

libGDX

PROJECT SETUP

powered by gradle 

Name:

Package:

Game class:

Destination:

[Browse](#)

Android SDK:

[Browse](#)

LibGDX Version

Nightlies are development builds, be aware!

Sub Projects

Desktop

Android

Ios

Html

Extensions

Bullet

Freetype

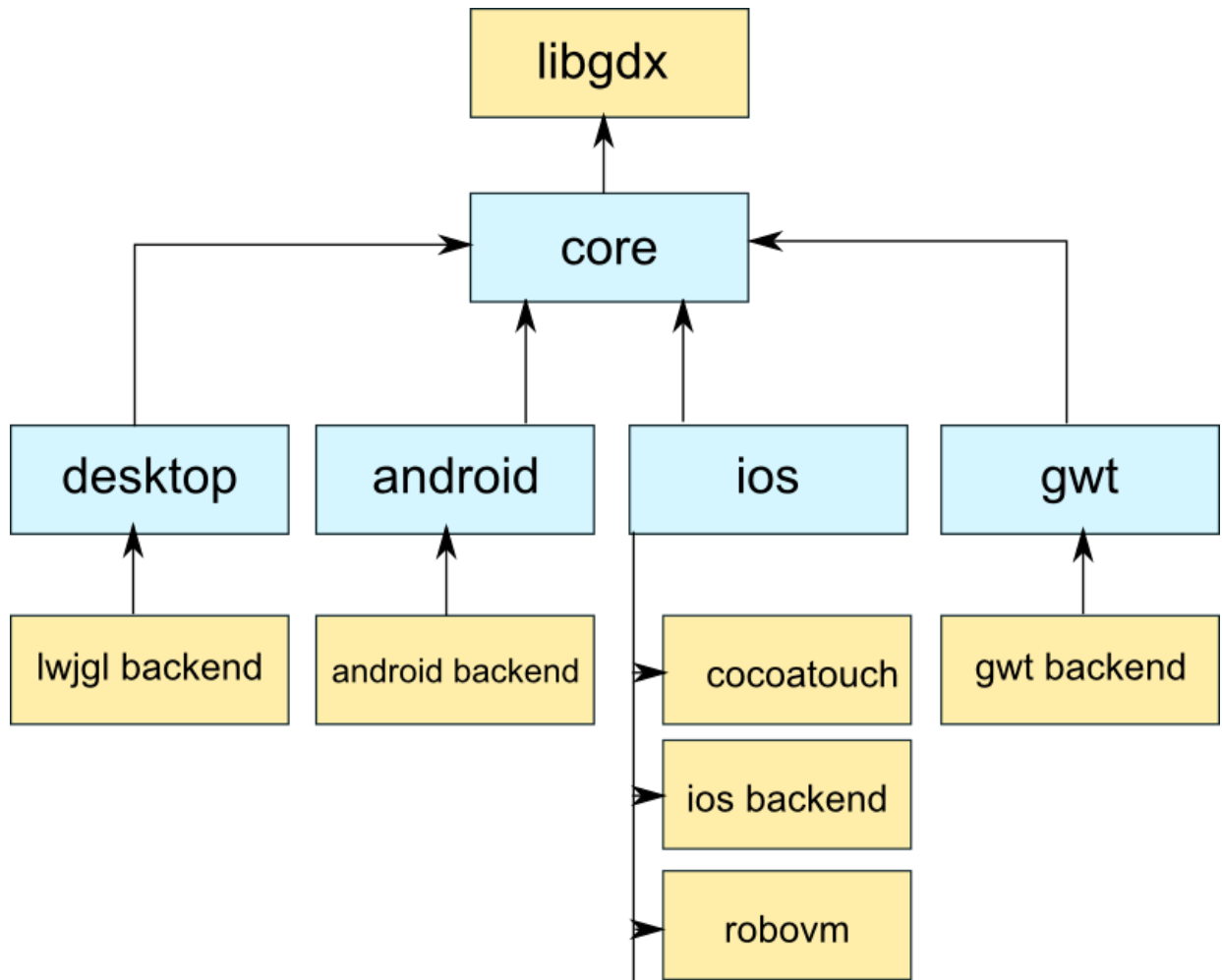
Tools

Controllers

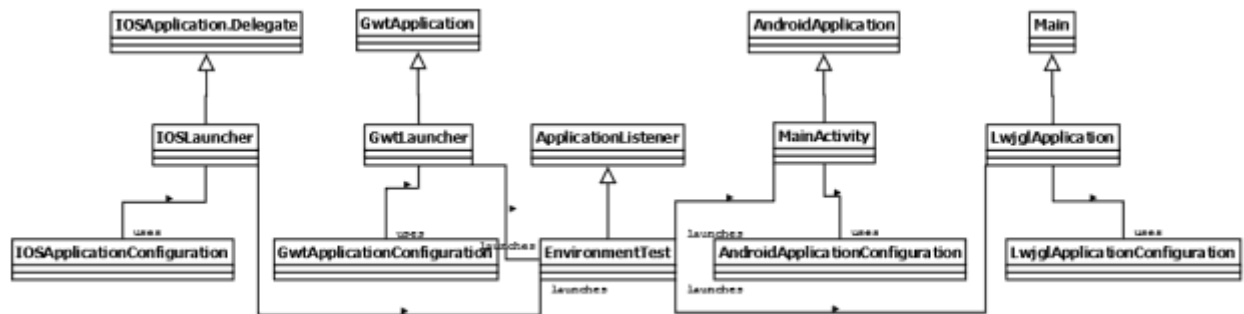
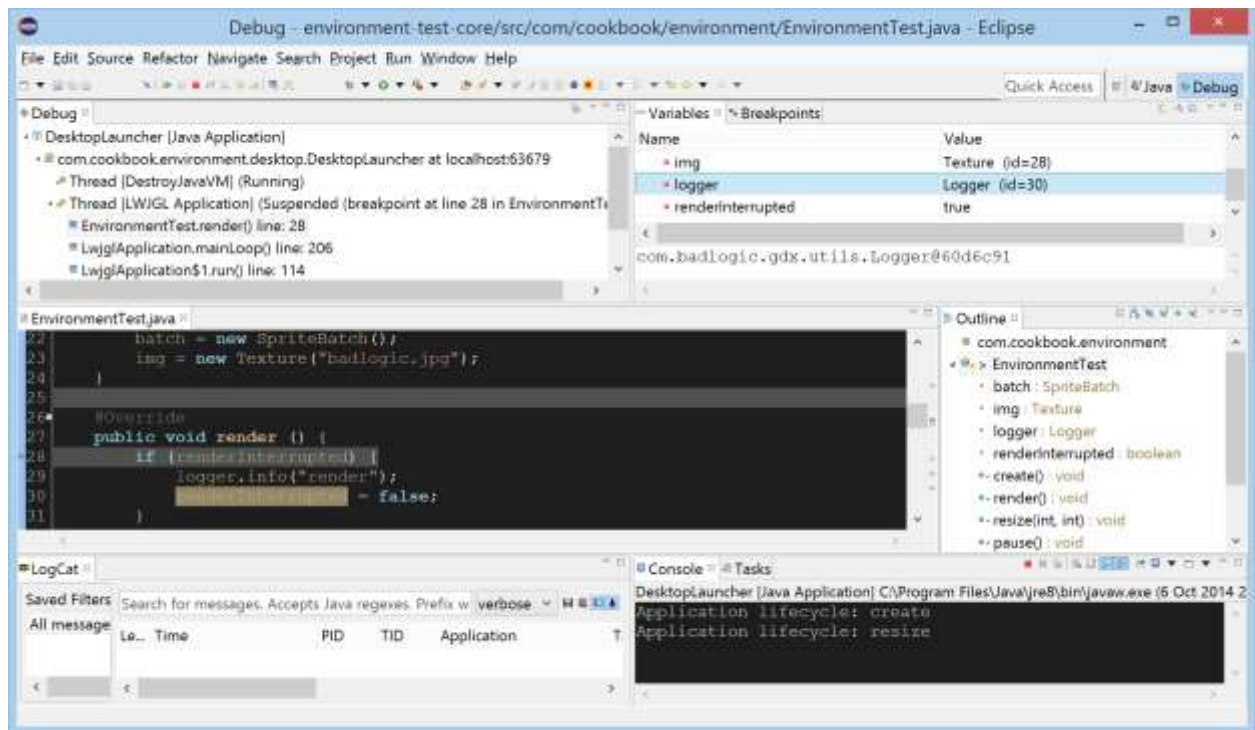
Box2d

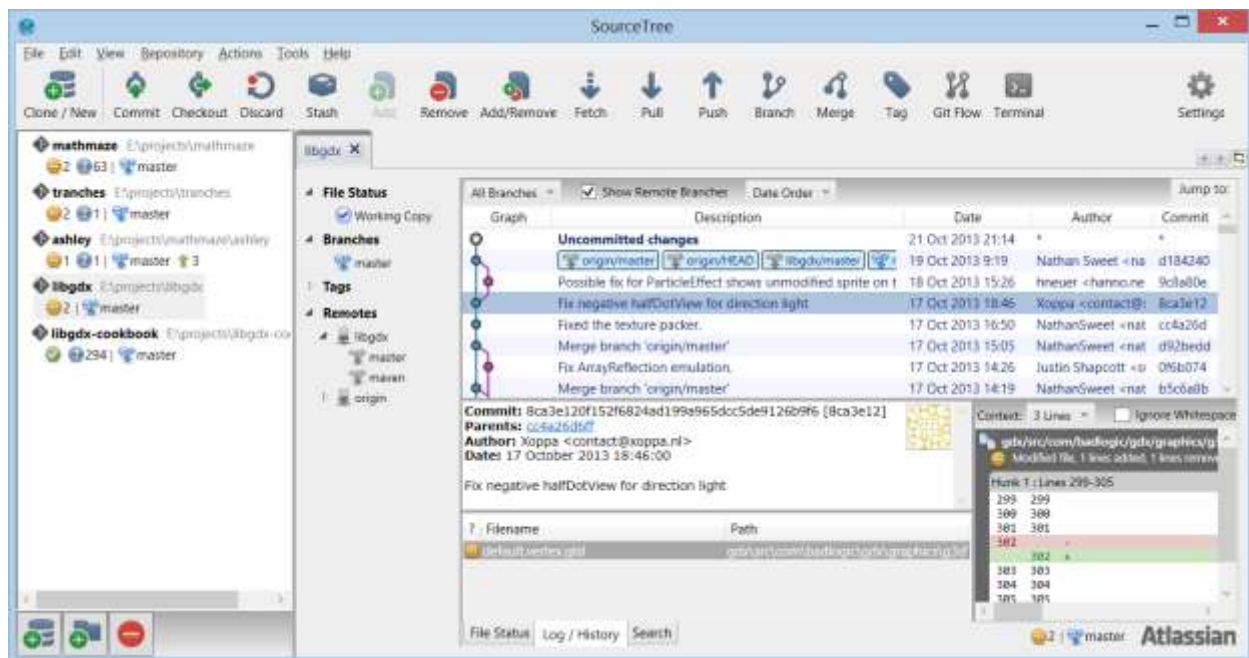
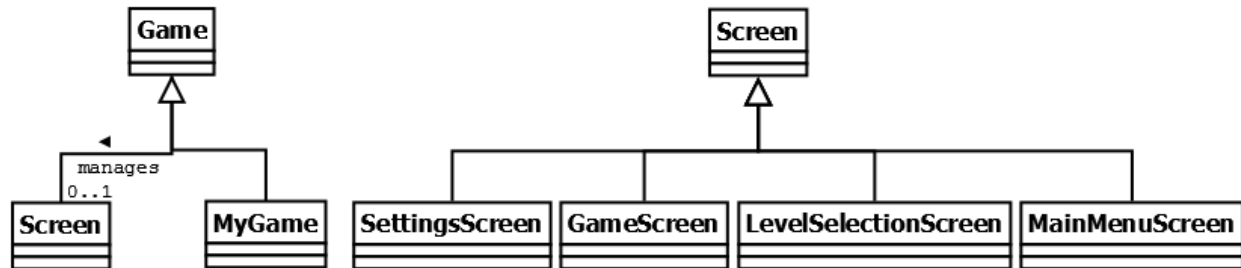
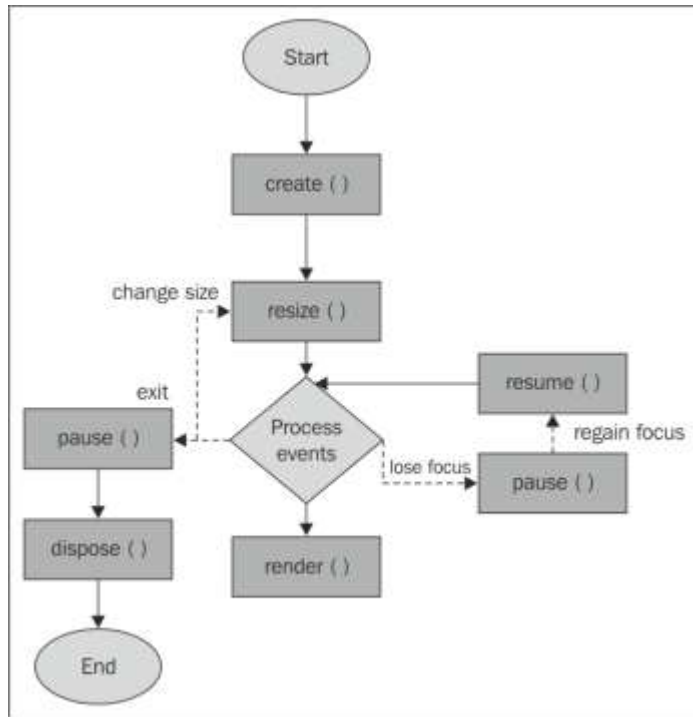
Box2dlights

[Generate](#)






```
26 @Override
27 public void render () {
28     if (renderInterrupted) {
29         logger.info("render");
30         renderInterrupted = false;
31     }
32
33
34     Gdx.gl.glClearColor(1, 0, 0, 1);
35     Gdx.gl.glClear(GL20.GL_COLOR_BUFFER_BIT);
36     batch.begin();
37     batch.draw(img, 0, 0);
38     batch.end();
39 }
40
```






Clone / Add / Create Repository

 Clone Repository
  Add Working Copy
  Create New Repository

Source Path / URL: ...

Repository Type:  This is a Git repository

Destination Path: ...

Advanced Options

Bookmarks

Bookmark this repository

Name:

Folder: ▾

Working Copy Changes ⬇️ ⬇️

?	Filename	Path
?	.classpath	environment\environment-test-ar ^
?	.project	environment\environment-test-ar
?	org.eclipse.jdt.core.prefs	environment\environment-test-ar
?	AndroidManifest.xml	environment\environment-test-ar
?	libgdx.png	environment\environment-test-ar
?	.gitignore	environment\environment-test-ar
?	AndroidManifest.xml	environment\environment-test-ar
?	libgdx.so	environment\environment-test-ar
?	libgdx.so	environment\environment-test-ar
?	gdx-backend-android-sources.jar	environment\environment-test-ar
?	gdx-backend-android.jar	environment\environment-test-ar v

Commit: libgdx-cookbook

Commit message: Sign off
Adds .gitignore file to make repository management easier

Recent messages

Commit mode: Staged changes Author: David Saltares <david.saltares@gmail.com>

Show Pending Search Context: 3 Lines Ignore Whitespace External Diff

Staged Changes		
?	Filename	Path
<input checked="" type="checkbox"/>	.gitignore	

Working Copy Changes		
?	Filename	Path
<input type="checkbox"/>	.classpath	environment\environment-test-a
<input type="checkbox"/>	.project	environment\environment-test-a
<input type="checkbox"/>	org.eclipse.jdt.core.prefs	environment\environment-test-a

Push commits immediately to: origin Amend latest commit

Commit **Cancel**

.gitignore
+ New file, 9 lines added Unstage File

File Contents

```
1 + bin/
2 + target/
3 + obj/
4 + .gwt/
5 + gwt-unitCache/
6 + war/
7 + gen/
8 +
9 + *.class
0 10 \ No newline at end of file
```

Unstage Hunk Unstage Selected Lines

Push: libgdx-cookbook

Push to repository: origin git@bitbucket.org:siondream/libgdx-game-development-cookbook.git

Branches to push

Push?	Local branch	Remote branch	Track?
<input checked="" type="checkbox"/>	master	master	<input type="checkbox"/>

Select All

Push all tags

OK Cancel

Pull

Pull from remote: origin git@bitbucket.org:siondream/libgdx-game-development-cookbook.git

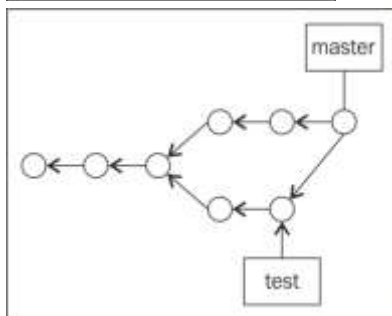
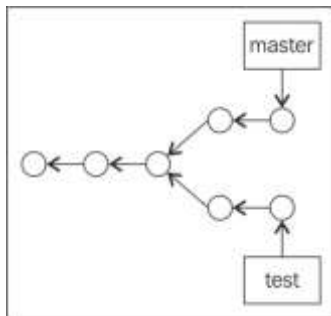
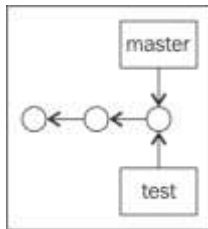
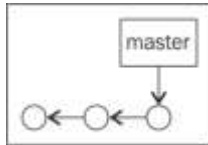
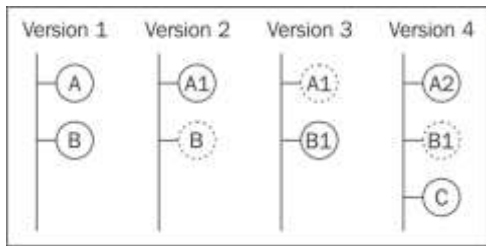
Remote branch to pull: master Refresh

Pull into local branch: master

Options

- Commit merged changes immediately
- Include messages from commits being merged in merge commit
- Create a new commit even if fast-forward is possible
- Rebase instead of merge (WARNING: make sure you haven't pushed your changes)

OK Cancel



Ignore

Ignore filenames or pattern:

`samples/samples-android/assets/data/shaders/vignette - Copy.frag`

- Ignore exact filename(s)
- Ignore all files with this extension
- Ignore everything beneath: `samples` ▾
- Ignore custom pattern

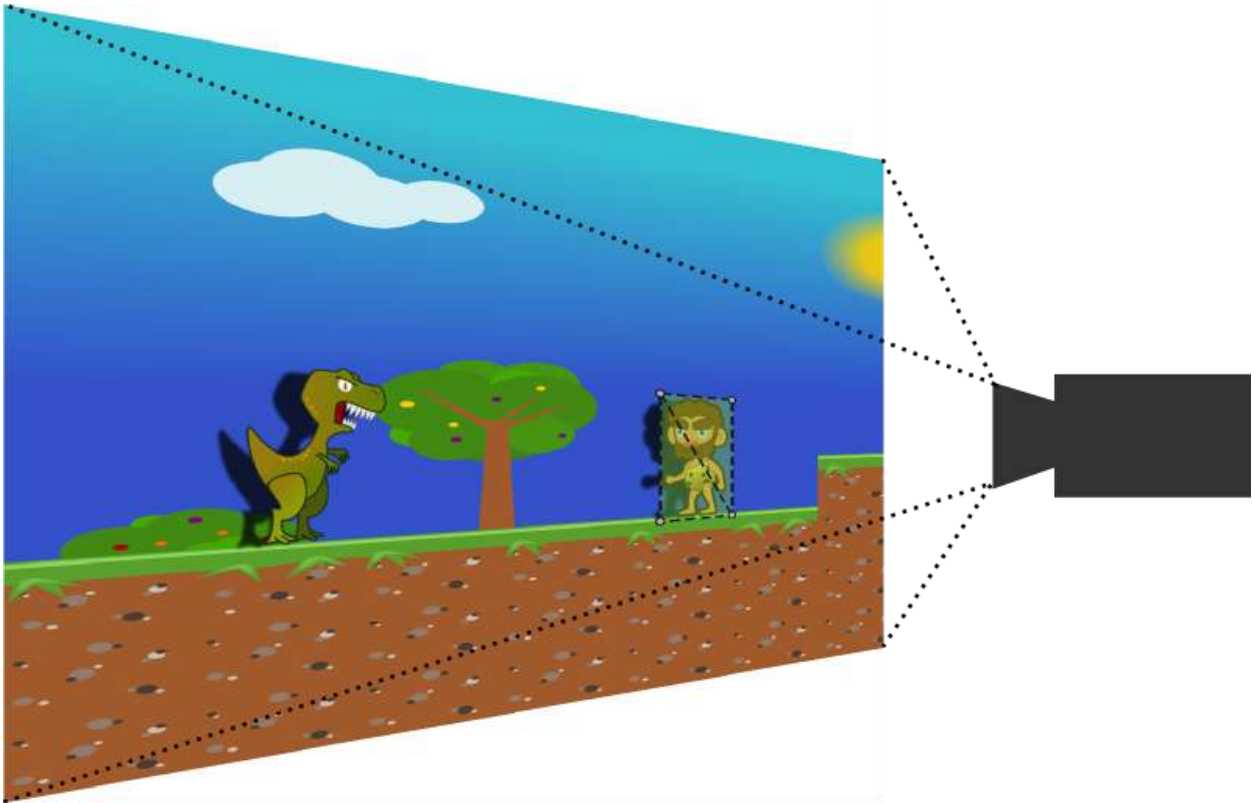
Ignore for: `this repository only` ▾

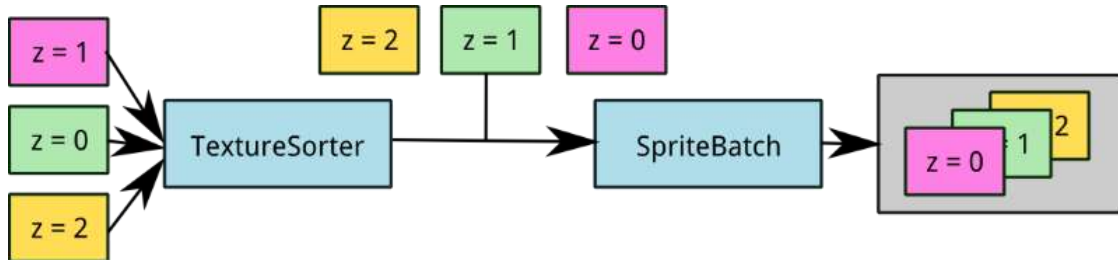
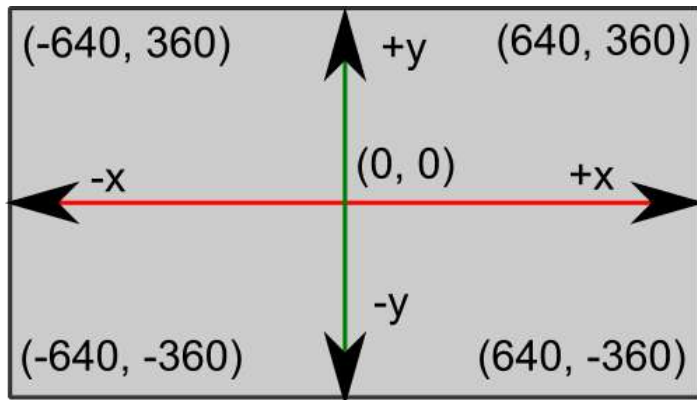
OK

Cancel

SCORE: 10









PROJECT CONFIGURATION

 New pack    

 Open project  Save project


caveman


Input directory: ...

Output directory: ...


File name:

Leave blank for "<packname>.pack"

 Pack'em all

 Pack selected

SELECTED PACK SETTINGS

 Copy settings to all packs

Encoding format ▼

Min filter ▼

Output format ▼

Mag filter ▼

Min page width ▼

PaddingX ▼

Min page height ▼

PaddingY ▼

Max page width ▼

WrapX ▼

Max page height ▼

WrapY ▼

Use fast algorithm

Jpeg quality ▼

Duplicate padding

Alpha threshold ▼

Edge padding

Force PoT

Strip whitespace X


Use aliases

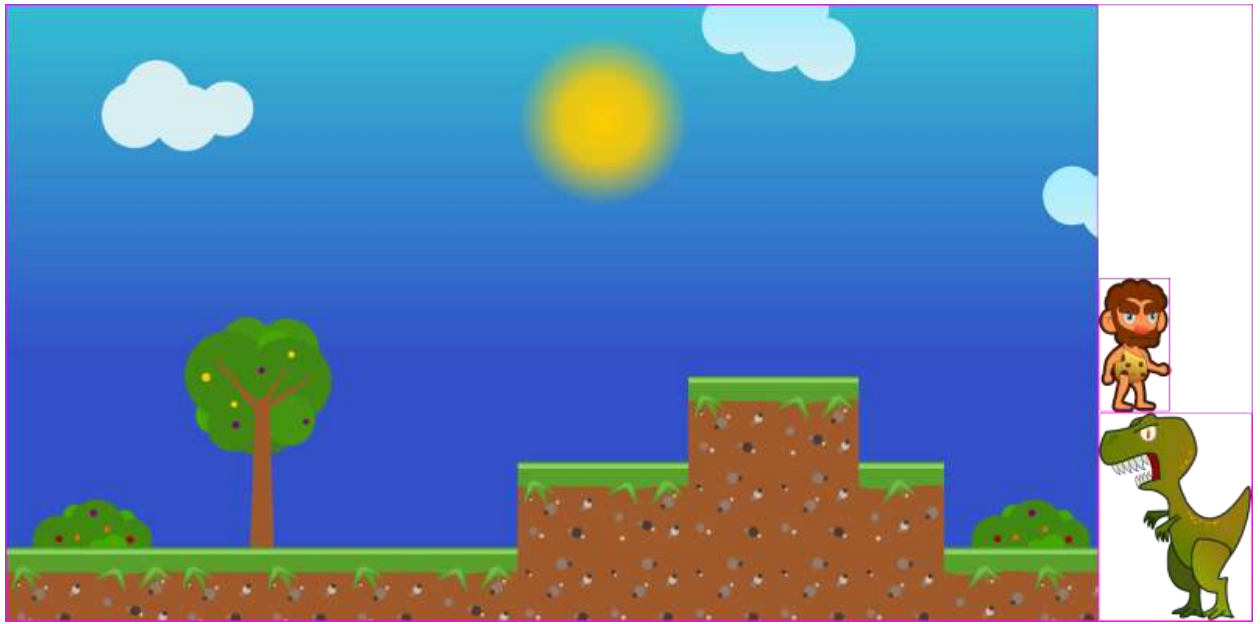
Strip whitespace Y

Ignore blank imgs

Allow rotations

Debug

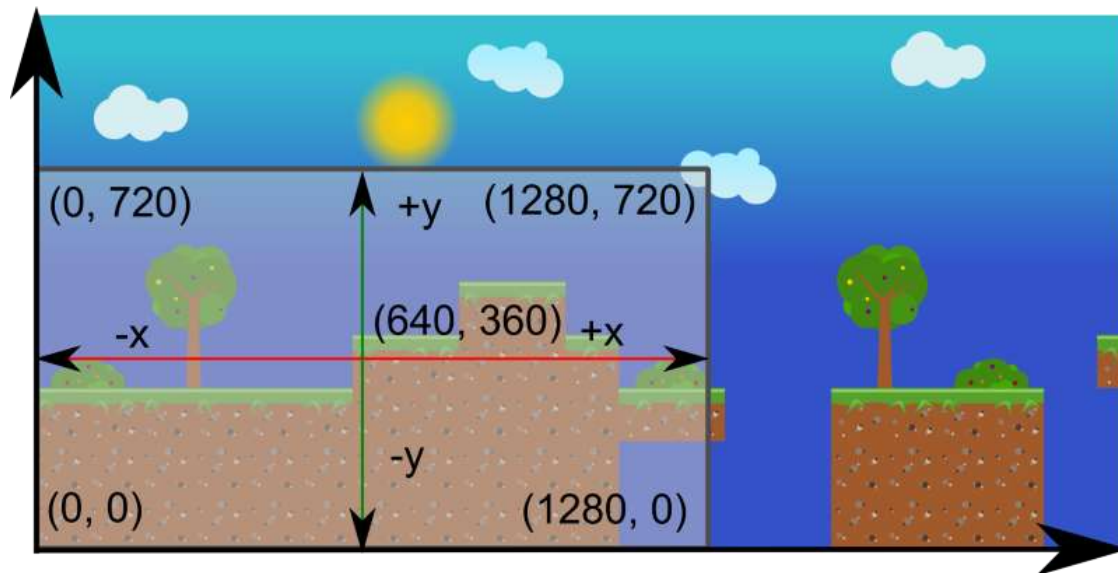
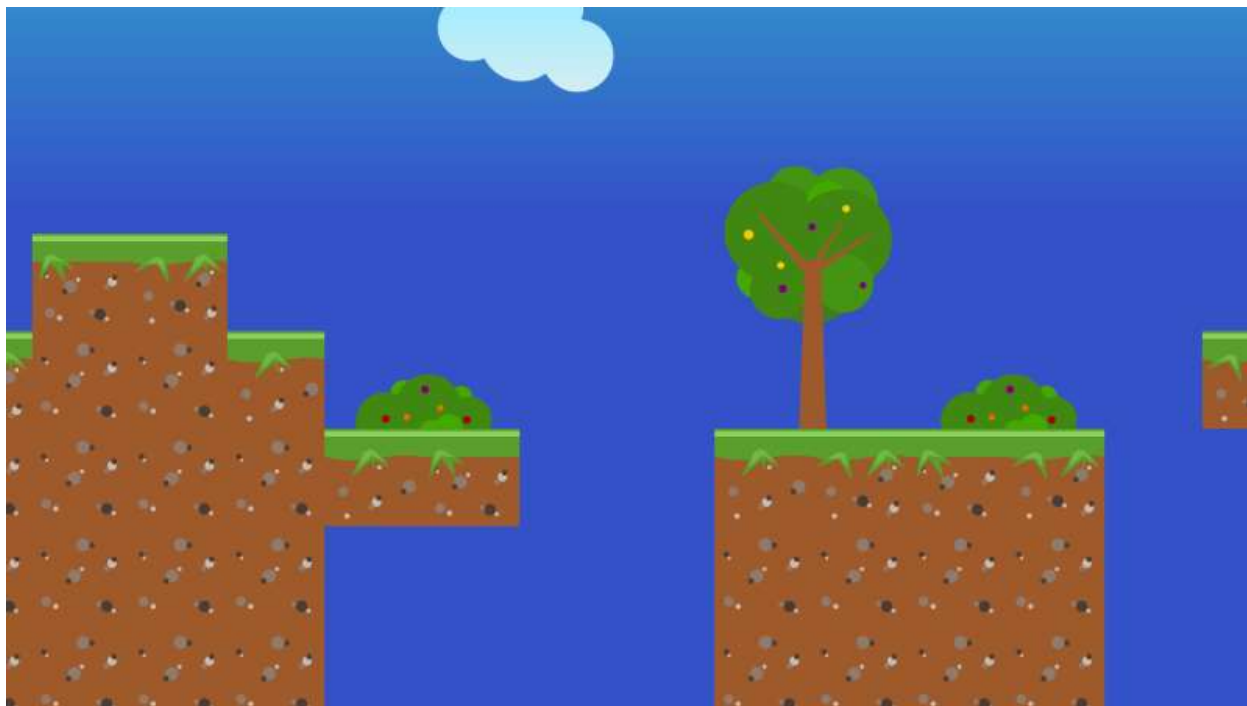
 v3.2.0 (latest version)

