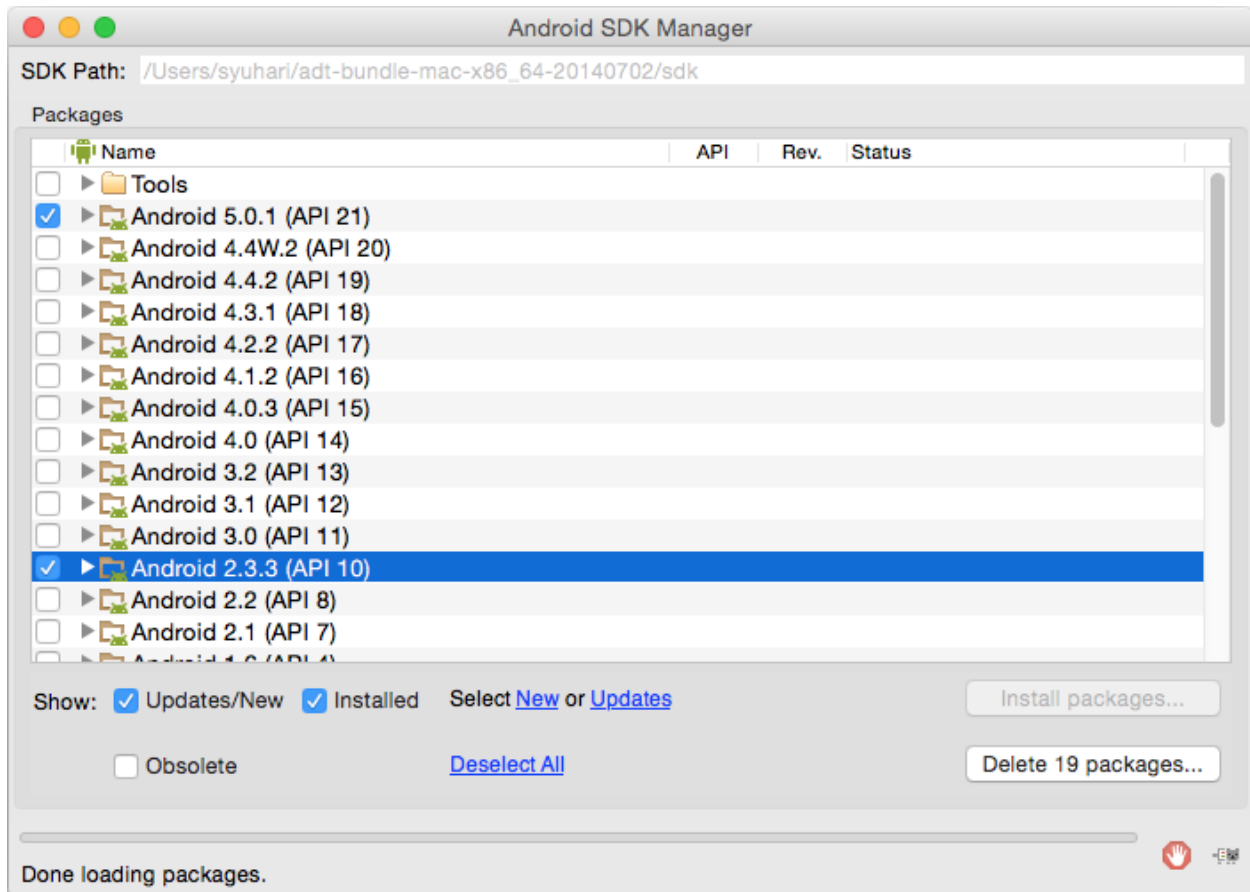
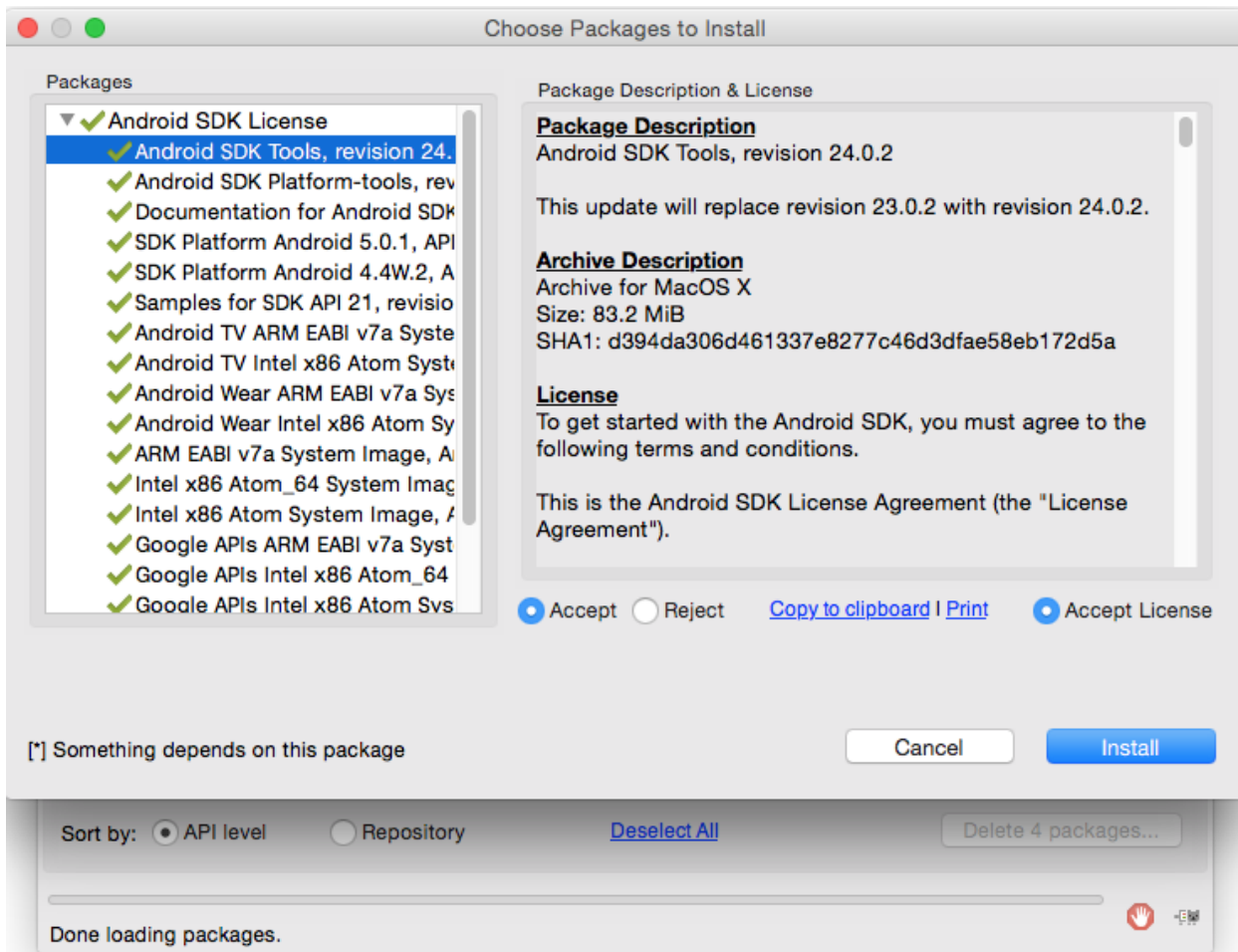


Chapter
1





```
syuhari ~$ java -version
java version "1.6.0_65"
Java(TM) SE Runtime Environment (build 1.6.0_65-b14-466.1-11M4716)
Java HotSpot(TM) 64-Bit Server VM (build 20.65-b04-466.1, mixed mode)
syuhari ~$ █
```

```
cocos2d-x-3.4 -- bash -- 80x24
syuhari cocos2d-x-3.4$ source ~/.bash_profile
syuhari cocos2d-x-3.4$ cocos

/Users/syuhari/cocos2d-x-3.4/tools/cocos2d-console/bin/cocos.py 1.5 - cocos console: A command line tool for cocos2d-x

Available commands:
  run          Compiles & deploy project and then runs it on the target
  luacompile   minifies and/or compiles lua files
  deploy       Deploy a project to the target
  package      Do a package operation
  compile      Compiles the current project to binary
  framework    Do a framework operation
  new          Creates a new project
  jscompile    minifies and/or compiles js files

Available arguments:
  -h, --help    Show this help information
  -v, --version Show the version of this command tool

Example:
/Users/syuhari/cocos2d-x-3.4/tools/cocos2d-console/bin/cocos.py new --help
lp
/Users/syuhari/cocos2d-x-3.4/tools/cocos2d-console/bin/cocos.py run --help
```

```
cocos2d-x-3.4 -- bash -- 80x24
syuhari cocos2d-x-3.4$ cocos new MyGame -p jp.syuhari.mygame -l cpp -d ~/Documents/
Running command: new
> Copy template into /Users/syuhari/Documents/MyGame
> Copying cocos2d-x files...
> Rename project name from 'HelloCpp' to 'MyGame'
> Replace the project name from 'HelloCpp' to 'MyGame'
> Replace the project package name from 'org.cocos2dx.hellocpp' to 'jp.syuhari.mygame'
> Replace the mac bundle id from 'org.cocos2dx.hellocpp' to 'jp.syuhari.mygame'
> Replace the ios bundle id from 'org.cocos2dx.hellocpp' to 'jp.syuhari.mygame'
syuhari cocos2d-x-3.4$
```

```
cocos2d-x-3.4 -- bash -- 80x24
Touch /Users/syuhari/Documents/MyGame/bin/debug/ios/MyGame\ iOS.app
  cd /Users/syuhari/Documents/MyGame/proj.ios_mac
  export PATH="/Applications/Xcode.app/Contents/Developer/Platforms/iPhoneSimulator.platform/Developer/usr/bin:/Applications/Xcode.app/Contents/Developer/usr/bin:/usr/local/Cellar/ant/1.9.2/libexec/bin:/Users/syuhari/adt-bundle-mac-x86_64-20140702/sdk/tools:/Users/syuhari/adt-bundle-mac-x86_64-20140702/sdk/platform-tools:/Users/syuhari/adt-bundle-mac-x86_64-20140702/sdk:/Users/syuhari/android-ndk-r10c:/Users/syuhari/cocos2d-x-3.4/templates:/Users/syuhari/cocos2d-x-3.4/tools/cocos2d-console/bin:/usr/local/bin:/usr/bin:/bin:/usr/sbin:/sbin"
  /usr/bin/touch -c /Users/syuhari/Documents/MyGame/bin/debug/ios/MyGame\ iOS.app

** BUILD SUCCEEDED **

build succeeded.
Running command: deploy
Deploying mode: debug
Running command: run
starting application
running: '/Users/syuhari/cocos2d-x-3.4/tools/cocos2d-console/plugins/project_run/bin/ios-sim-xcode6 launch "/Users/syuhari/Documents/MyGame/bin/debug/ios/MyGame iOS.app" &'

syuhari cocos2d-x-3.4$
```

Hello World



GL verts: 78
GL calls: 3
59.7 / 0.009



The screenshot shows an IDE window with the following components:

- Project Explorer (Left):** Displays a project named "MyGame" with subfolders for "Classes", "Resources", "Frameworks", "ios", "mac", and "Products". Under "Classes", files include "AppDelegate.cpp", "AppDelegate.h", "HelloWorldScene.cpp", and "HelloWorldScene.h".
- Code Editor (Center):** Shows the content of "HelloWorldScene.cpp". The code includes headers, defines an autorelease object "scene", creates a menu item for closing, sets up a menu, and creates a label "Hello World".
- Properties Panel (Right):**
 - Identity and Type:** Name: "HelloWorldScene.cpp", Type: "Default - C++ Source".
 - Location:** Relative to Group, Full Path: "/Users/syuhari/Documents/MyGame/Classes/HelloWorldScene.cpp".
 - Target Membership:** Checked for "MyGame iOS" and "MyGame Mac".
 - Text Settings:** Text Encoding: "Unicode (UTF-8)", Line Endings: "Default - OS X / Unix (LF)", Indent Using: "Spaces", Widths: 4.
 - Source Control:** Shows repository, type, and current branch information.
 - Class Library:** Includes "Cocoa Touch Class - A Cocoa Touch class", "Test Case Class - A class implementing a unit test", and "Playground - A Playground".

```
#include "HelloWorldScene.h"

USING_NS_CC;

Scene* HelloWorld::createScene()
{
    // 'scene' is an autorelease object
    auto scene = Scene::create();

    // 'layer' is an autorelease object
    auto layer = HelloWorld::create();

    // add layer as a child to scene
    scene->addChild(layer);

    // return the scene
    return scene;
}

// on "init" you need to initialize your instance
bool HelloWorld::init()
{
    ////////////////////////////
    // 1. super init first
    if ( !layer::init() )
    {
        return false;
    }

    Size visibleSize = Director::getInstance()->getVisibleSize();
    Vec2 origin = Director::getInstance()->getVisibleOrigin();

    ////////////////////////////
    // 2. add a menu item with "X" image, which is clicked to quit the program
    // you may modify it.

    // add a "close" icon to exit the progress. it's an autorelease object
    auto closeItem = MenuItemImage::create(
        "CloseNormal.png",
        "CloseSelected.png",
        CC_CALLBACK_1(HelloWorld::menuCloseCallback, this));

    closeItem->setPosition(Vec2(origin.x + visibleSize.width - closeItem->getContentSize().width/2 ,
        origin.y + closeItem->getContentSize().height/2));

    // create menu, it's an autorelease object
    auto menu = Menu::create(closeItem, NULL);
    menu->setPosition(Vec2::ZERO);
    this->addChild(menu, 1);

    ////////////////////////////
    // 3. add your codes below...

    // add a label shows "Hello World"
    // create and initialize a label

    auto label = Label::createWithTTF("Hello World", "fonts/Marker Felt.ttf", 24);

    // position the label on the center of the screen
    label->setPosition(Vec2(origin.x + visibleSize.width/2,
        origin.y + visibleSize.height - label->getContentSize().height));

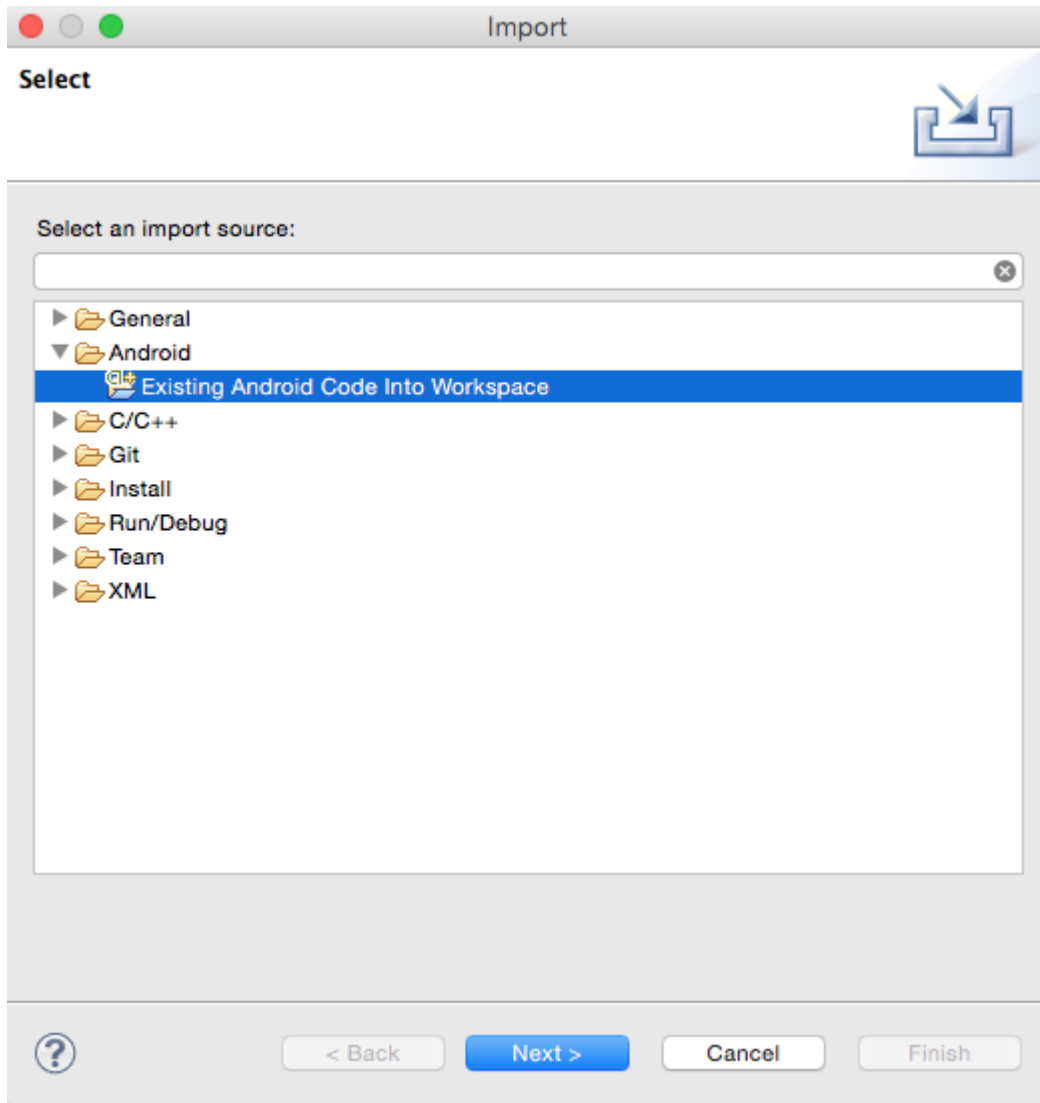
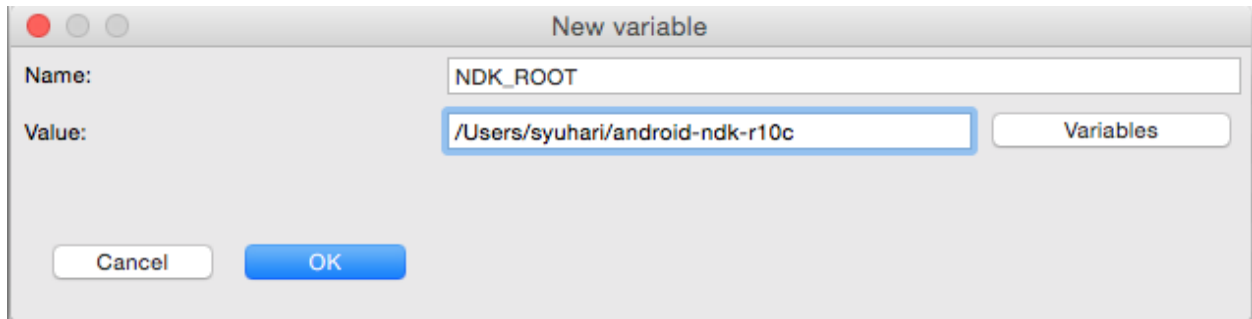
    // add the label as a child to this layer
    this->addChild(label, 1);


    // add "HelloWorld" splash screen"
    auto sprite = Sprite::create("HelloWorld.png");
    // position the sprite on the center of the screen
```

The screenshot shows the "Preferences" dialog box with the "Environment" tab selected. The left sidebar lists various categories like "General", "Android", "C/C++", "Appearance", "Build", "Console", "Environment", "Logging", "Make Targets", "Makefile Editor", "Settings", "Code Analysis", "Code Style", "Debug", "Editor", "File Types", "Indexer", "Language Mappings", "New CDT Project Wizard", "Property Pages Settings", "Task Tags", "Template Default Values", "Help", "Install/Update", "Java", "Run/Debug", "Team", and "XML".

The "Environment" tab contains the following elements:

- Environment variables to set:** A table with columns for "Variable" and "Value".
- Action Buttons:** "Add...", "Select...", "Edit...", "Delete", "Undefine".
- Environment Options:** Radio buttons for "Append variables to native environment" (selected) and "Replace native environment with specified one".
- Buttons:** "Restore Defaults", "Apply", "Cancel", "OK".



