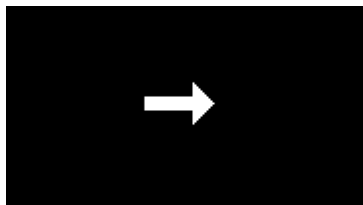
Custom Mouse Cursors



Application Icons



Borderless Window Mode



See more Display Examples

Downloads



Getting Started with Orx

Events



Realistic Walk Movement



Using orxObjects in

Classes with an EventHandler



Creating Particle Explosions

Fonts



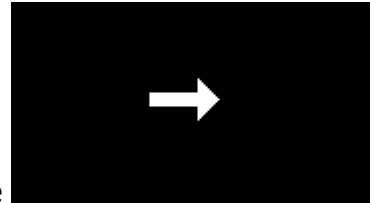
Fun with Text and Shaders



orxFontGen



Font tool for unicode, including Chinese



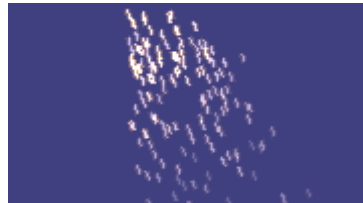
See

[more Font Examples](#)

FX



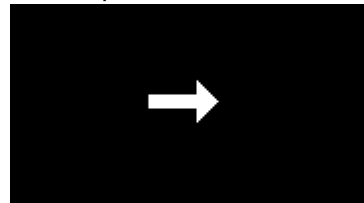
FX



Sparks with Spawners and FX



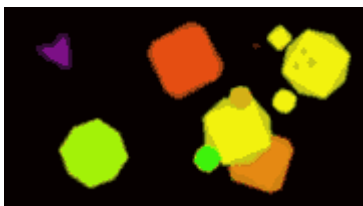
Creating an Insect Object (Speed FX)



See

[more FX Examples](#)

Game Writing Guides



Learning Orx with Asteroids

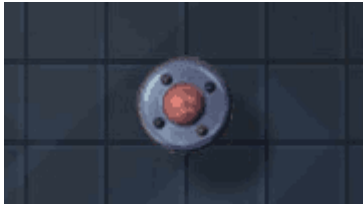


Beginner's Guide -

[Platform Game](#)



[Beginner's Guide - 2D UFO Game](#)



Beginner's Guide - UFO Game Video Version

iPad / iOS / iPhone



a game to the iPad

Using compressed textures on the iPad

Porting

Input



8 Way Joystick / Gamepad Control



Analog

Joystick / Gamepad Control



Analog Stick Threshold



Overriding a Controller Mapping



Remapping

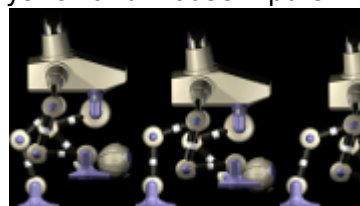
Controller Inputs



Testing Key, Joystick and Mouse Inputs



Interaction, Control and Physics



Realistic Walk



Movement

Creating Particle Explosions



Mouse

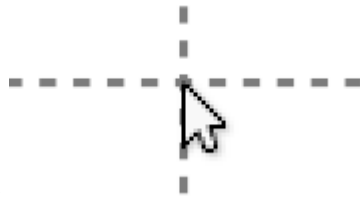
over effect for buttons



Notes on input



Keyboard Inputs

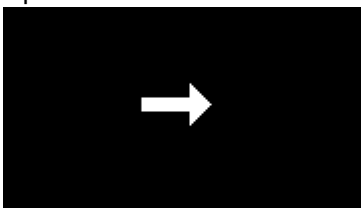


Mouse Grab



Compiling hidapi

in a game

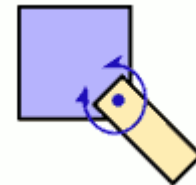


See more Input Examples

Joints

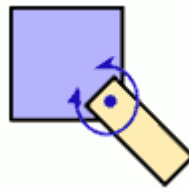


Creating an Insect Object (Revolute Joint)



