

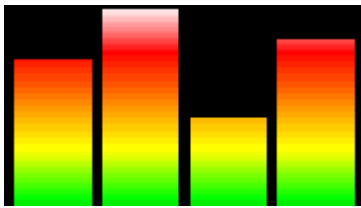
Tutorials Listed By Subject

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

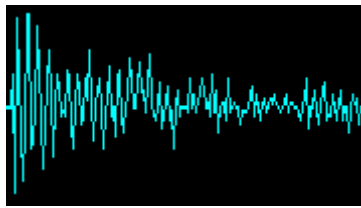
Contributions are very welcome.

 Search

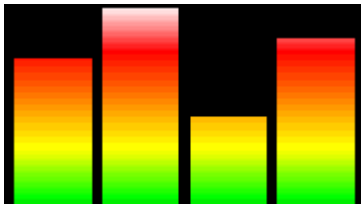
Audio



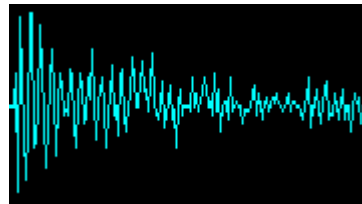
Sound & Music



Sound Recording



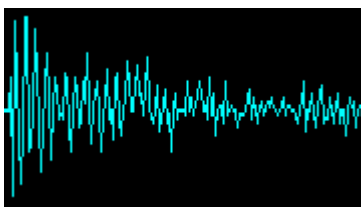
Sound Buses



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

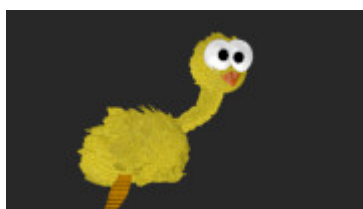
Android Demo as a template project



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

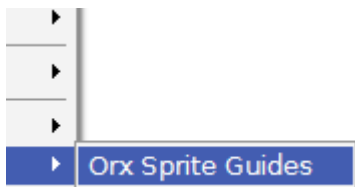


Realistic Walk Movement



Creating Particle

Explosions



Addin for The Gimp to Extract Guides for Configuration



Mouse over effect for buttons



Creating an

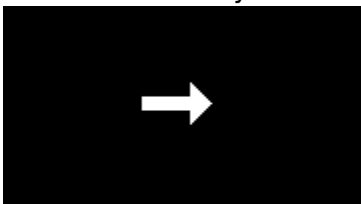


Insect Object (Animation)

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

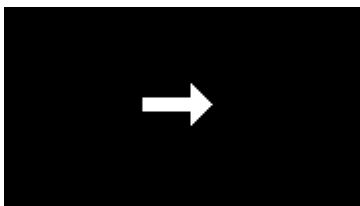


Cameras and Frustums



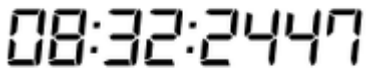
Camera Examples

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



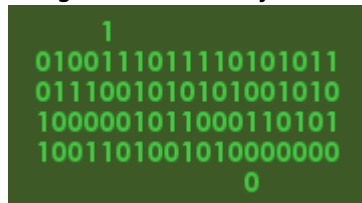
Library with Codelite on Mac OS X

Building the Orx library on Linux with



Codelite

Setting up Codelite on Linux



Stand



Alone Application

Codelite & Environment Variables Video

Color / Colour

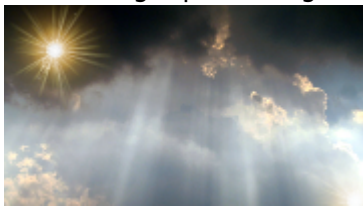


OrxCOLOR and how to colour an object

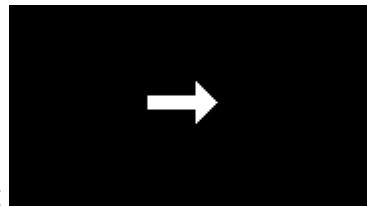


Converting a percentage to a color

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

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

Guide to the Orx Console and Commands



The

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

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



Changing the Default Config File for orx/Scroll

```

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