Import Projects 

Select a directory to search for existing Android projects

Root Directory:

Projects:


Project to Import	New Project Name
<input checked="" type="checkbox"/> /Users/syuhari/Documents/MyGame/proj...	MyGame

Copy projects into workspace

Working sets

Add project to working sets

Working sets:





Import Projects

Select a directory to search for existing Android projects



Root Directory:

Projects:

Project to Import	New Project Name
<input checked="" type="checkbox"/> /Users/syuhari/Documents/MyGame/coc...	libcocos2dx

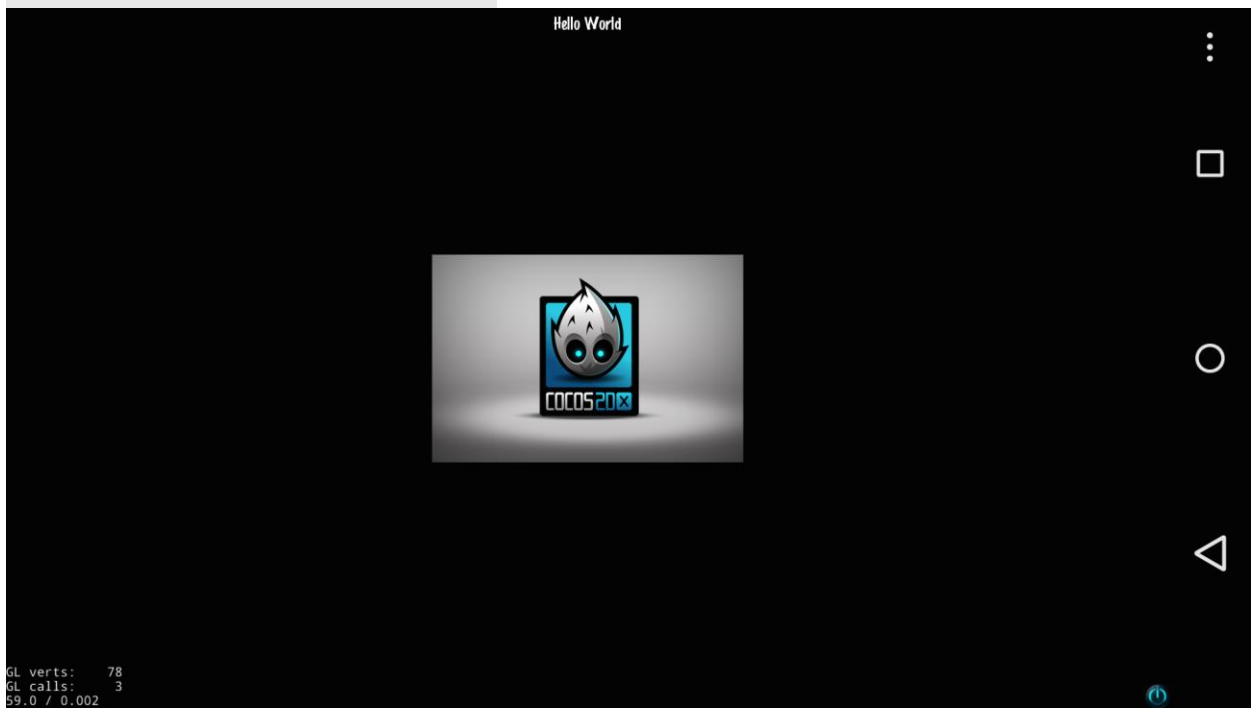
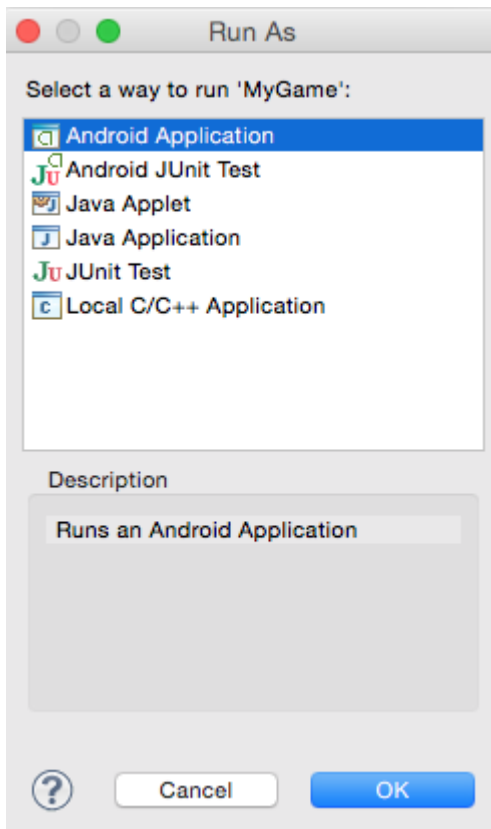
Copy projects into workspace

Working sets

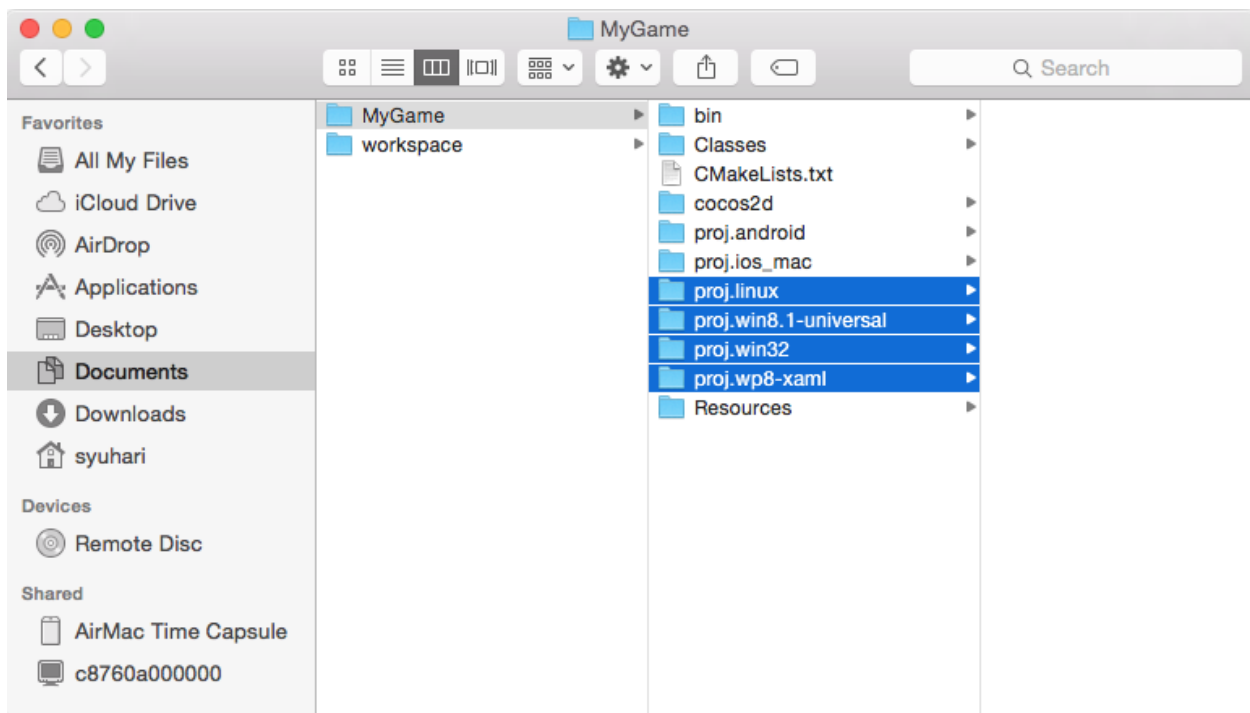
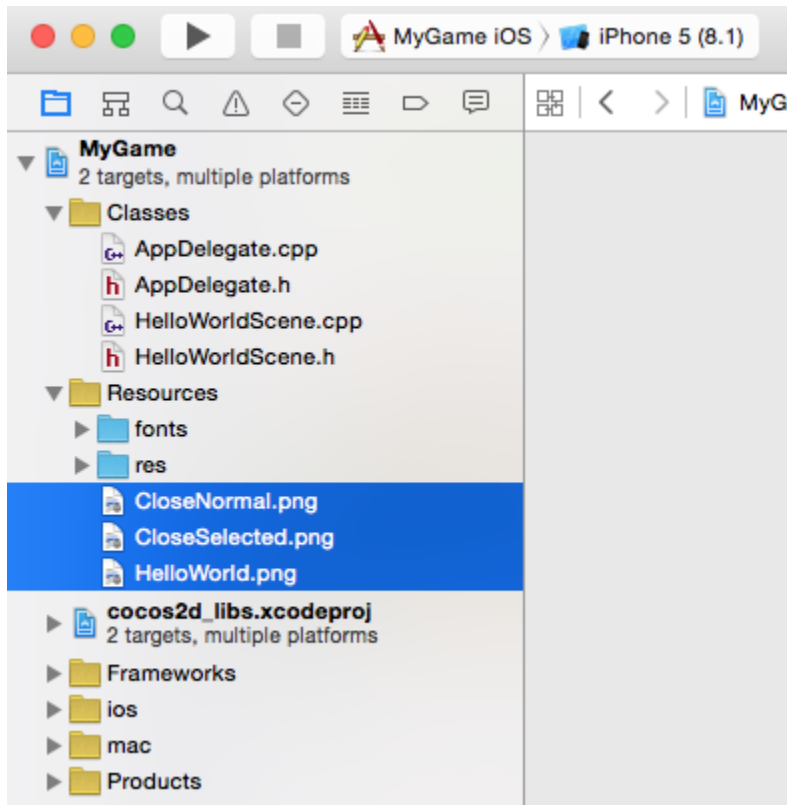
Add project to working sets

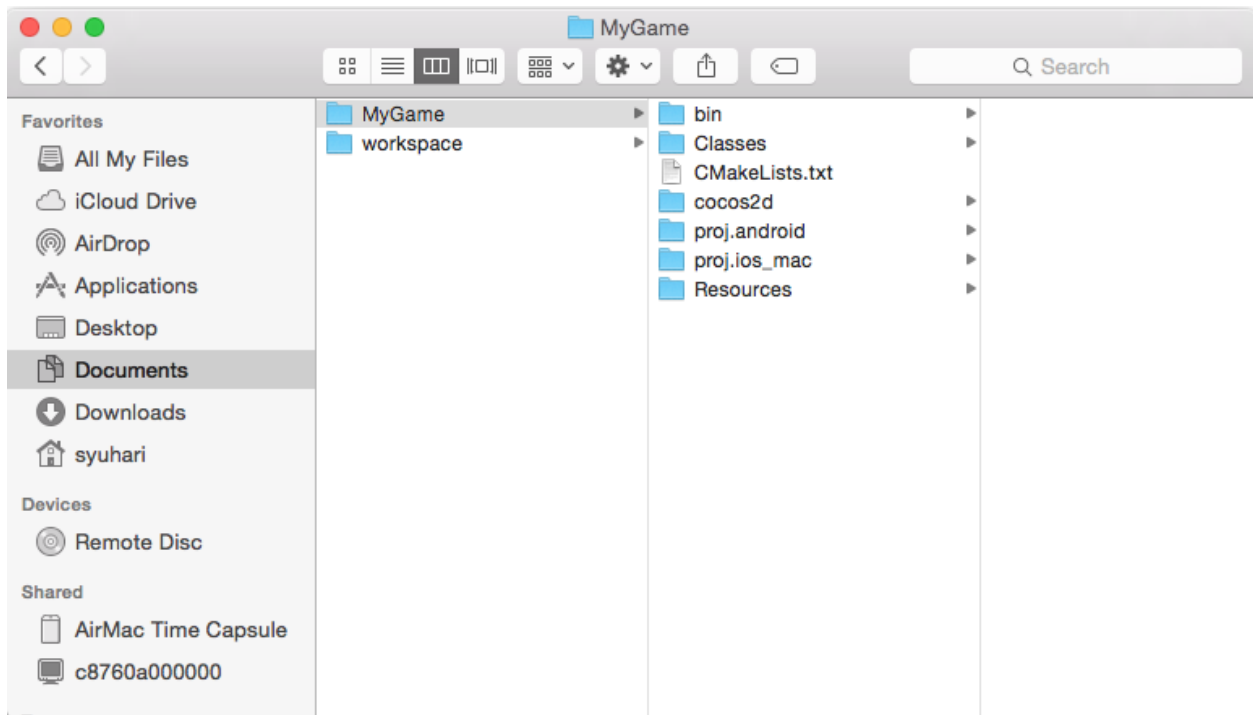
Working sets:



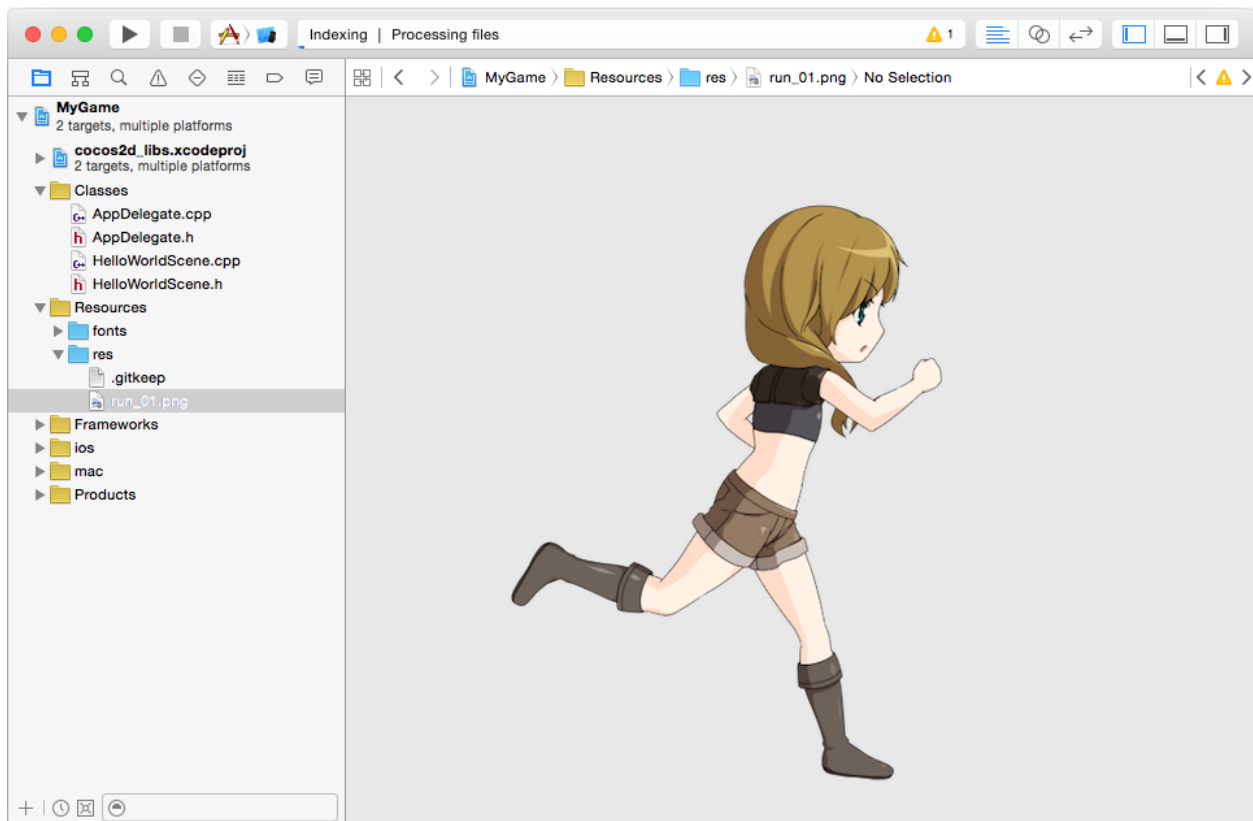


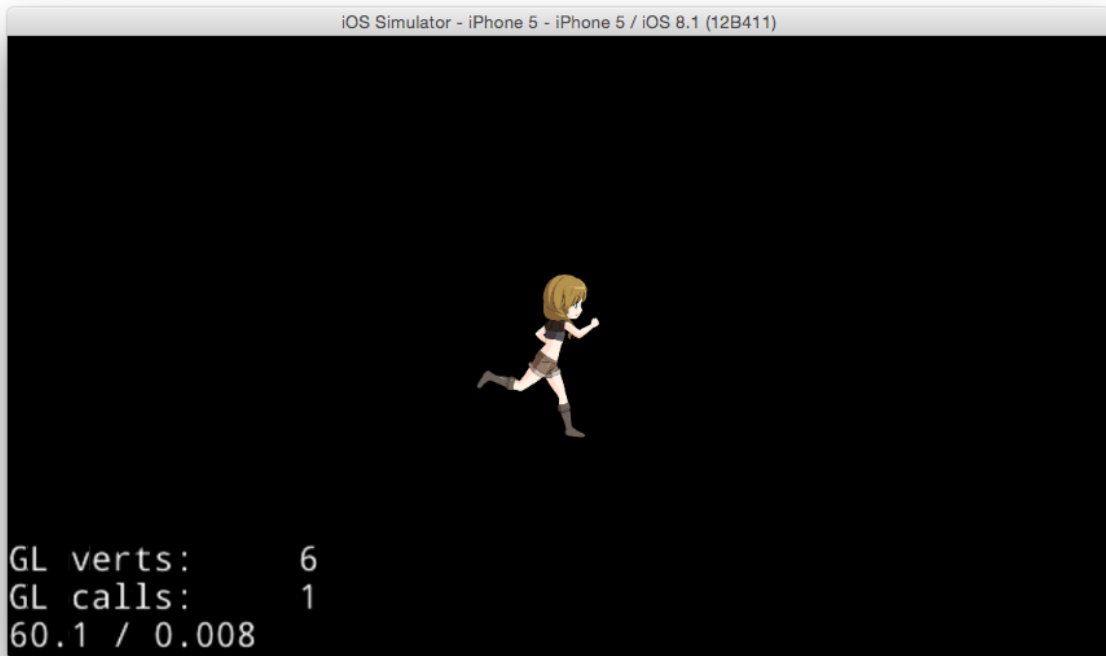




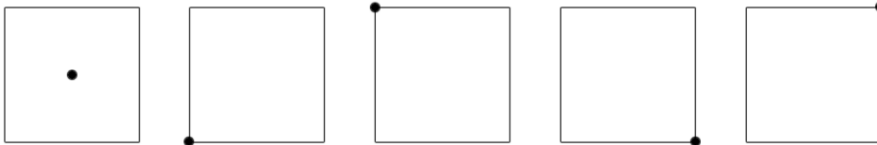


Chapter 2

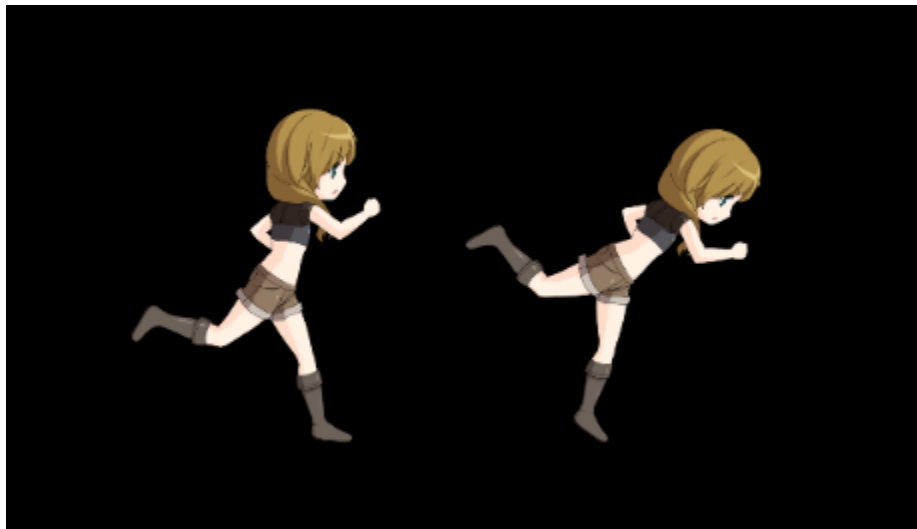


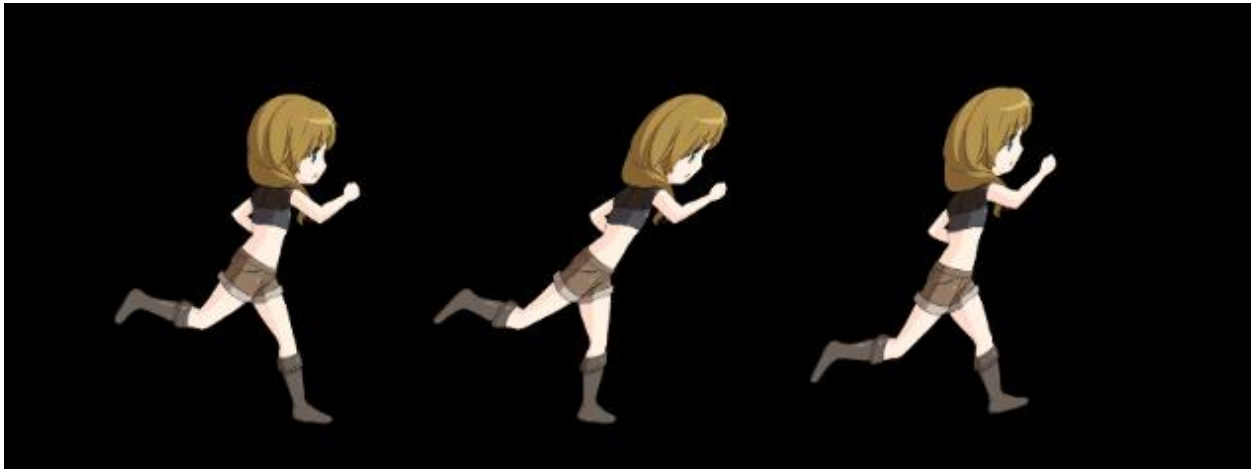
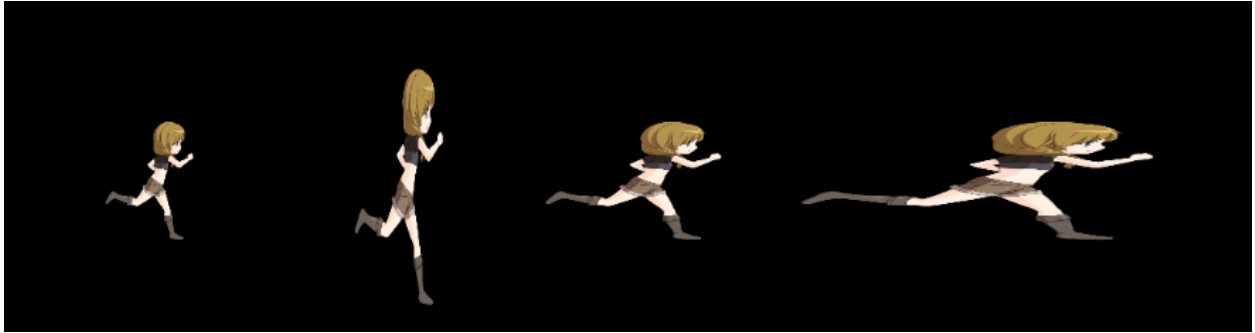