Weld

Joint on parent/child Objects with Bodies



Z-order of Objects with Joints

Level Mapping



Semi-dynamic Objects and Level Mapping





Using the Tiled to ORX Converter

Hexagon Grid Tutorial



Creating Maps in Scrolled



Pathfinding

Linux



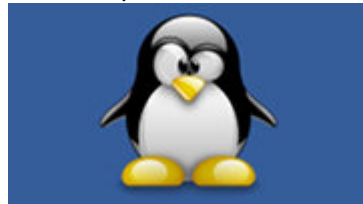
Setting up a Development Environment on Linux



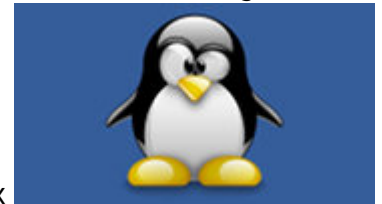
Linux Setup (brief overview)



Building the Orx



Codelite in Linux



library on Linux with Codelite

Building the Orx Library with Code::Blocks on Linux

Localisation



Languages

Localization



Localization and Multiple

Mac OS X



Setting up a Development Environment for Mac OS X



Cloning and building the Orx library on Mac OS X



Building the Orx Library with Xcode on Mac OS X



Building the Orx Library with Codelite on Mac OS X

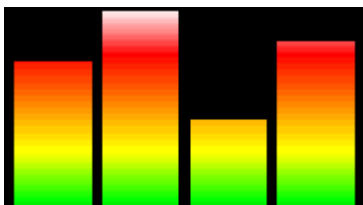


Building the Orx Library with Code::Blocks on Mac OS X

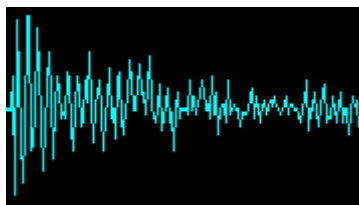


Setting up a game project on Mac OS X

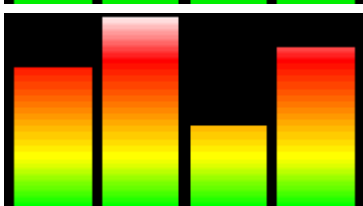
Music



Sound & Music



Sound Recording

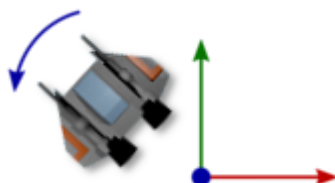


Sound Buses

Objects



Basic Object



Object Transformation



Semi-dynamic Objects and Level Mapping



Objects in Classes with EventHandlers



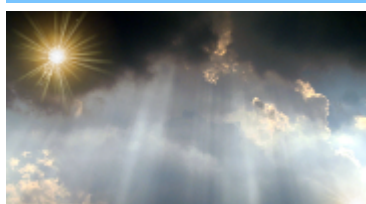
The Binding of Objects



Object Traversing



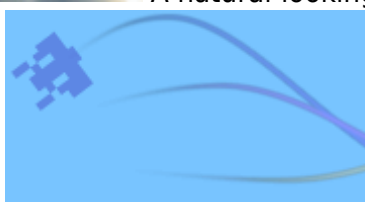
Notes on Rotation



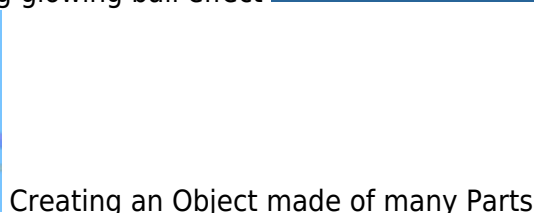
A natural-looking glowing ball effect



Creating



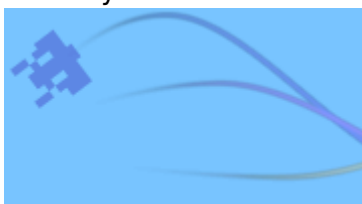
an Insect Object



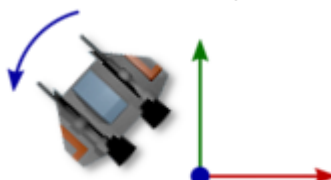
Creating an Object made of many Parts



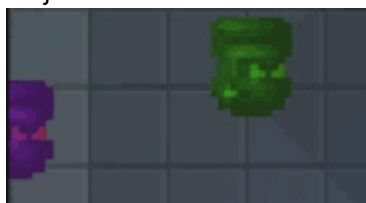