```

Retrieving and Updating

Config Values

```

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

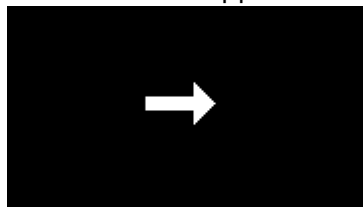
```

Stepped Random Values



Local-

only Config Overriding Video

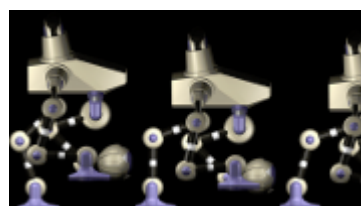


See more Config Examples

Controls



Interaction, Control and Physics



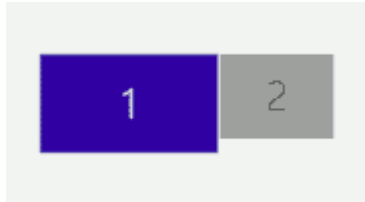
Realistic Walk



Movement

Creating Particle Explosions

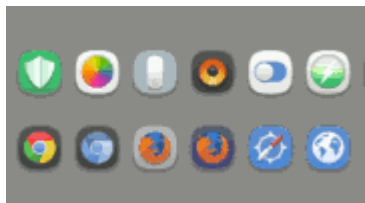
Display



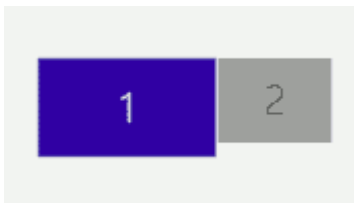
Multiple Monitors



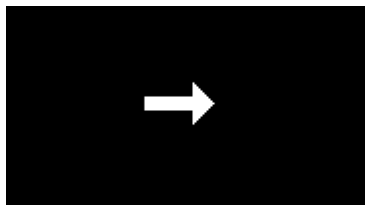
Custom Mouse Cursors



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



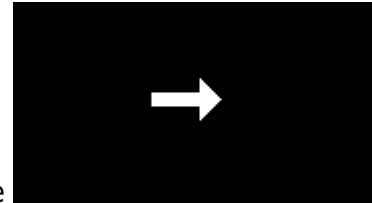
Fun with Text and Shaders



orxFontGen



Font tool for unicode, including Chinese



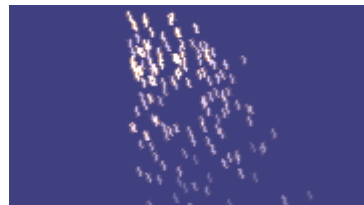
See

[more Font Examples](#)

FX



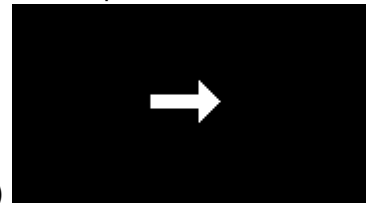
FX



Sparks with Spawners and FX



Creating an Insect Object (Speed FX)



See

[more FX Examples](#)