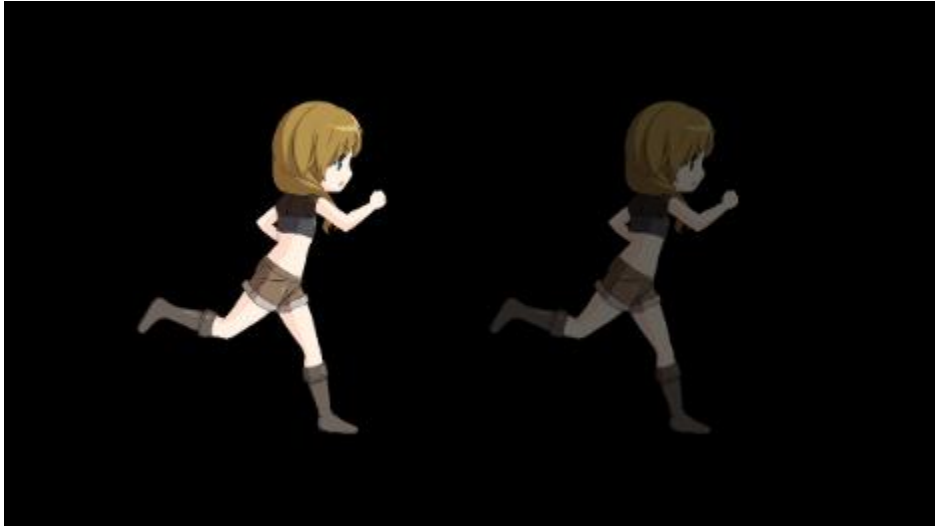
Anchor Position



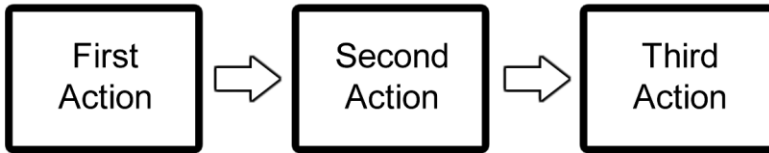
setAnchrPoint(0.5f, 0.5f) setAnchrPoint(0.0f, 0.0f) setAnchrPoint(1.0f, 0.0f) setAnchrPoint(0.0f, 1.0f) setAnchrPoint(0.0f, 1.0f)



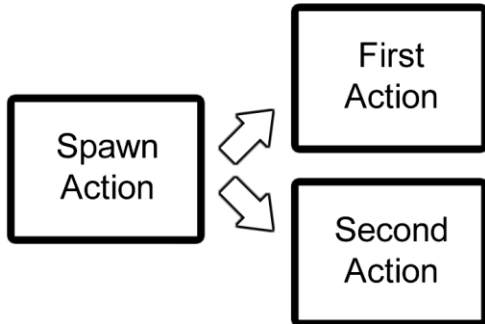




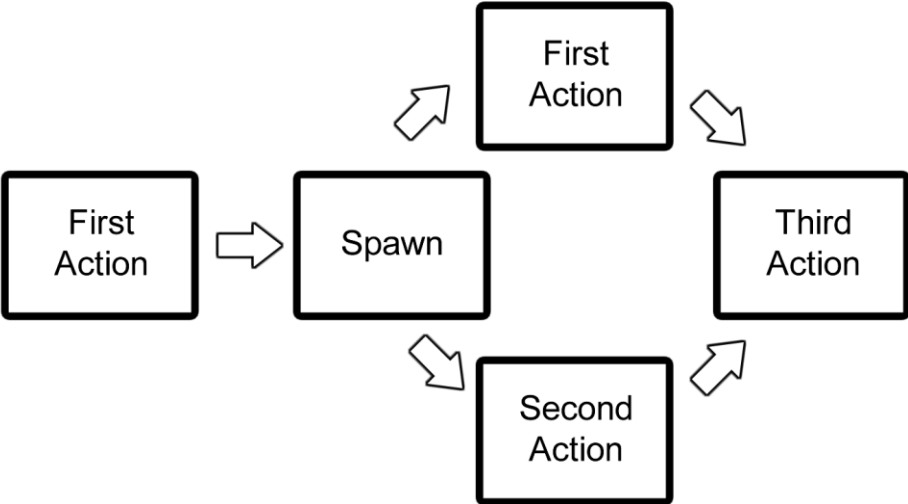
Sequence Action

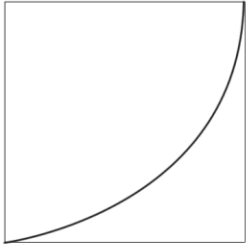


Spawn Action

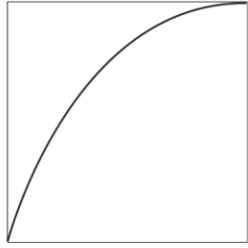


Combine Sequence Action and Spawn Action

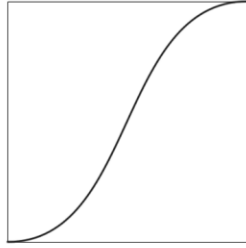




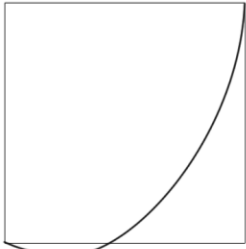
EaseIn



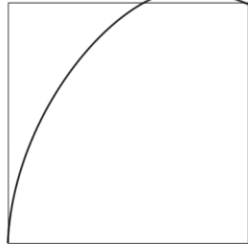
EaseOut



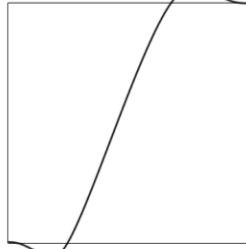
EaseInOut



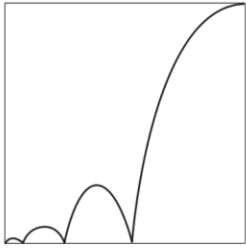
EaBackIn



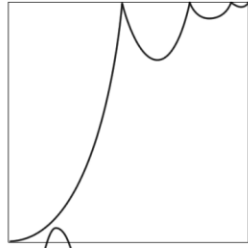
EaseBackOut



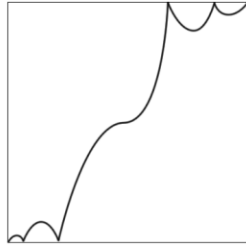
EasBackInOut



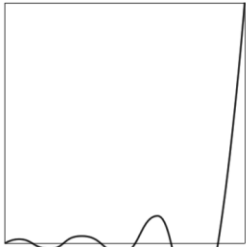
EaseBounceIn



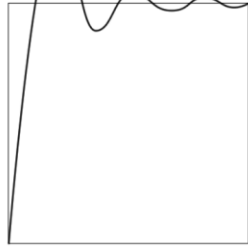
EaseBounceOut



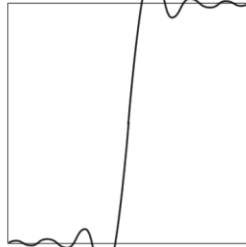
EaseBounceInOut



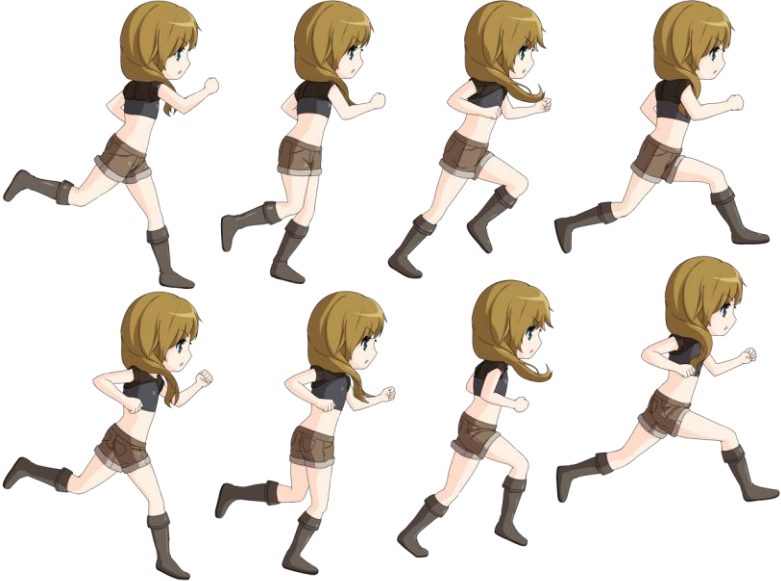
EaseElasticIn



EaseElasticOut

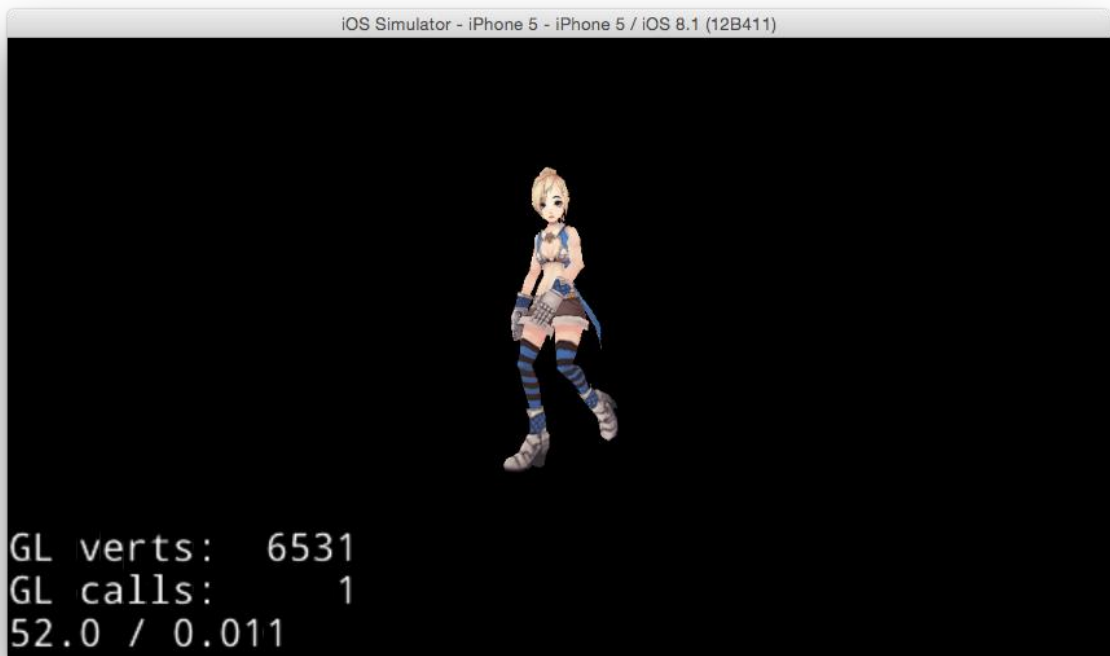


EaseElasticInOut

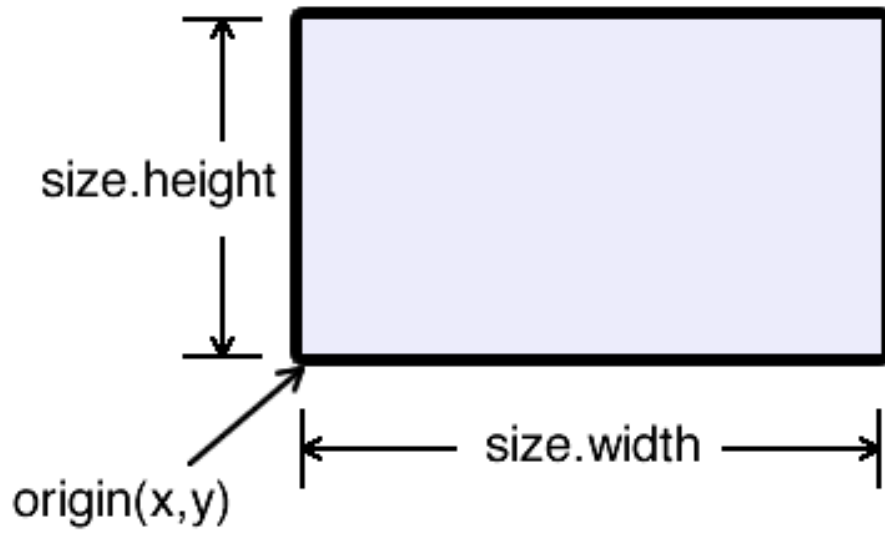


CCString.h MyGame > Resources > res > run_animation.plist > No Selection

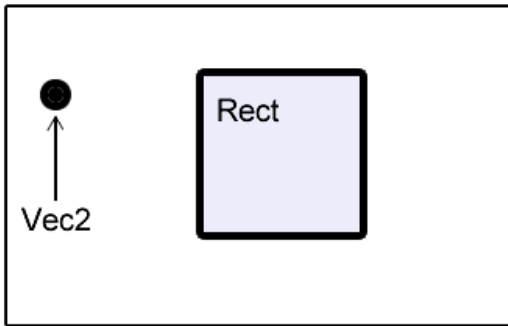
Key	Type	Value
▼ Root	Dictionary	(2 items)
▼ animations	Dictionary	(1 item)
▼ run	Dictionary	(4 items)
delayPerUnit	Number	0.1
restoreoriginalFrame	Boolean	YES
loops	Number	-1
▼ frames	Array	(8 items)
▼ Item 0	Dictionary	(3 items)
spriteframe	String	run_01.png
delayUnits	Number	1
▼ notification	Dictionary	(1 item)
firstframe	Boolean	YES
▼ Item 1	Dictionary	(2 items)
spriteframe	String	run_02.png
delayUnits	Number	1
▼ Item 2	Dictionary	(2 items)
spriteframe	String	run_03.png
delayUnits	Number	1
▼ Item 3	Dictionary	(2 items)
spriteframe	String	run_04.png
delayUnits	Number	1
▼ Item 4	Dictionary	(2 items)
spriteframe	String	run_05.png
delayUnits	Number	1
▼ Item 5	Dictionary	(2 items)
spriteframe	String	run_06.png
delayUnits	Number	1
▼ Item 6	Dictionary	(2 items)
spriteframe	String	run_07.png
delayUnits	Number	1
▼ Item 7	Dictionary	(3 items)
spriteframe	String	run_08.png
delayUnits	Number	1
▼ notification	Dictionary	(1 item)
lastframe	Boolean	YES
▼ properties	Dictionary	(2 items)
▼ spritesheets	Array	(1 item)
Item 0	String	running.plist
format	Number	2



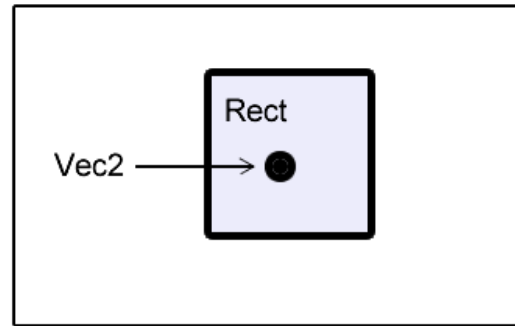
Rect



rect.containsPoint(Vec2 point)

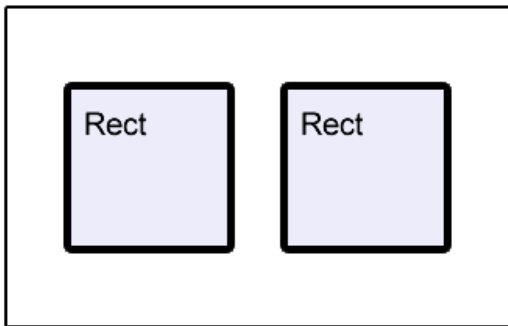


false

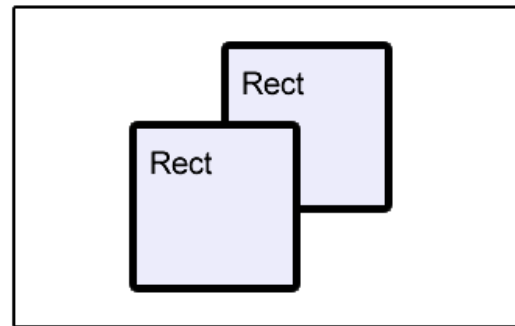


true

rect.intersectsRect(Rect rect)

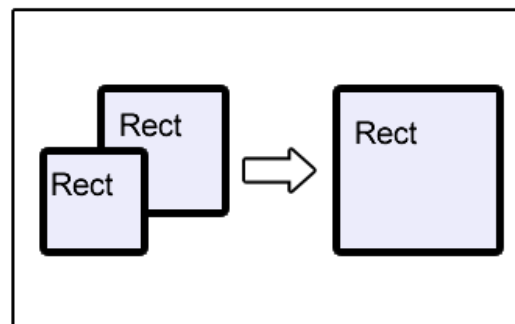
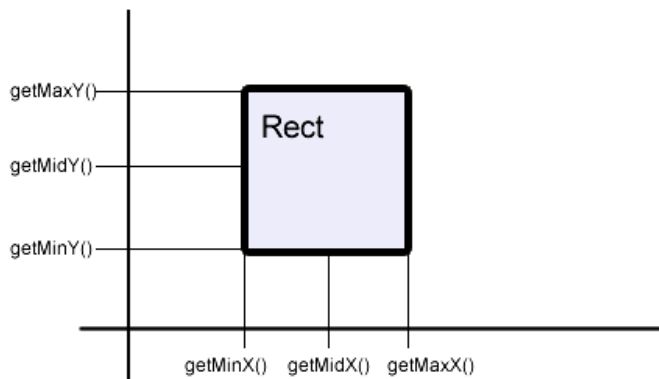


false



true

rect.unionWithRect(Rect rect)



iOS Simulator - iPhone 5 - iPhone 5 / iOS 8.1 (12B411)



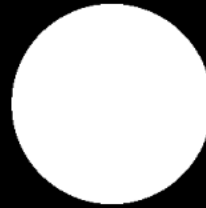
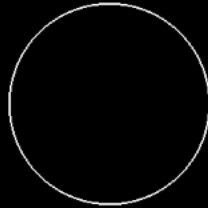
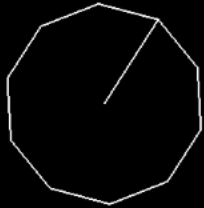
```
GL verts:      6
GL calls:      1
59.9 / 0.008
```

iOS Simulator - iPhone 5 - iPhone 5 / iOS 8.1 (12B411)



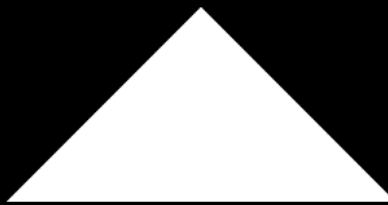
```
GL verts:     20
GL calls:      2
60.2 / 0.008
```

iOS Simulator - iPhone 5 - iPhone 5 / iOS 8.1 (12B411)