Passing items from one Object to another



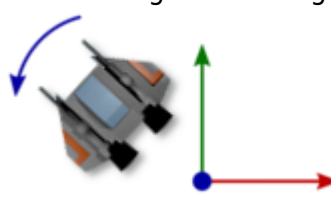
Object Lifetime



Relative Object Positioning and Scaling



Teleporting on Screen Edges



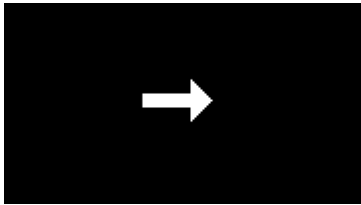
Literals for



Objects



Command Hooks for Object Events



Aged Objects

See more Object Examples

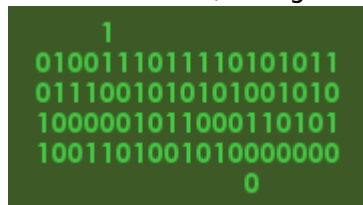
Orx Code (General)



orxSTRINGS, strings and chars



orxCOLOR and



how to colour an object

Lists, HashTables and Trees

Orx (Setting up)



Cloning Orx from Github



Using Premake to

create a Build Project to compile ORX from scratch



Compiling Orx with

mingw32/gmake



Download a pre-built Orx for your environment



The Bounce Demo



Getting & setting up Orx

Video

Orx/Scroll (C++ Abstraction layer for Orx)



An Introduction to Orx/Scroll



The Binding of



Objects

Creating an orx/Scroll project using 'init'



Creating Maps in ScrollEd



Colliding

ScrollObjects with Orx Objects



Access Scroll class from ScrollObject



ScrollObject to ScrollObject Communication



Changing the Default Config File for orx/Scroll



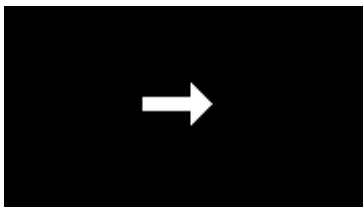
Moving a ScrollObject along

a curve



orxScroll, Cameras and Viewports





ProgressBars in orxScroll
orx/Scroll Examples

Pathfinding

See more

Physics



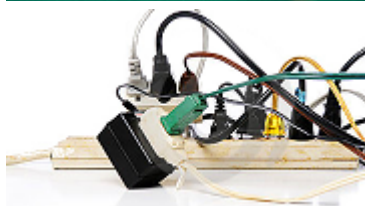
Basic Physics and Collisions

Physics



Raycasting

Interaction, Control and Physics

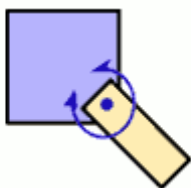


Using the Inkscape SVG to ORX Converter



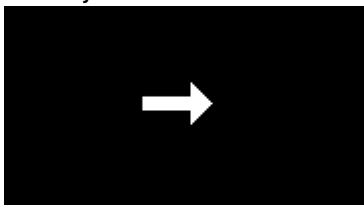
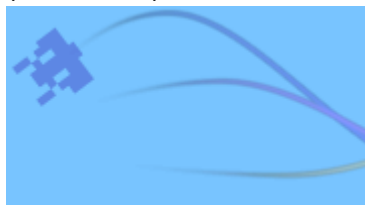
Creating an Object made of many Parts

Creating an Insect Object



(Animation)