Game Guides



Beginner's Guide - Platform Game



Beginner's

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

iPad / iOS / iPhone



Using compressed textures on the iPad



Porting

a game to the iPad

Input



8 Way Joystick / Gamepad Control



Analog



Joystick / Gamepad Control

Analog Stick Threshold



Overriding a Controller Mapping



Remapping

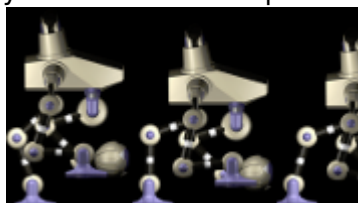


Controller Inputs

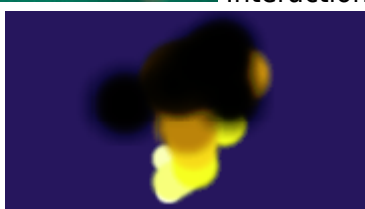
Testing Key, Joystick and Mouse Inputs



Interaction, Control and Physics



Realistic Walk



Movement

Creating Particle Explosions



Mouse

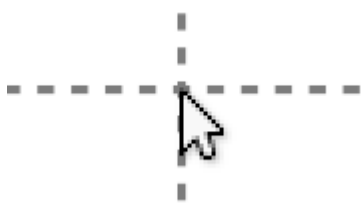


over effect for buttons

Notes on input



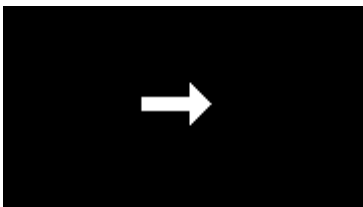
Keyboard Inputs



Mouse Grab



Compiling hidapi



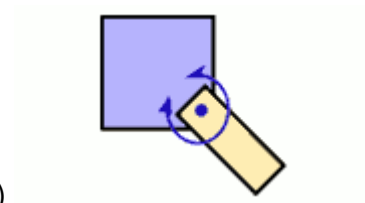
in a game

[See more Input Examples](#)

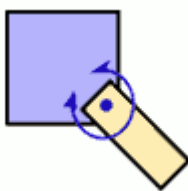
Joints



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



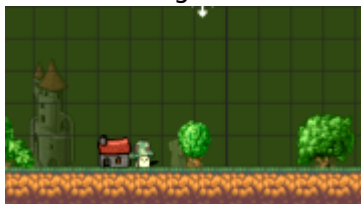
[Using the Tiled to ORX Converter](#)



[Hexagon Grid Tutorial](#)



[Creating Maps in Scrolled](#)



[Pathfinding](#)

Linux



[Setting up a Development Environment on Linux](#)



Linux Setup (brief overview)