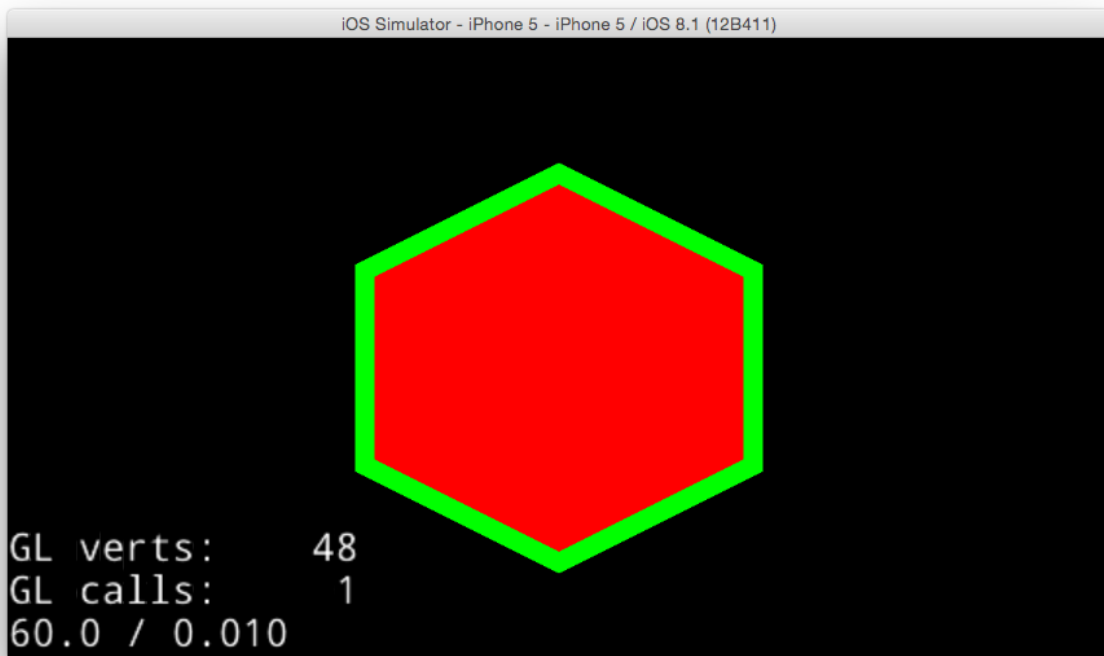
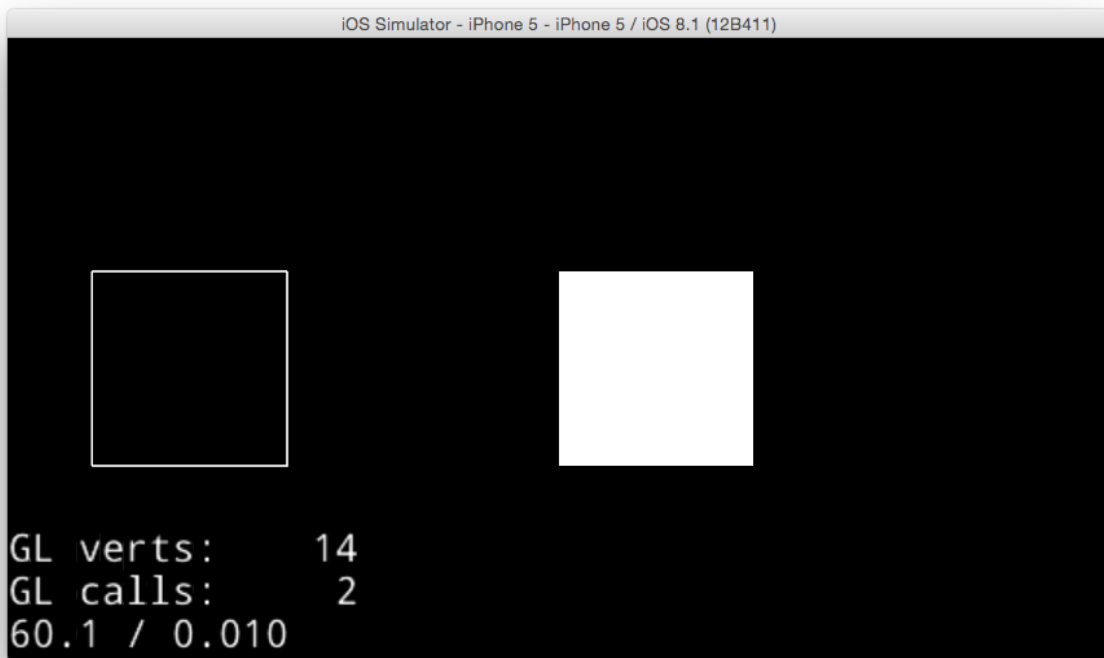


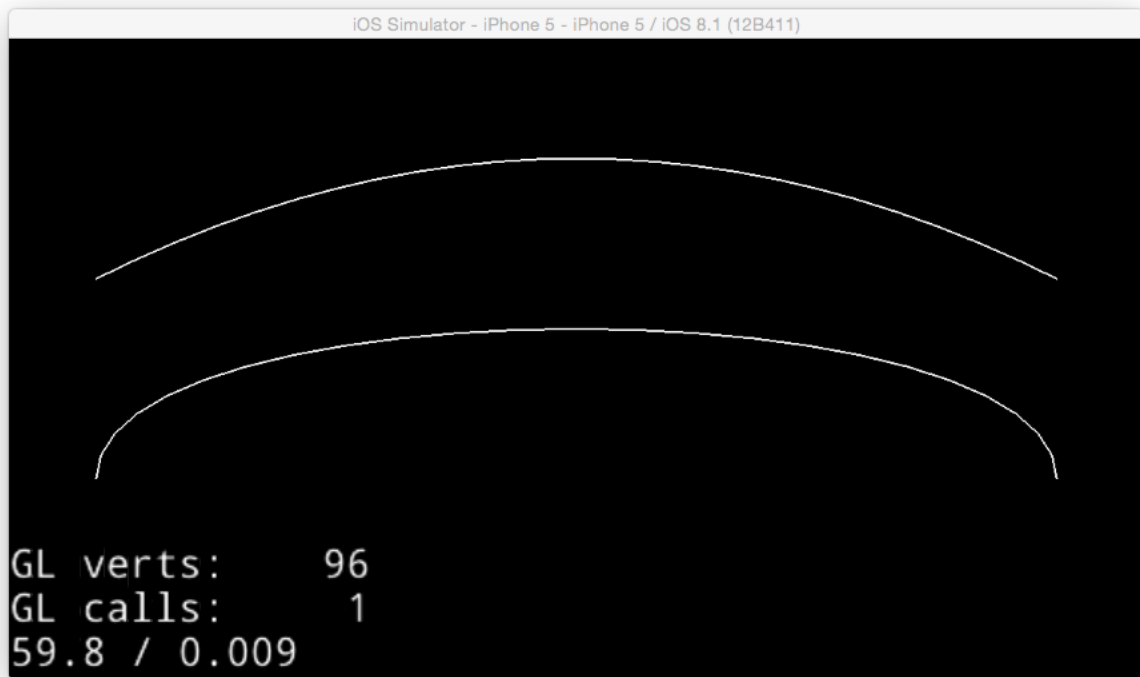
```
GL verts:    520
GL calls:      2
59.9 / 0.010
```

iOS Simulator - iPhone 5 - iPhone 5 / iOS 8.1 (12B411)

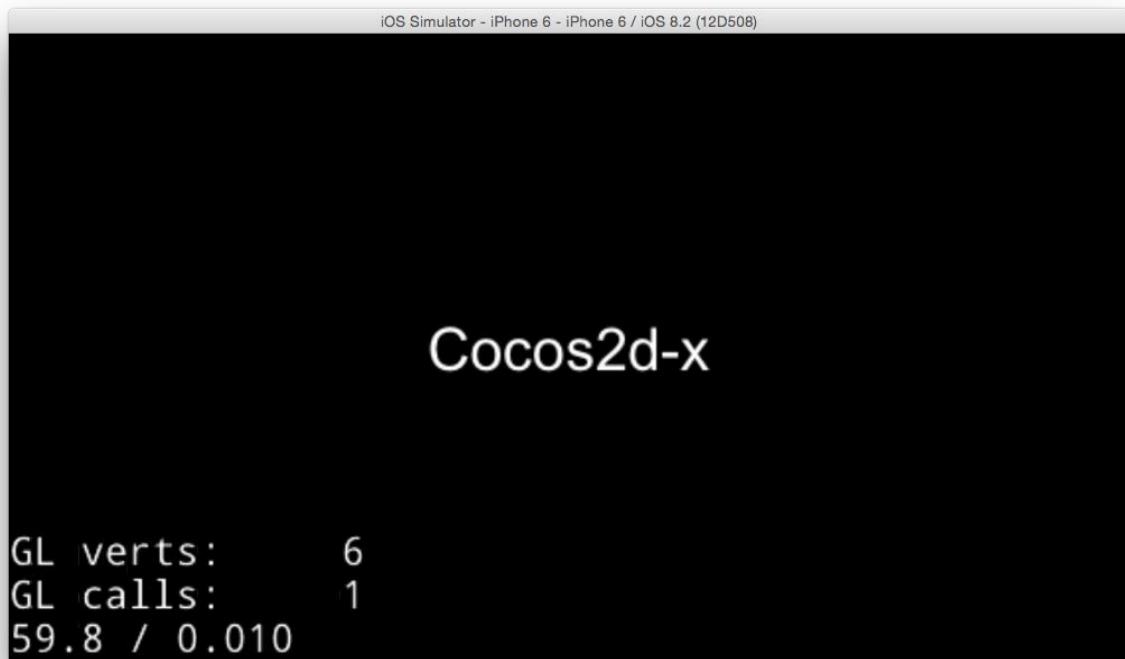


```
GL verts:      3
GL calls:       1
59.8 / 0.008
```





Chapter 3



Hello
Cocos2d-x

GL verts: 6
GL calls: 1
59.9 / 0.012

Hello
Cocos2d-x

GL verts: 6
GL calls: 1
59.9 / 0.011

True Type Font

```
GL verts:      84  
GL calls:      1  
60.3 / 0.010
```

Bitmap Font

```
GL verts:      66  
GL calls:      1  
60.2 / 0.009
```

Bitmap Font

GL verts: 66
GL calls: 1
59.9 / 0.010

Drop Shadow

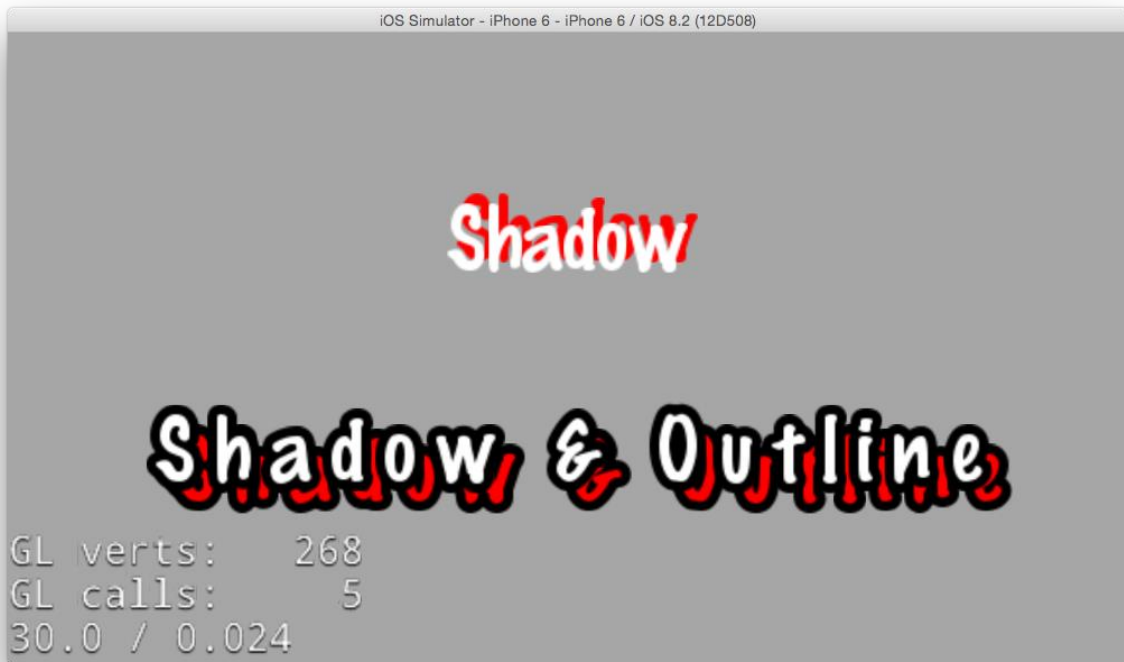
GL verts: 136
GL calls: 3
43.7 / 0.016

Outline

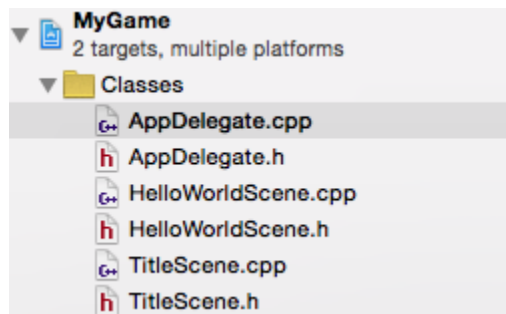
GL verts: 46
GL calls: 2
34.7 / 0.018

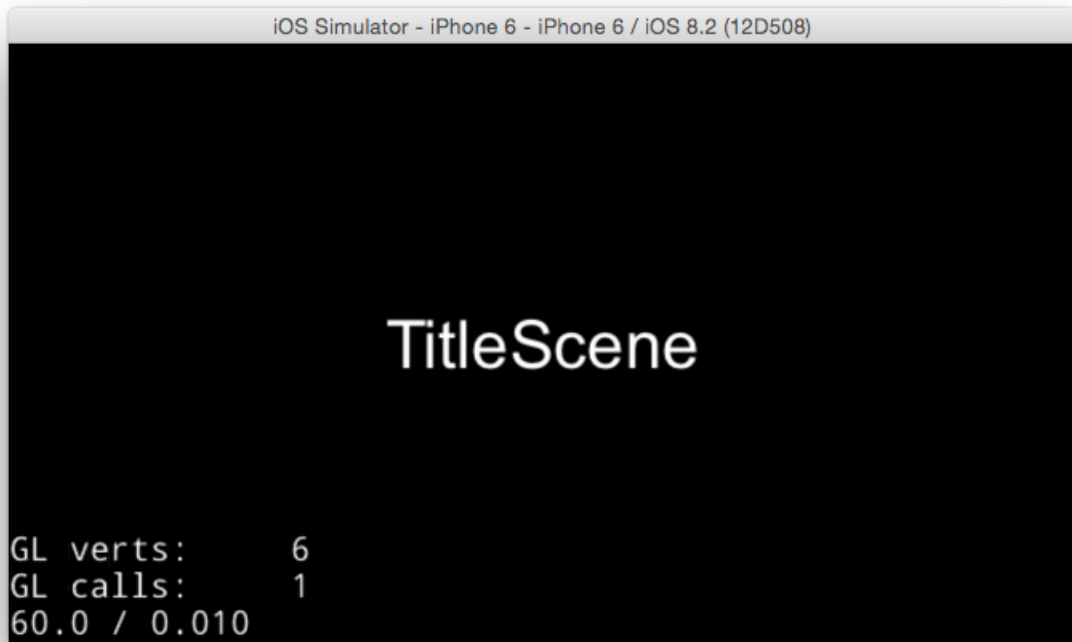
Glow

GL verts: 28
GL calls: 2
32.7 / 0.018



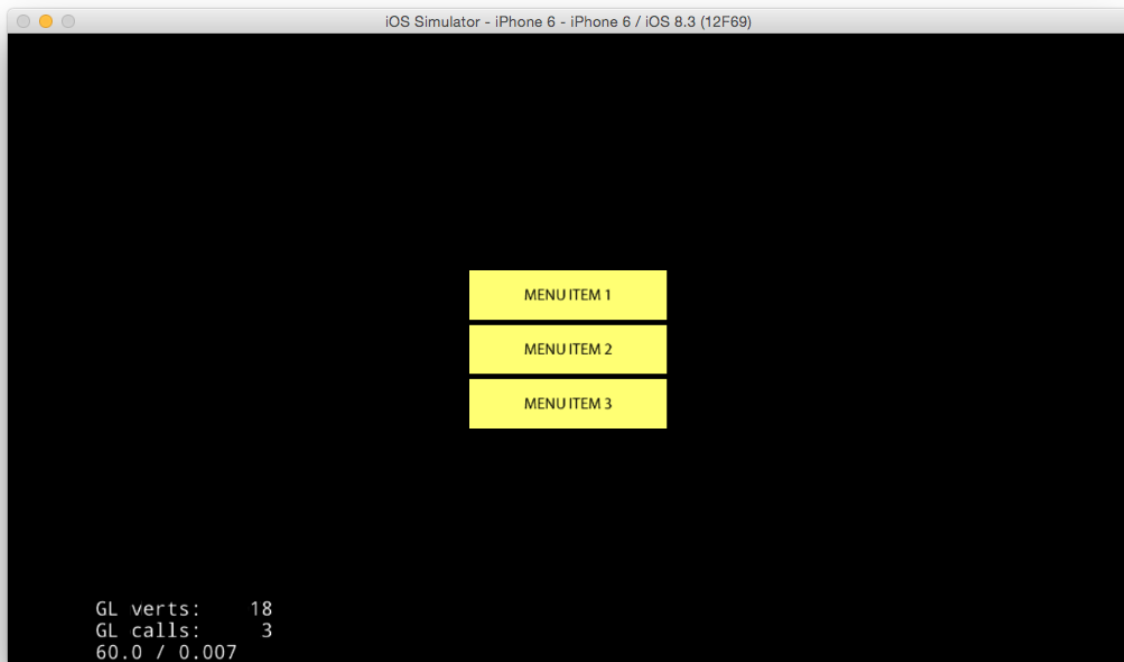
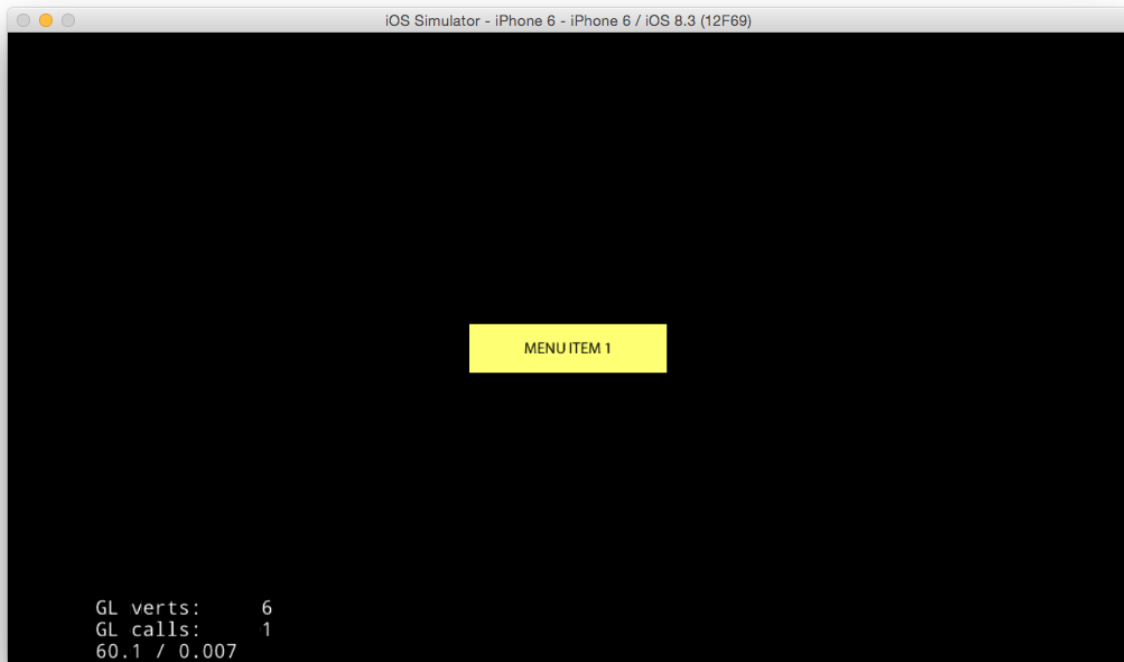
Chapter 4