Weld Joint on parent/child Objects with Bodies



Applying a force at a position point

See more

Physics Examples

Premake (deprecated)



Using Premake to create a Build Project to compile ORX from scratch

Projects



Creating your own project using 'init' The 'init'



command & available extensions Video

Creating an orx/Scroll project



using 'init'

How to use Premake to create a build configuration for your



own project in any IDE/OS

XCode 3 Tutorial



Working with Android

~~Native Tutorial~~ (deprecated)



Using the Android Demo as a template for your own projects



Using orxhub (deprecated)

Publishing



Preparing for a release under Windows



Preparing for a release under MacOSX



Console-less Applications



Android Packaging Scripts for continued deployments



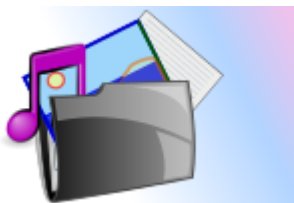
Common Release Checklist

Scrolling

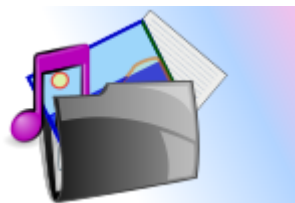


Scrolling

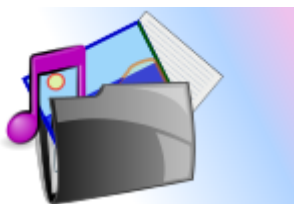
Resources



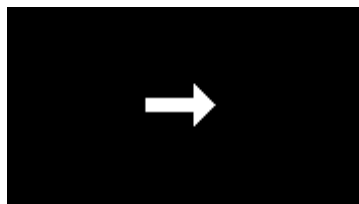
Zip Archive Resources



Resources over HTTP



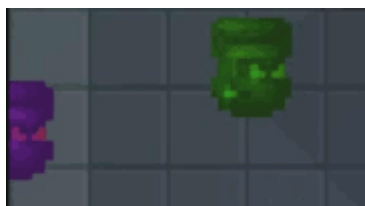
Resource Reloading



See more Resource

Examples

Scenes



Data-Driven Scene Transitions

Shaders



Getting started with Shaders in Orx

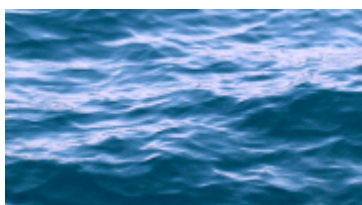


Shaders in

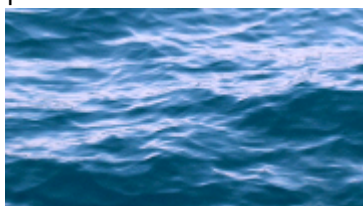


Screen Space

Spawner & Shader

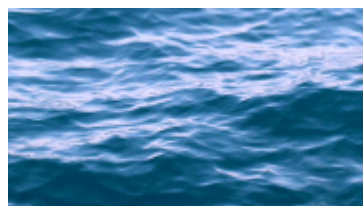


Shader &

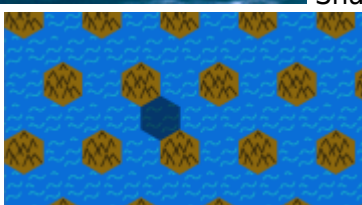


Lighting

Shader coordinates tutorial

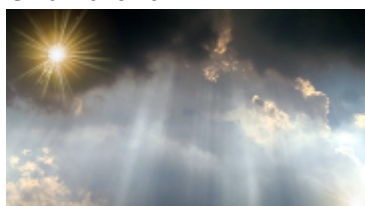


Hexagon



Grid Tutorial

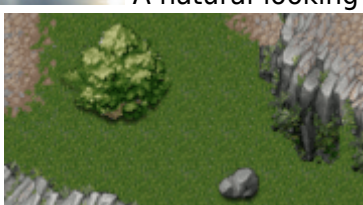
Hexagon Grid Tutorial (Axial/Cubial Coordinates)