Building the Orx



library on Linux with Codelite

Codelite in Linux



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

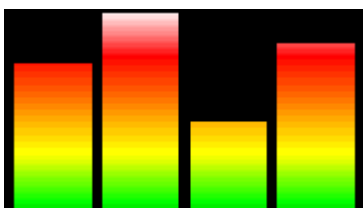


Building the Orx Library with Code::Blocks on Mac OS X

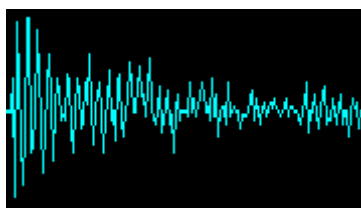


Setting up a game project on Mac OS X

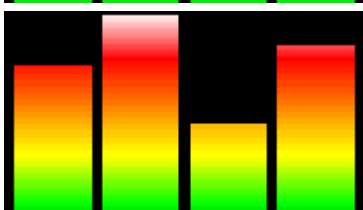
Music



Sound & Music



Sound Recording

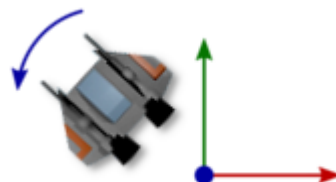


Sound Buses

Objects



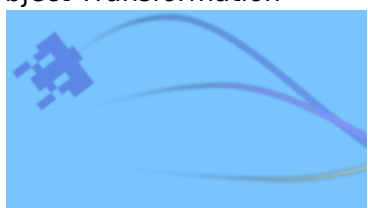
Basic Object



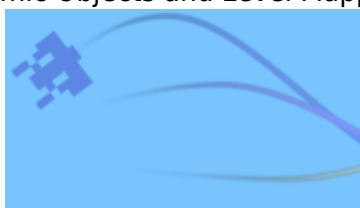
Object Transformation



Semi-dynamic Objects and Level Mapping



Objects in Classes with EventHandlers



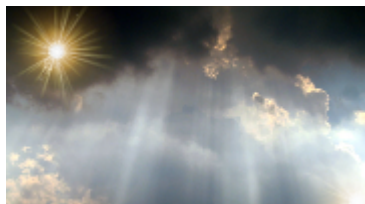
The Binding of Objects



Object Traversing



Notes on Rotation



A natural-looking glowing ball effect



Creating

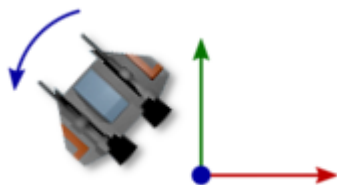


Creating an Object made of many Parts

an Insect Object

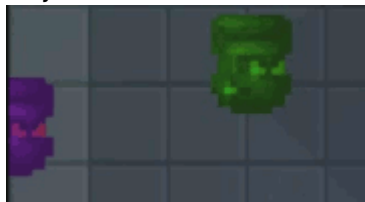


Passing items from one Object to another

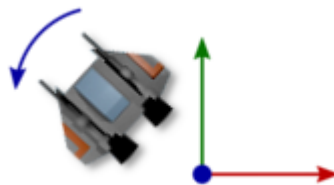


Object Lifetime

Relative Object Positioning and Scaling



Teleporting on Screen Edges



Literals for

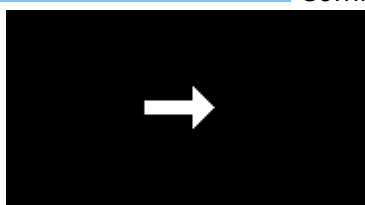
Objects



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



SCROLL

Objects



Creating an orx/Scroll project using 'init'



SCROLL

Colliding

Creating Maps in ScrollEd



SCROLL

ScrollObjects with Orx Objects

Access Scroll class from ScrollObject



SCROLL



SCROLL

ScrollObject to ScrollObject Communication



SCROLL

Changing the Default Config File for orx/Scroll

Moving a ScrollObject along



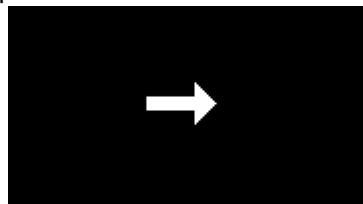
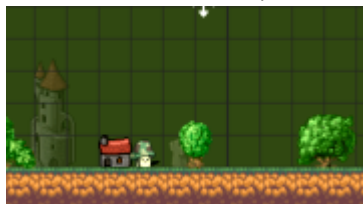
SCROLL



SCROLL

a curve

orxScroll, Cameras and Viewports



ProgressBars in orxScroll
orx/Scroll Examples

Pathfinding

See more

Physics



Basic Physics and Collisions



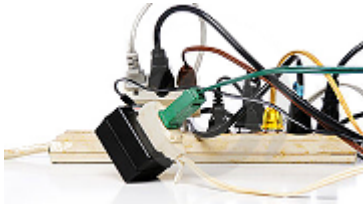
Physics



Raycasting



Interaction, Control and Physics



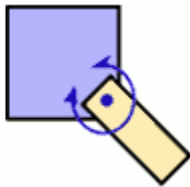
Using the Inkscape SVG to ORX Converter



Creating an Object made of many Parts



Creating an Insect Object



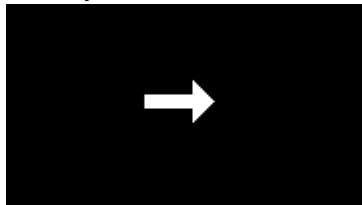
(Animation)