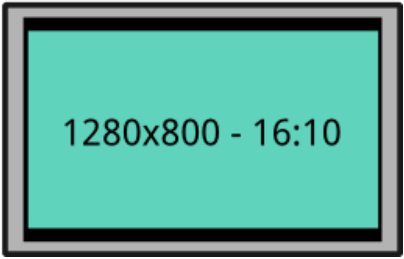
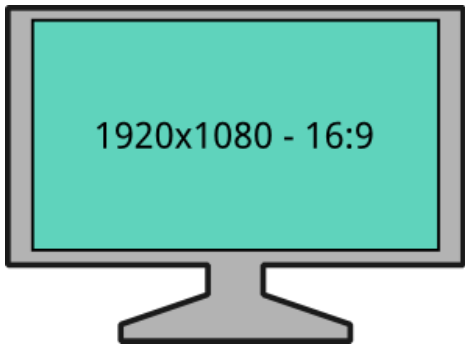
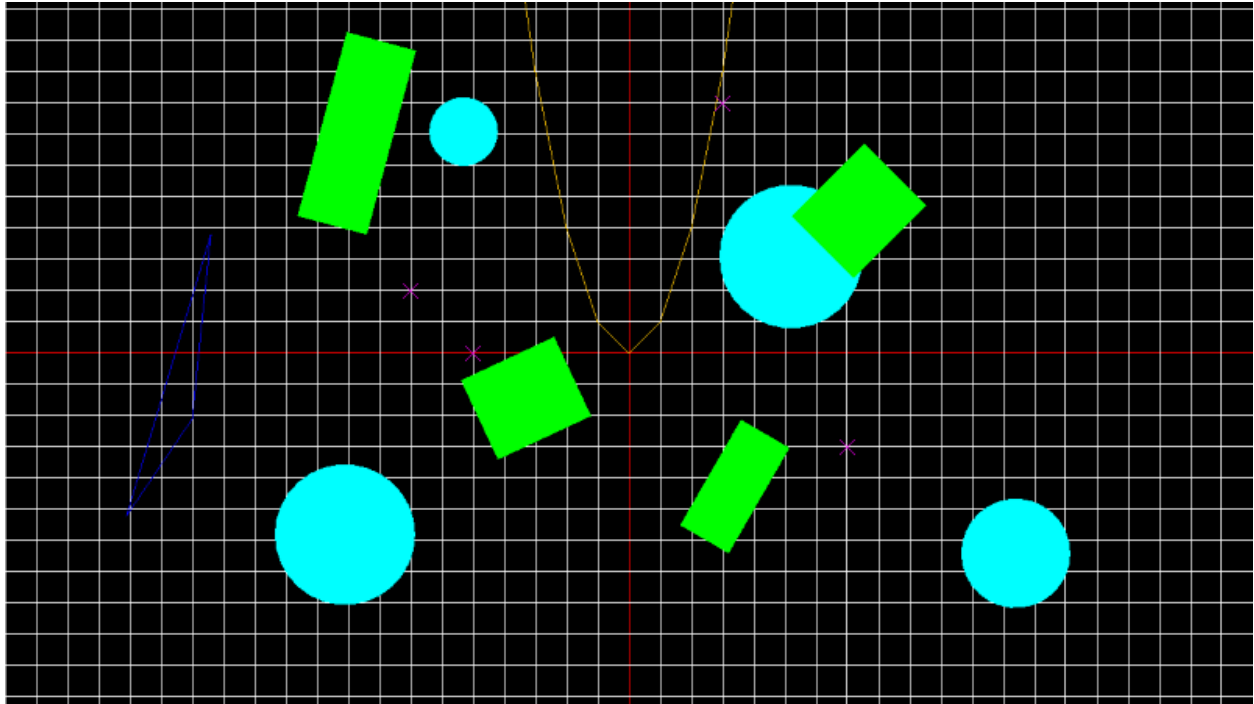
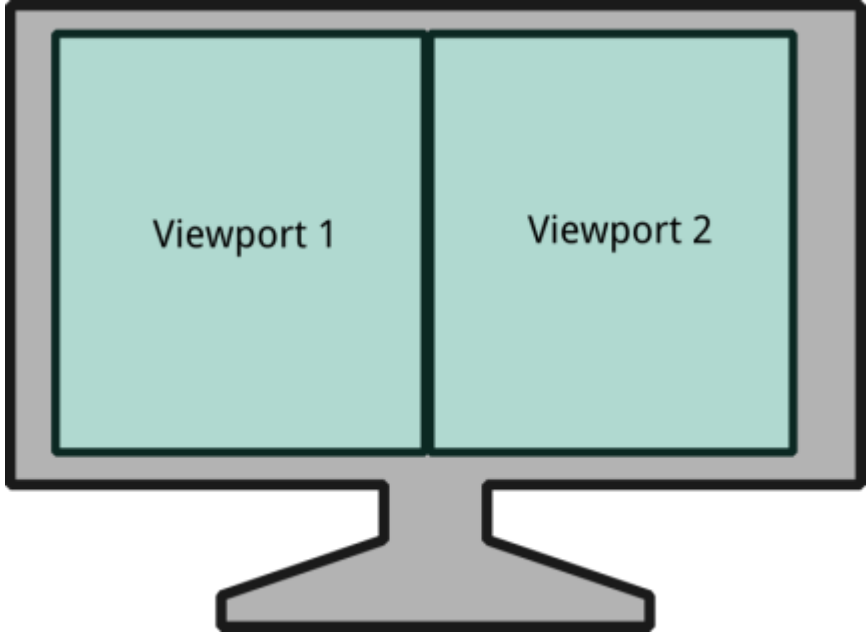




Collision between caveman and dinosaur!



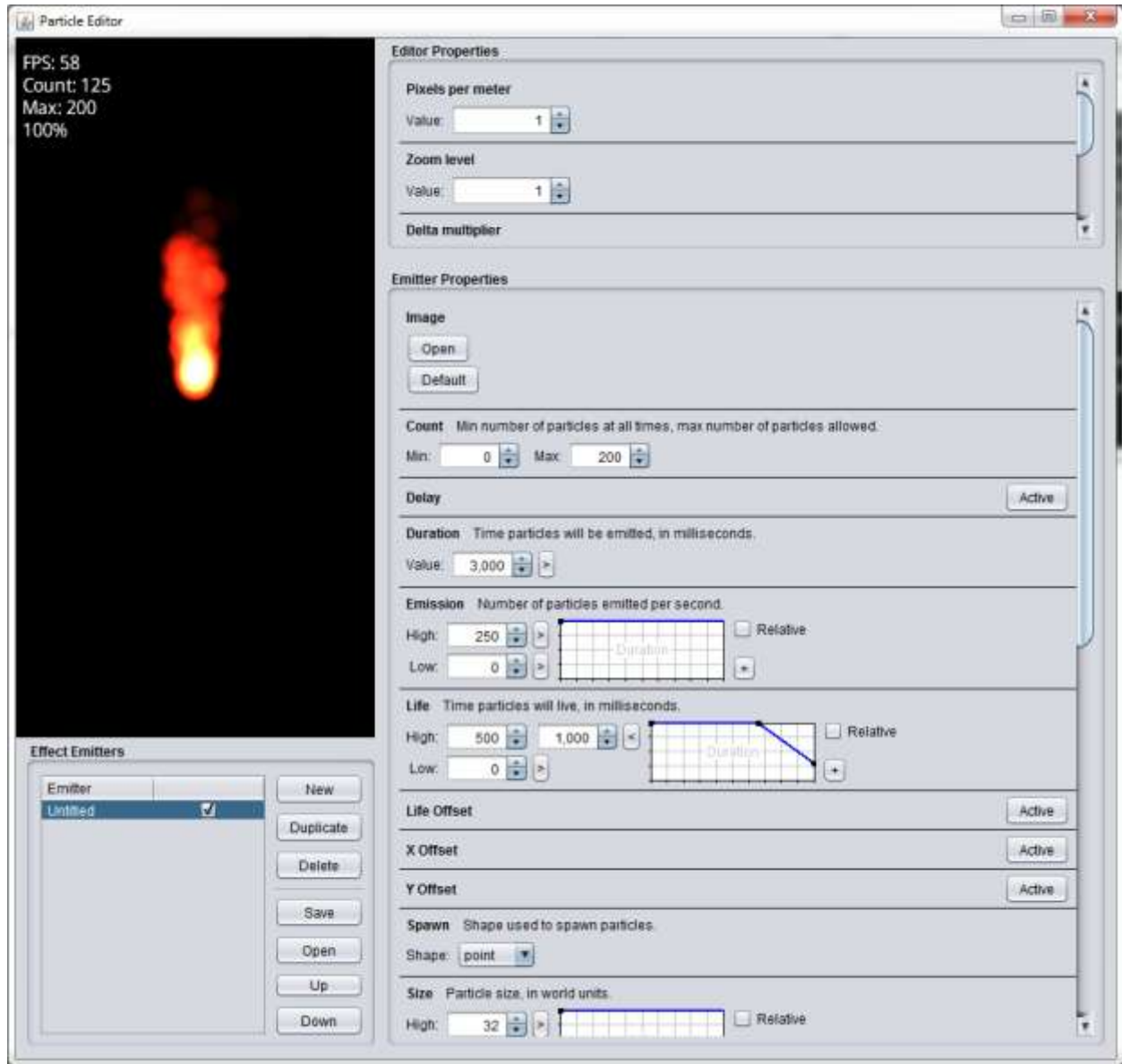


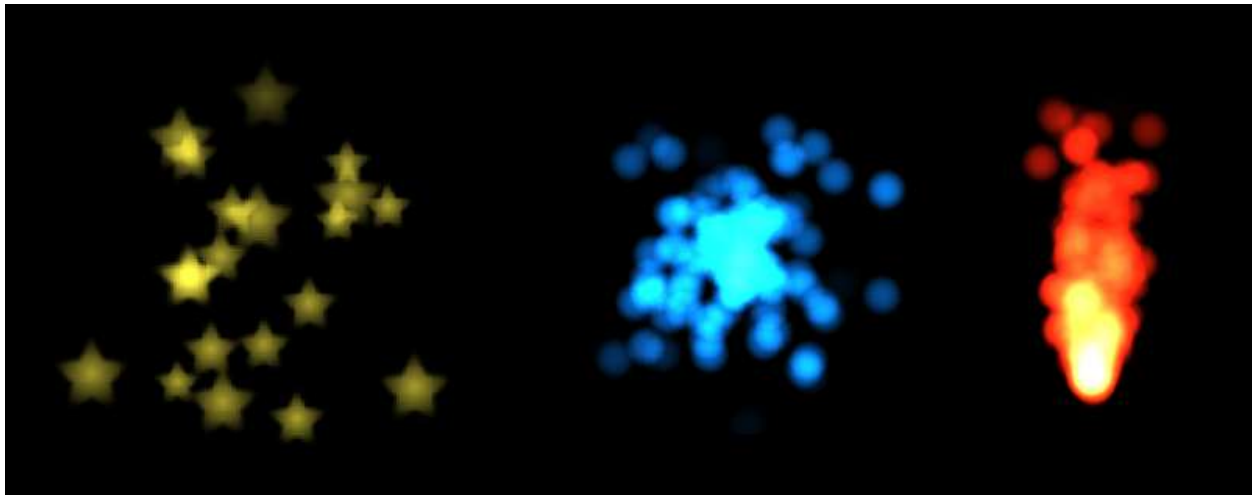






Chapter 3, *Advanced 2D graphics*





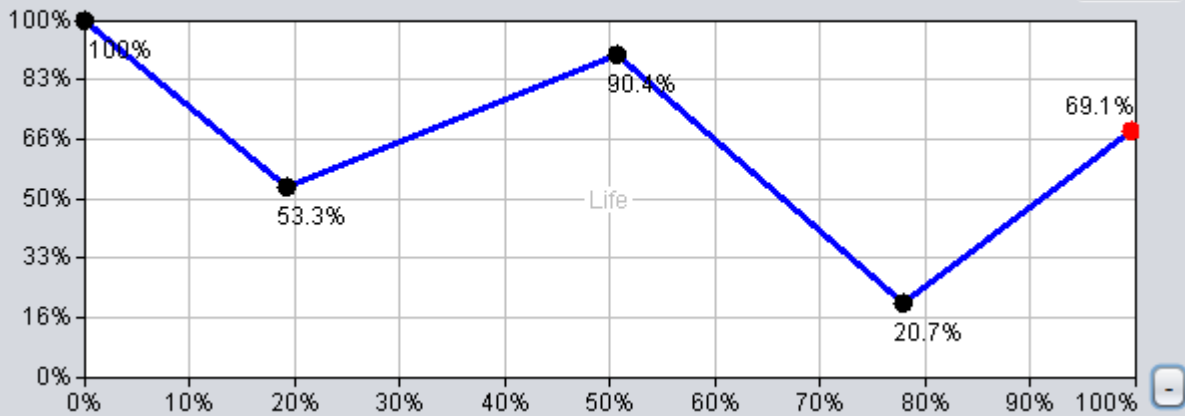
Delay Time from beginning of effect to emission start, in milliseconds.

Active

Value: <

Velocity Particle speed, in world units per second.

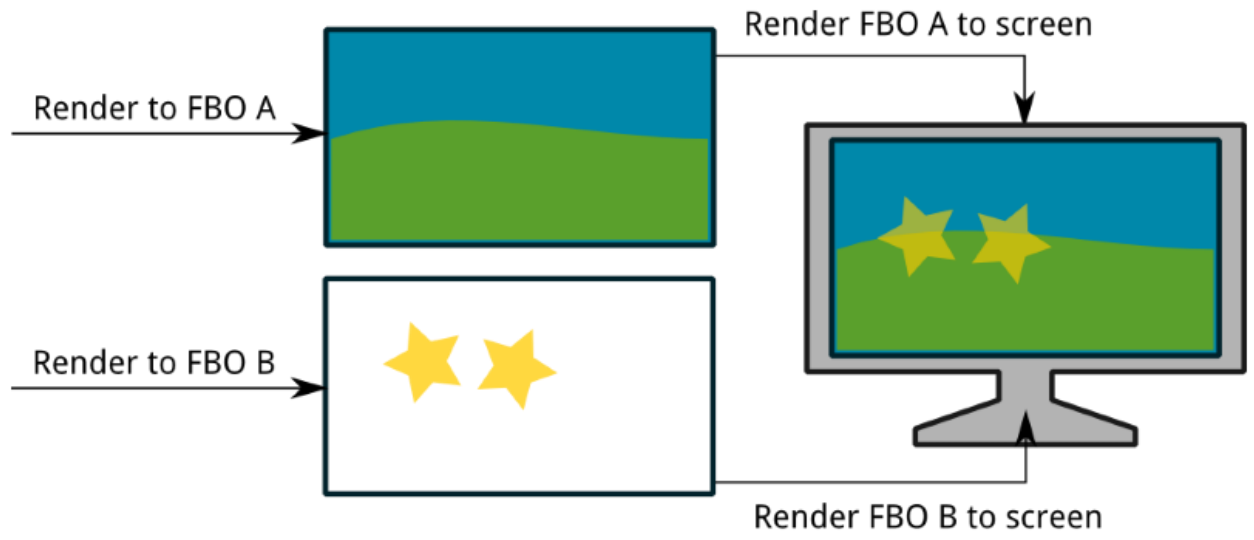
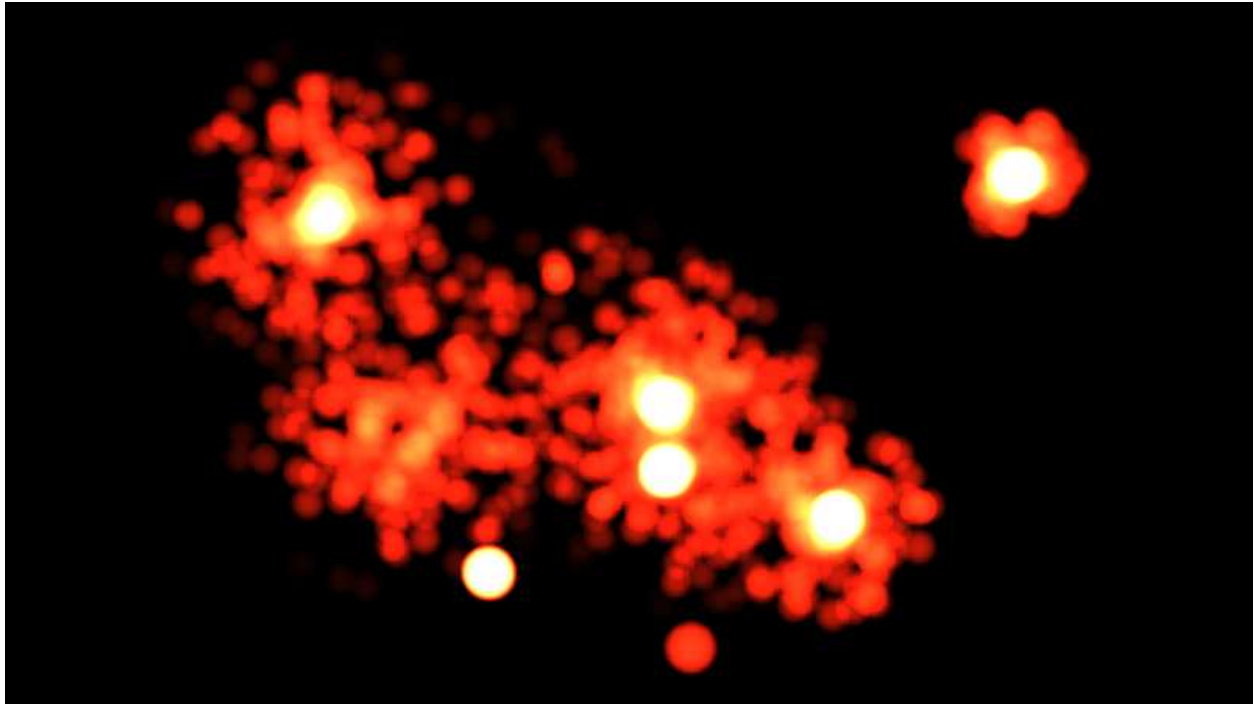
Active



Delay Time from beginning of effect to emission start, in milliseconds.

Active

Value: <



currentFrameBuffer



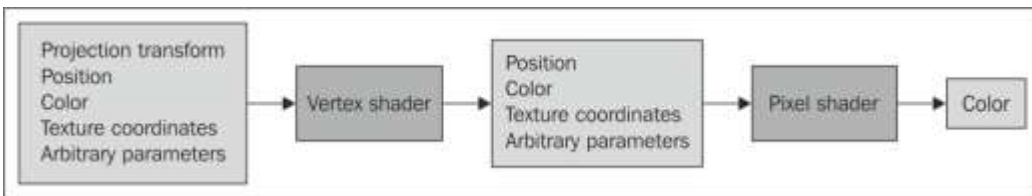
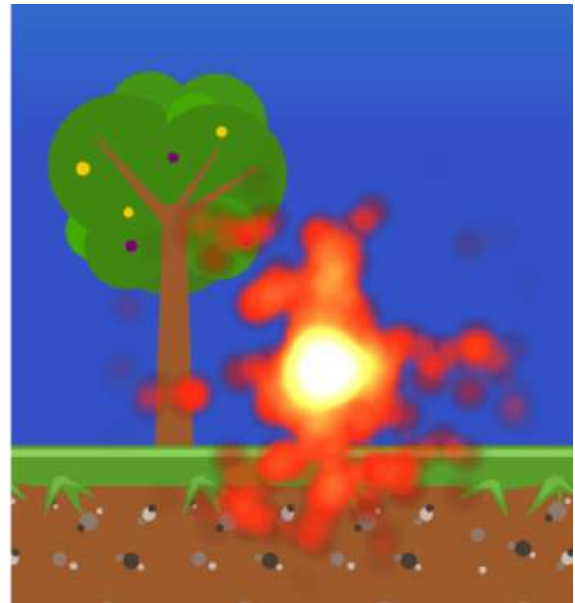
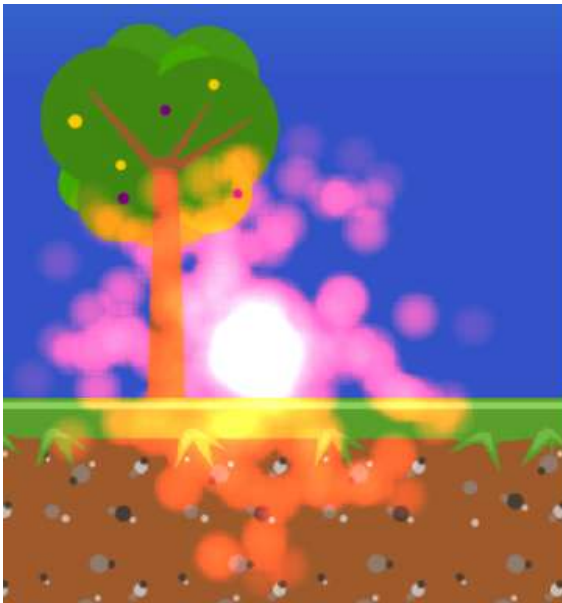
$\alpha = 0.5f$

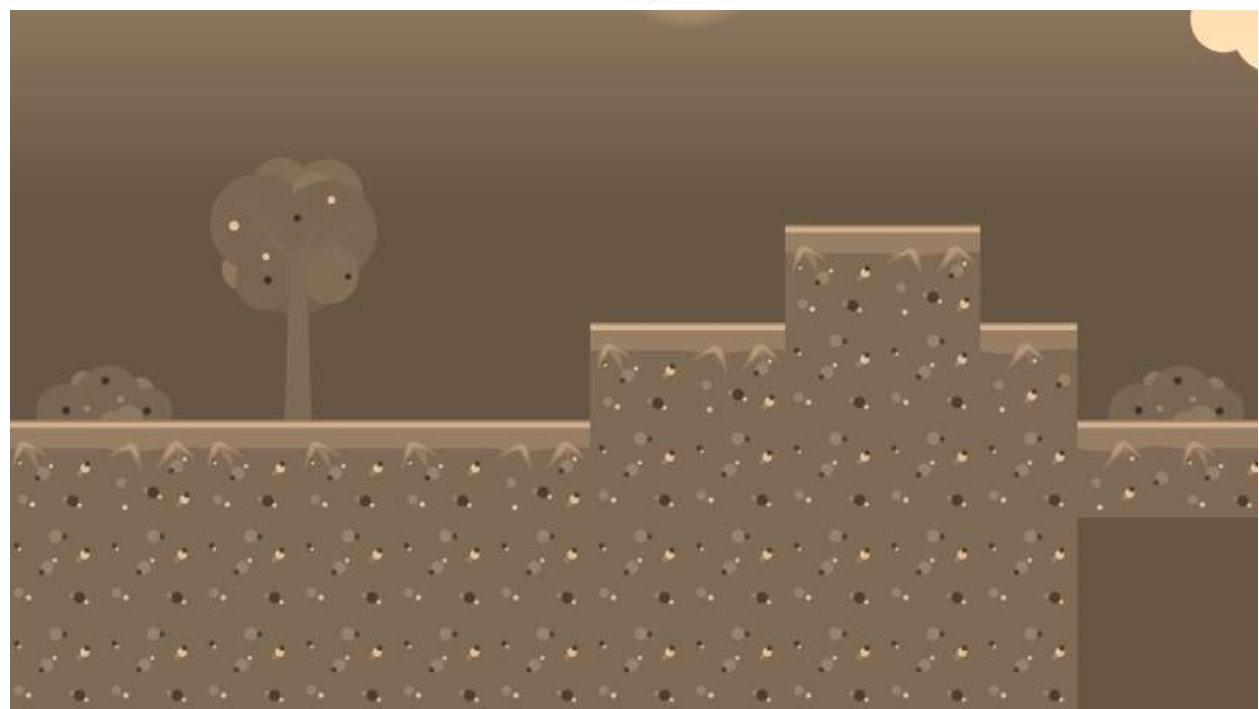
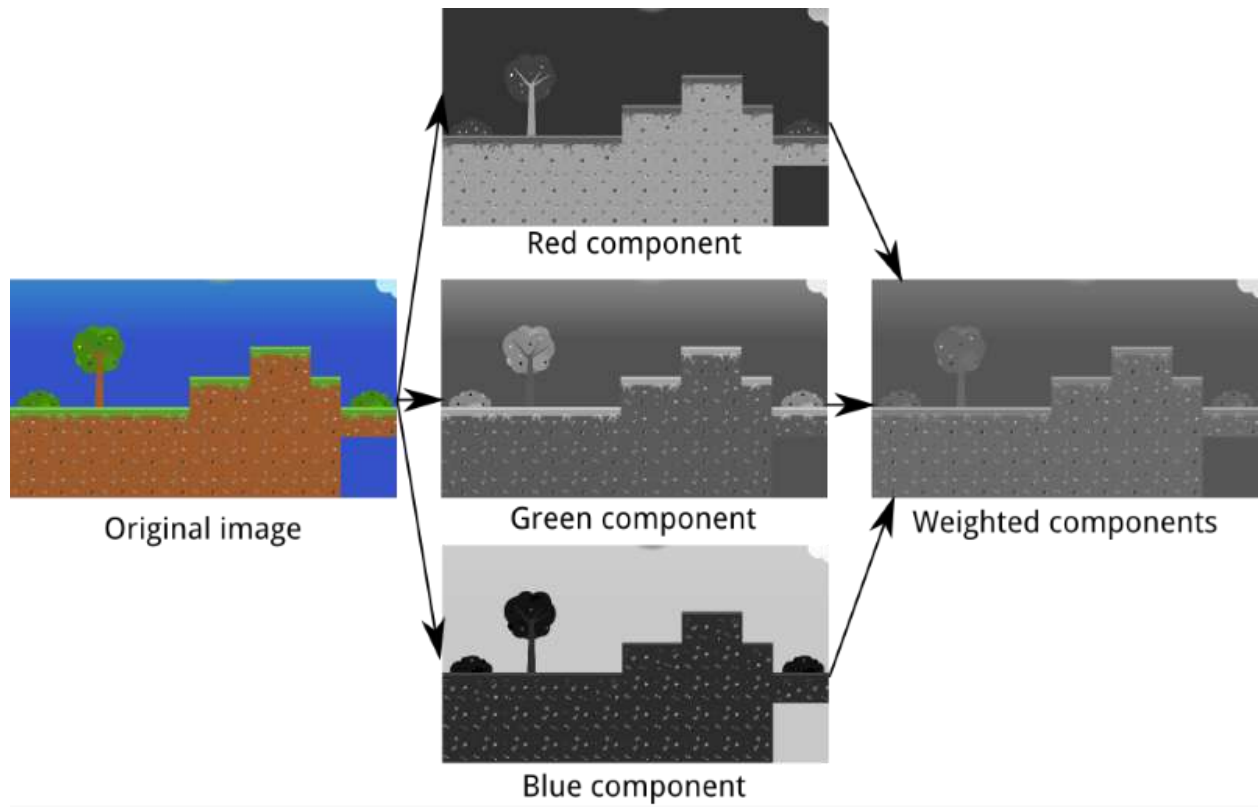