A natural-looking glowing ball effect

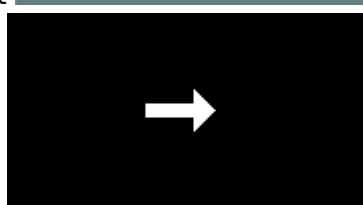


Fun with



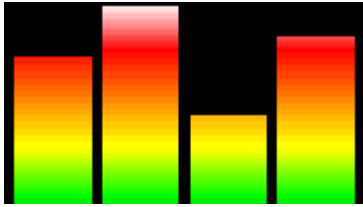
Text and Shaders
Shader Examples

Maps in a Shader

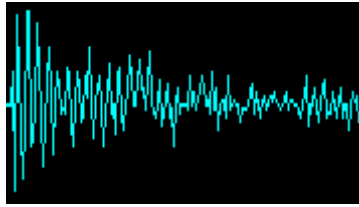


See more

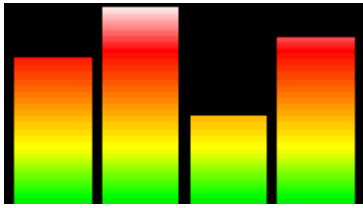
Sound



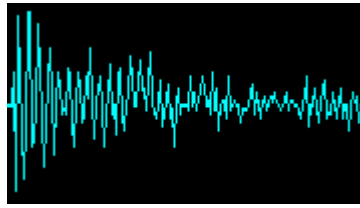
Sound & Music



Sound Recording



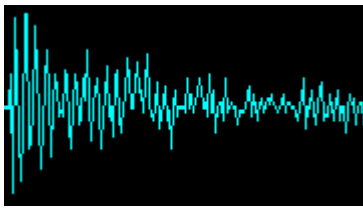
Sound Buses



Audio Filters



Audio filters, miniaudio & audio extensions Video



Sound Spatialization

Spawners



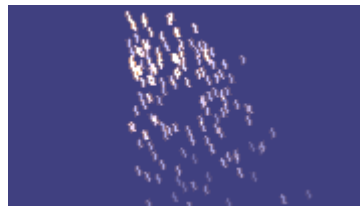
Spawner & Shader



Creating Particle Explosions



Spawning Bullets



Sparks with Spawners and

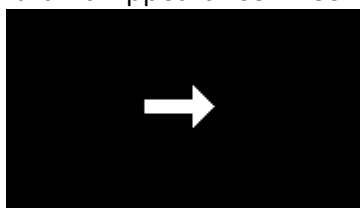


FX Futurama Appearance Effect



Spawners

using Relative Position and Scale



See more Spawner Examples

Sprites



Using the darkFunction to ORX Converter Addin for The Gimp to Extract Guides for Configuration

System



The Clipboard

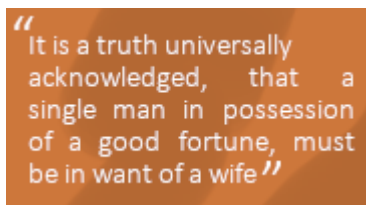


Drag and Drop



Commandline Parameters

Text



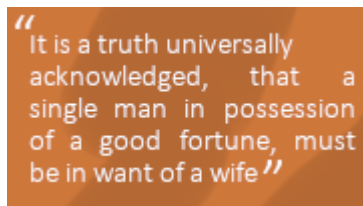
Text Boundaries



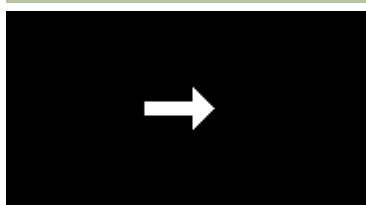
Fun with Text and Shaders



orxFontGen



Text Background



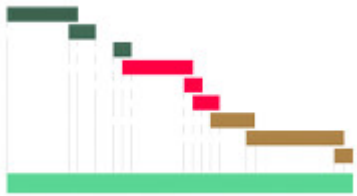
See more Text Examples

Textures



Using compressed textures on the iPad

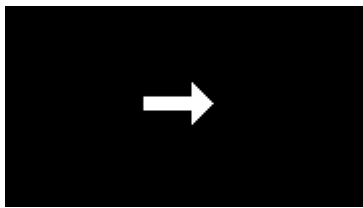
Timelines / Tracks



Timelines / Tracks

```
: 0xFFFFFFFFFFFFFFFF
Object.create Object
: 0x000000010000002F
Object.create Hero_
```