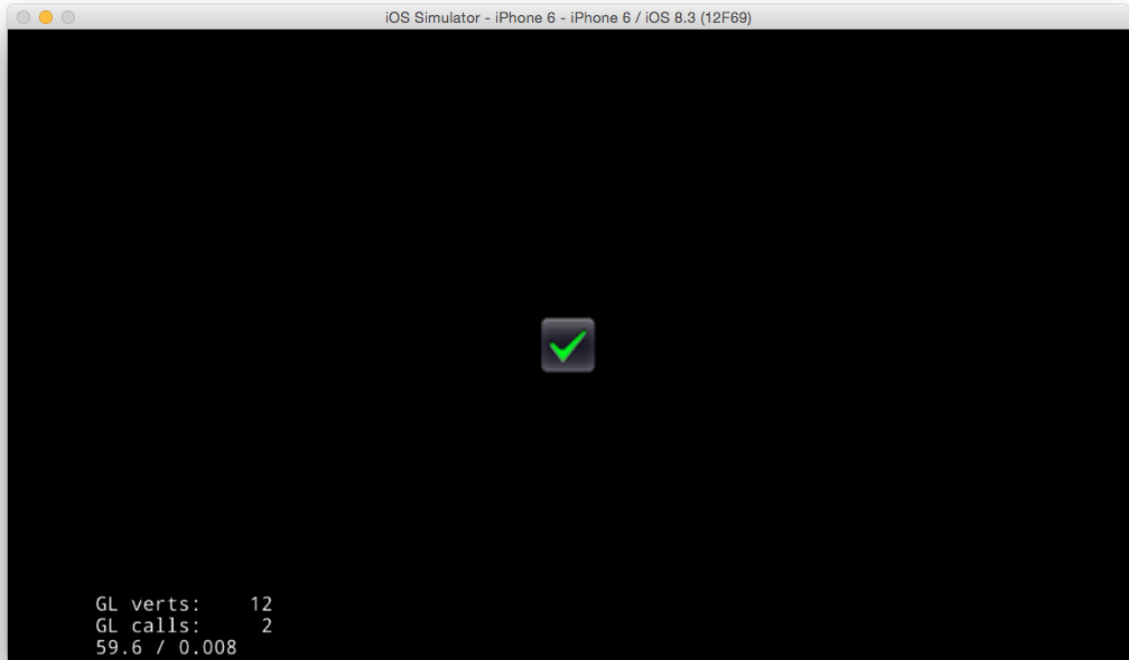


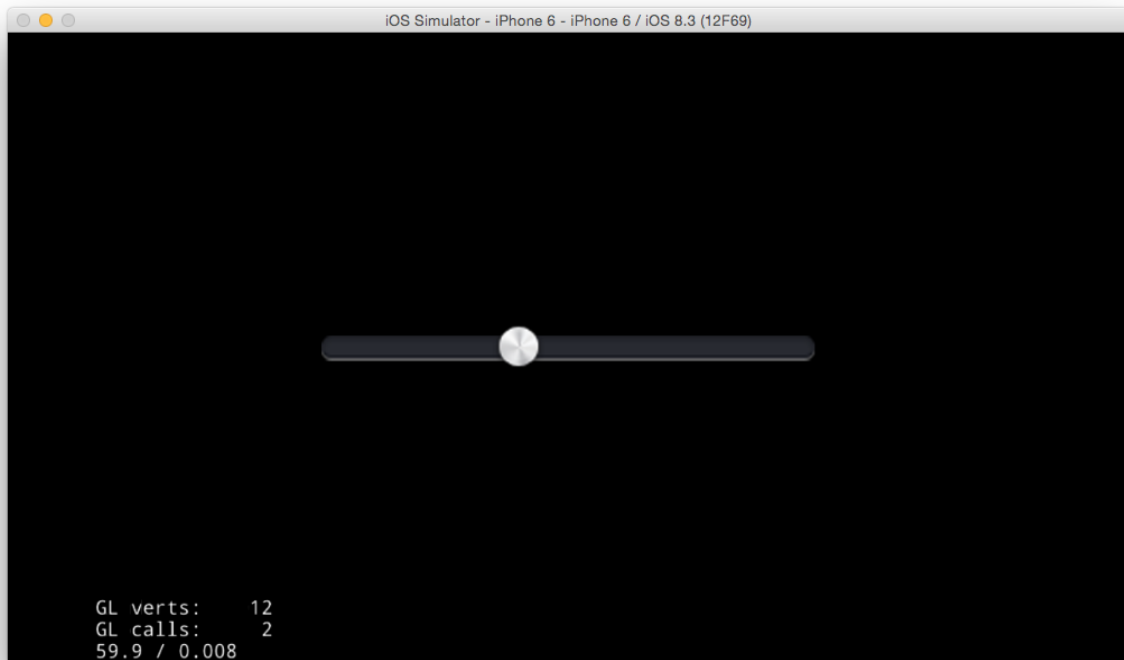
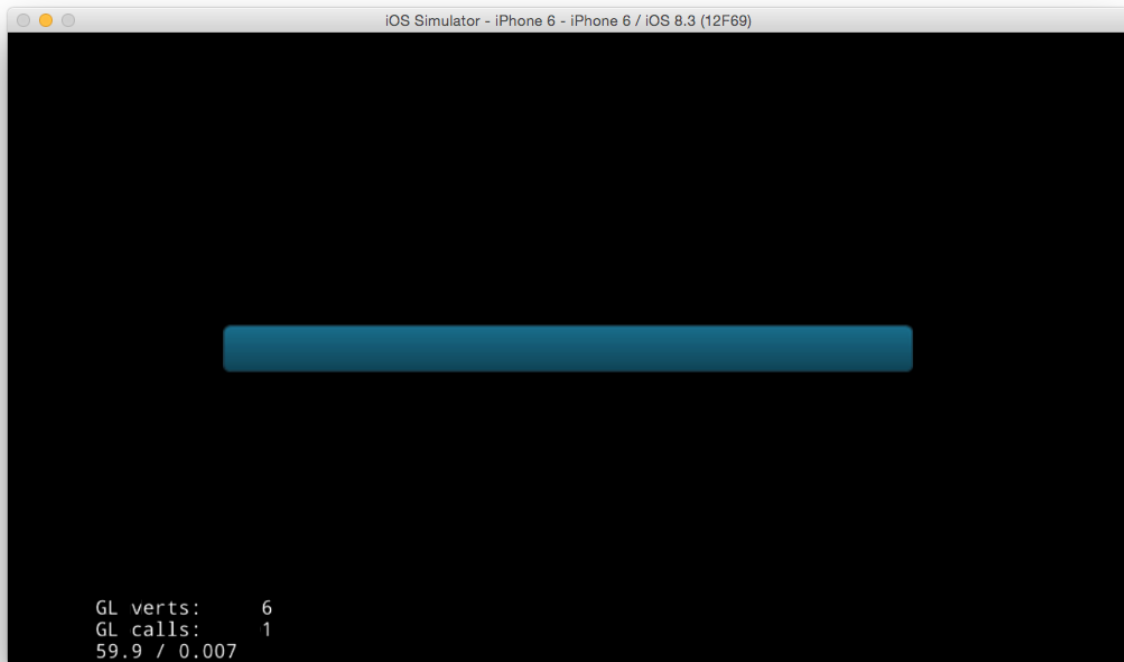


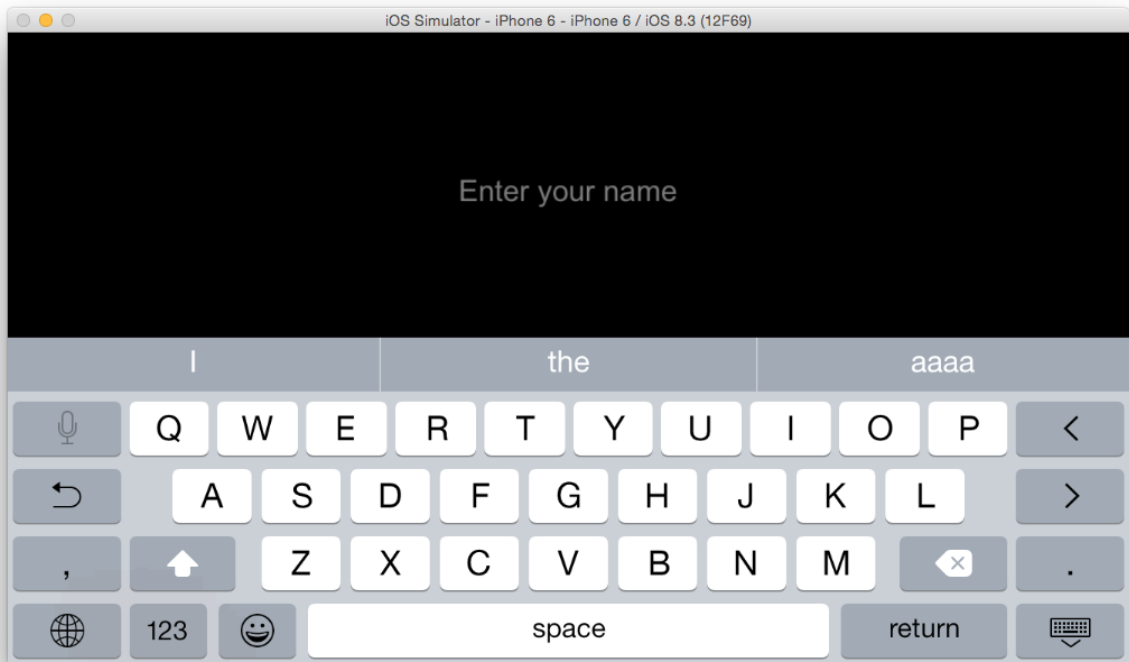
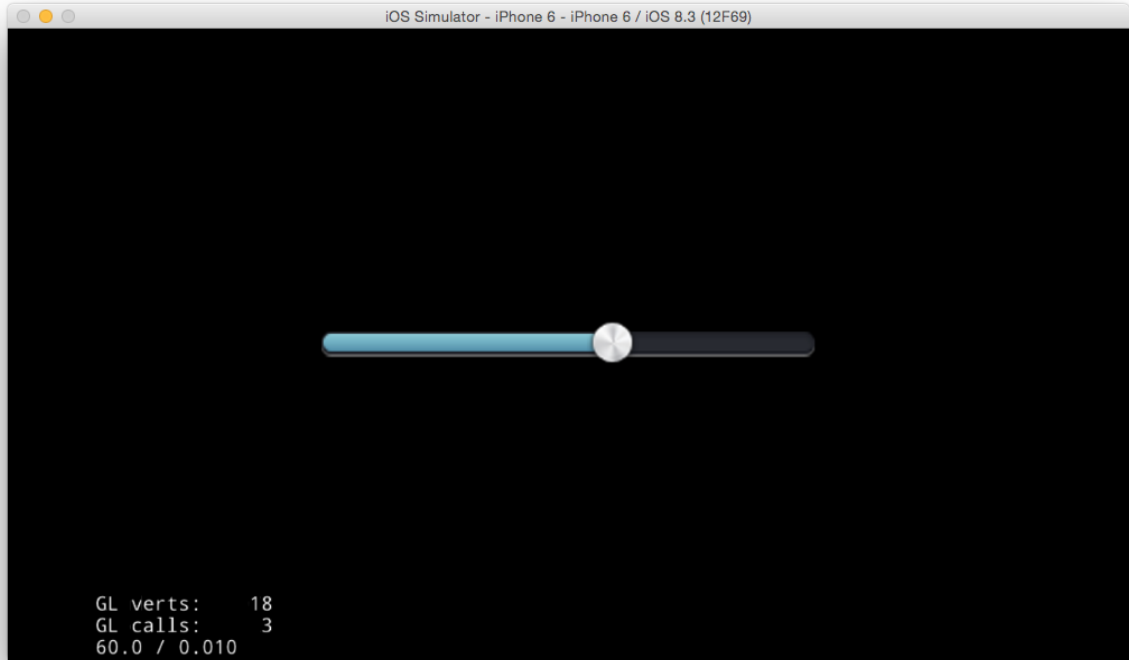
Chapter 5

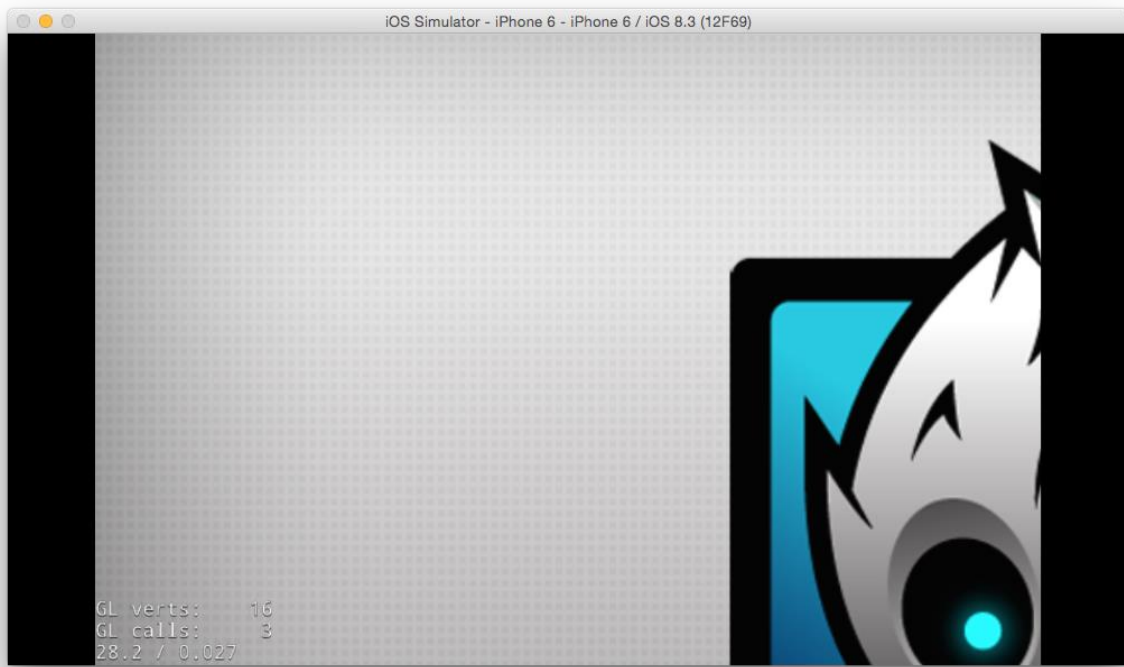
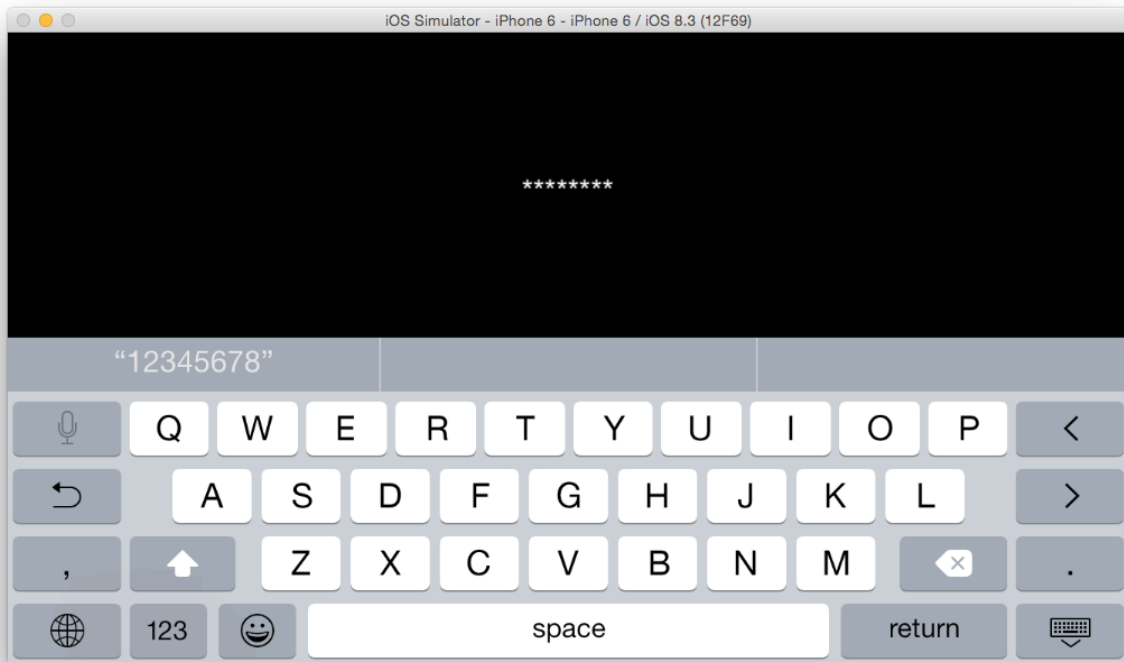
MENU ITEM 1

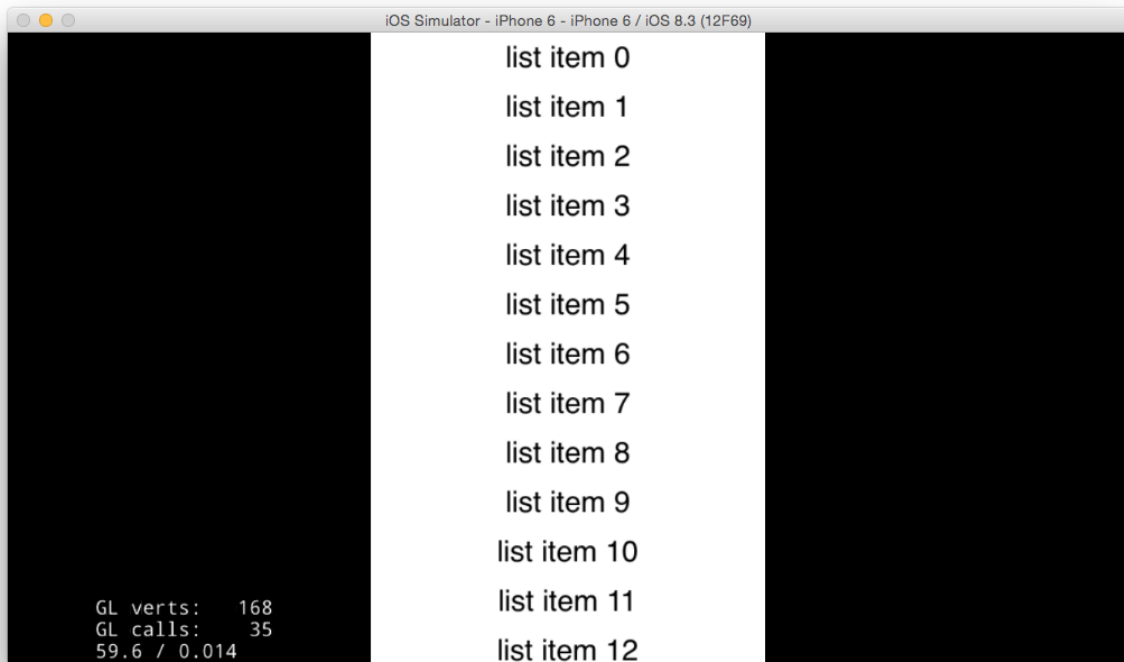























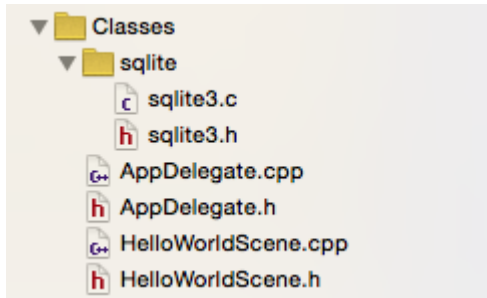
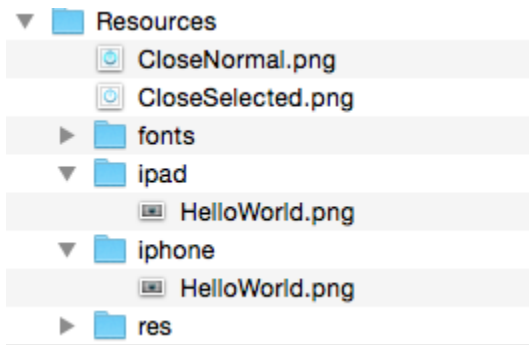


Chapter 6

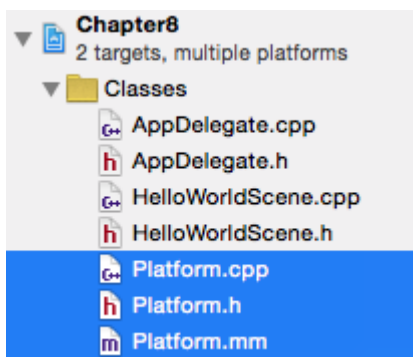
▼ Link Binary With Libraries (13 items)