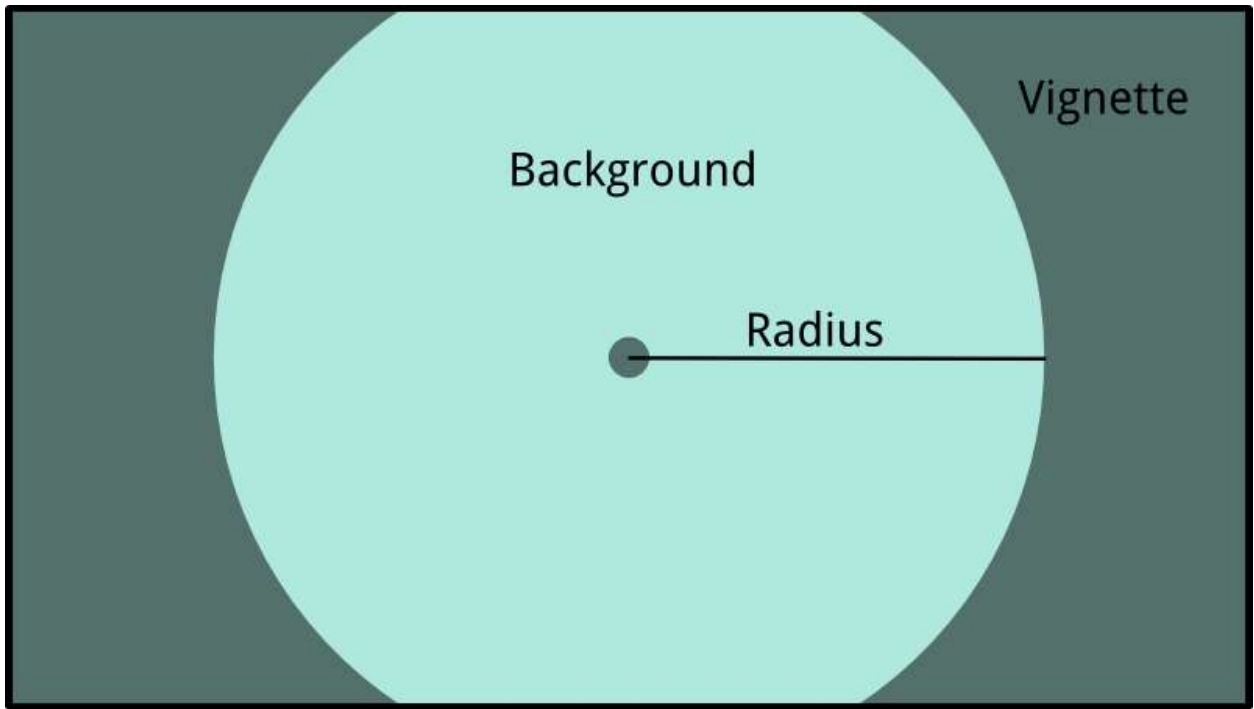
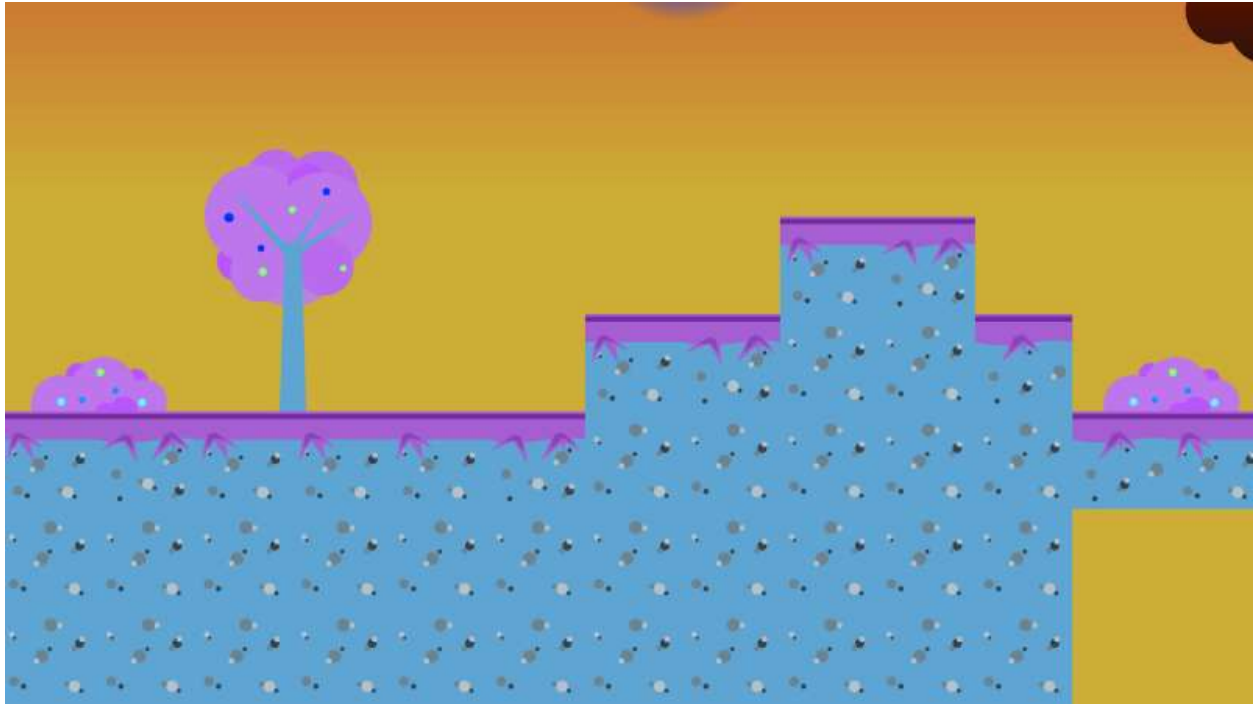
nextFrameBuffer

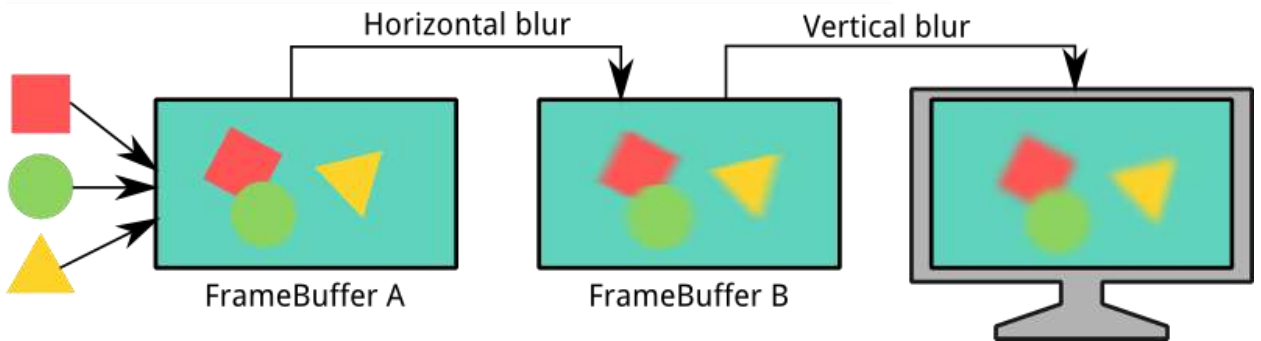
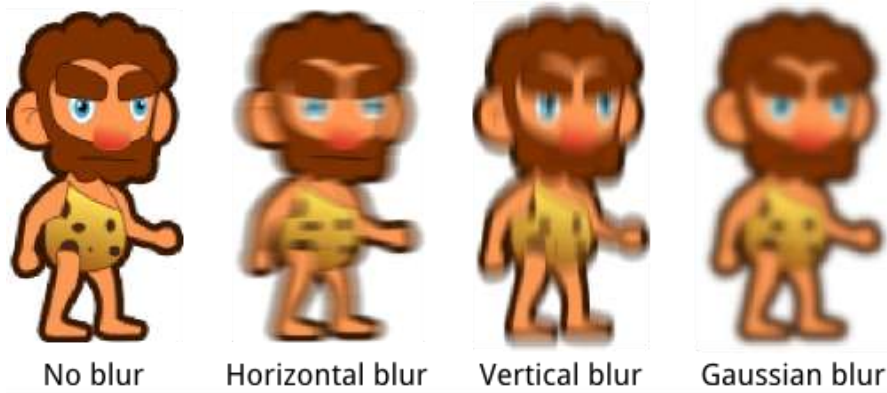
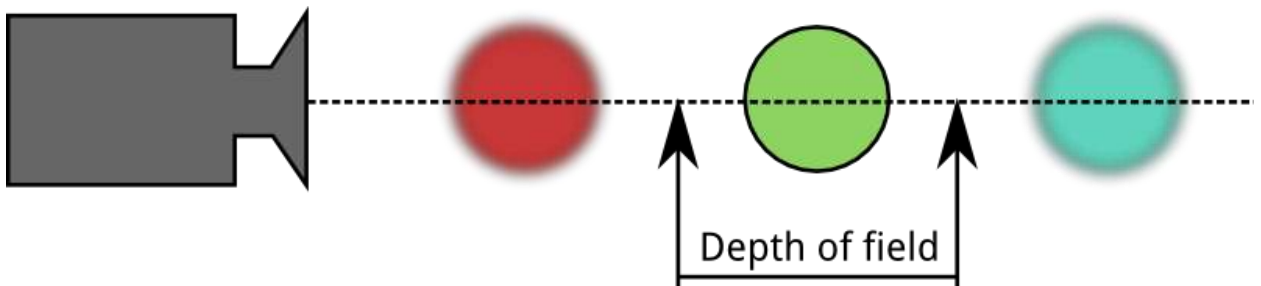
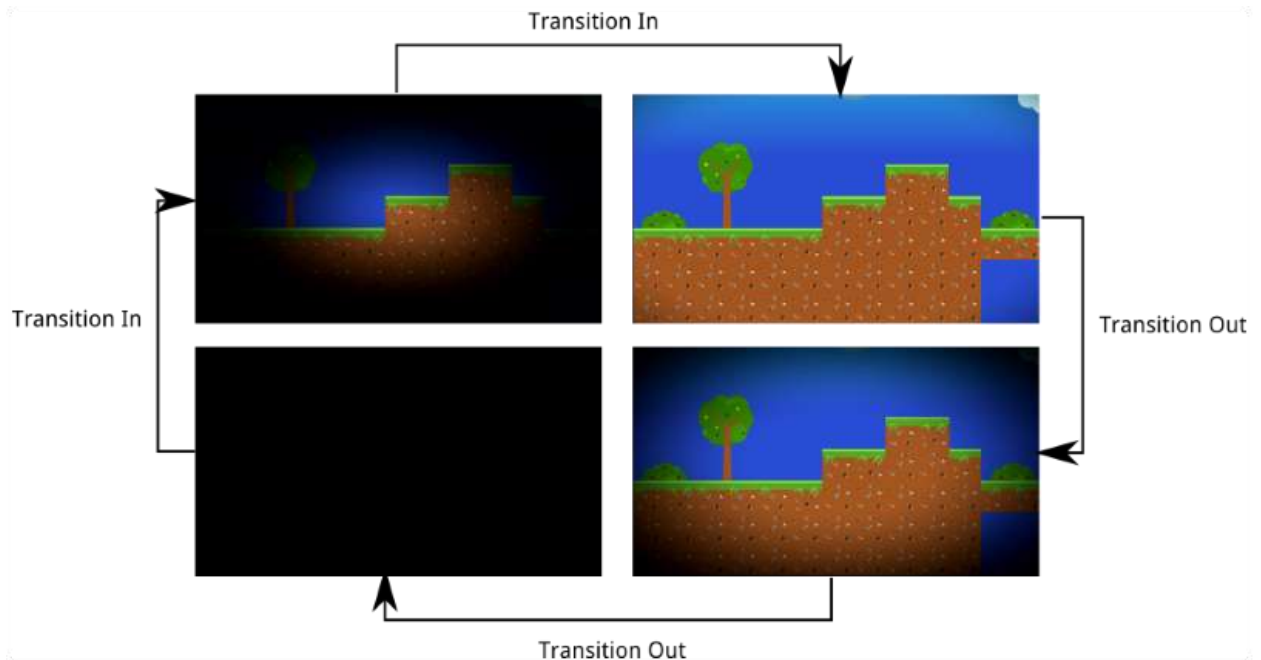


$\alpha = 0.5f$









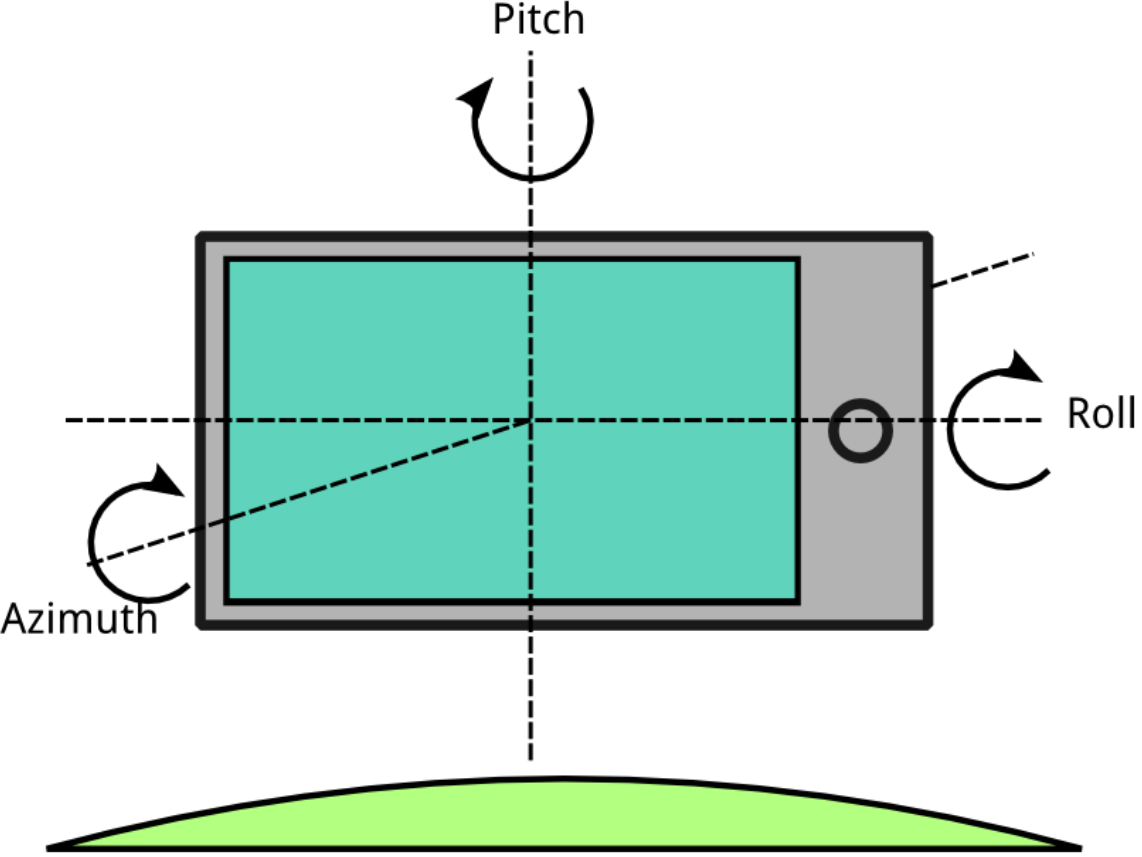


Depth of field off



Depth of field on





Math Maze!