Command and Timeline



Notes

See more Track and Command Examples

Tools



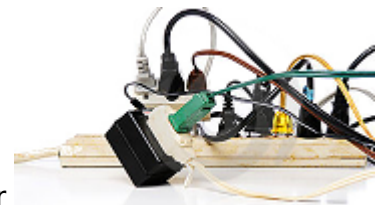
The Orx Profiler



orxFontGen



Using the Inkscape SVG to ORX Converter



Using the TMX to ORX Converter



Using the darkFunction to ORX Converter



all Structures to a Tree

Using SWIG to talk to Java on Android

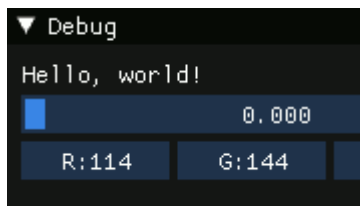


Logging

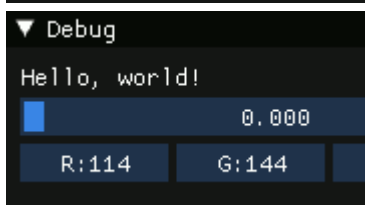
UI / User Interface



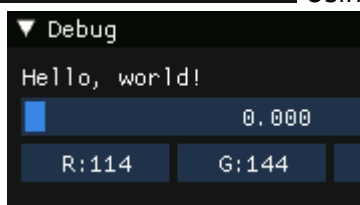
Using ImGui with Orx



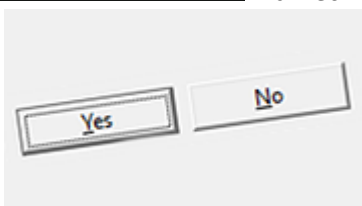
Using Nuklear with Orx



Nuklear Font Management



Notes on Nuklear

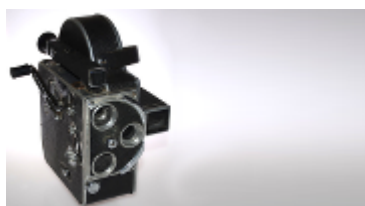


with Orx
Mouser over effect for buttons

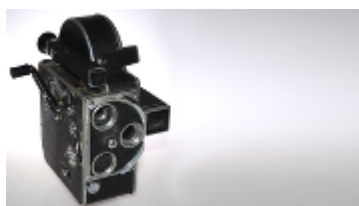
File Dialogs and Messageboxes



Viewports

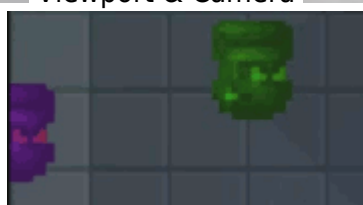


Viewport & Camera



Heads Up Display (HUD)

using Viewport + Groups



Teleporting on Screen Edges

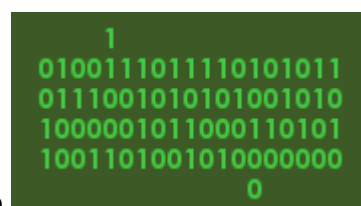


Viewport Render to Texture

Visual Studio



Building the Orx library with Visual Studio



Stand Alone Application

Windows



Compiling Orx with mingw32/gmake
the Orx library with Visual Studio



Building

XCode



Xcode4 Scroll, Console-less, Resources
Building the Orx Library with Xcode on Mac OS X



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