Weld Joint on parent/child Objects with Bodies



Physics Examples

Applying a force at a position point



See more

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

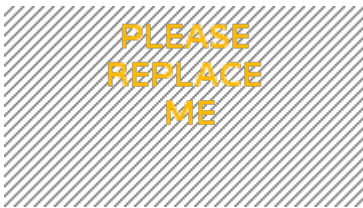


Android Packaging Scripts for continued deployments



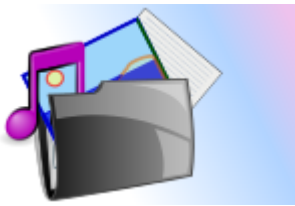
Common Release Checklist

Scrolling

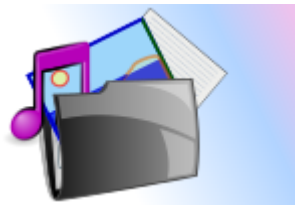


Scrolling

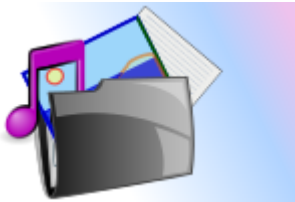
Resources



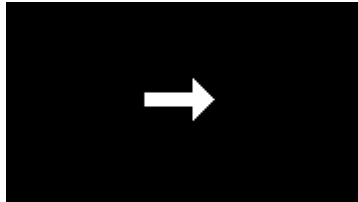
Zip Archive Resources



Resources over HTTP



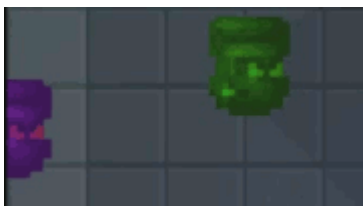
Resource Reloading



See more Resource

Examples

Scenes



Data-Driven Scene Transitions

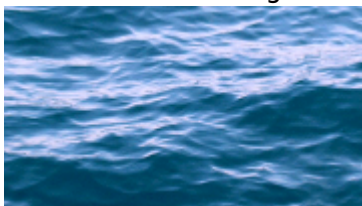
Shaders



Getting started with Shaders in Orx



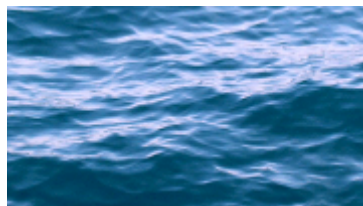
Shaders in



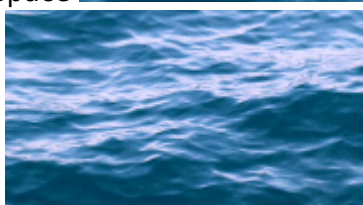
Screen Space



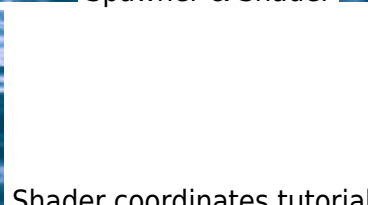
Spawner & Shader



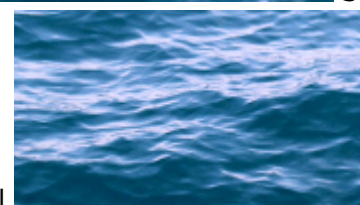
Shader &



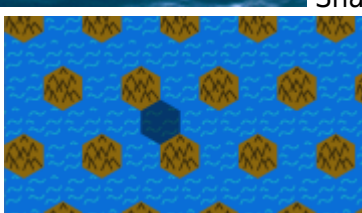
Lighting



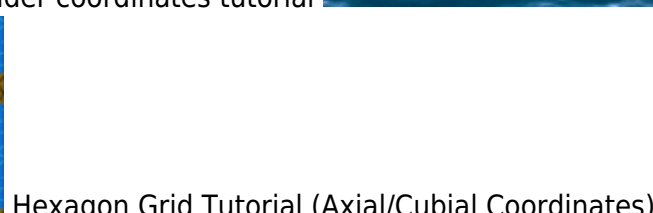
Shader coordinates tutorial



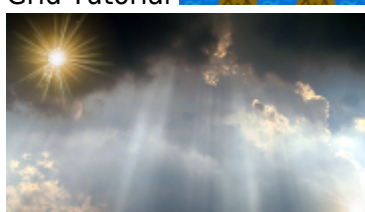
Hexagon



Grid Tutorial



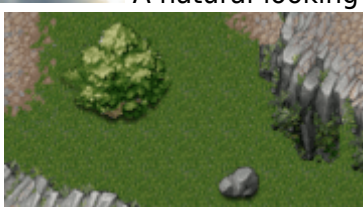
Hexagon Grid Tutorial (Axial/Cubial Coordinates)