Name	Status
 MediaPlayer.framework	Required ⌵
 Security.framework	Required ⌵
 libcocos2d iOS.a	Required ⌵
 CoreMotion.framework	Required ⌵
 Foundation.framework	Required ⌵
 UIKit.framework	Required ⌵
 CoreGraphics.framework	Required ⌵
 OpenGL.framework	Required ⌵
 libz.dylib	Required ⌵
 QuartzCore.framework	Required ⌵
 OpenAL.framework	Required ⌵
 AVFoundation.framework	Required ⌵
 AudioToolbox.framework	Required ⌵
+ -	Drag to reorder frameworks

Chapter 7



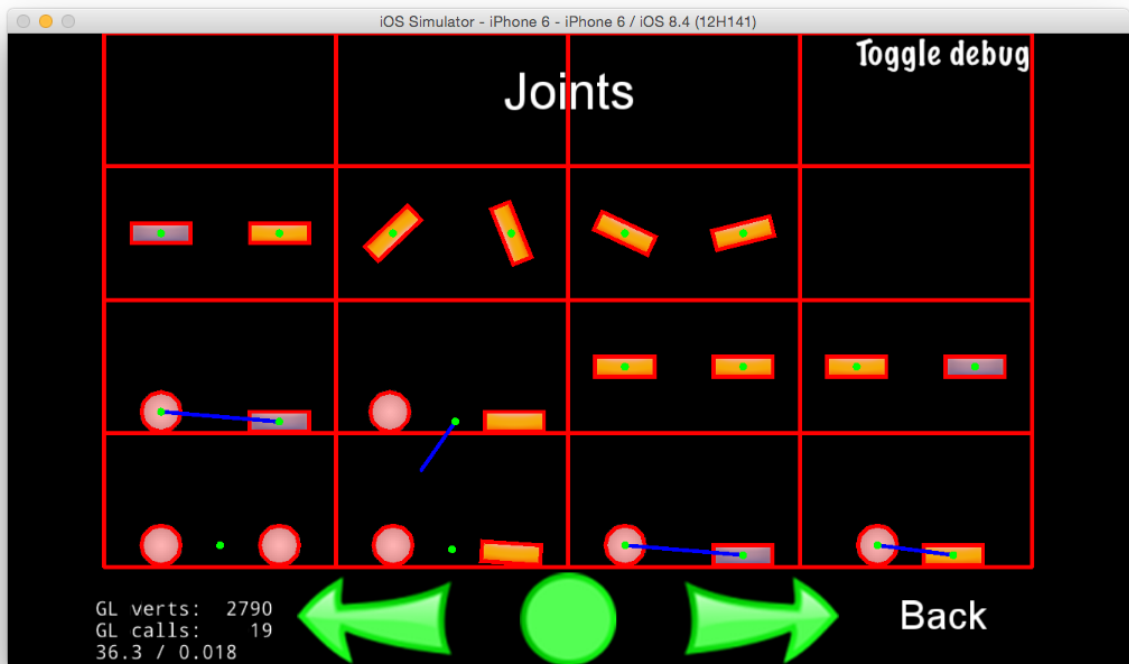
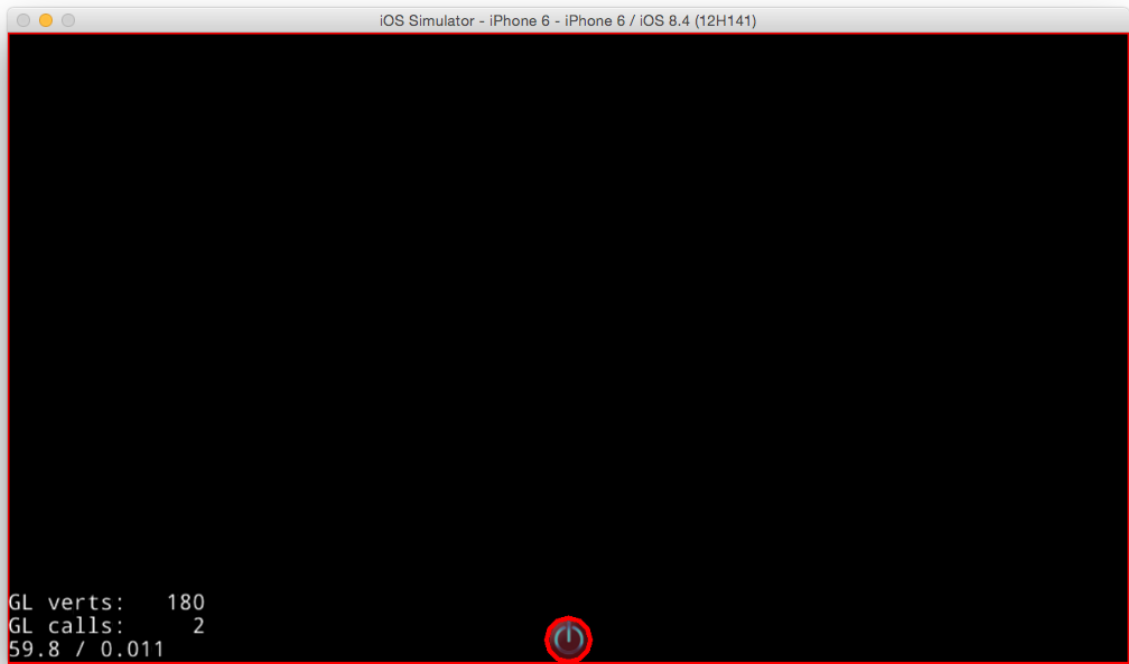
Chapter 8



▼ Compile Sources (6 items)

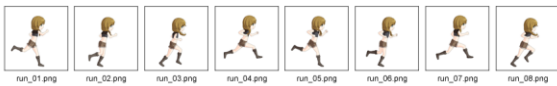
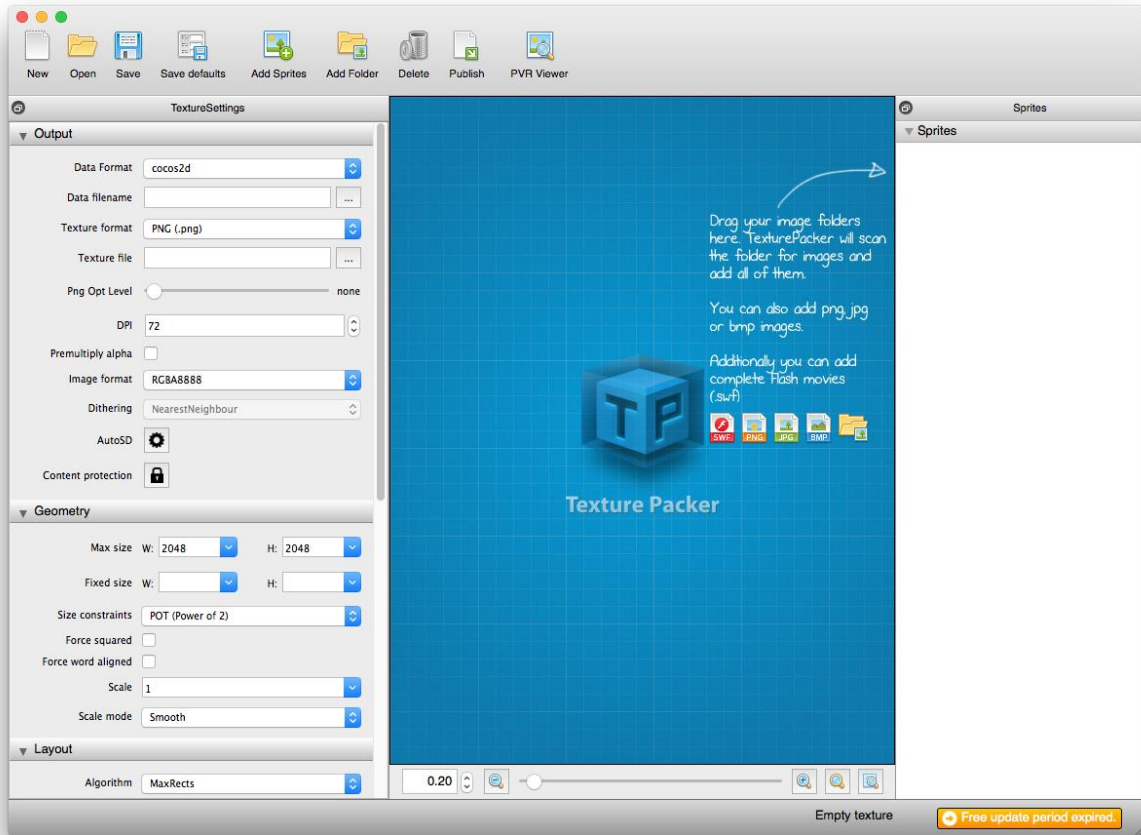
Name
AppDelegate.cpp ...in ../Classes
HelloWorldScene.cpp ...in ../Classes
AppController.mm ...in ios
RootViewController.mm ...in ios
Platform.mm ...in ../Classes
main.m ...in ios

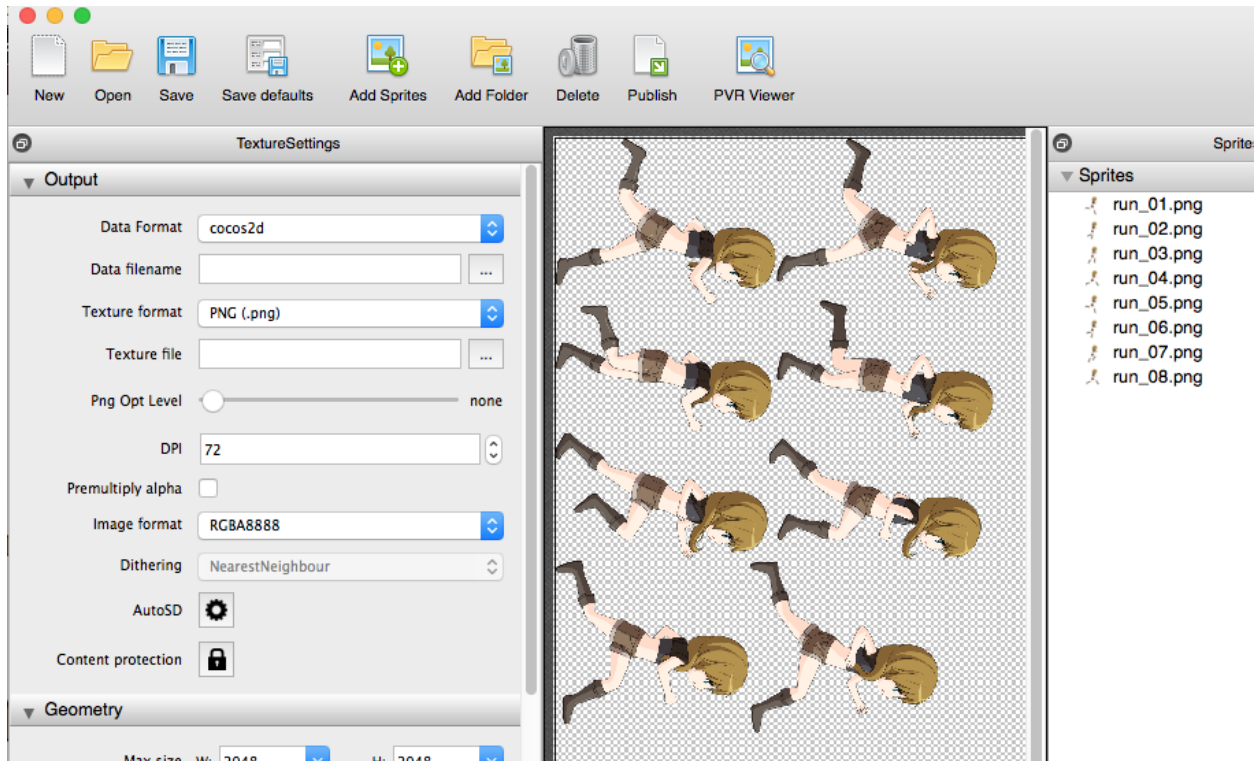
Chapter 9

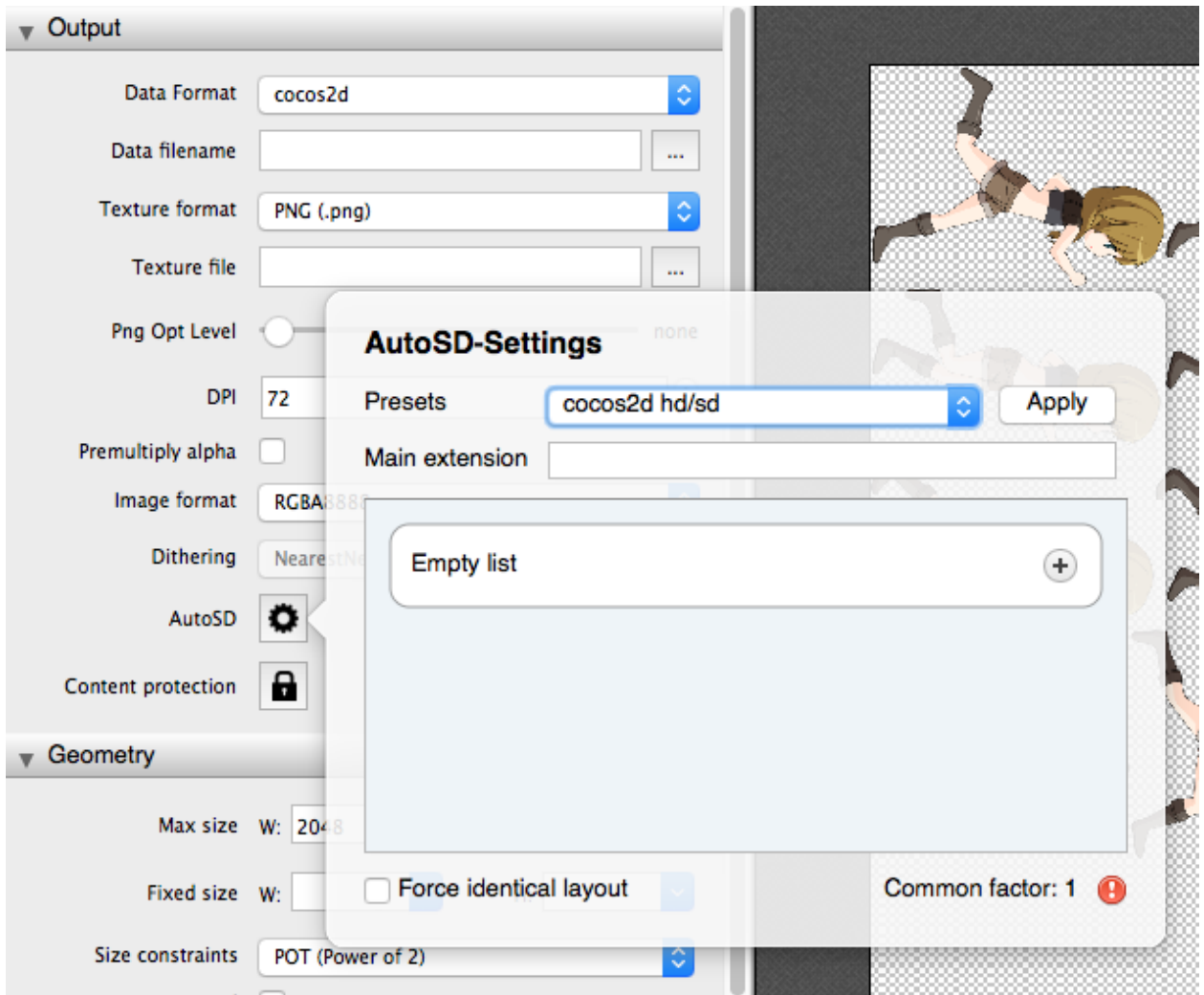


- Device Orientation Portrait
 Upside Down
 Landscape Left
 Landscape Right

Chapter 10







AutoSD-Settings

Presets cocos2d-x HDR/HD/SD Apply

Main extension /HDR/

Scale 0.5 - +

Extension /HD/

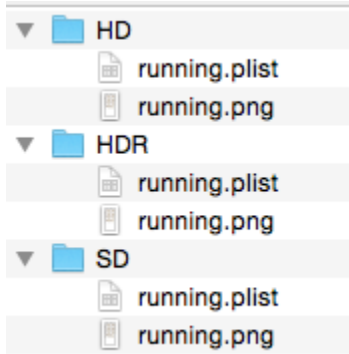
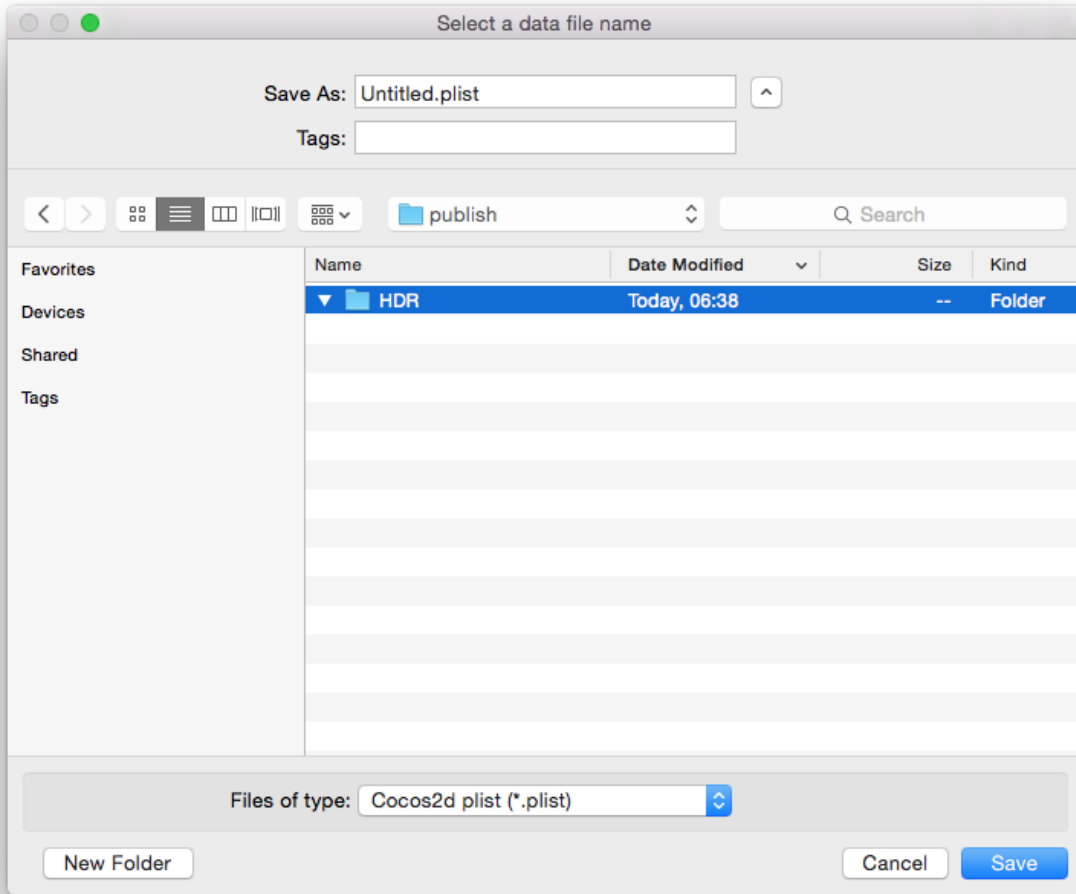
Max. Texture Size W: 2048 H: 2048