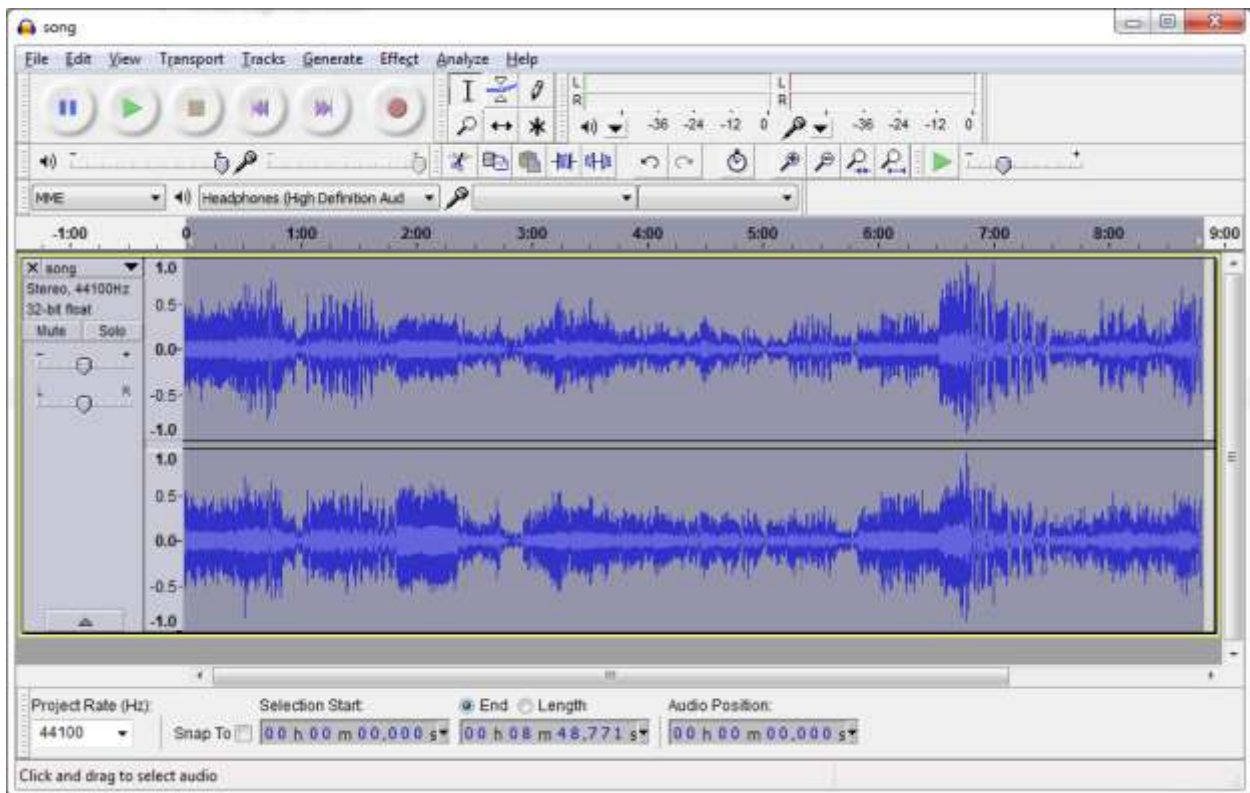
Level 1

Time: 00:03





Chapter 5, *Audio and File I/O*



GENERATOR

PICKUP/COIN

LASER/SHOOT

EXPLOSION

POWERRUP

HIT/HURT

JUMP

BLIP/SELECT

MUTATE

RANDOMIZE

LD48

MANUAL SETTINGS

SQUAREWAVE

SAWTOOTH

SINEWAVE

NOISE

ATTACK TIME

SUSTAIN TIME

SUSTAIN PUNCH

DECAY TIME

START FREQUENCY

MIN FREQUENCY

SLIDE

DELTA SLIDE

VIBRATO DEPTH

VIBRATO SPEED

CHANGE AMOUNT

CHANGE SPEED

SQUARE DUTY

DUTY SWEEP

REPEAT SPEED

PHASER OFFSET

PHASER SWEEP

LP FILTER CUTOFF

LP FILTER CUTOFF SWEEP

LP FILTER RESONANCE

HP FILTER CUTOFF

HP FILTER CUTOFF SWEEP

VOLUME

PLAY SOUND

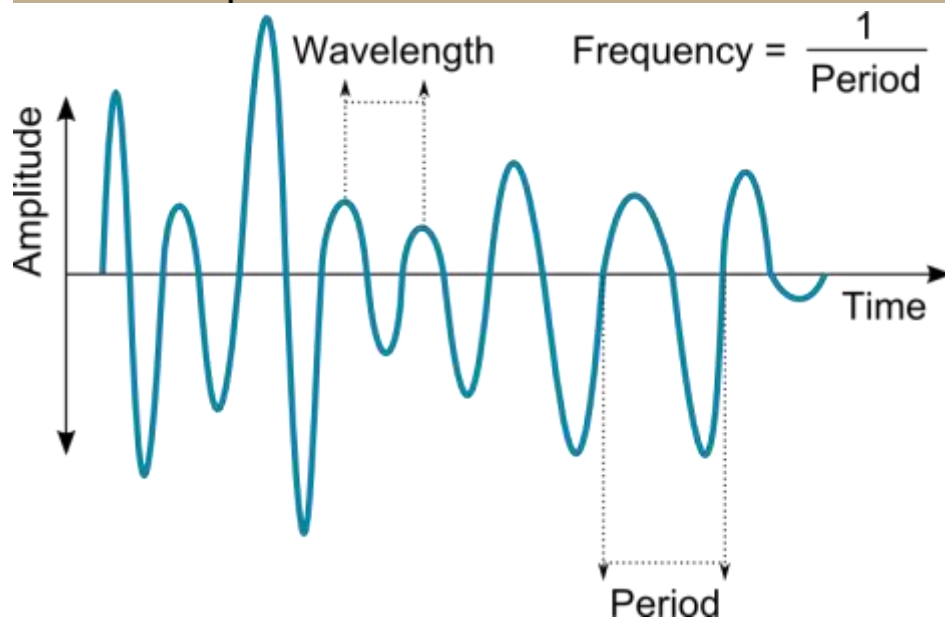
LOAD SOUND

SAVE SOUND

EXPORT .WAV

44100 HZ

16-BIT



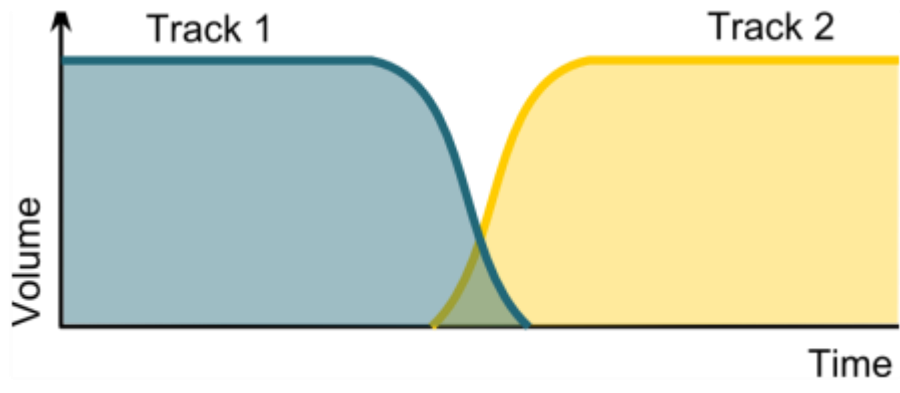
Pan = -0.5f

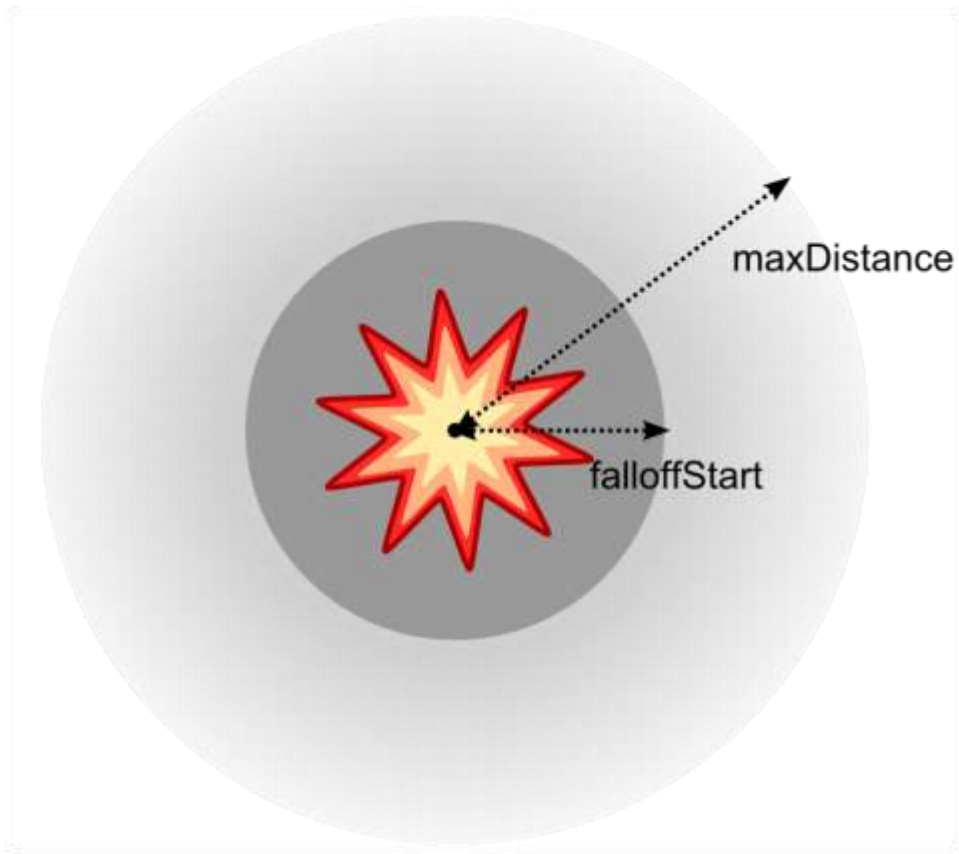


Pan = -1.0f

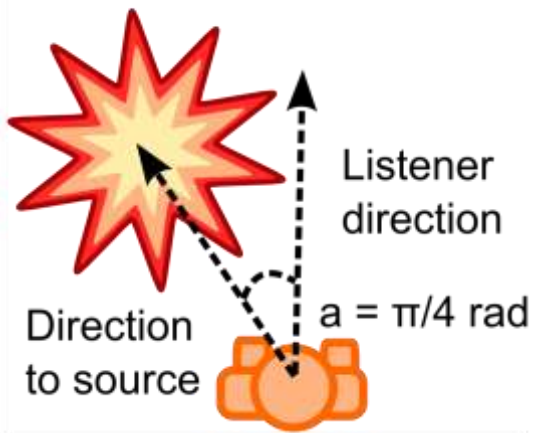


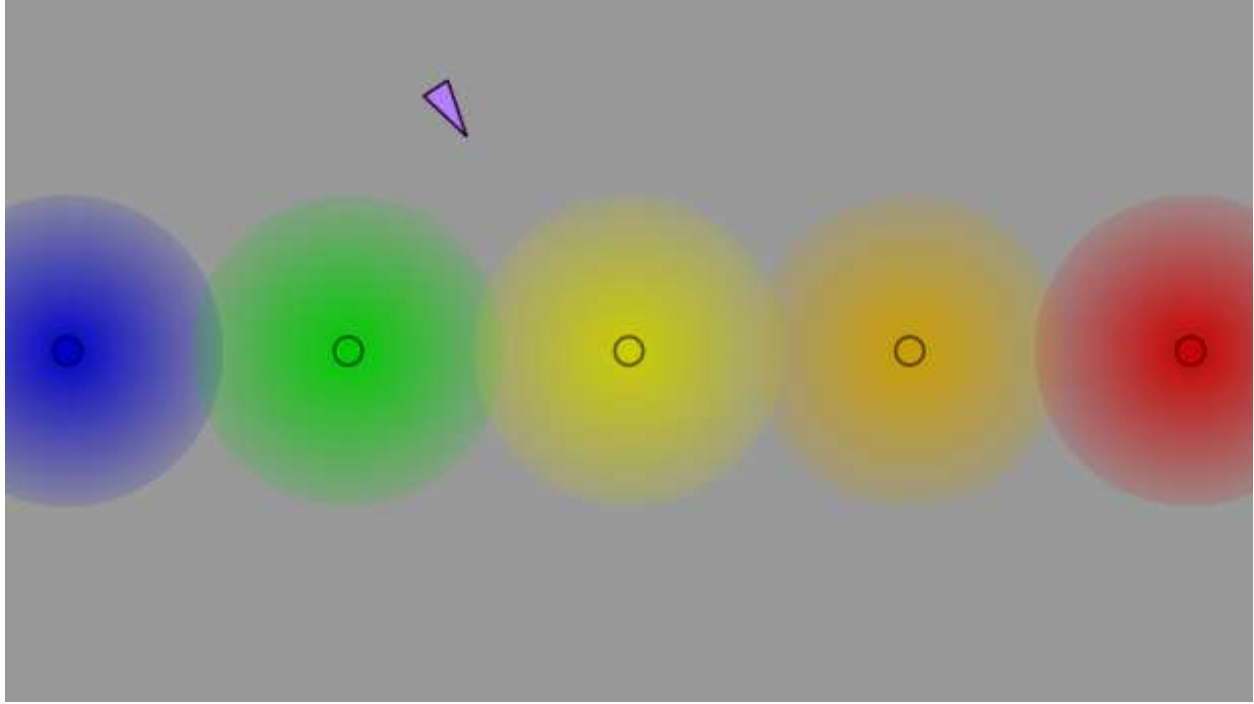
Pan = 1.0f



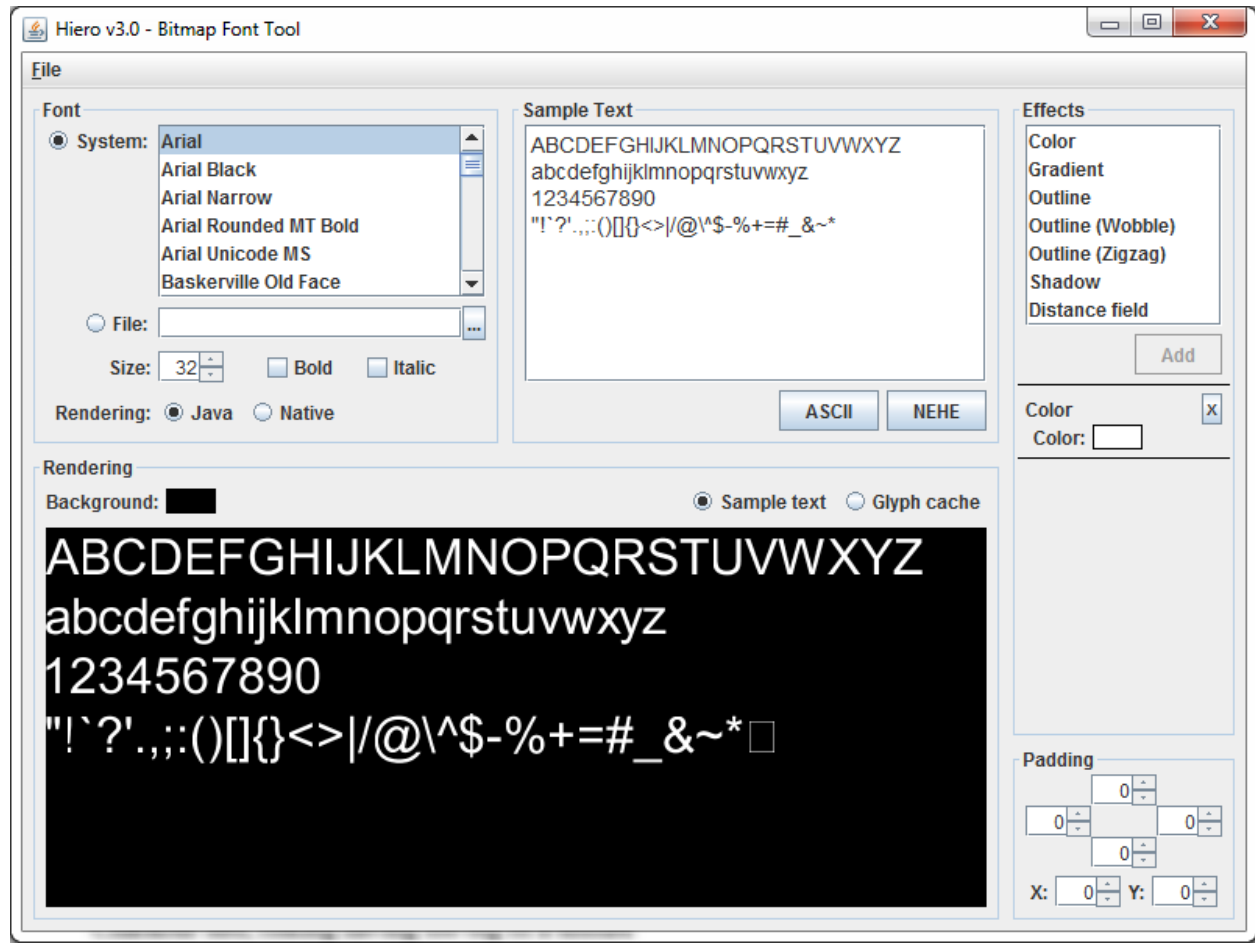


Pan = -0.5f





Chapter 6, Font Rendering

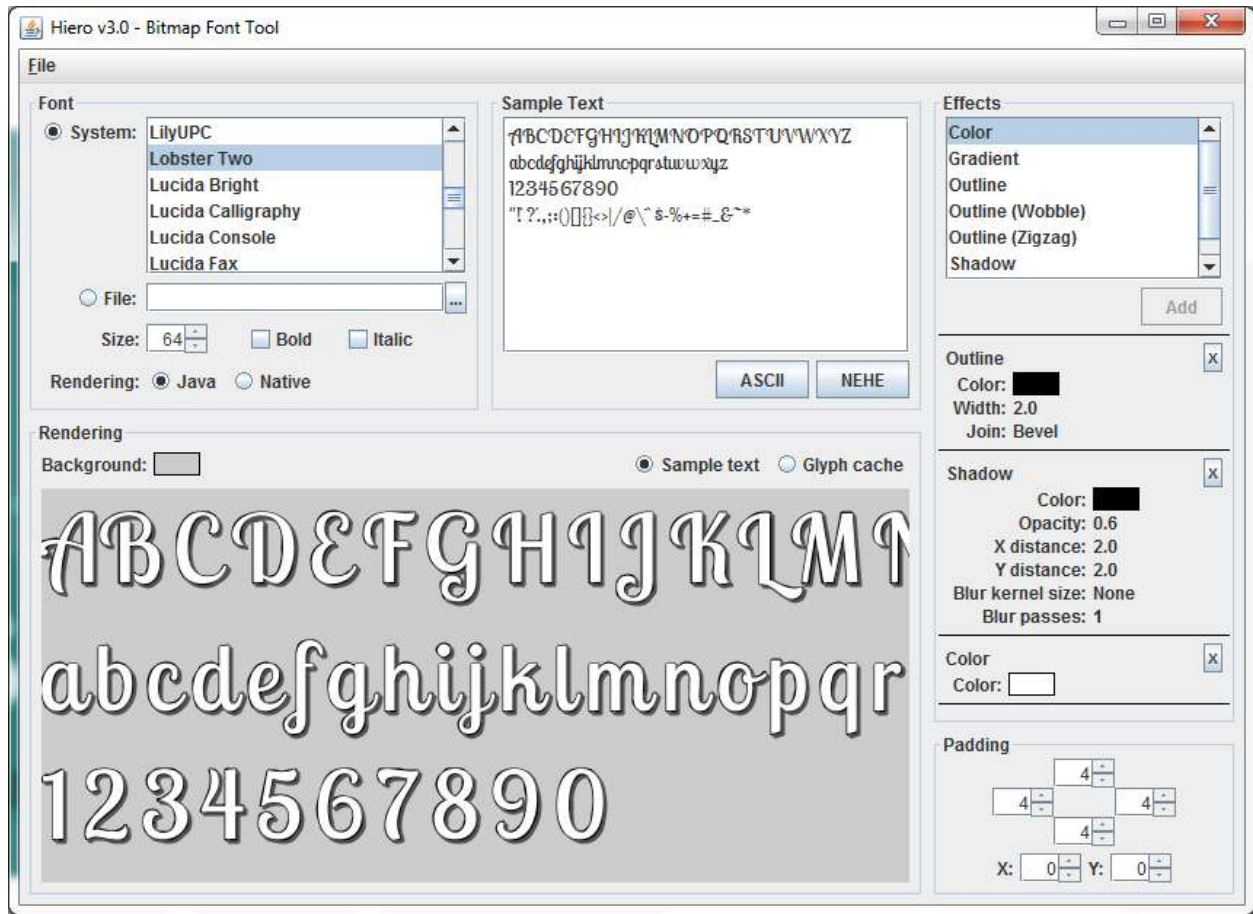


This is a one line string

This is a scaled red
multiline string

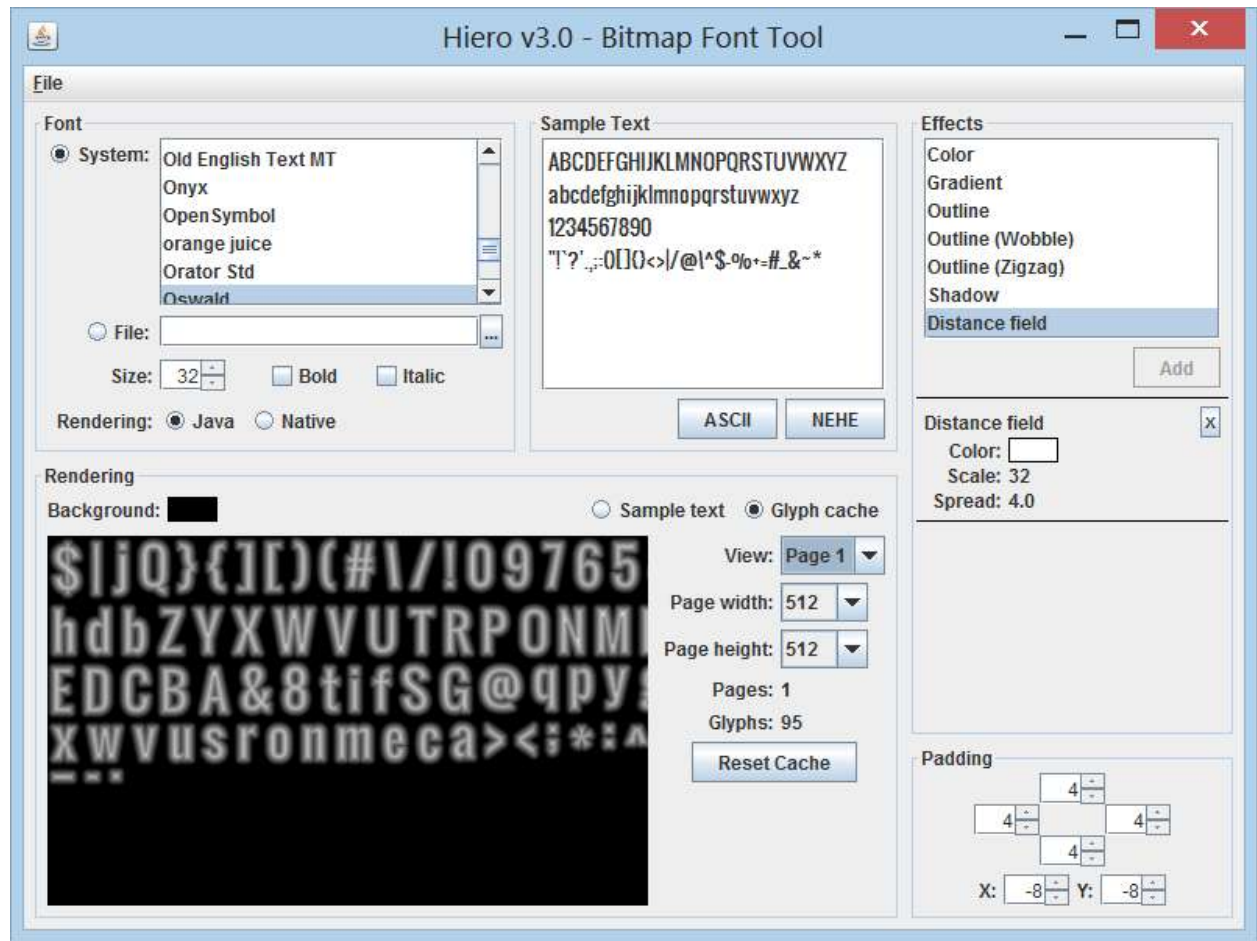
This is a blue string wrapped to
fit inside a 900px box.
BitmapFont will have to insert
line breaks somewhere





This effect is exciting!
Pretty boring text

Libgdx

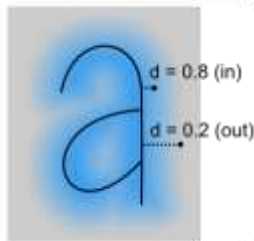


Linear



Distance field

QZYWVUTRPNMLKJIHFEDC

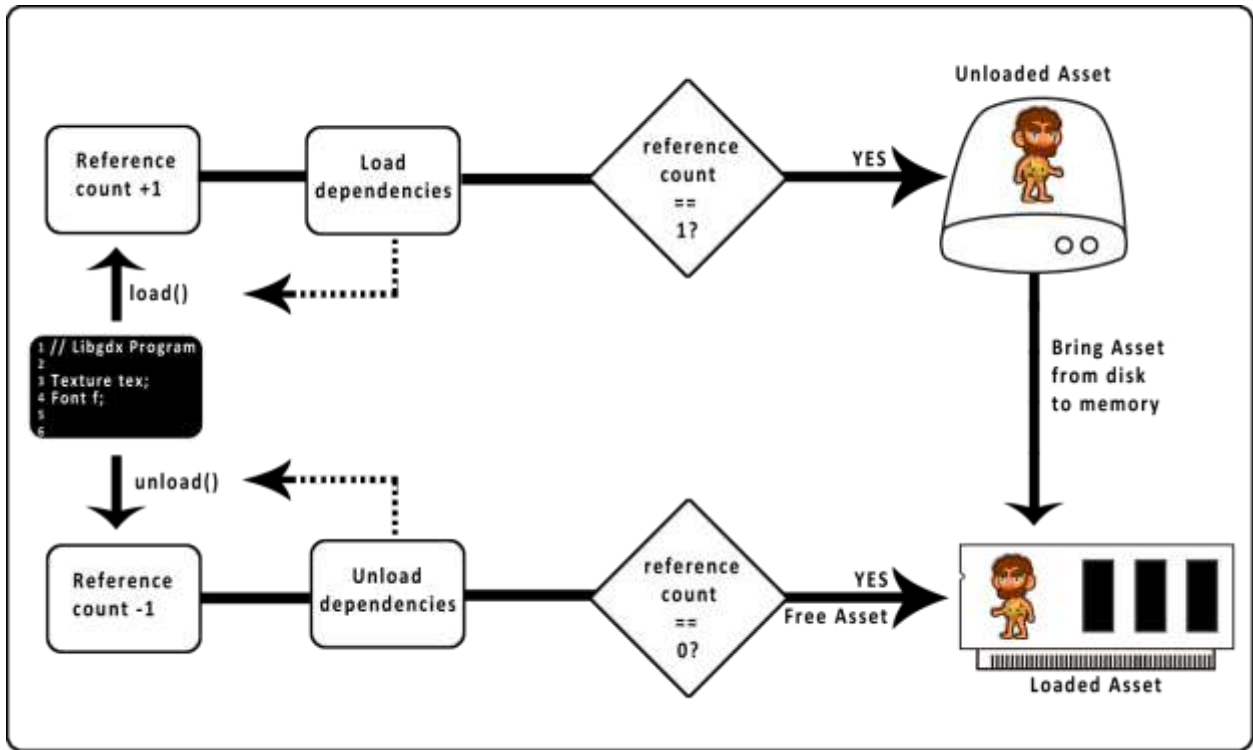


Just outline

Just glow

Outline and glow

Chapter 7, Asset Management



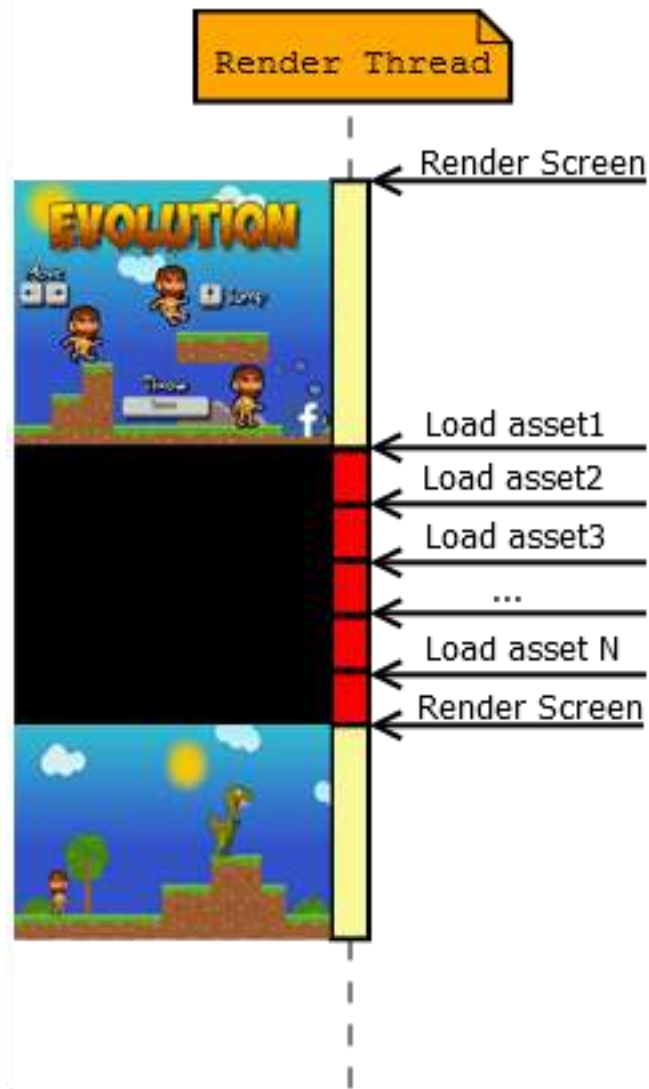
Loading bar

Background bar

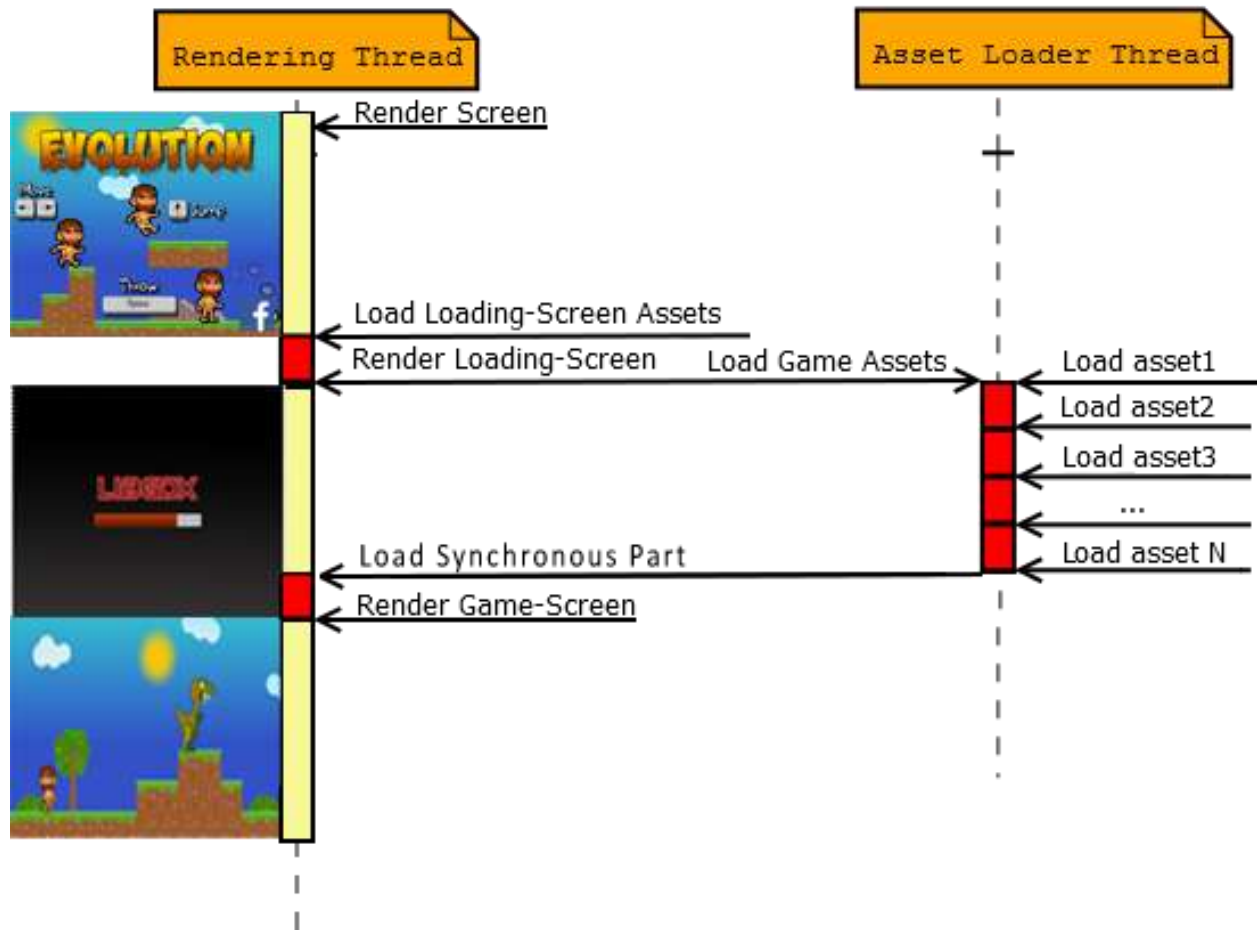


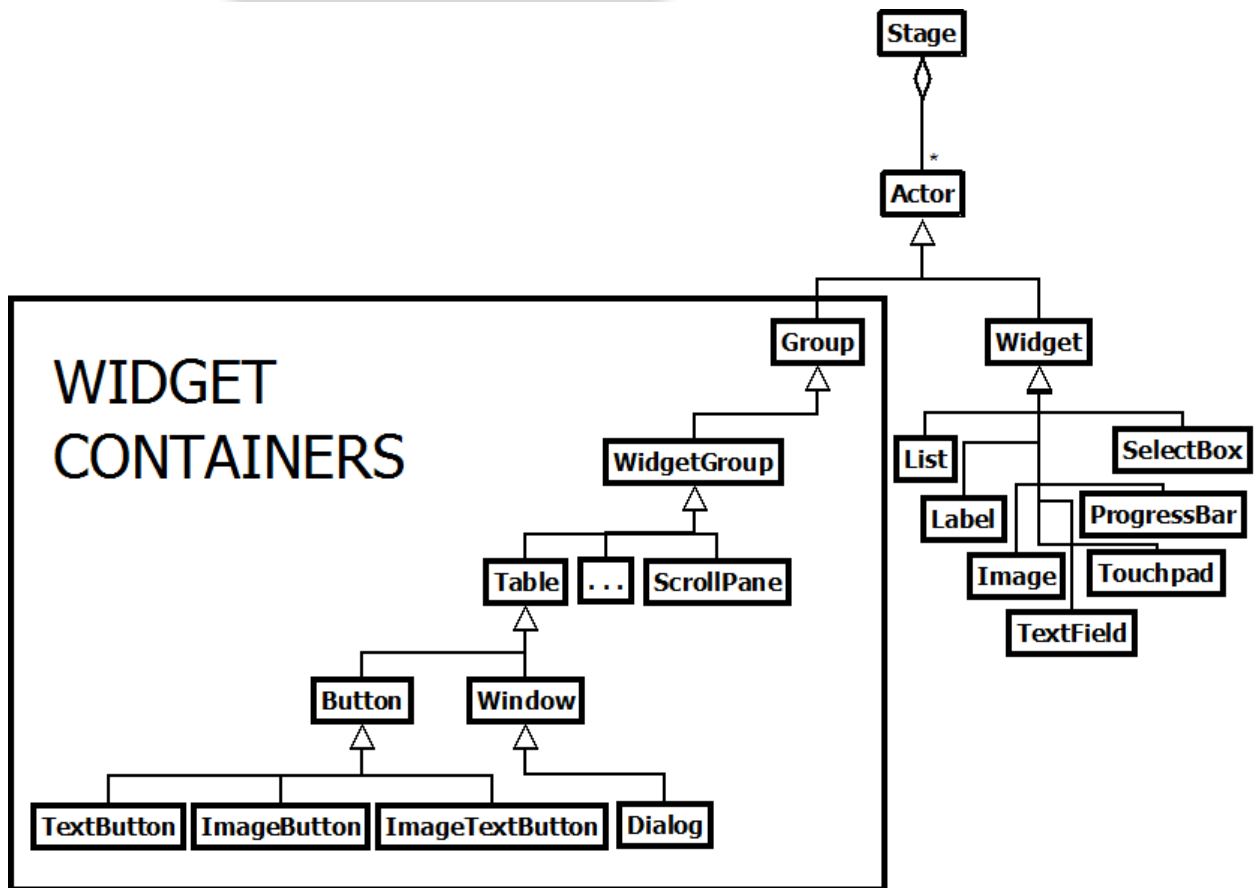
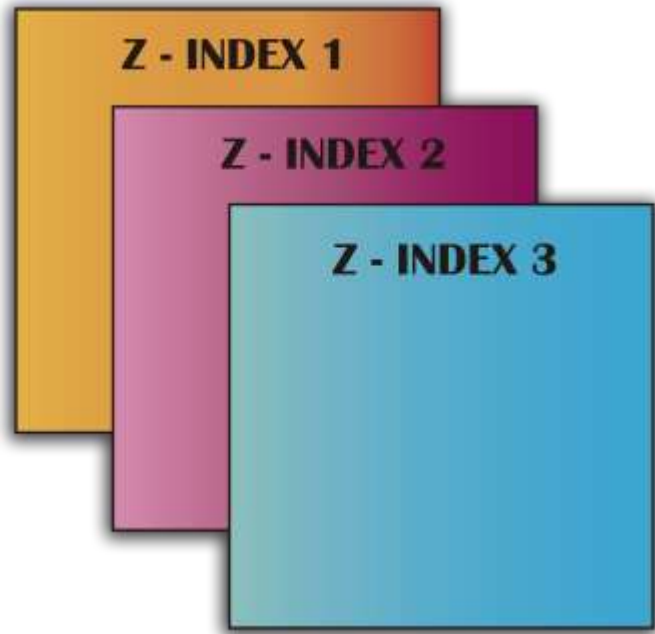
(pbPos.x, pbPos.y)

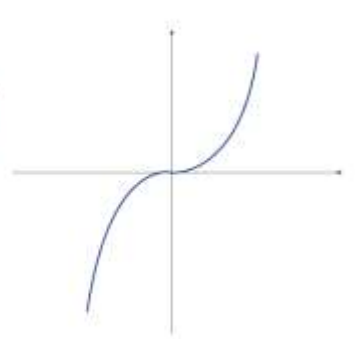
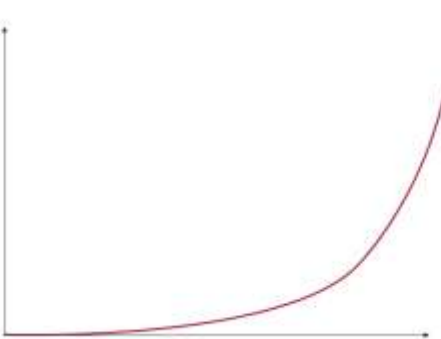
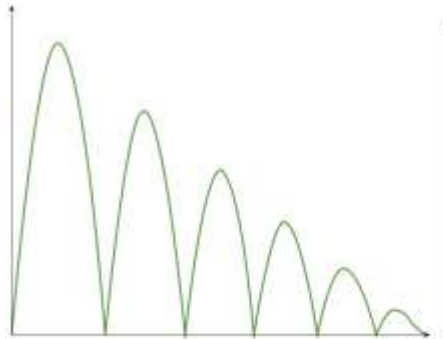
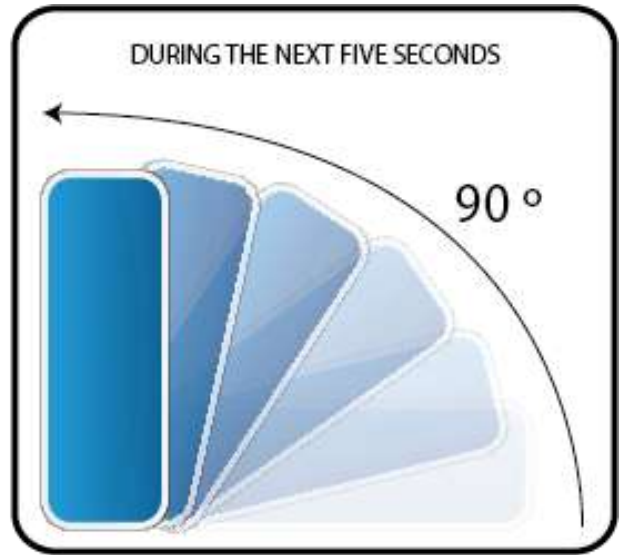
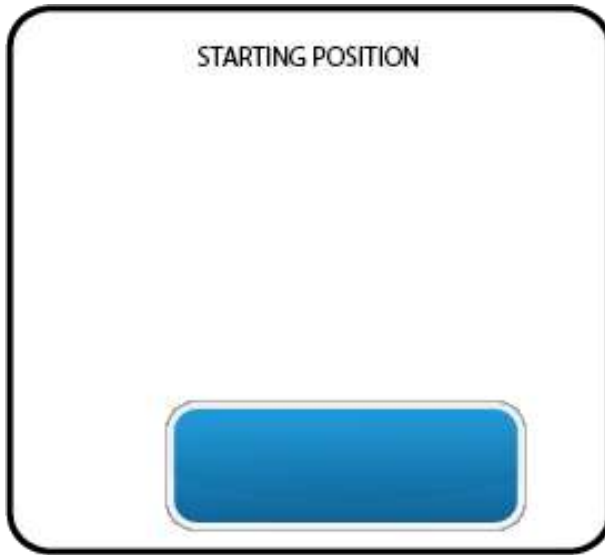
Synchronous Loading



Asynchronous Loading







- Checkbox
- Checkbox2
- Checkbox3

Enter password...