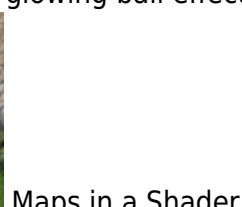
A natural-looking glowing ball effect



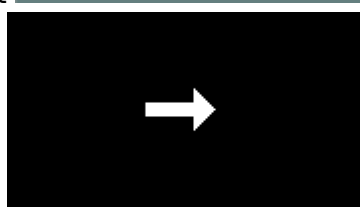
Fun with



Text and Shaders
Shader Examples

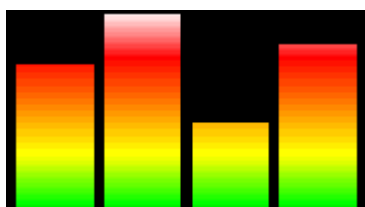


Maps in a Shader

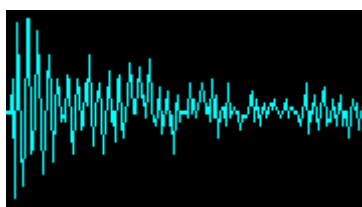


See more

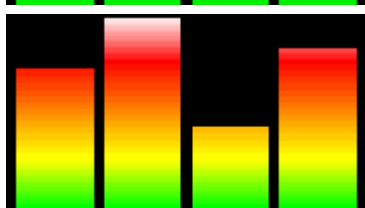
Sound



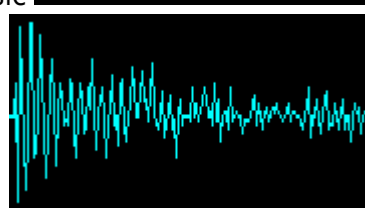
Sound & Music



Sound Recording



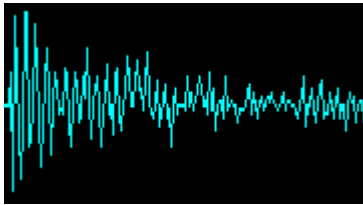
Sound Buses



Audio Filters

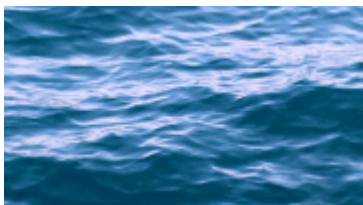


Audio filters, miniaudio & audio extensions Video



Sound Spatialization

Spawners



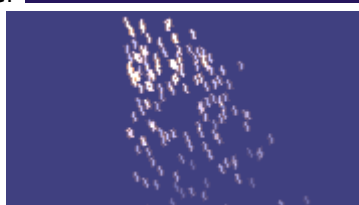
Spawner & Shader



Creating Particle Explosions



Spawning Bullets



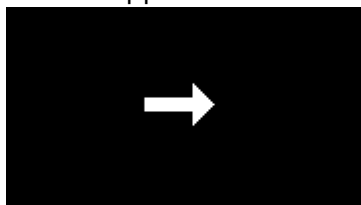
Sparks with Spawners and



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

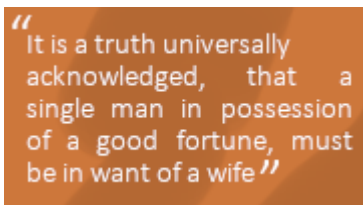


Drag and Drop



Commandline Parameters

Text



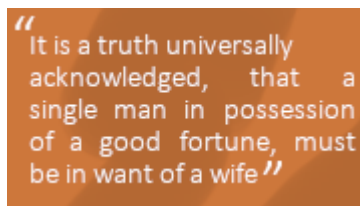
Text Boundaries



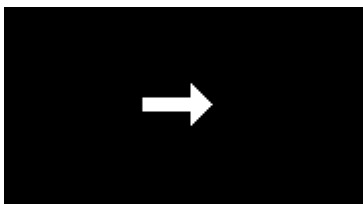
Fun with Text and Shaders



orxFontGen



Text Background



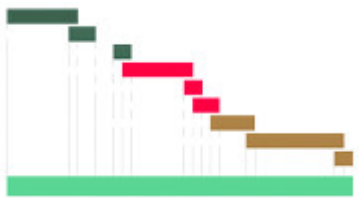
See more Text Examples

Textures