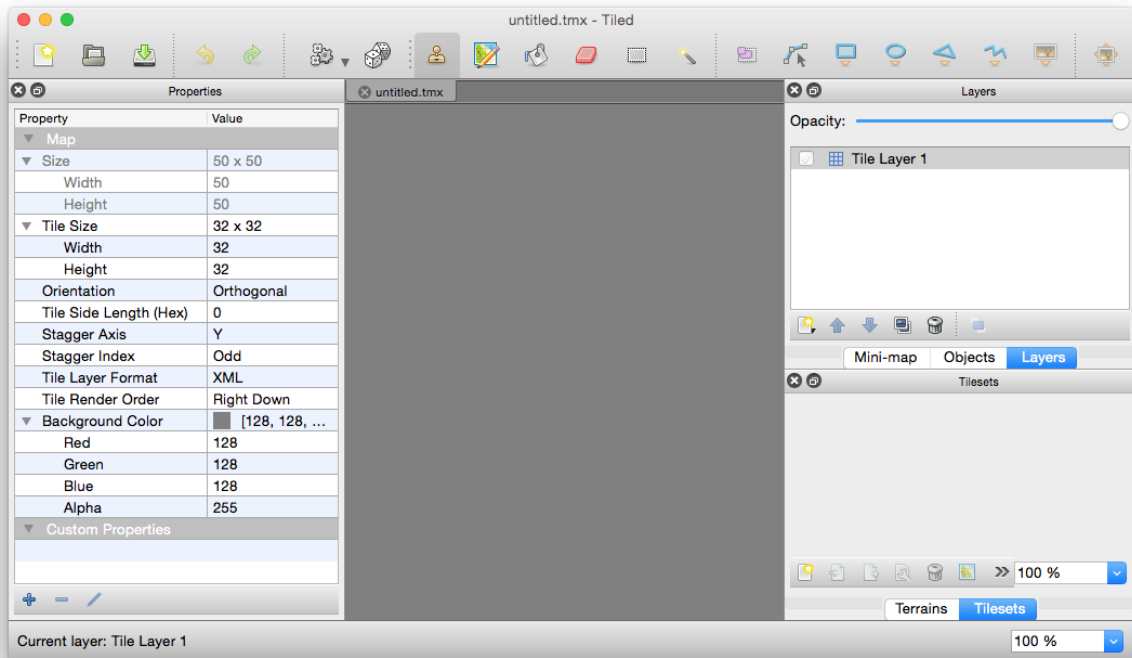
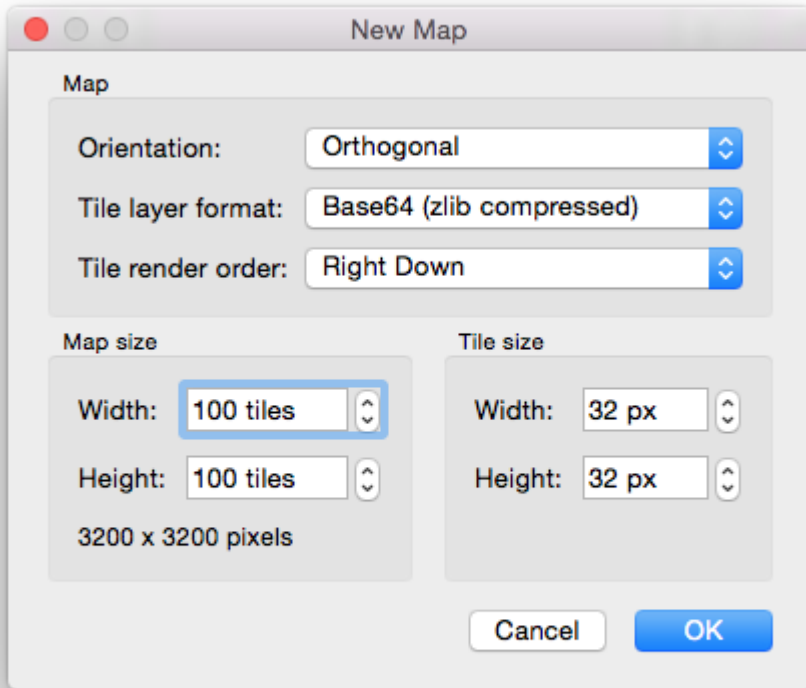
Identical layout accept fractional values

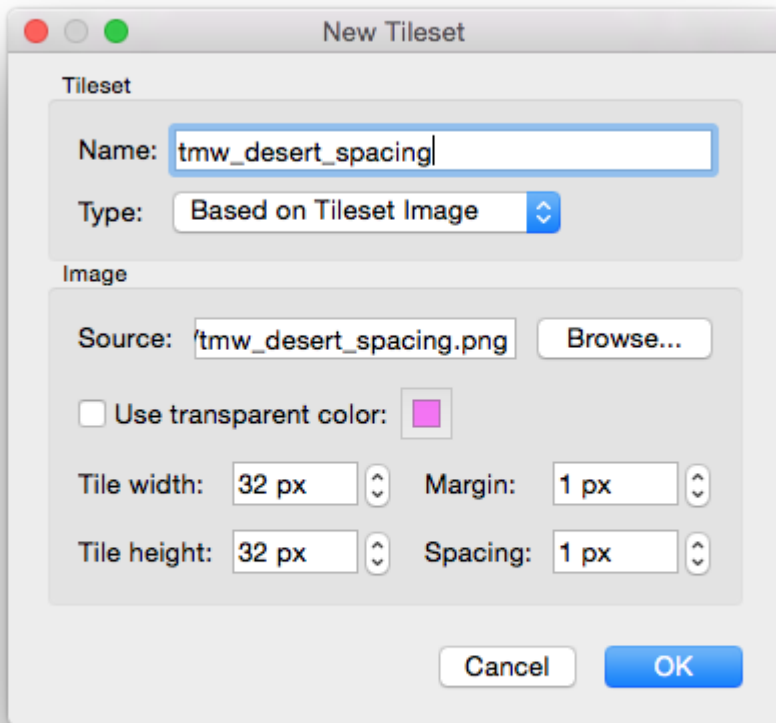
Scale 0.25 - +

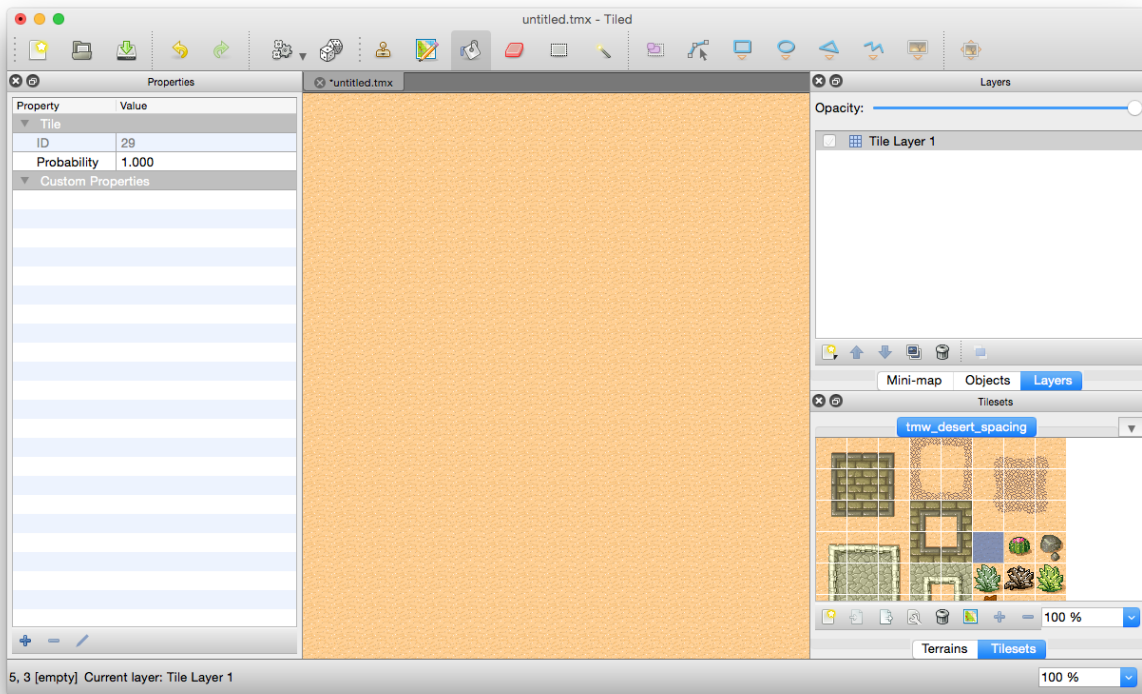
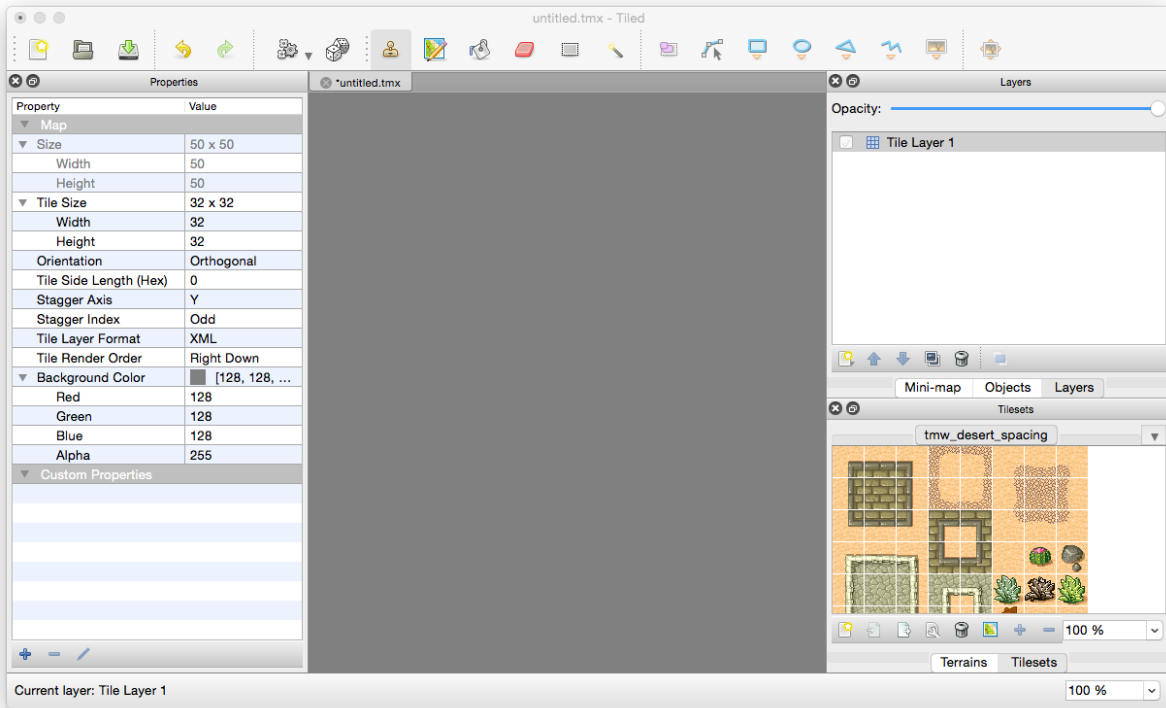
Force identical layout

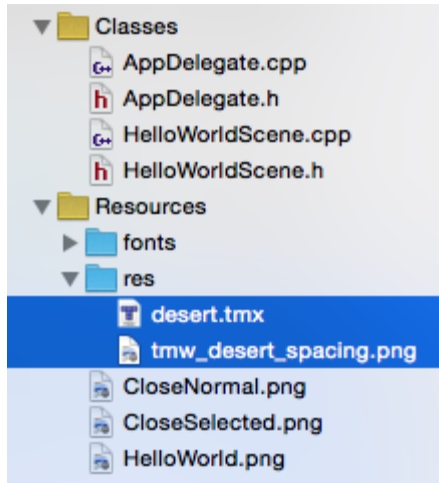
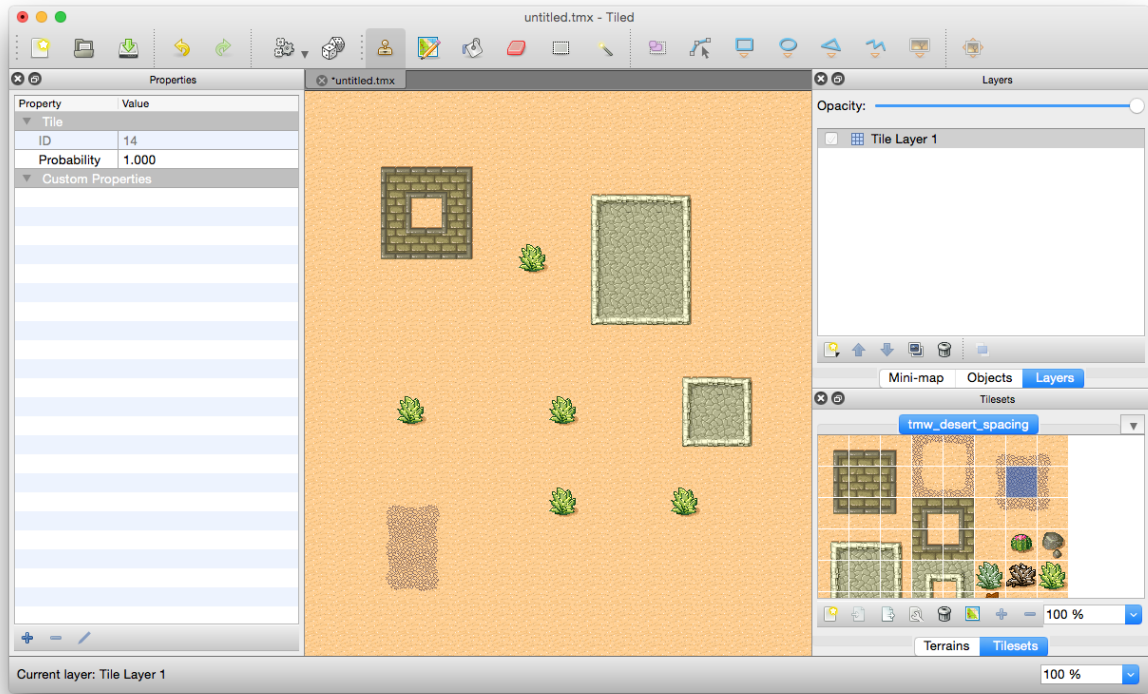
Common factor: 4 !





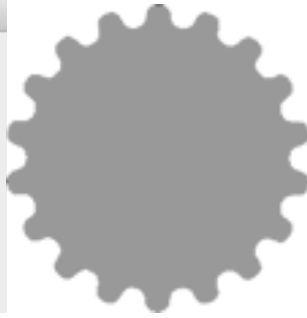


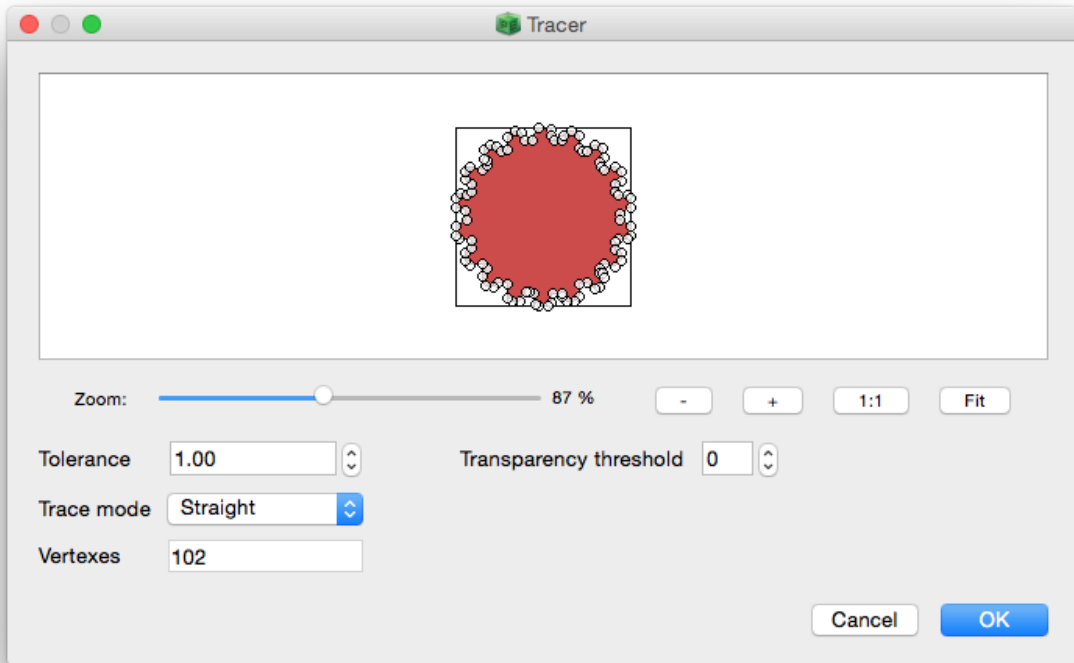
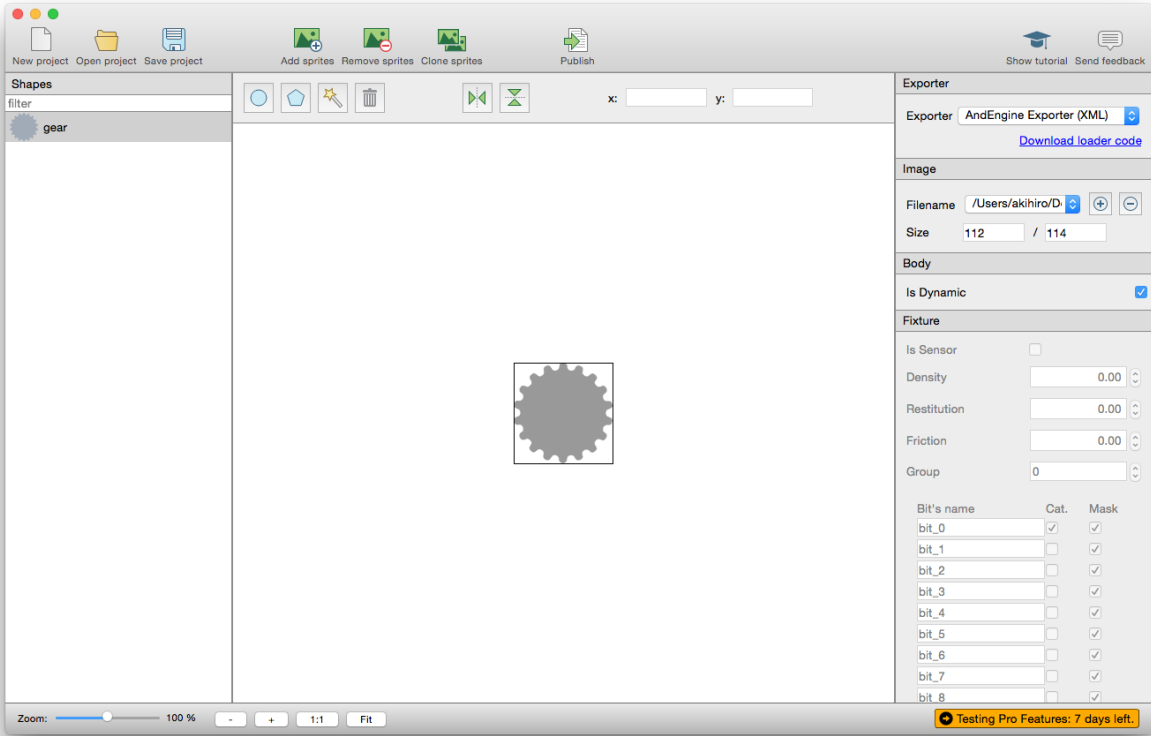


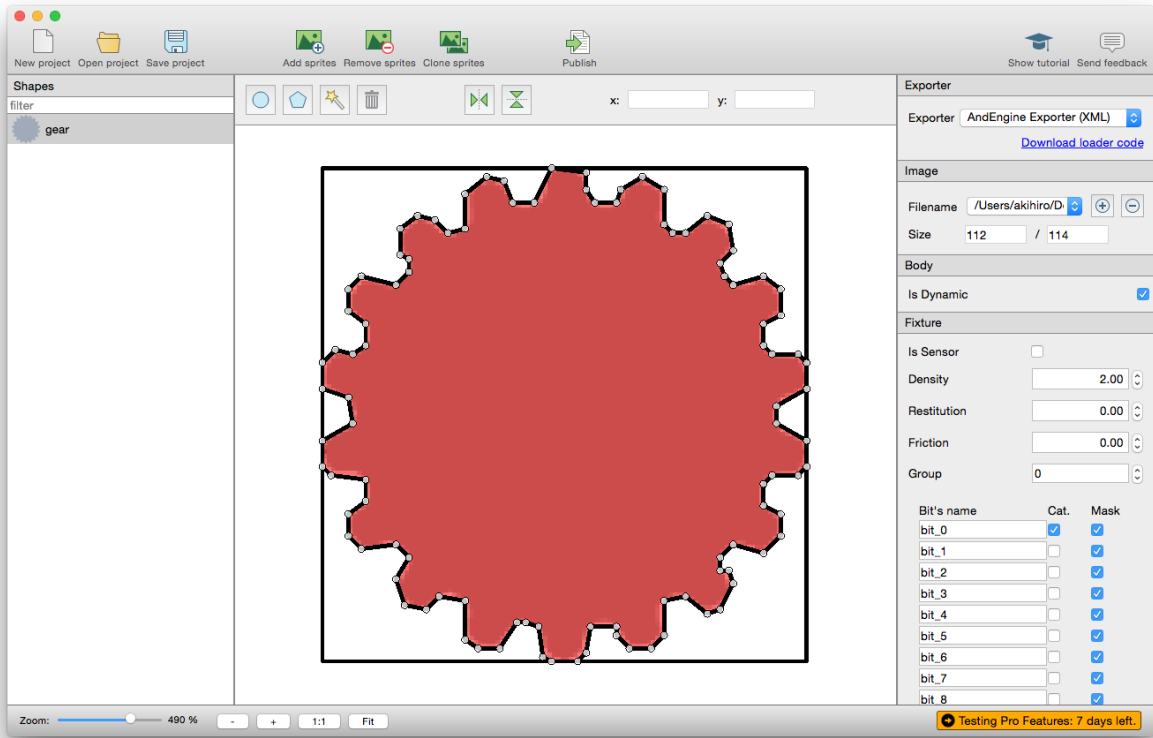




Properties	
Property	Value
▼ Tile	
ID	39
Probability	0.010
▼ Custom Properties	
isTree	true