- item 1
- item 2
- item 3
- item 4

- item 3
- item 4
- item 5

- item 1
- item 2
- item 3
- item 4
- item 1



- Root-node
Child-node1
Child-node2



- item 1
- item 2
- item 3
- item 4
- item 5
- item 6
- item 7
- item 8

This is the title
WindowLabel

[Three blue buttons stacked vertically]

Dialog: Exit?

[Yes] [No]

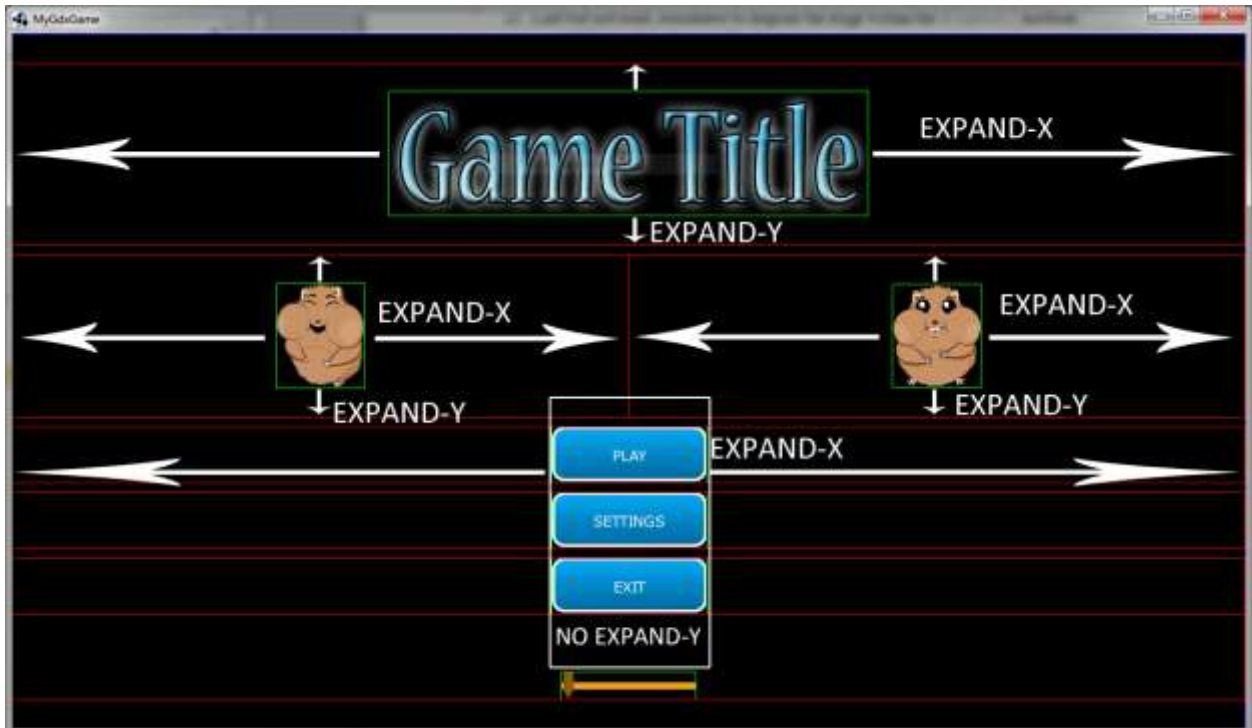
Game Title



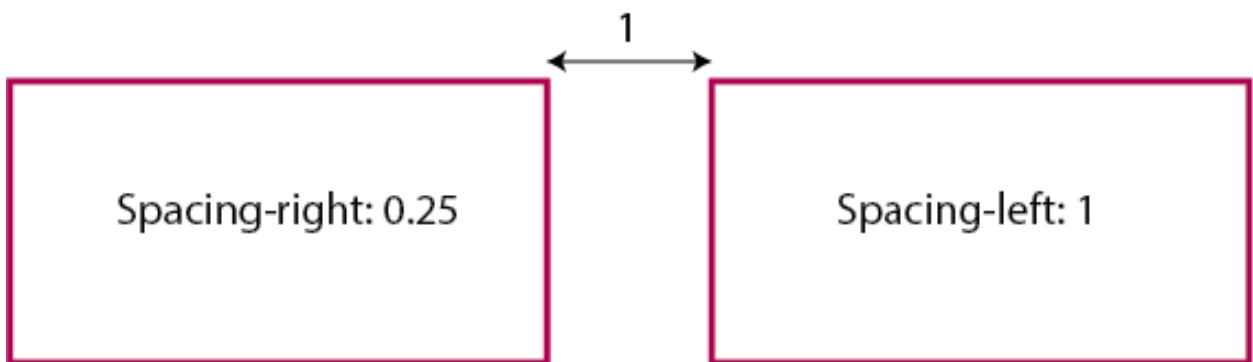
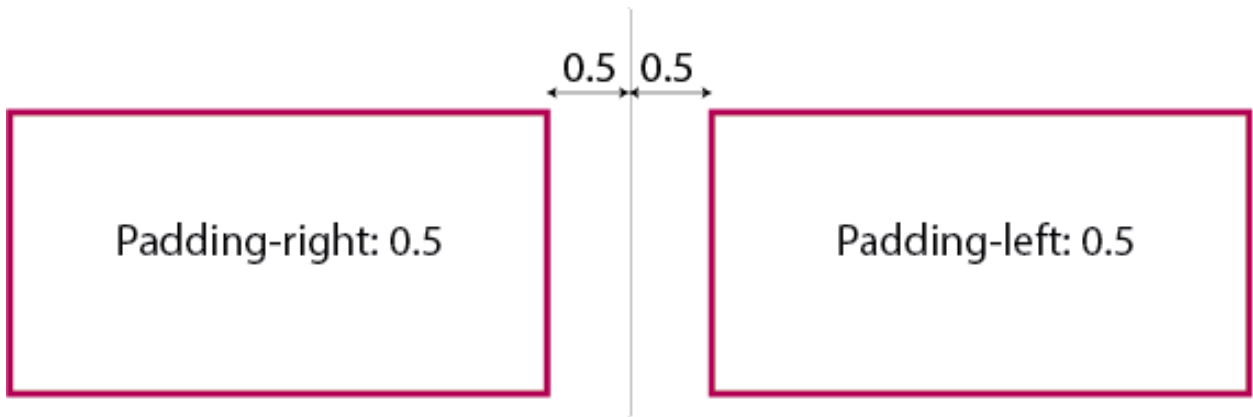
PLAY

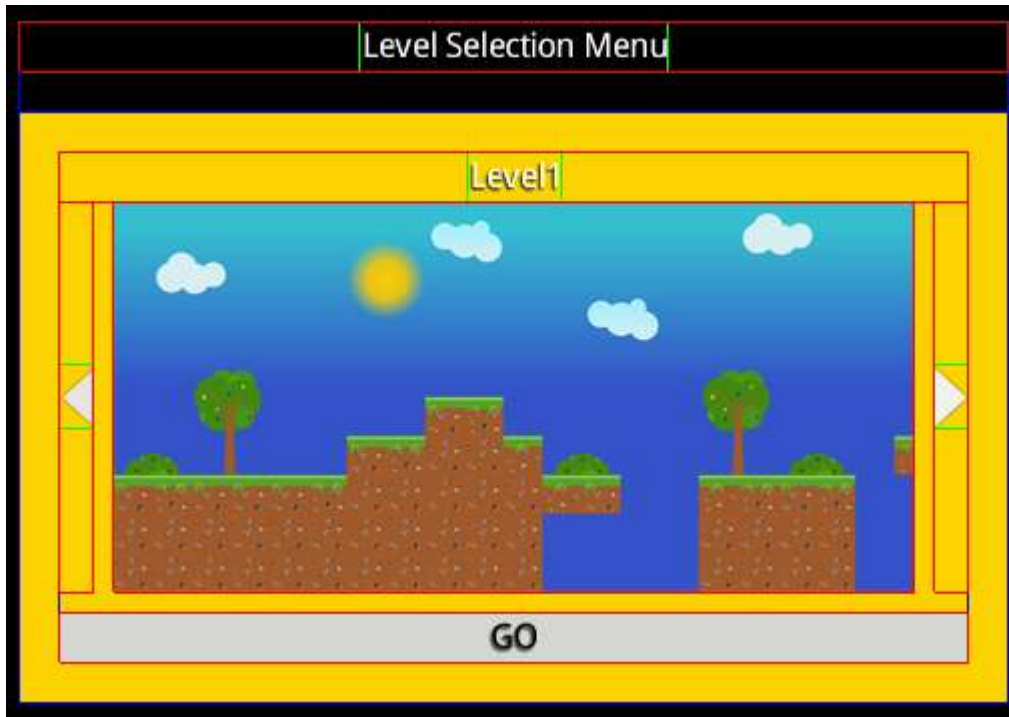
SETTINGS

EXIT

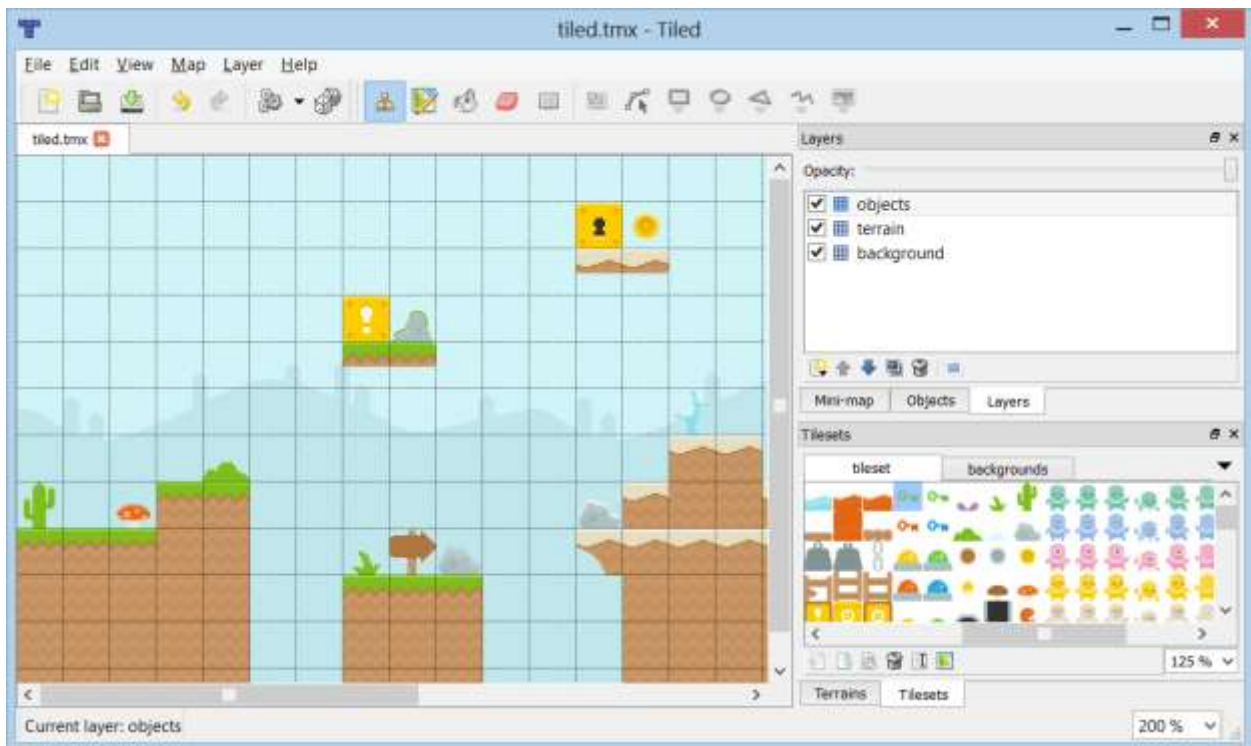


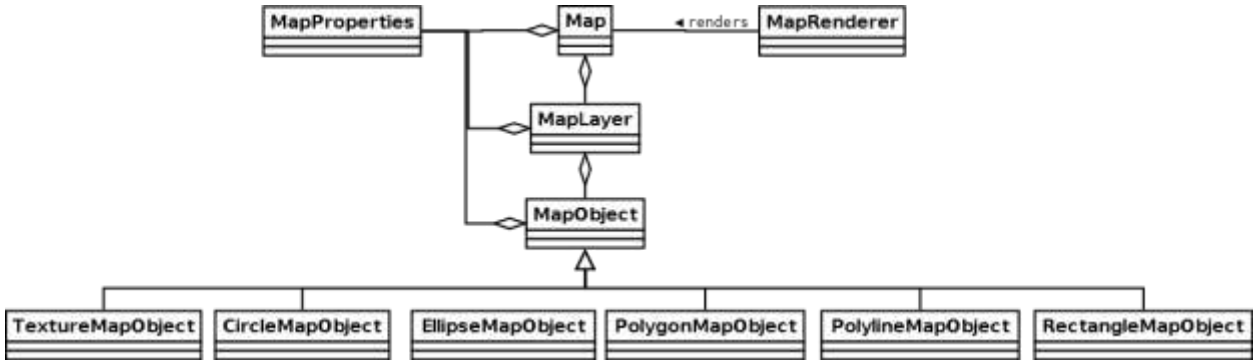


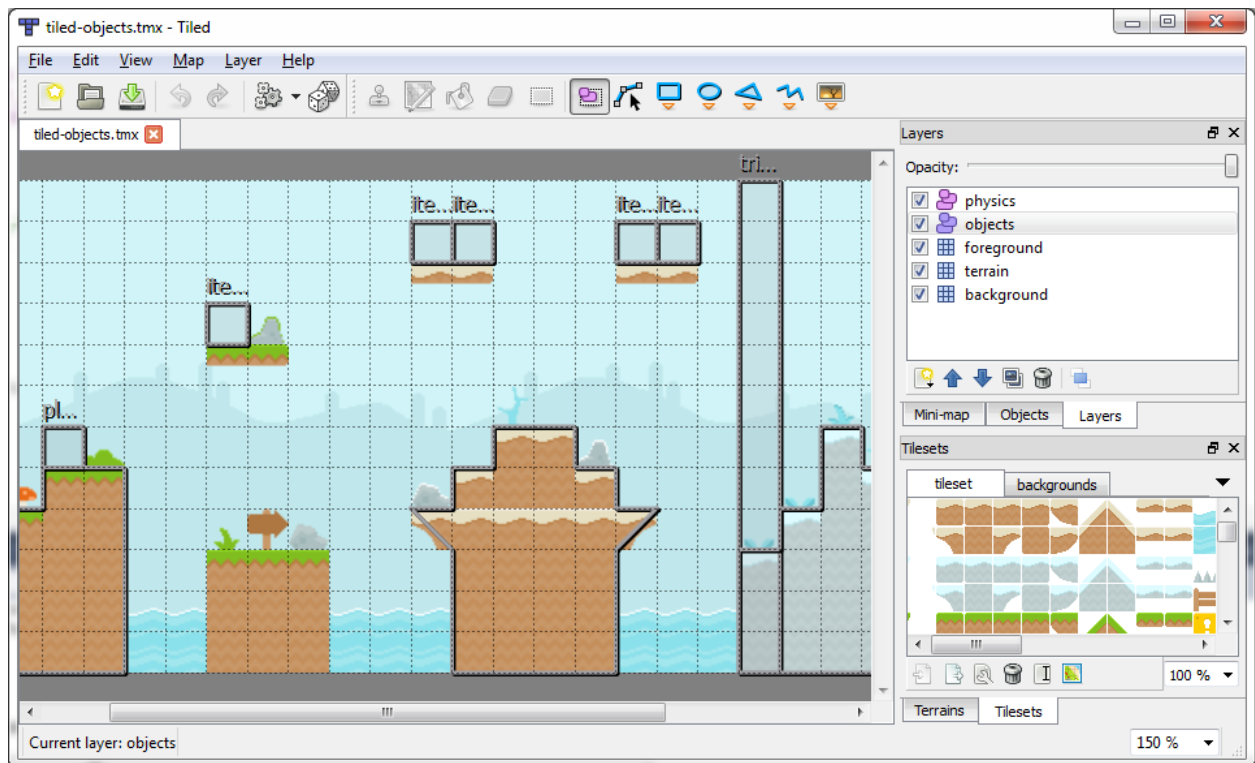


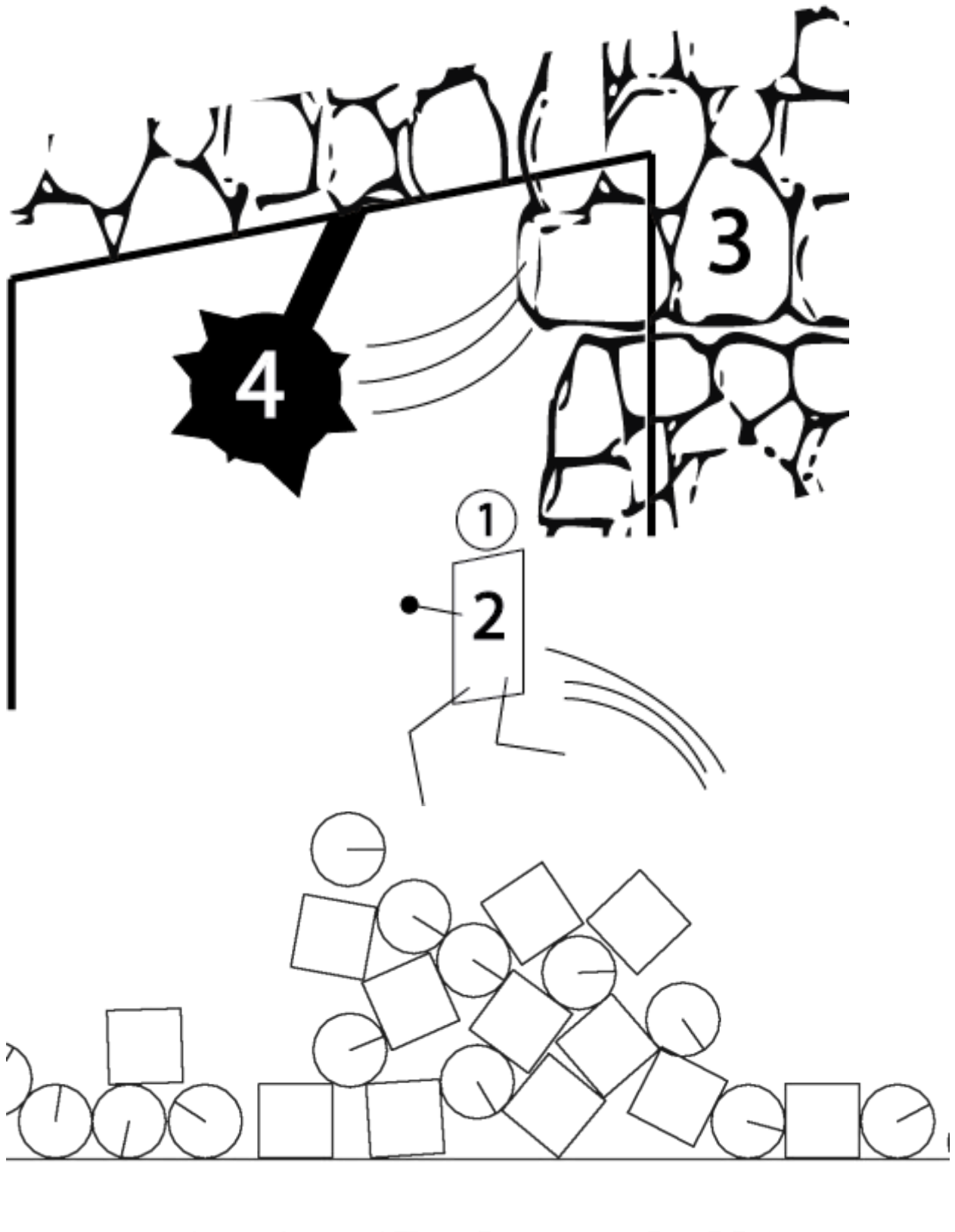


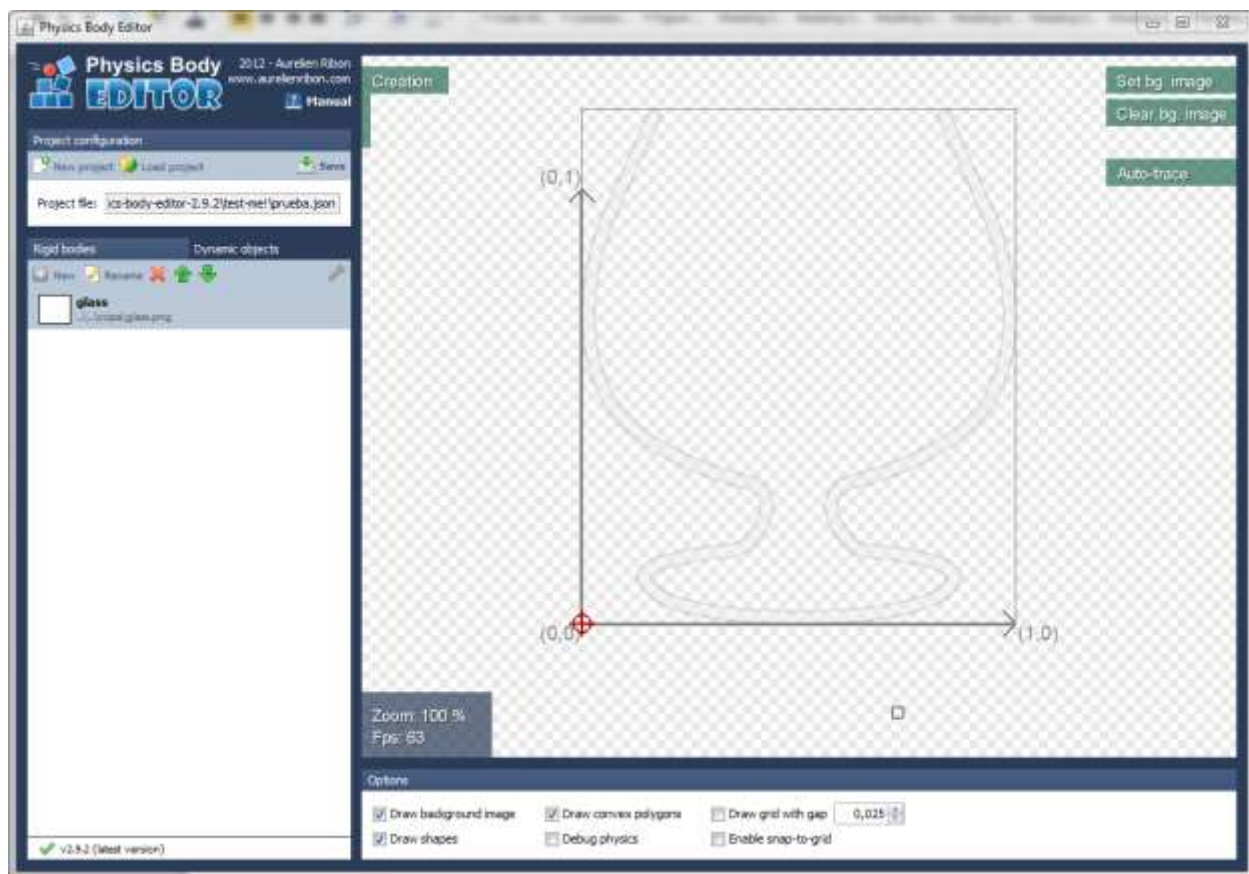
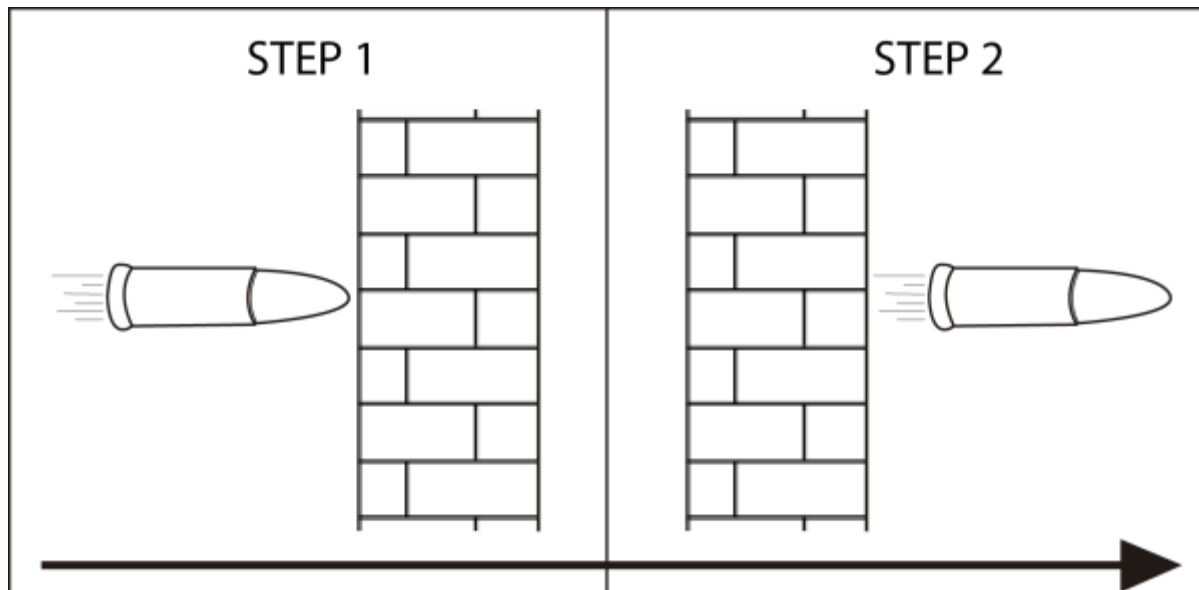
Chapter 9, *The 2D Maps API*