Using compressed textures on the iPad

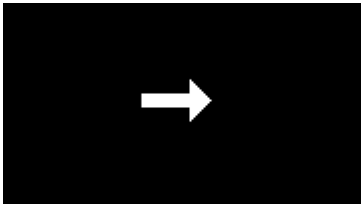
Timelines / Tracks



Timelines / Tracks

```
: 0xFFFFFFFFFFFFFFFF
Object.create Object
: 0x000000001000002F
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



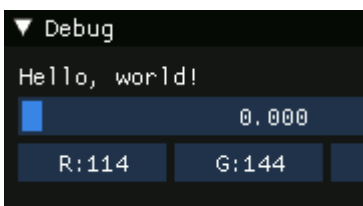
all Structures to a Tree

Using SWIG to talk to Java on Android

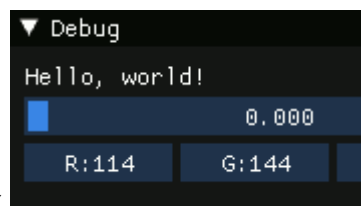


Logging

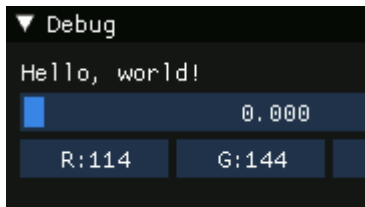
UI / User Interface



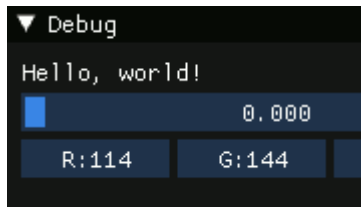
Using ImGui with Orx



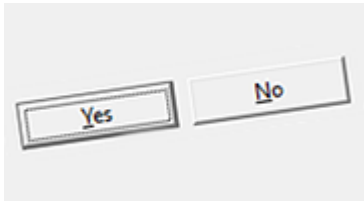
Using Nuklear with Orx



Nuklear Font Management



Notes on Nuklear



with Orx
Mouser over effect for buttons

File Dialogs and Messageboxes



Viewports



Viewport & Camera

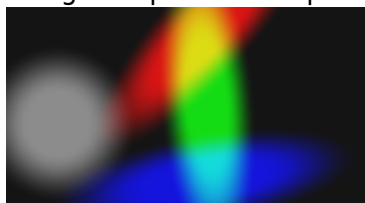


Heads Up Display (HUD)



using Viewport + Groups

Teleporting on Screen Edges



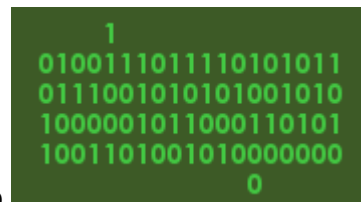
Viewport Render to Texture

Visual Studio



Stand Alone Application

Building the Orx library with Visual Studio



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

From:

<https://orx-project.org/wiki/> - **Orx Learning**

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