Exporter

Exporter

[Download loader code](#)

Image

Filename

Size /

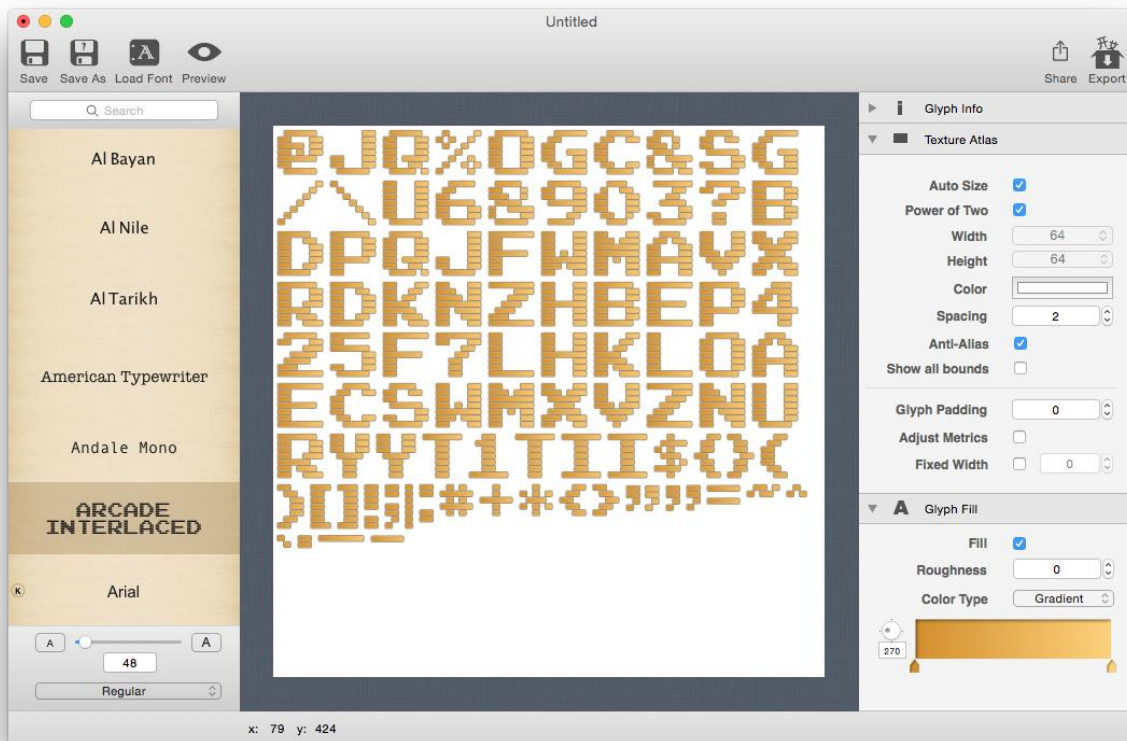
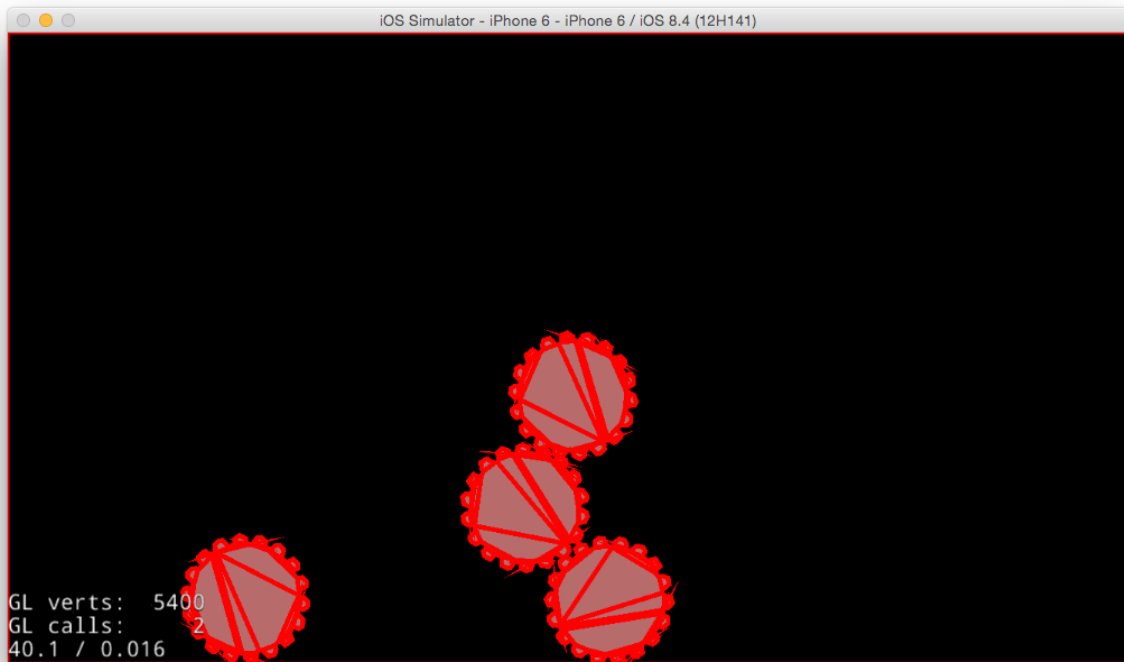
Anchor point:

Pixel /

Relative /

Chapter10

- 2 targets, multiple platforms
- Classes
 - AppDelegate.cpp
 - AppDelegate.h
 - HelloWorldScene.cpp
 - HelloWorldScene.h
 - PhysicsShapeCache.cpp**
 - PhysicsShapeCache.h**



▼ 开 Included Glyphs

ASCII NEHE Update

```
!"#$%&'()*+,-./
0123456789:;<=>?
@ABCDEFGHIJKLMNQRST
UVWXYZ[\]^_`abcdefghijklmnopq
rstuvwxyz{|}~
```

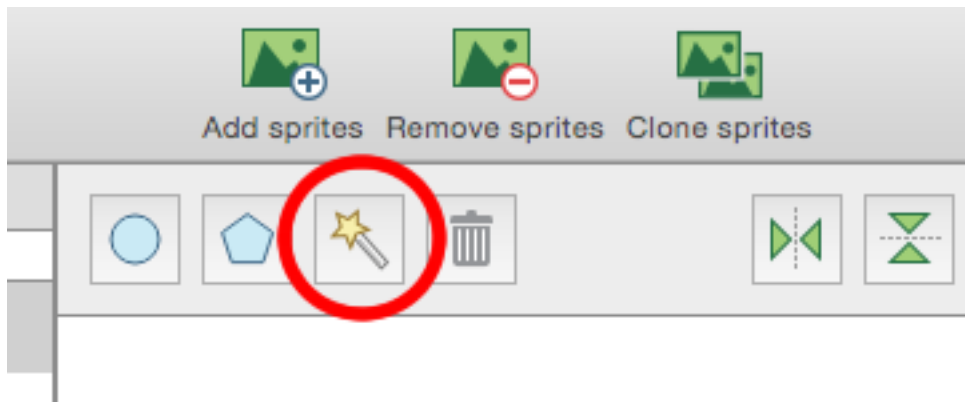
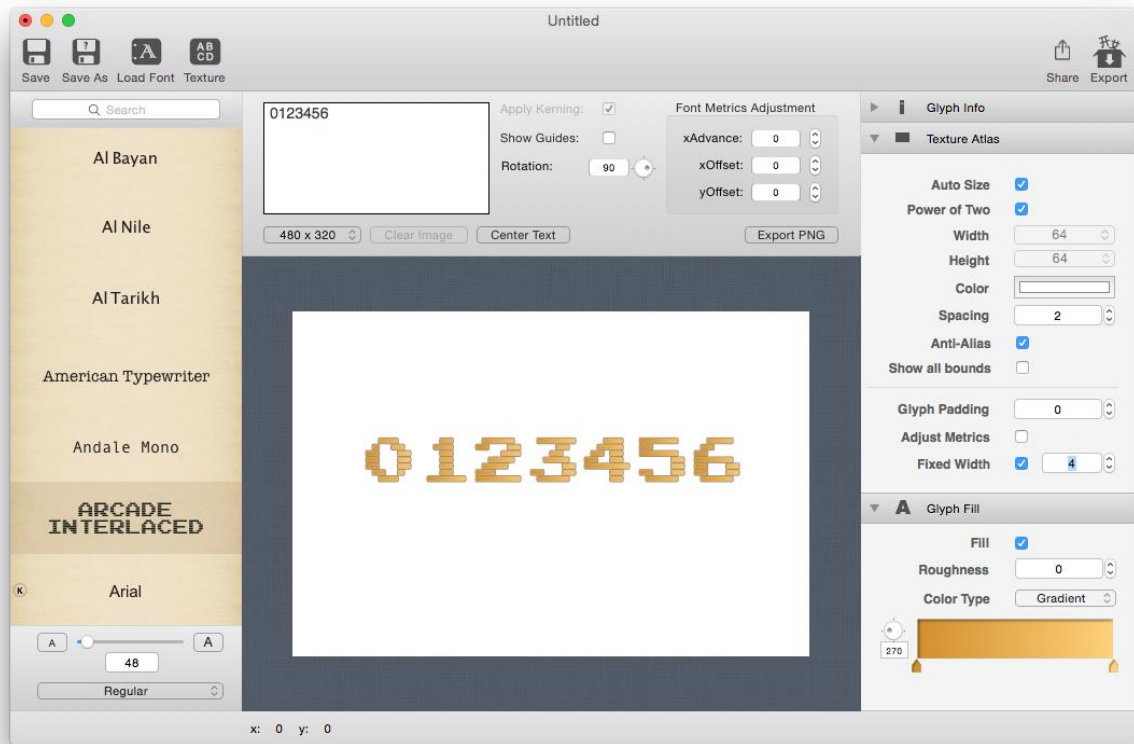
Substitute Missing Glyphs

Show Substituted Glyphs

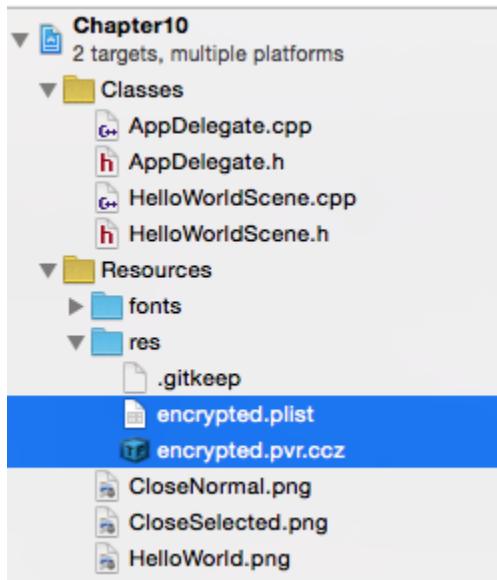
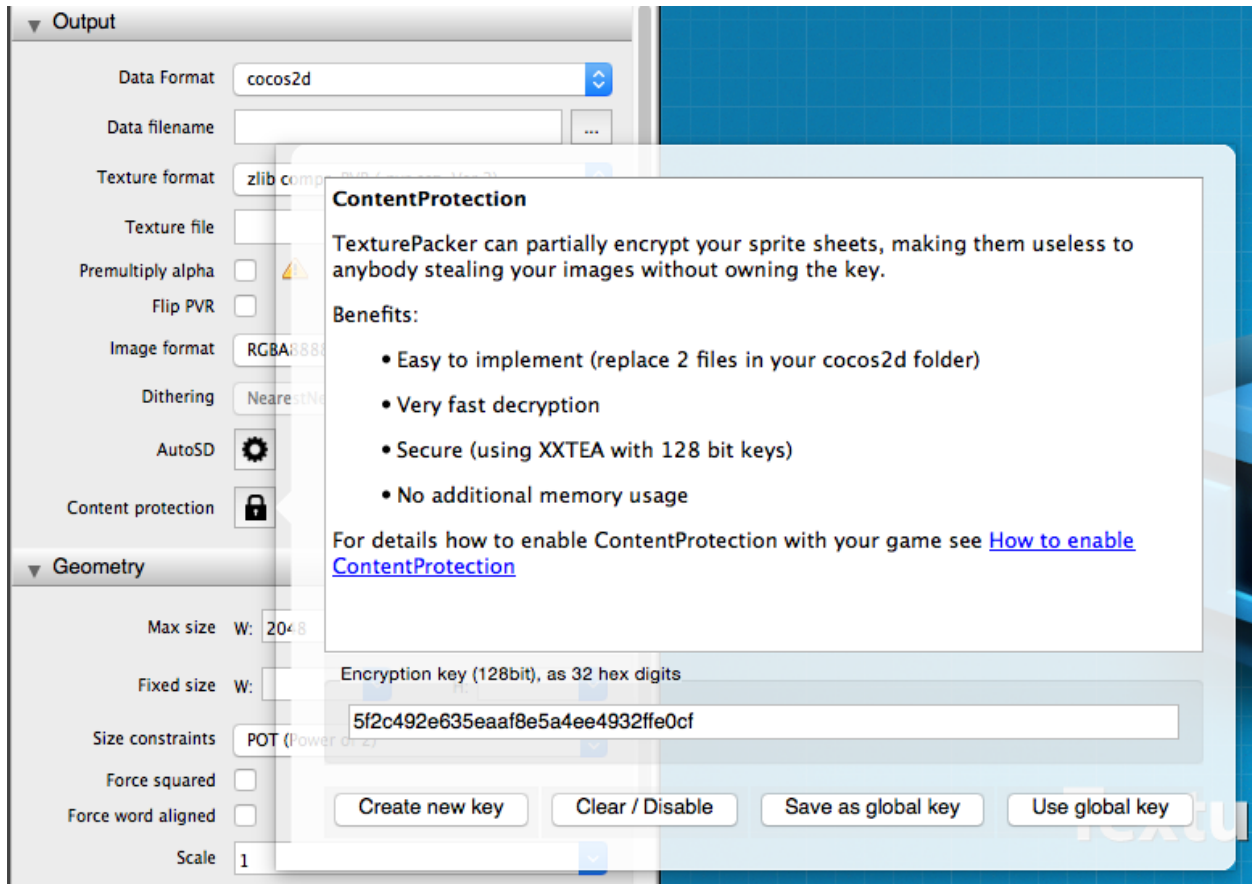
Manual substitution

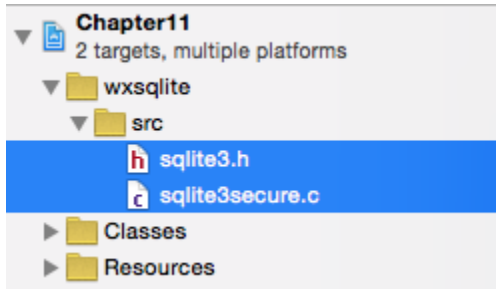
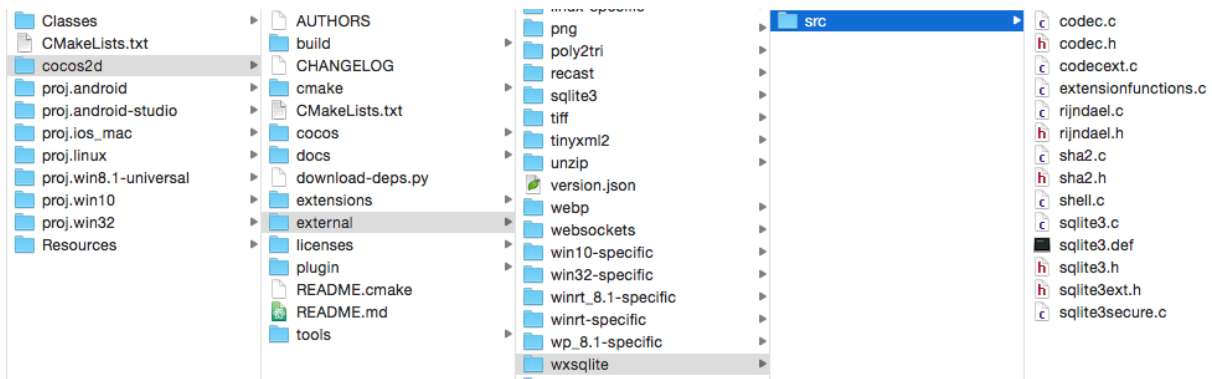
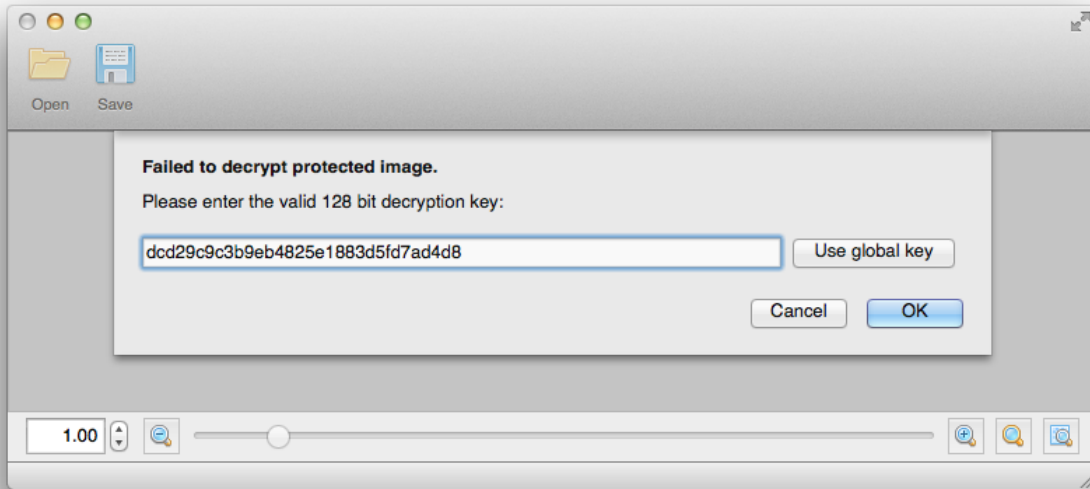
Abadi MT Condensed Extra Bold





Chapter 11

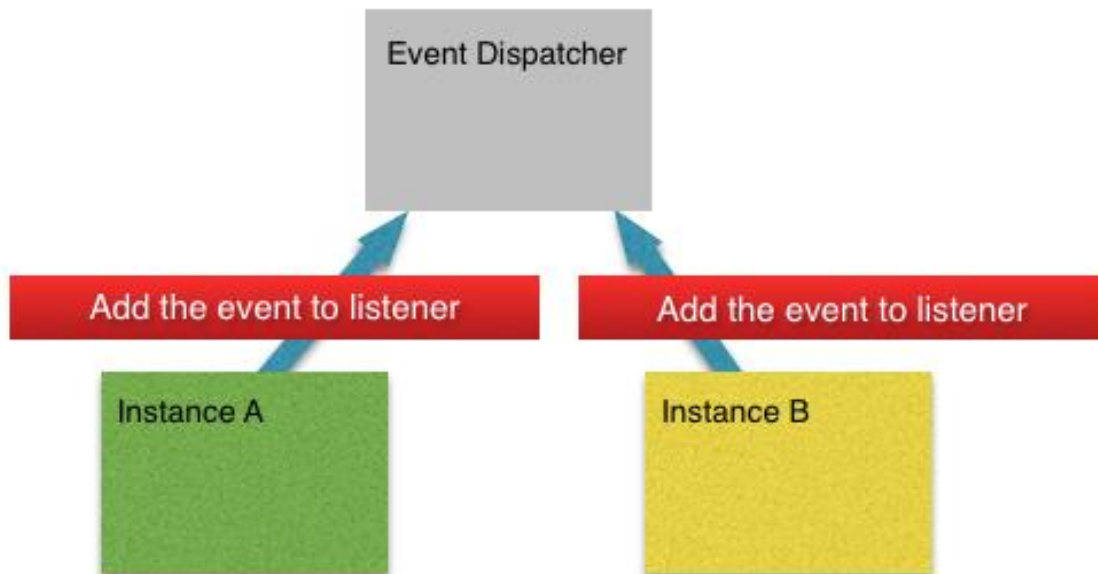




▼ Apple LLVM 6.1 - Custom Compiler Flags

Setting	Chapter11-mobile
Other C Flags	<Multiple values>
Debug	-DSQLITE_HAS_CODEC
Release	-DNS_BLOCK_ASSERTIONS=1 -DSQLITE_HAS_CODEC

Add Custom Event



Notify the event