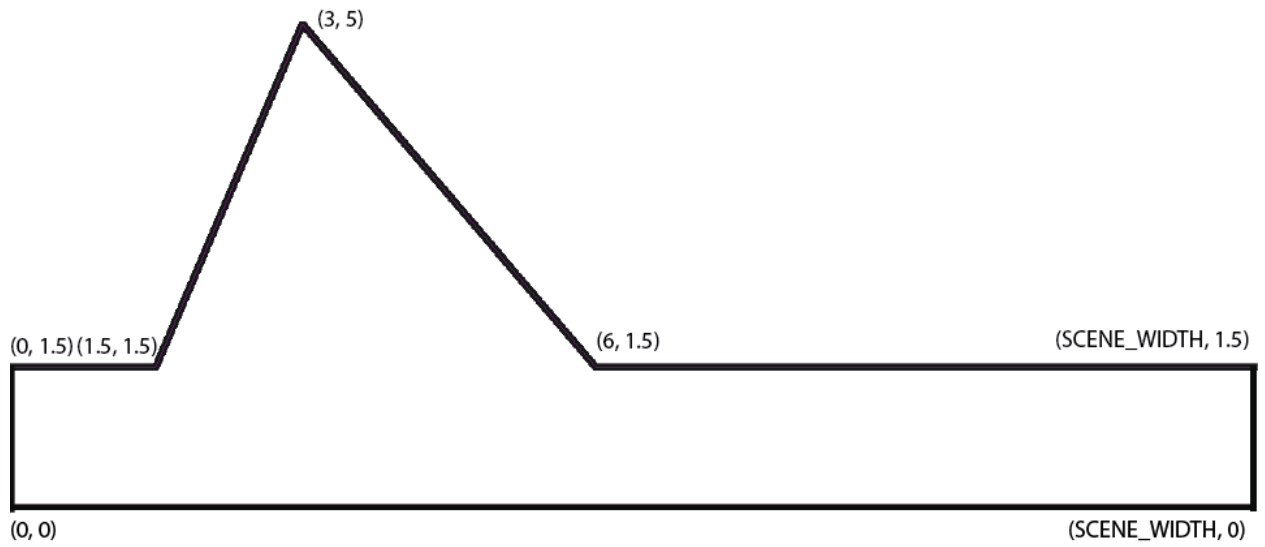
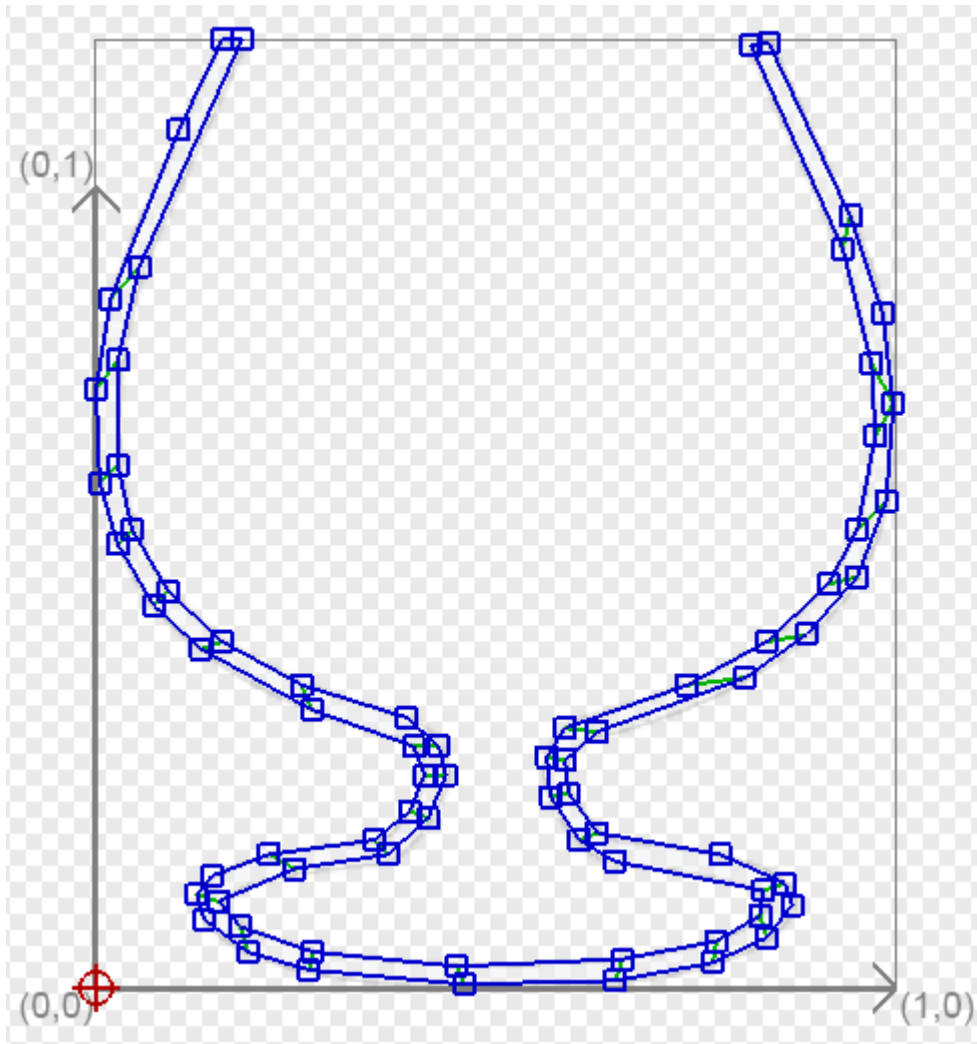


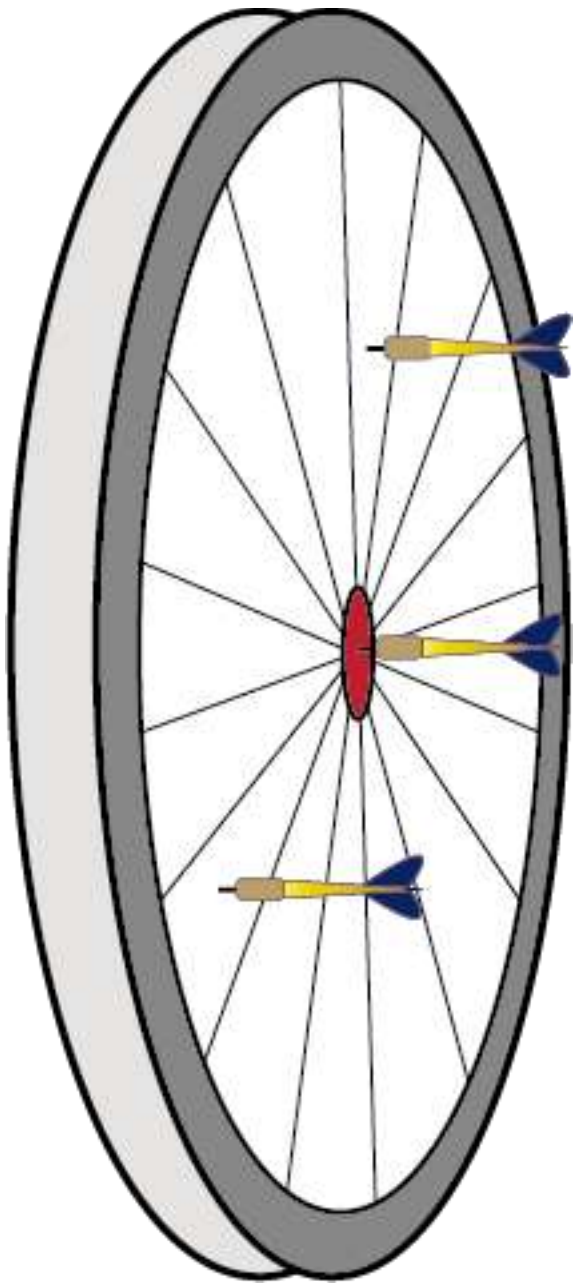


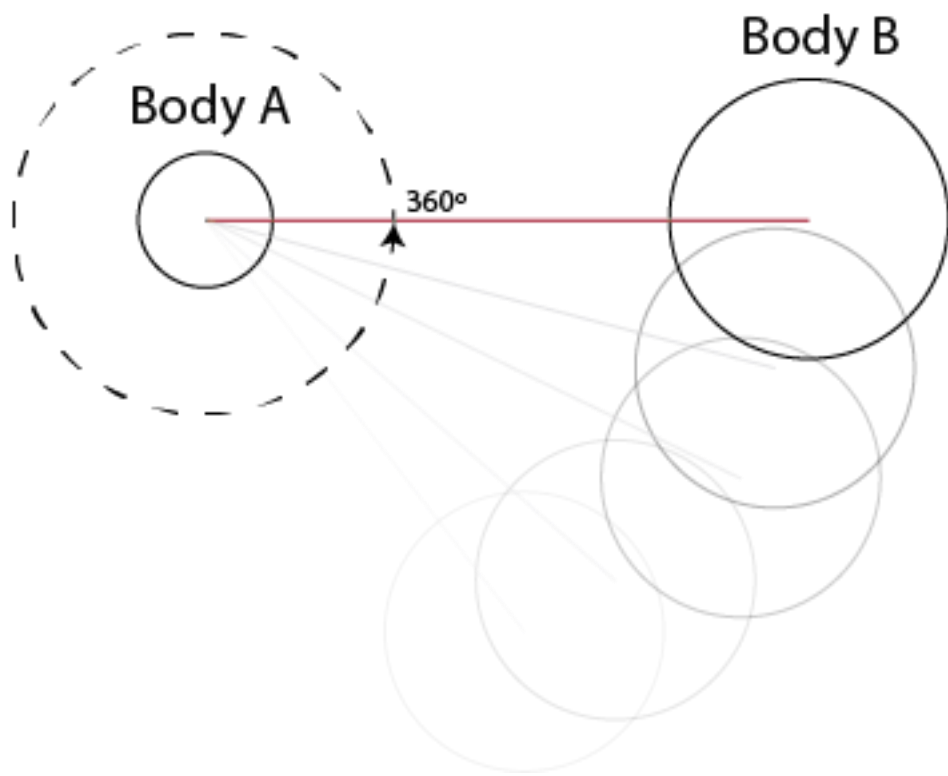


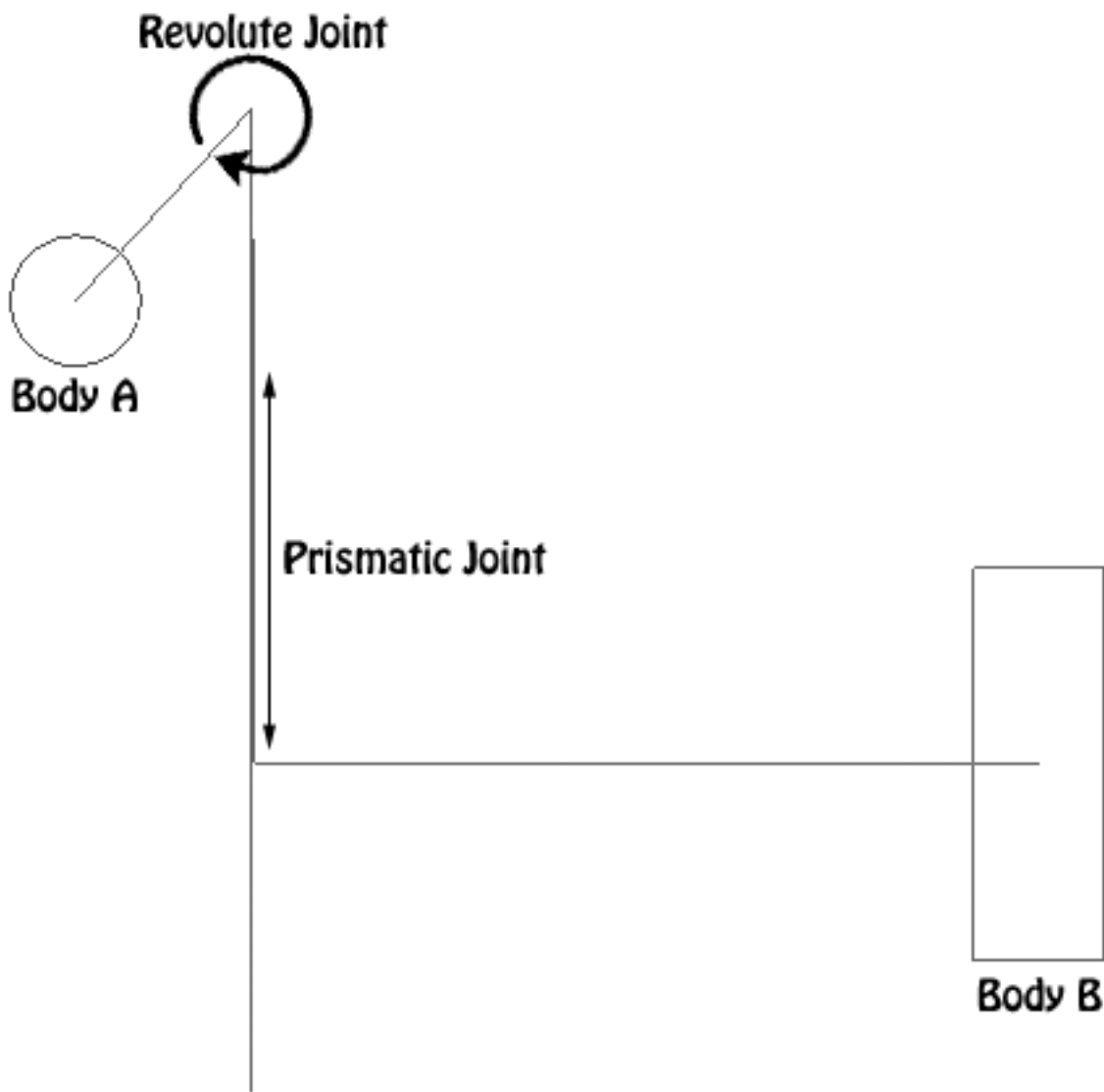


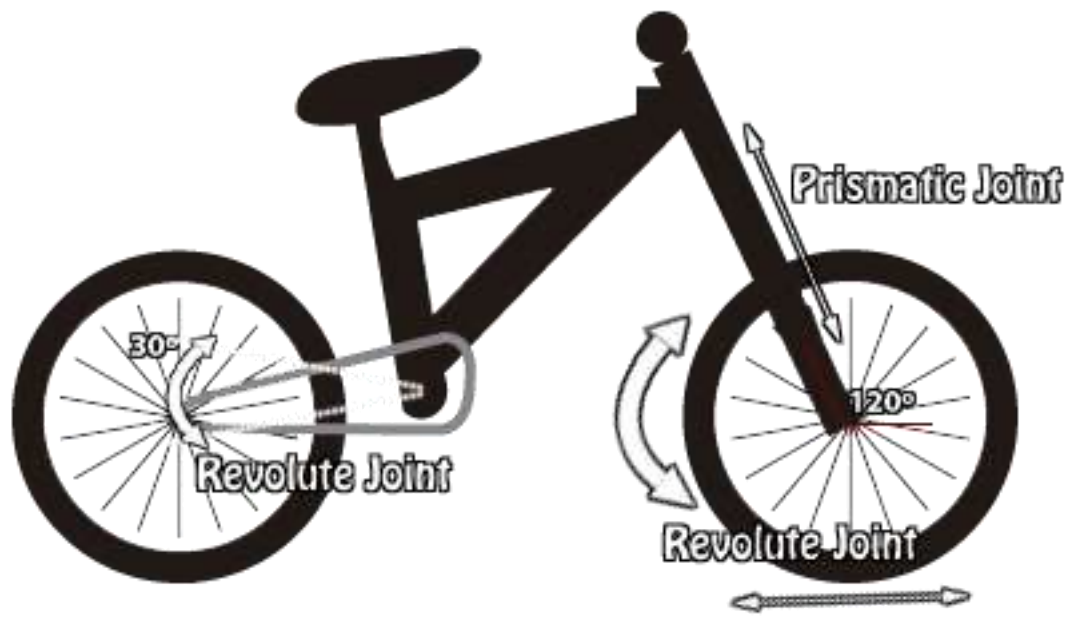


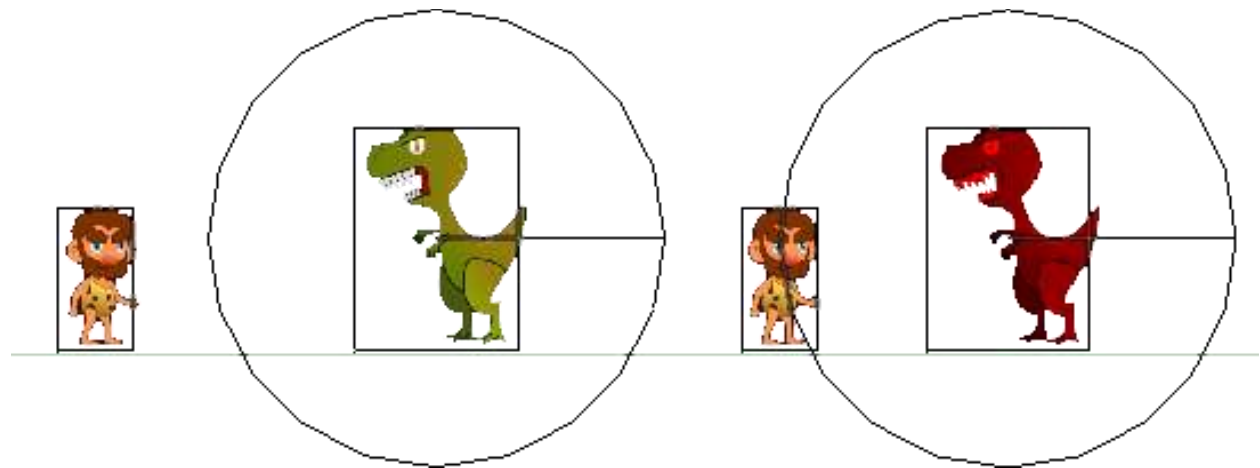
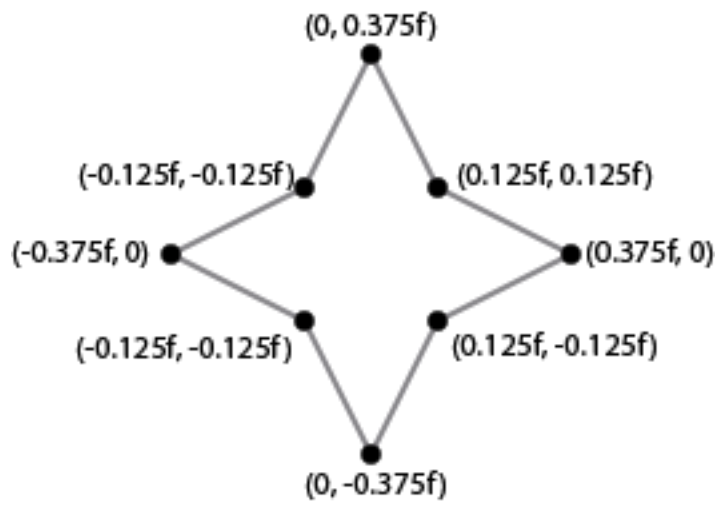


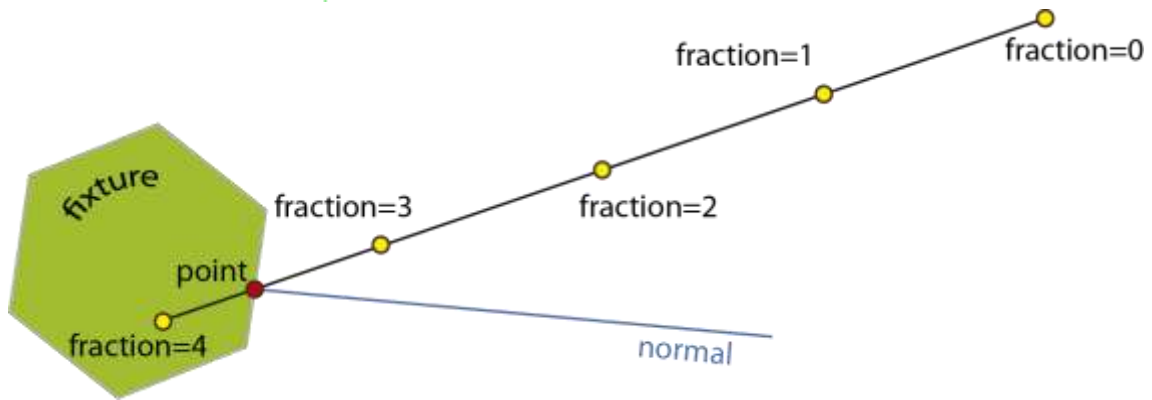
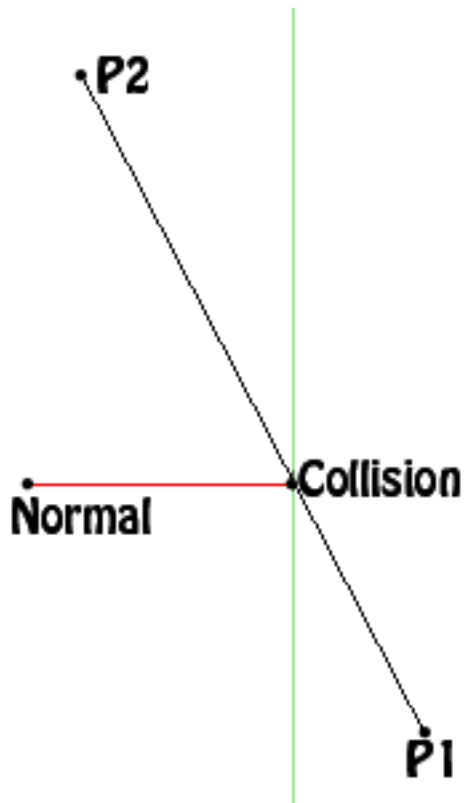


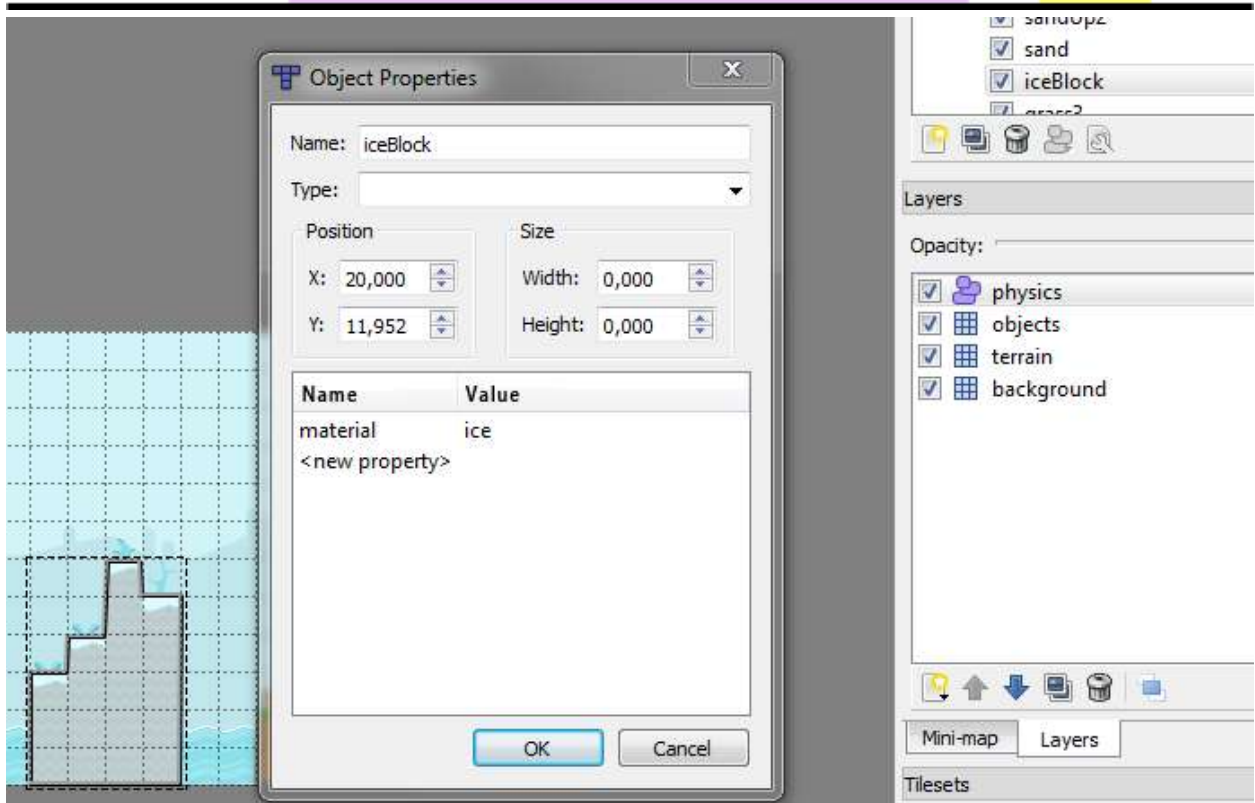
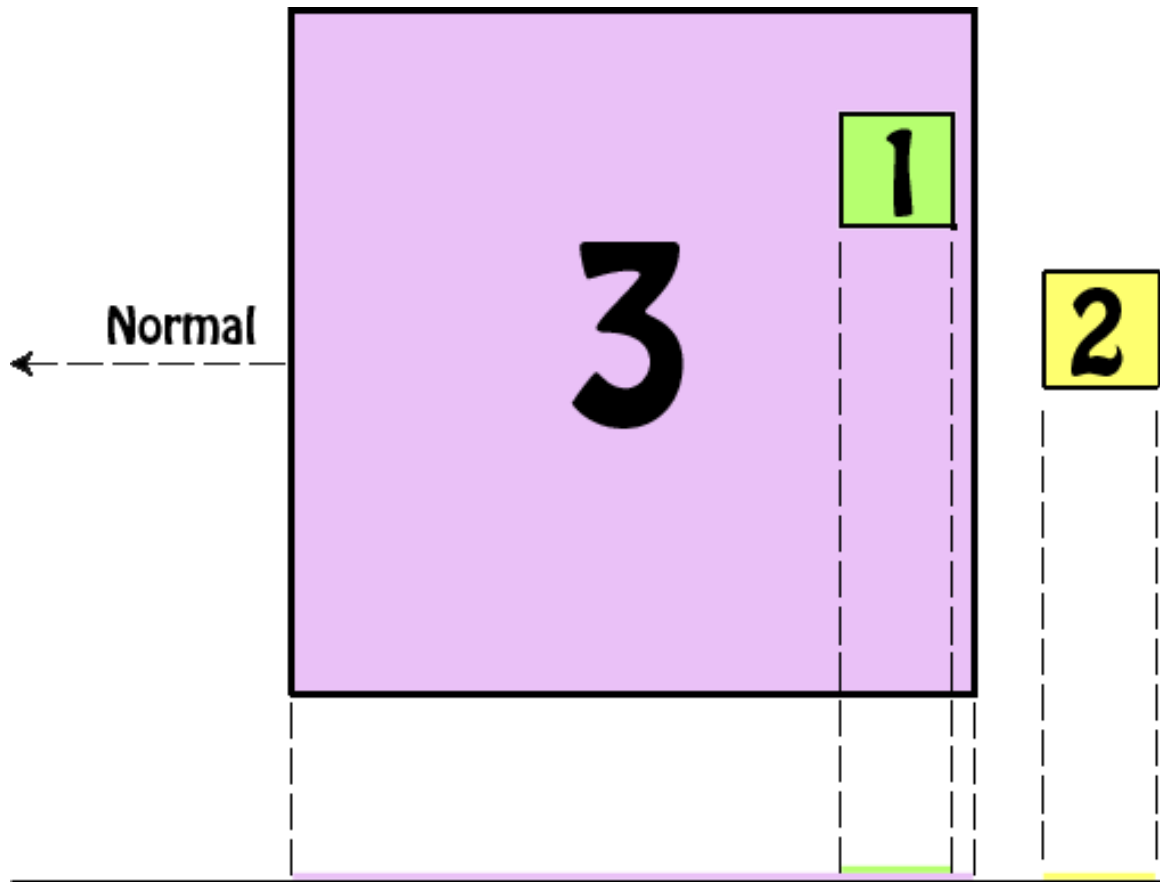








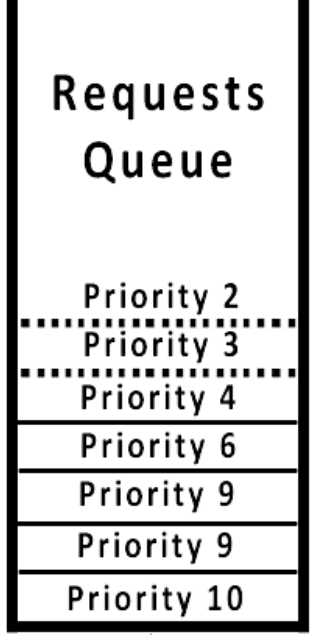




```
1 // Libgdx Program
2
3 Texture tex;
4 Font f;
5
6
```

RayCast
Manager

addRequest

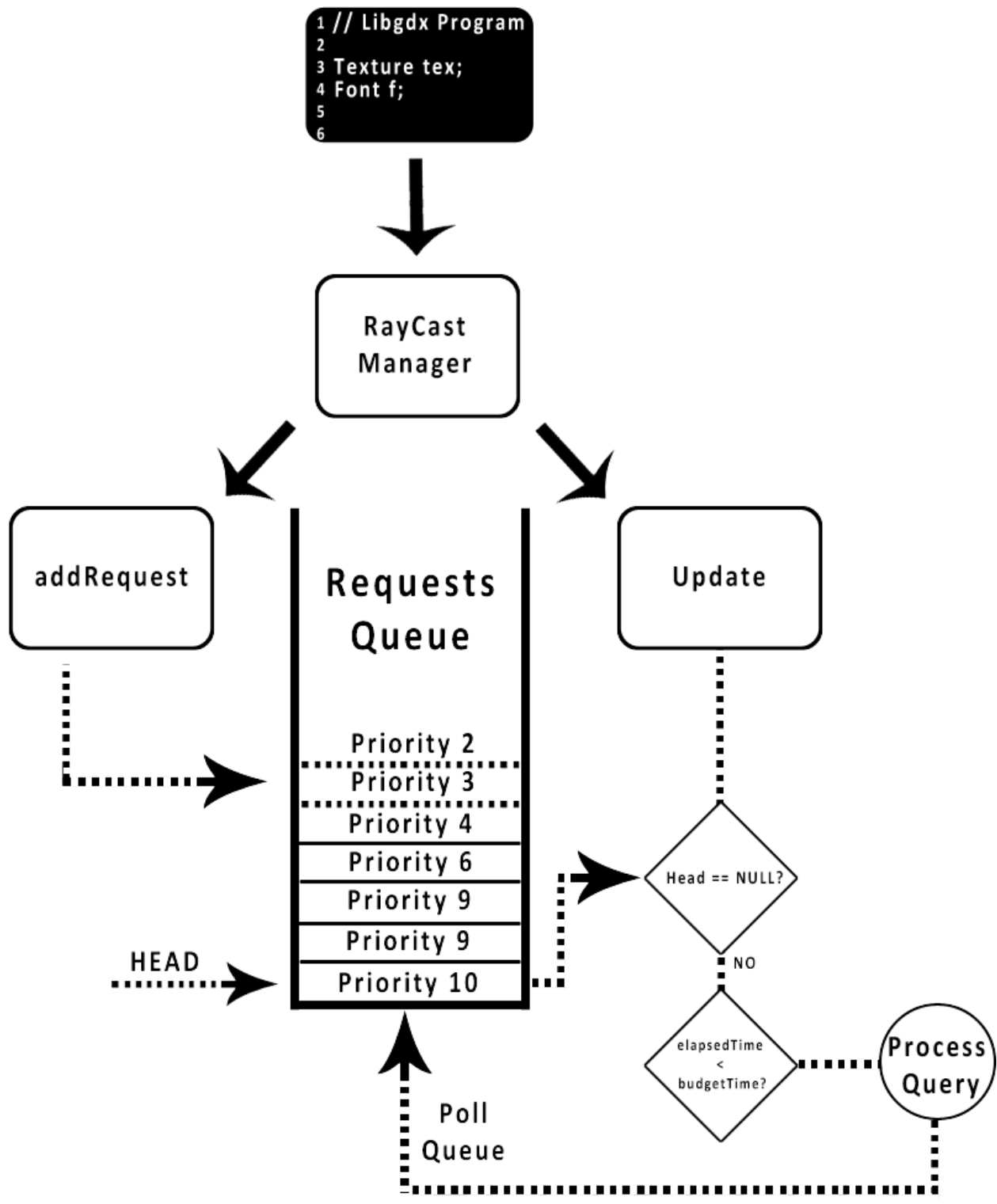


Update

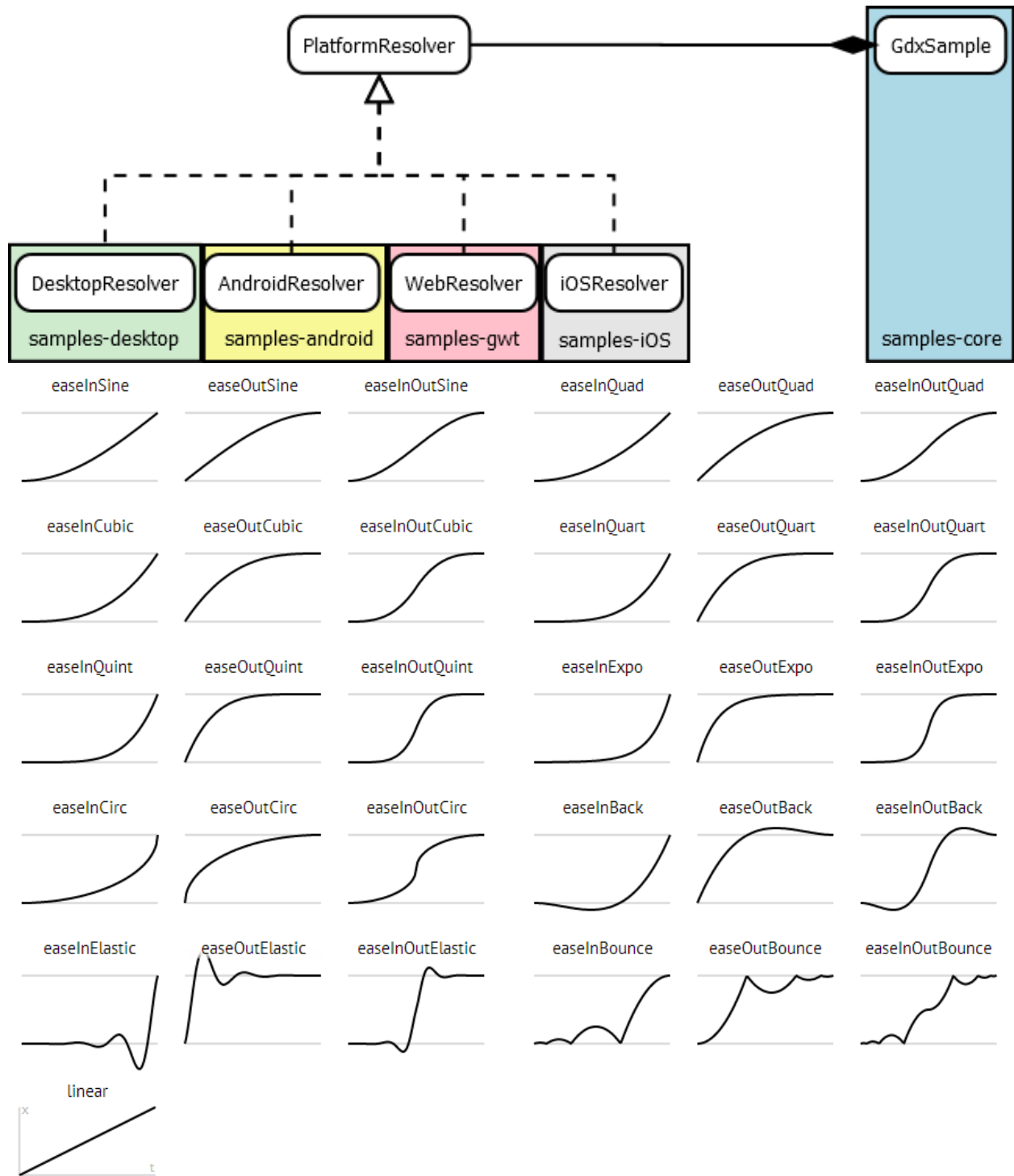
Head == NULL?

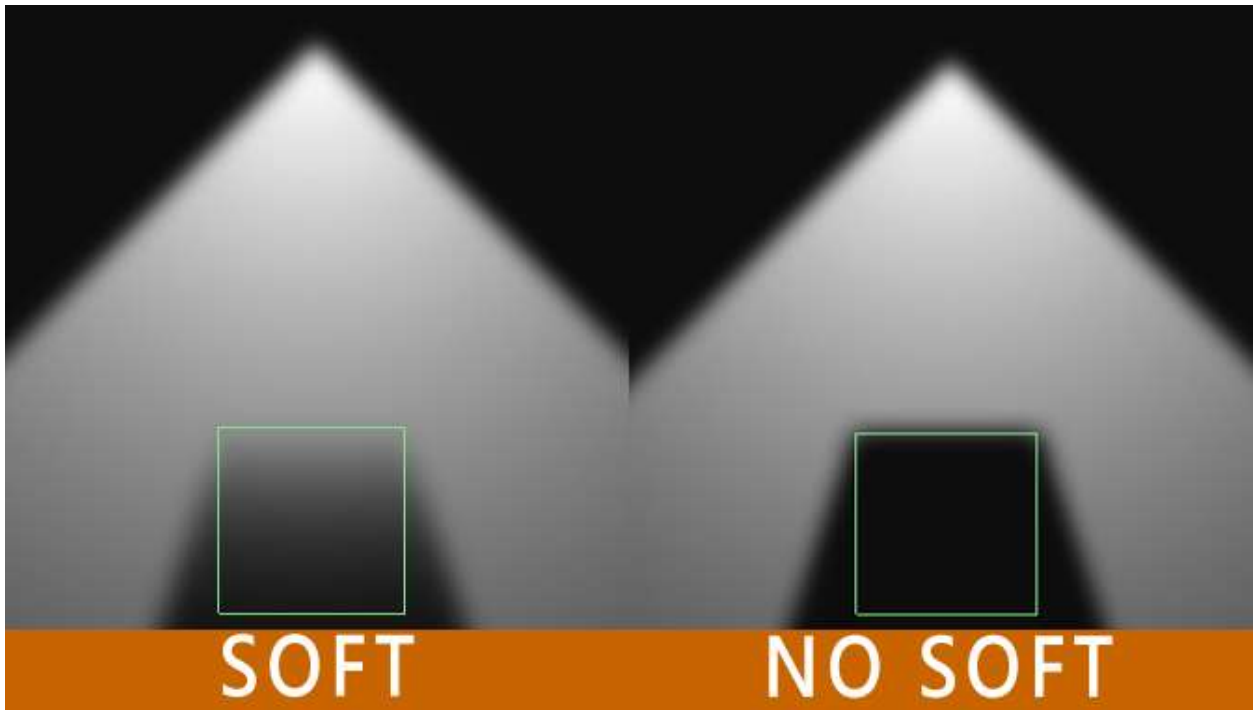
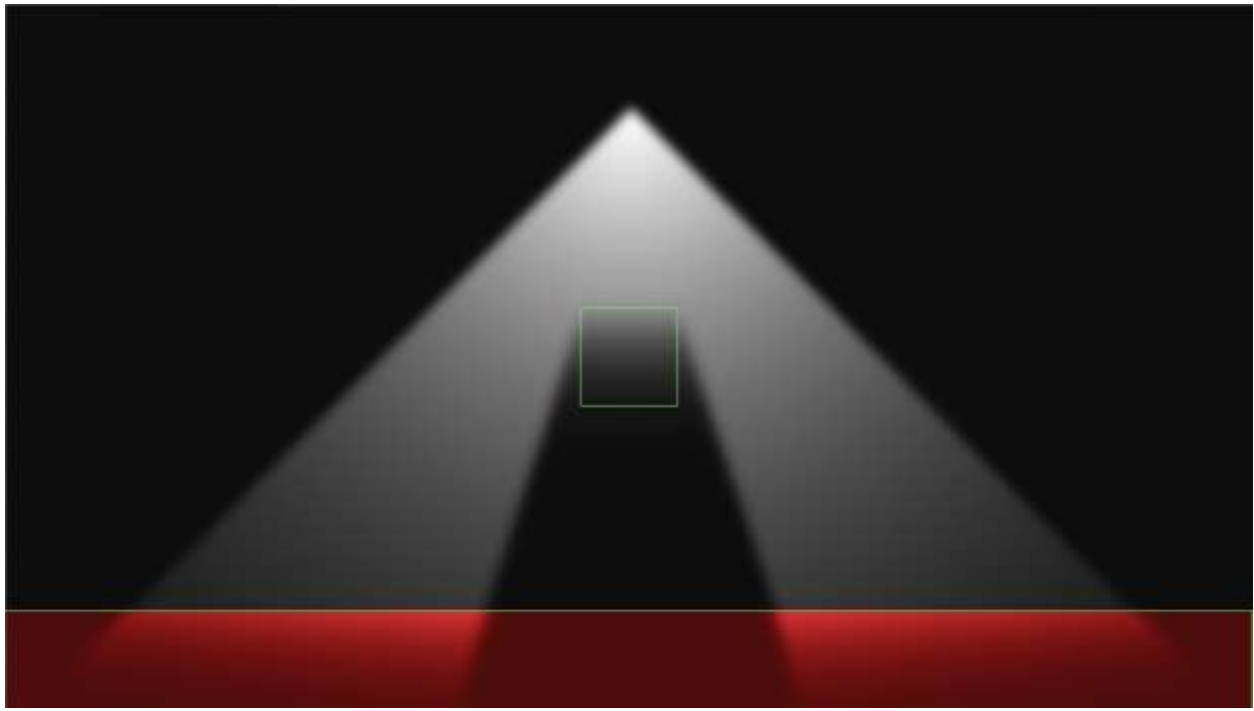
elapsedTime < budgetTime?

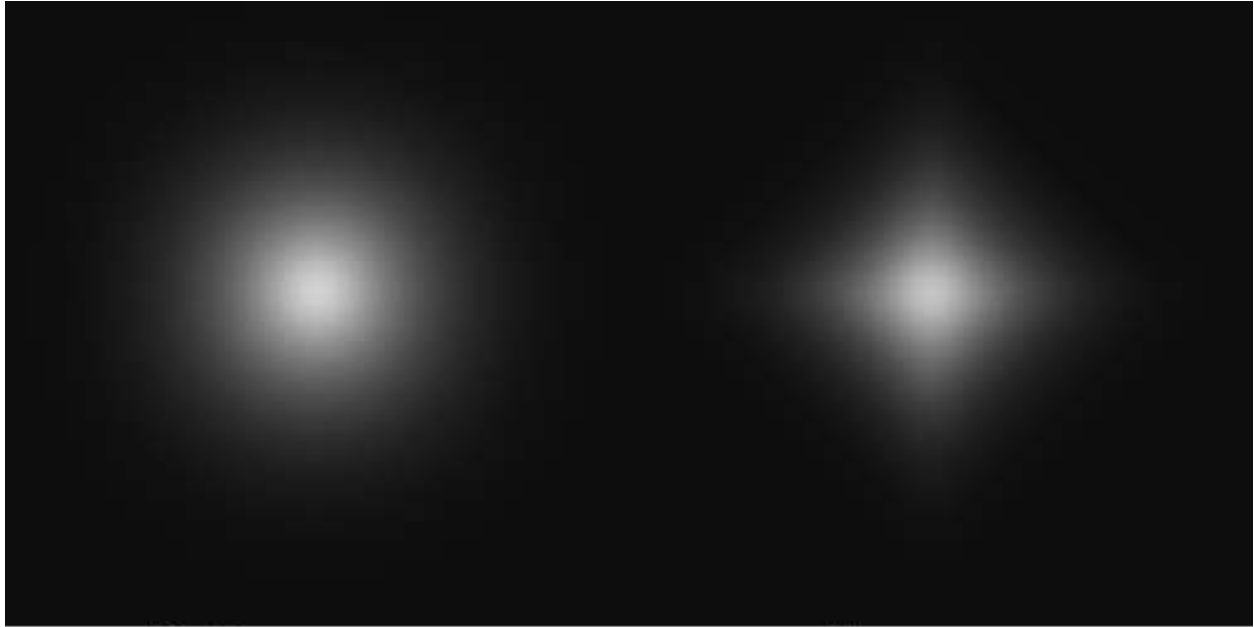
Process Query



Chapter 11, *Third-party Libraries and Extras*

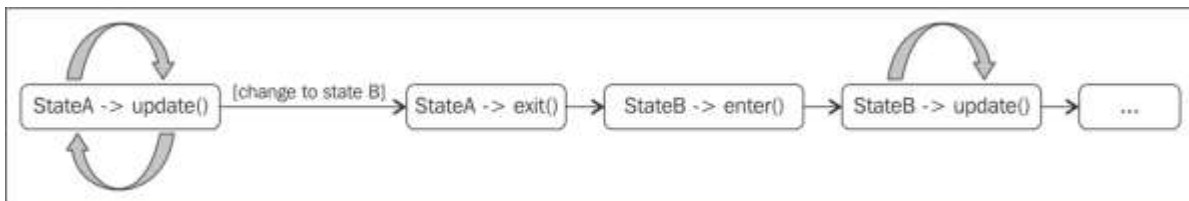
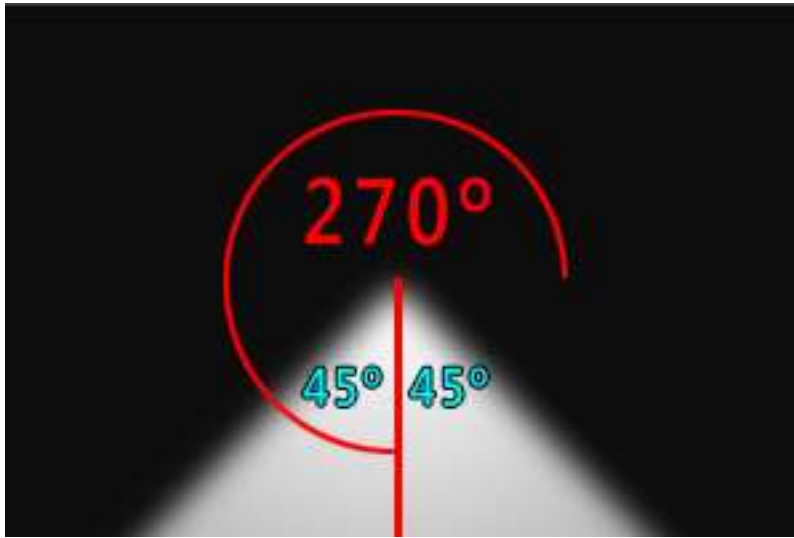


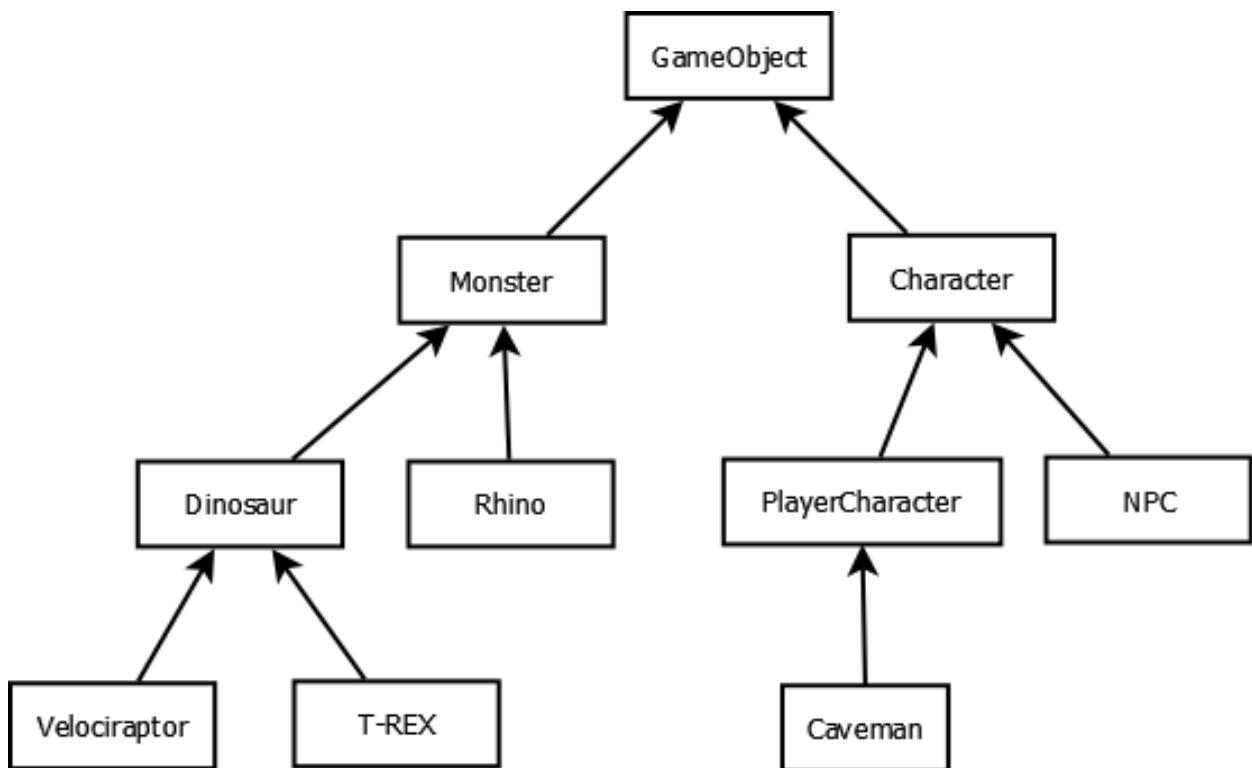
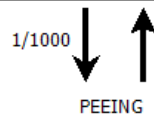
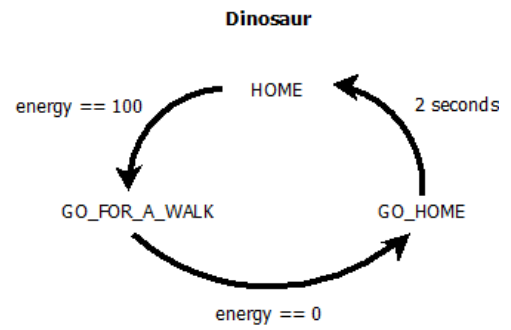
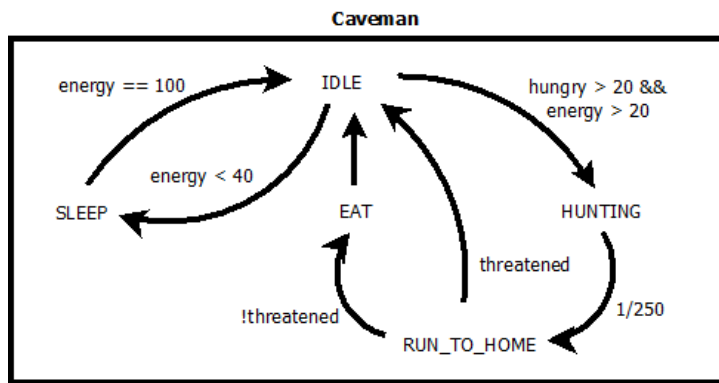


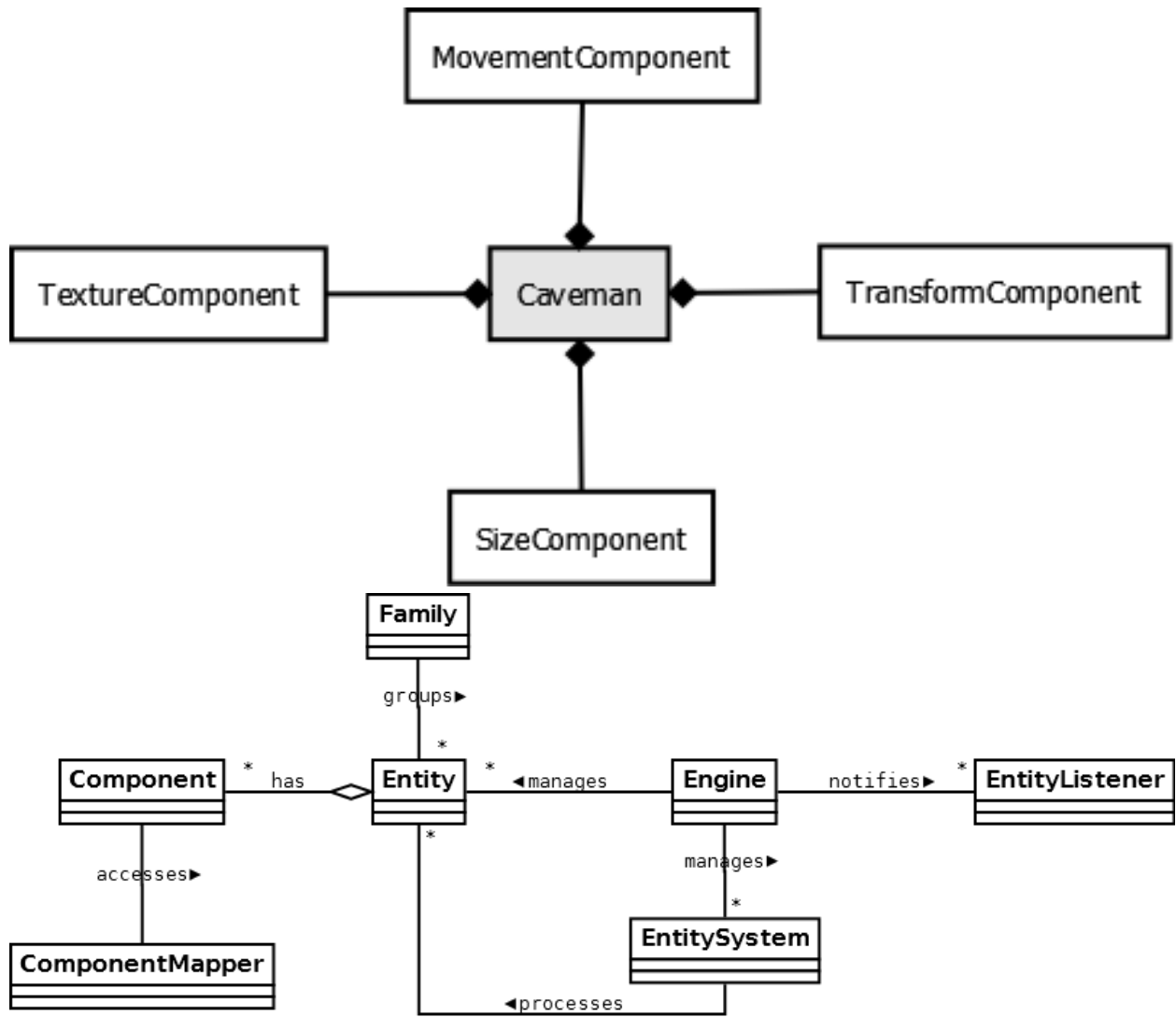


32 rays

5 rays









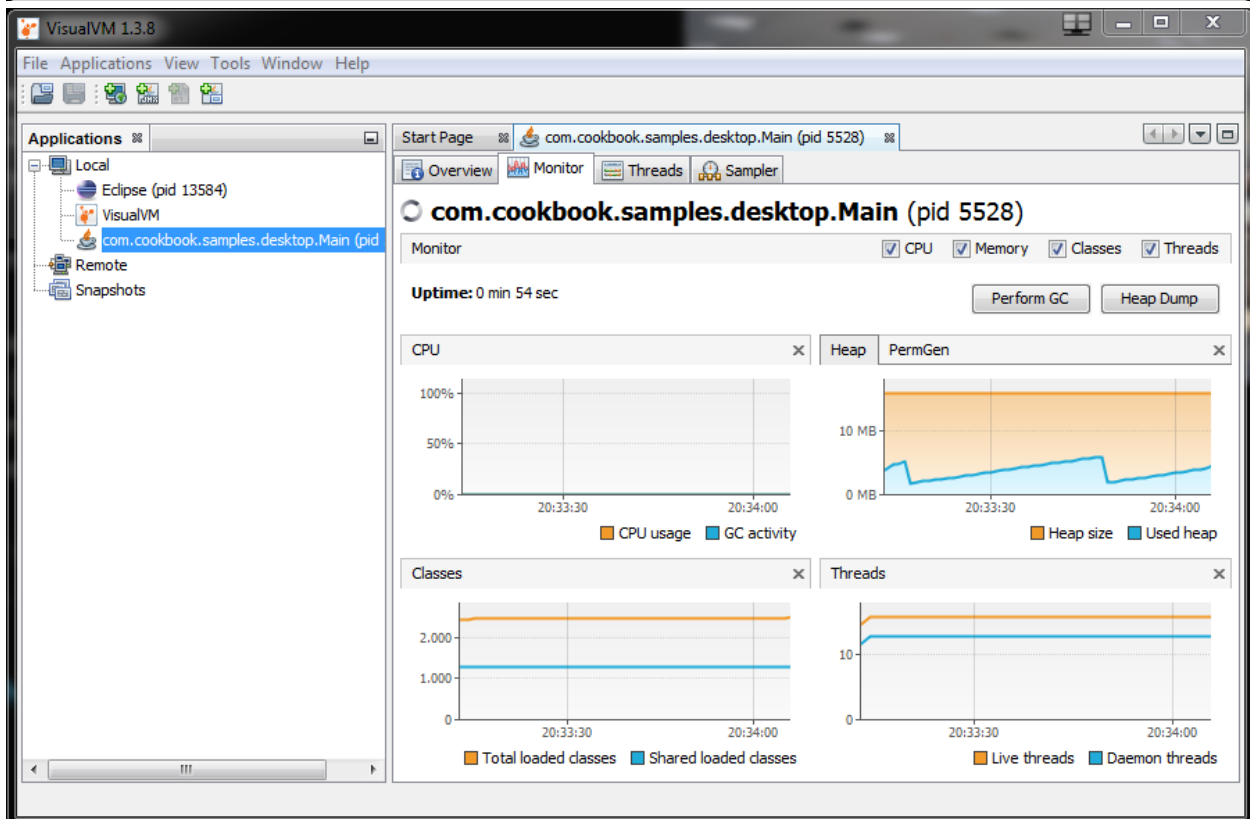
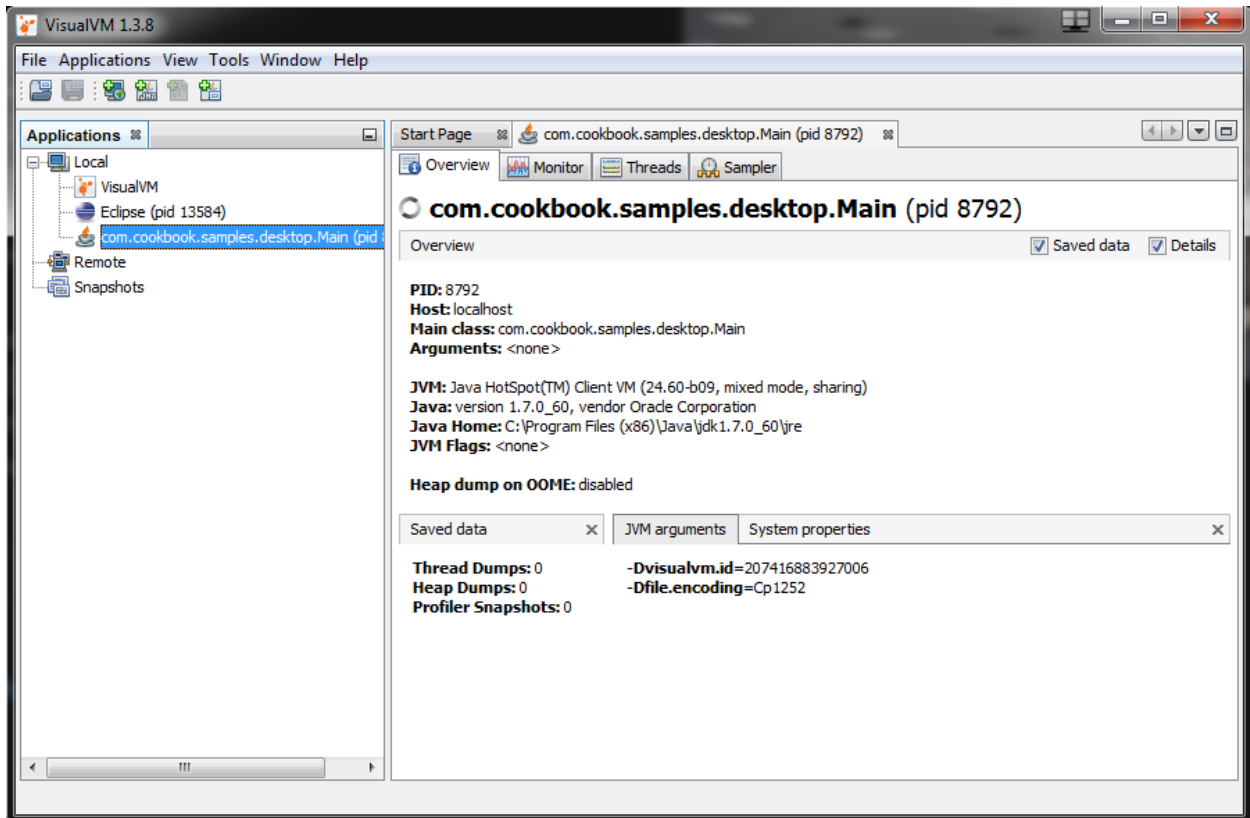


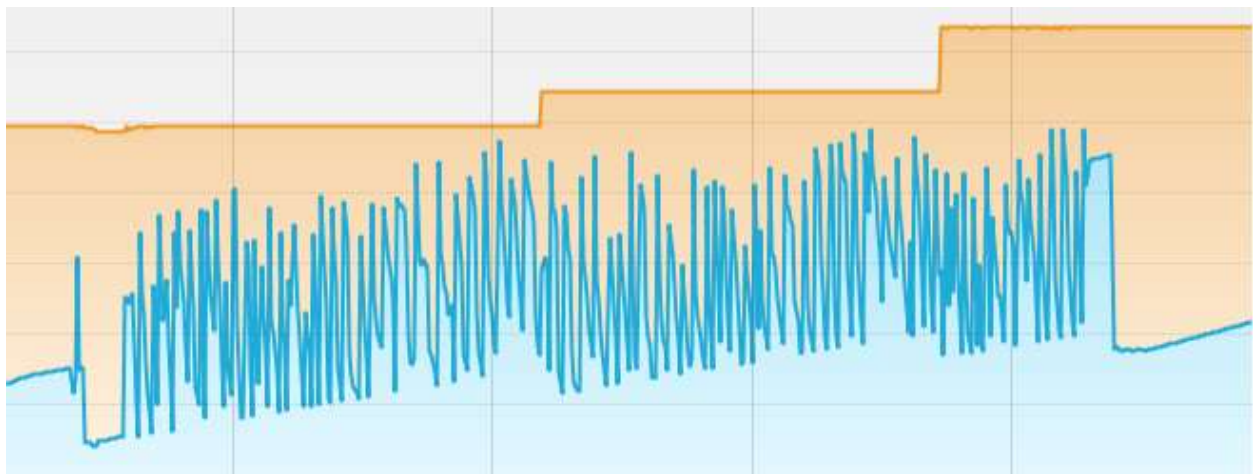
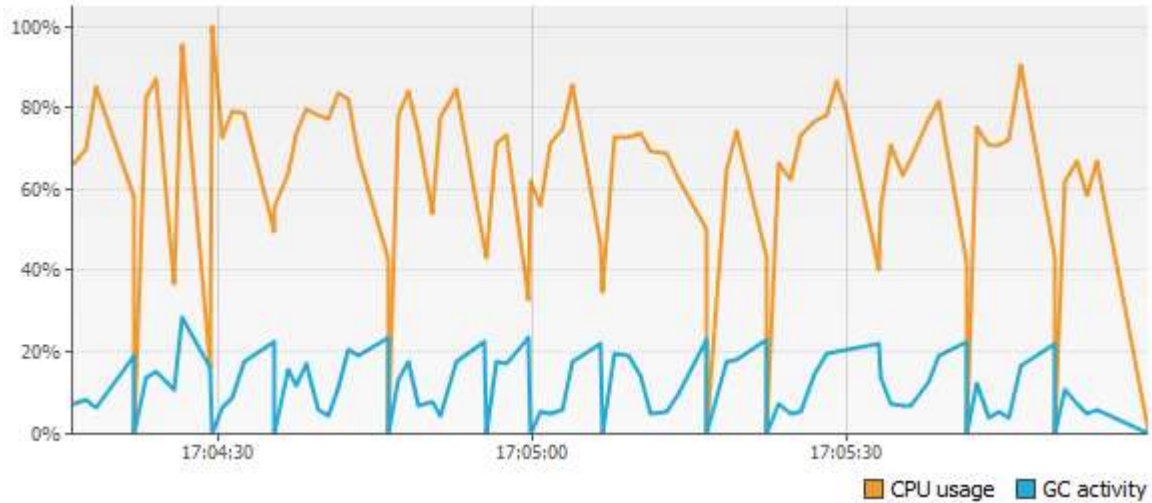


Chapter 12, Performance and Optimizations



Multiple launchers available - [Select one...](#)





Name	30:05:05	30:05:10	30:05:15	30:05:20	30:05:25	30:05:30	Running	Total
TimeQueue							0 ms (0%)	22,966 ms
JMX server connection timeout 20							0 ms (0%)	22,966 ms
RMI Scheduler (0)							0 ms (0%)	22,966 ms
RMI TCP Connection(0)-192.168.1.1							22,966 ms (100%)	22,966 ms
RMI TCP Accept-0							22,966 ms (100%)	22,966 ms
D3D Screen-Updater							0 ms (0%)	22,966 ms
DestroyJavaVM							22,966 ms (100%)	22,966 ms
AWT-EventQueue-0							968 ms (4.2%)	2,470 ms
AWT-Window							22,966 ms (100%)	22,966 ms
AWT-Shutdown							0 ms (0%)	2,470 ms
Java2D Disposer							0 ms (0%)	22,966 ms
Attach Listener							22,966 ms (100%)	22,966 ms
Signal Dispatcher							22,966 ms (100%)	22,966 ms
Finalizer							0 ms (0%)	22,966 ms
Reference Handler							0 ms (0%)	22,966 ms
RMI TCP Connection(2)-192.168.1.1							21,986 ms (96%)	21,986 ms
LWGL Application							12,009 ms (51.7%)	21,000 ms
LWGL Timer							0 ms (0%)	19,996 ms
AWT-Shutdown							0 ms (0%)	1,000 ms
AWT-Shutdown							0 ms (0%)	999 ms

CPU samples Thread CPU Time
 Snapshot

Hot Spots - Method	Self Time [%]	Self Time	Self Time (CPU)	Total Time	Total Time (CPU)
org.lwjgl.opengl.Sync.sync ()	32.0%	703,076 ms	99,3 ms	704,962 ms	1,985 ms
org.netbeans.lib.profiler.server.MonitorSurvGenAndThreadMonitor.run ()	17.7%	193,008 ms	0,000 ms	196,406 ms	3,307 ms
org.netbeans.lib.profiler.wireprotocol.WireIO.receiveCommandOrResponse ()	15.3%	171,091 ms	171,091 ms	171,091 ms	171,091 ms
org.lwjgl.opengl.WindowsContextImplementation.nSwapBuffers(native) ()	4%	44,179 ms	44,179 ms	44,179 ms	44,179 ms
org.lwjgl.WindowsSysImplementation.nGetTime(native) ()	0.2%	1,886 ms	1,886 ms	1,886 ms	1,886 ms
org.netbeans.lib.profiler.server.system.Threads.getAllThreads(native) ()	0.1%	1,297 ms	1,297 ms	1,297 ms	1,297 ms
org.netbeans.lib.profiler.server.system.Threads.getThreadsStatus(native) ()	0.1%	1,202 ms	1,202 ms	1,202 ms	1,202 ms
org.netbeans.lib.profiler.server.system.GC.getCurrentGCEpoch(native) ()	0%	299 ms	299 ms	299 ms	299 ms
org.netbeans.lib.profiler.server.system.GC.getGCStartFinishTimes(native) ()	0%	299 ms	299 ms	299 ms	299 ms
org.netbeans.lib.profiler.server.ThreadInfo.releaseDeadThreads ()	0%	299 ms	299 ms	299 ms	299 ms
org.lwjgl.opengl.GL11.nglDrawElements(native) ()	0%	100 ms	100 ms	100 ms	100 ms

Self time [%] ▾



Profiling results



Class Name - Live Allocated Objects	Live Bytes [%] ▾	Live Bytes	Live Objects	Generators
java.lang.Object[]		108.480 B (26.8%)	2.250 (20.2%)	13
java.util.TreeMap\$Entry		74.592 B (18.4%)	2.331 (20.9%)	12
java.io.ObjectStreamClass\$WeakClassKey		49.344 B (12.2%)	1.542 (13.8%)	1
char[]		21.256 B (5.2%)	269 (2.4%)	12
int[]		20.880 B (5.2%)	26 (0.2%)	2
java.util.TreeMap		18.288 B (4.5%)	381 (3.4%)	11
java.util.TreeMap\$KeyIterator		14.496 B (3.6%)	453 (4.1%)	1
java.util.TreeMap\$KeySet		9.024 B (2.2%)	376 (3.4%)	11
java.util.Vector		8.064 B (2%)	252 (2.3%)	13
java.util.HashMap		6.720 B (1.7%)	280 (2.5%)	13
byte[]		6.312 B (1.6%)	41 (0.4%)	5
java.security.ProtectionDomain		6.192 B (1.5%)	129 (1.2%)	13
javax.management.openbean.CompositeDataSupport		6.080 B (1.5%)	380 (3.4%)	12
java.util.TreeMap\$EntrySet		5.888 B (1.5%)	368 (3.3%)	11

java.lang.String Instances: 21,742 | Instance size: 20 | Total size: 434,840 | [Compute Retained Size](#)

Instances

- #1 Display0
- #2 D3DGraphicsDevice[screen=0]
- #3 ActorSample
- #4 AnimatedSpriteSample
- #5 ArtificialIntelligenceSample
- #6 AssetManagerSampleSample
- #7 StringFontSample
- #8 BlurSample
- #9 Box2DBox2DRevolverSample
- #10 Box2DCollisionFilteringSample
- #11 Box2DCollisionReactionSample
- #12 Box2DComplexShapesSample
- #13 Box2DDeferredRaycasterSample

Value:
ActorSample

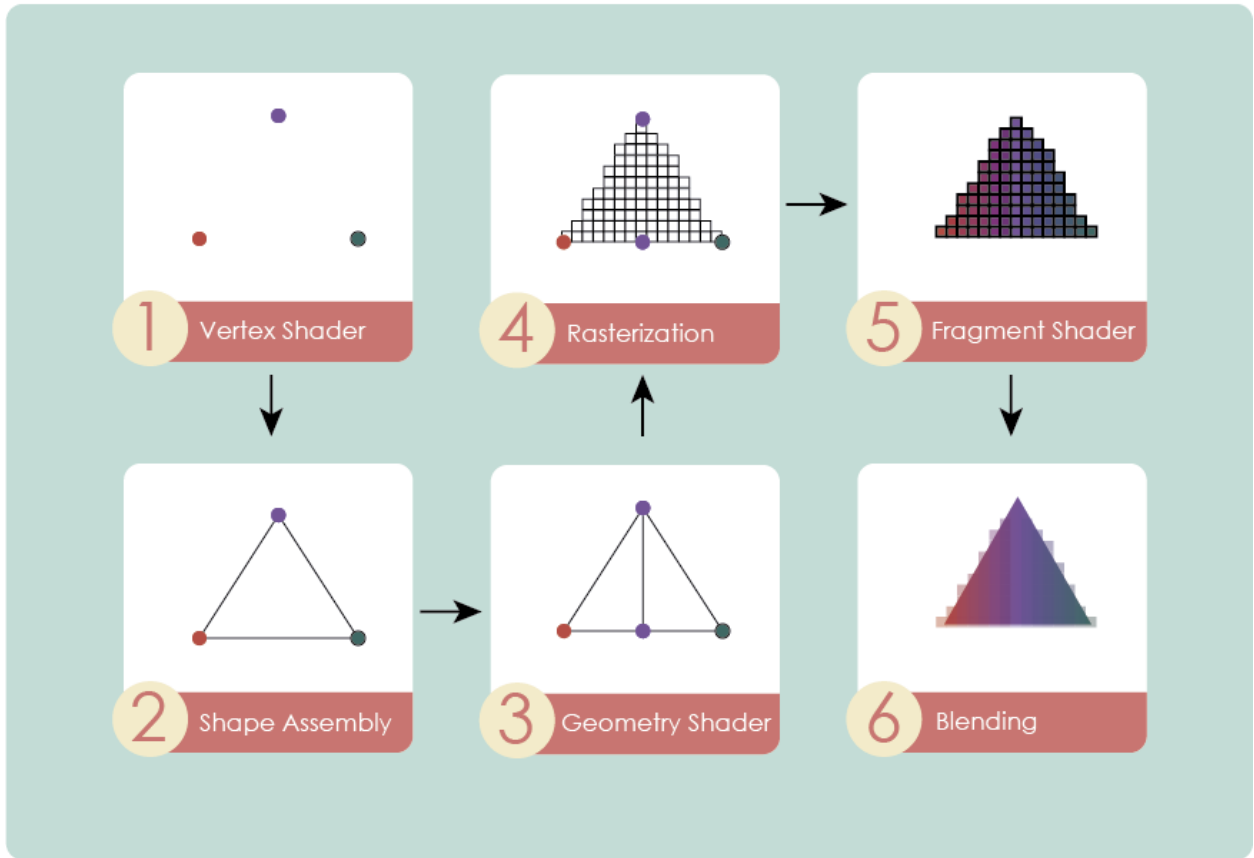
Fields

Field	Type	Value
this	String	#3 ActorSample
hash32	int	0
hash	int	0
value	char[]	#17 ActorSample
[0]	char	A
[1]	char	t
[2]	char	t
[3]	char	r
[4]	char	r
[5]	char	S
[6]	char	e
[7]	char	m
[8]	char	p
[9]	char	i
[10]	char	e
HASHING_SEED	int	-1644338649
CASE_INSENSITIVE_ORDER	String\$CaseInsensitiveComparator	#1
serialPersistentFields	ObjectStreamField[]	#10 0 items
serialVersionUID	long	-6849794470754667710
<classLoader>	<object>	null

References

Field	Type	Value
this	String	#3 ActorSample
[0]	Object[]	#527 50 items

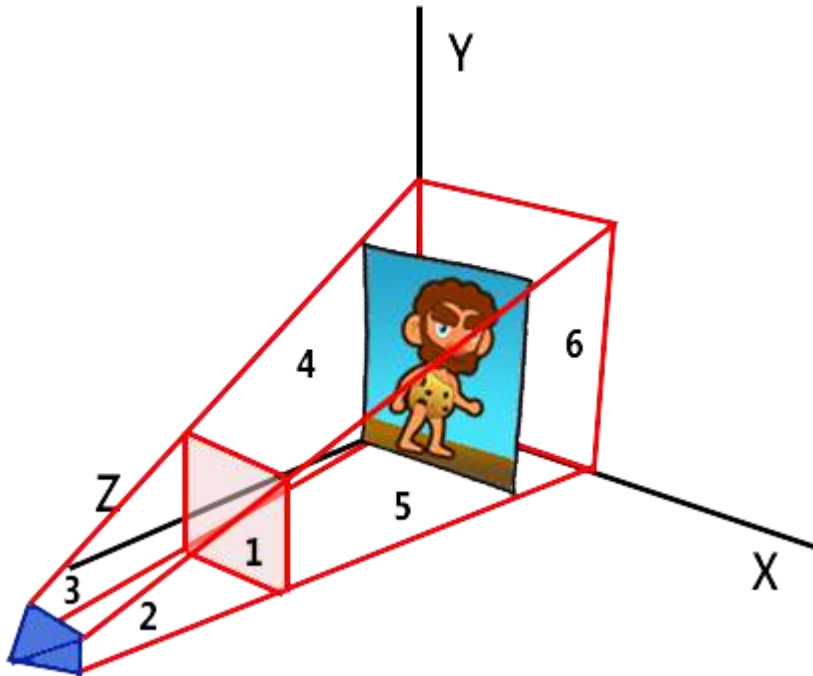
Input Data (vertices)



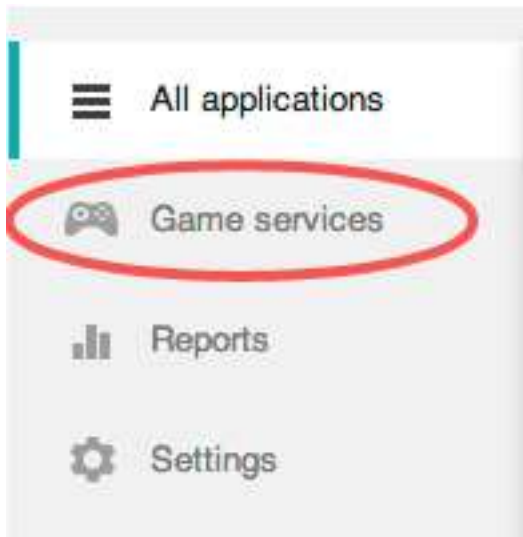
side1

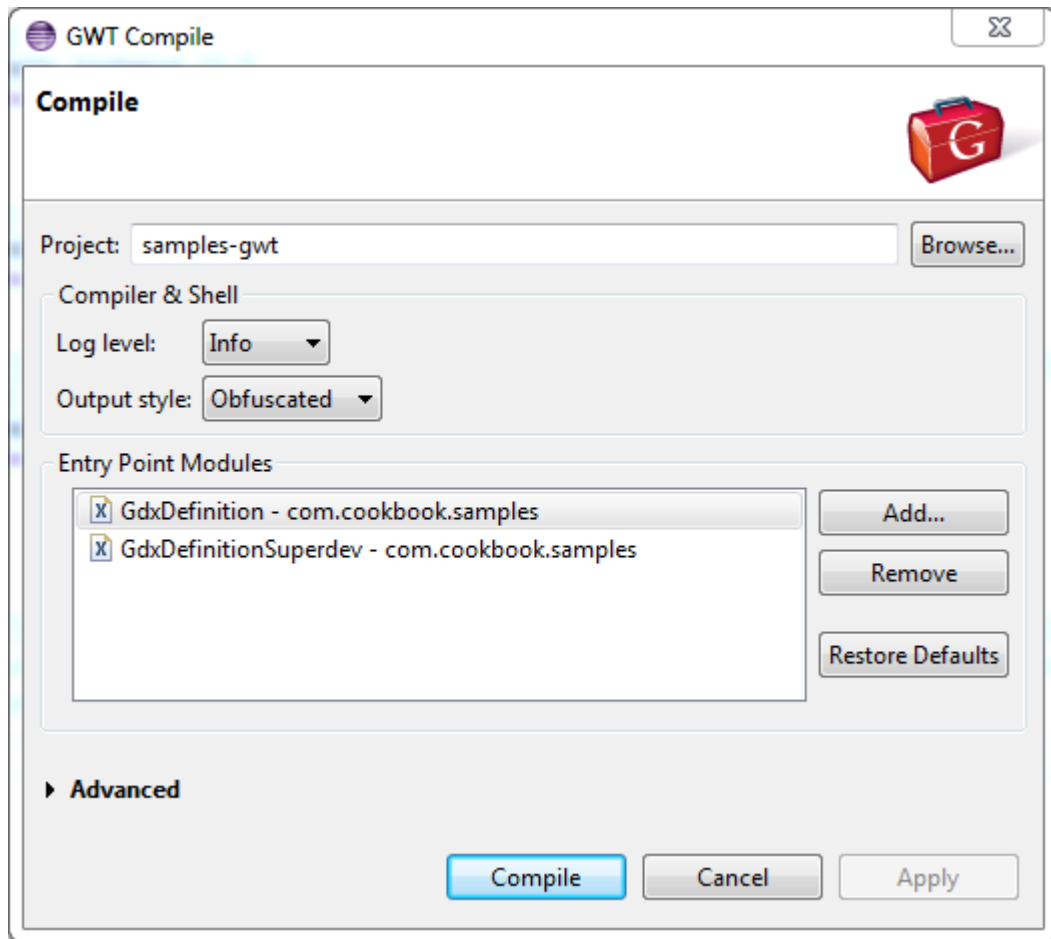
side2

$$\text{diagonal} = \sqrt{\text{side1}^2 + \text{side2}^2}$$




Chapter 13, *Giving Back*





 libgdx / libgdx

 Watch

743


 Star

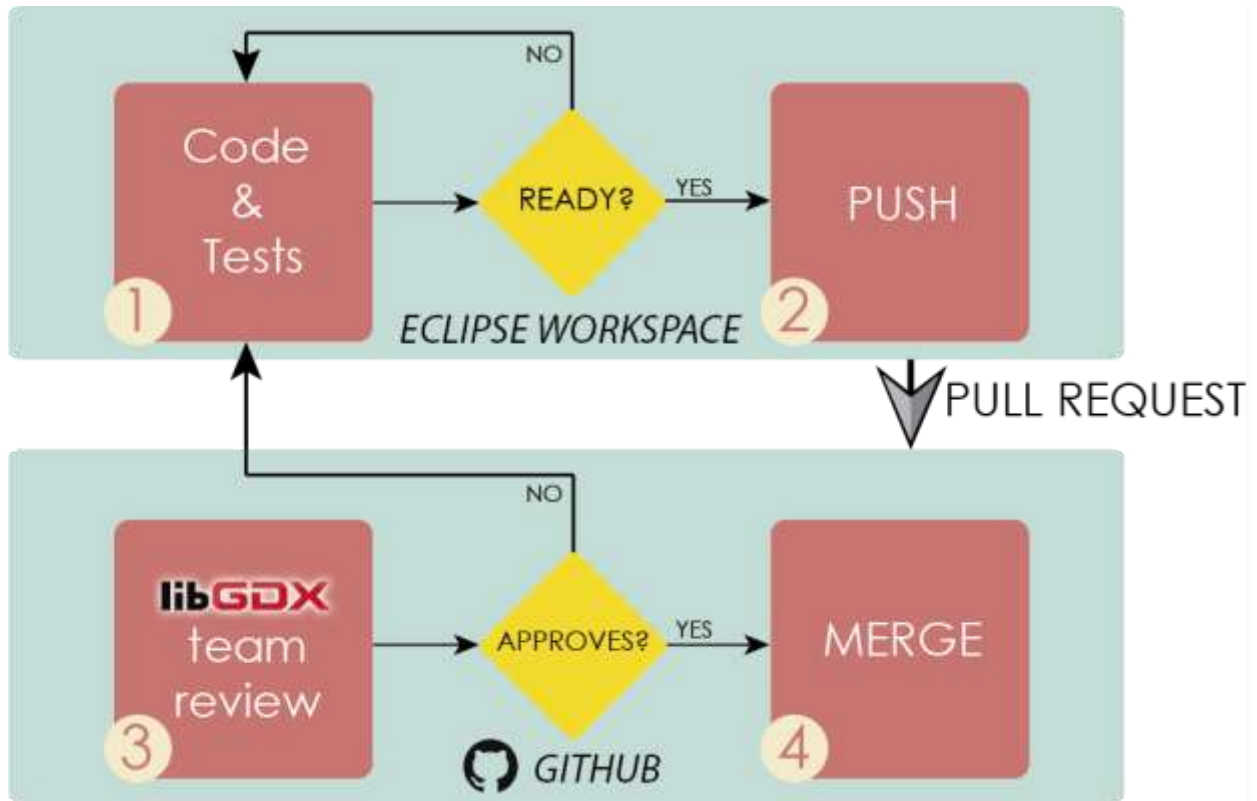
4,335

 Fork 3,154

HTTPS clone URL



You can clone with [HTTPS](#), [SSH](#),
or [Subversion](#). 



Title

[#14235] adds Ashley link

Write Preview

Parsed as Markdown Edit in full screen



✓ Able to merge.
These branches can be automatically merged.

Description

description goes here

Dependencies

dependencies go here

Screenshots

screenshots go here

Test

process to test goes here

Required Information

Create pull request

1 commit

1 file changed

0 commit comments

1 contributor

Aug 11, 2014

AlbertoCejas

adds Ashley link

3ed3376

Showing 1 changed file with 1 addition and 1 deletion

Show diff stats

README.md

View

```
@@ -26,7 +26,7 @@ Next modules are either fairly well documented or self-explanatory.
 26 26 $ionCore uses and exposes:
 27 27 * LLegdx
 28 28 * Ashley
 29 29 * [Ashley](https://github.com/stoachmann/ashley)
 30 30 * Spine
 31 31 * Universal Tween Engine
 32 32 * JavaCSV
```