LeapPaint

Generated by Doxygen 1.8.3.1

Wed May 8 2013 11:50:04

Contents

1 Main Page 1

2 Hierarchical Index 3

2.1 Class Hierarchy . . . 3

3 Class Index 5

3.1 Class List . . . 5

4 Class Documentation 7

4.1 AppDelegate Class Reference . . . 7

4.1.1 Detailed Description . . . 7

4.2 BackgroundLayer Class Reference . . . 7

4.2.1 Detailed Description . . . 8

4.3 BrushSelectionLayer Class Reference . . . 8

4.3.1 Detailed Description . . . 8

4.4 <BrushSelectionLayerDelegate> Protocol Reference . . . 8

4.4.1 Detailed Description . . . 9

4.5 ControlsLayer Class Reference . . . 9

4.5.1 Detailed Description . . . 10

4.5.2 Method Documentation . . . 10

4.5.2.1 collapsePanel . . . 10

4.5.2.2 expandPanel . . . 10

4.5.2.3 makeControlSwitch . . . 10

4.5.2.4 opacitySliderChanged: . . . 11

4.5.2.5 switchValueChanged: . . . 11

4.5.2.6 updateOpacitySlider: . . . 11

4.5.2.7 valueChanged: . . . 11

4.5.3 Member Data Documentation . . . 12

4.5.3.1 colorLabel . . . 12

4.5.3.2 gameSettings . . . 12
4.5.4 Property Documentation . . . 12
4.5.4.1 brushSelection . . . 12
4.5.4.2 delegate . . . 12
4.5.4.3 displayValueLabel . . . 12
4.5.4.4 opacitydisplayValueLabel . . . 12
4.5.4.5 opacitySlider . . . 13
4.5.4.6 opacitySwitchControl . . . 13
4.5.4.7 slider . . . 13
4.5.4.8 switchControl . . . 13
4.6 <ControlsLayerDelegate> Protocol Reference . . . 13
4.6.1 Detailed Description . . . 14
4.7 DrawScene Class Reference . . . 14
4.7.1 Detailed Description . . . 14
4.8 FingerPaintingScene Class Reference . . . 14
4.8.1 Detailed Description . . . 15
4.9 GameManager Class Reference . . . 15
4.9.1 Detailed Description . . . 16
4.9.2 Method Documentation . . . 16
4.9.2.1 opacityPercentage: . . . 16
4.9.3 Member Data Documentation . . . 17
4.9.3.1 currentPoint . . . 17
4.9.3.2 currentPointable . . . 17
4.9.3.3 framesSinceLastFound . . . 17
4.9.3.4 gameSettings . . . 17
4.9.3.5 inputMode . . . 17
4.9.3.6 lastPoint . . . 17
4.9.3.7 lastTag . . . 17
4.9.4 Property Documentation . . . 17
4.9.4.1 backgroundLayer . . . 17
4.9.4.2 controller . . . 18
4.9.4.3 controlsLayer . . . 18
4.9.4.4 hudLayer . . . 18
4.9.4.5 leapScreen . . . 18
4.9.4.6 textureScene . . . 18
4.10 GameManagerTests Class Reference . . . 18
4.10.1 Detailed Description . . . 19

4.10.2 Member Data Documentation . . . 19
4.10.2.1 node . . . 19
4.11 GameScene Class Reference . . . 19
4.11.1 Detailed Description . . . 19
4.12 GameSceneTests Class Reference . . . 19
4.12.1 Detailed Description . . . 20
4.13 GameSettings Class Reference . . . 20
4.13.1 Detailed Description . . . 20
4.13.2 Method Documentation . . . 20
4.13.2.1 sharedInstance . . . 20
4.13.3 Property Documentation . . . 21
4.13.3.1 depthOpacityMode . . . 21
4.13.3.2 eraserMode . . . 21
4.13.3.3 inputMode . . . 21
4.14 GameSettingsTests Class Reference . . . 21
4.14.1 Detailed Description . . . 22
4.14.2 Member Data Documentation . . . 22
4.14.2.1 gameSettings . . . 22
4.15 GLESDebugDraw Class Reference . . . 22
4.15.1 Detailed Description . . . 22
4.16 <HUDDelegate> Protocol Reference . . . 23
4.16.1 Detailed Description . . . 23
4.17 HUDLayer Class Reference . . . 23
4.17.1 Detailed Description . . . 24
4.17.2 Member Data Documentation . . . 24
4.17.2.1 eraseMode . . . 24
4.17.2.2 gameSettings . . . 24
4.17.2.3 inputMode . . . 24
4.17.2.4 lastBrush . . . 25
4.17.2.5 lastColor . . . 25
4.17.2.6 lastScale . . . 25
4.17.2.7 paintingIndicator . . . 25
4.17.2.8 previousColor . . . 25
4.17.2.9 primaryTool . . . 25
4.17.2.10 primaryToolID . . . 25
4.17.3 Property Documentation . . . 25
4.17.3.1 delegate . . . 25

4.18 LeapPaintTests Class Reference . . . 26
4.18.1 Detailed Description . . . 26
4.19 LeapPuzzTests Class Reference . . . 26
4.19.1 Detailed Description . . . 26
4.20 LPCCControlButtonVariableSize Class Reference . . . 26
4.20.1 Detailed Description . . . 27
4.20.2 Method Documentation . . . 27
4.20.2.1 standardButtonWithTitle: . . . 27
4.21 LPLine Class Reference . . . 27
4.21.1 Detailed Description . . . 28
4.22 LPTool Class Reference . . . 28
4.22.1 Detailed Description . . . 28
4.22.2 Property Documentation . . . 28
4.22.2.1 toolID . . . 28
4.22.2.2 updated . . . 28
4.23 LPToolTests Class Reference . . . 29
4.23.1 Detailed Description . . . 29
4.23.2 Member Data Documentation . . . 29
4.23.2.1 testName . . . 29
4.24 SimplePoint Class Reference . . . 29
4.24.1 Detailed Description . . . 30
4.24.2 Method Documentation . . . 30
4.24.2.1 initWithPosition: . . . 30
4.24.2.2 initWithPosition:withZ: . . . 30
4.24.2.3 initWithX:withY: . . . 31
4.24.2.4 initWithX:withY:withZ: . . . 31
4.24.2.5 point . . . 32
4.24.3 Property Documentation . . . 32
4.24.3.1 is3d . . . 32
4.24.3.2 x . . . 32
4.24.3.3 y . . . 32
4.24.3.4 z . . . 33
4.25 SimplePointObject Class Reference . . . 33
4.25.1 Detailed Description . . . 33
4.25.2 Property Documentation . . . 33
4.25.2.1 point . . . 33
4.26 SimplePointTests Class Reference . . . 34

4.26.1 Detailed Description . . . 34
4.26.2 Member Data Documentation . . . 34
4.26.2.1 testName . . . 34
4.26.2.2 threeValuePoint . . . 34
4.26.2.3 twoValuePoint . . . 34
4.27 SketchRenderTextureScene Class Reference . . . 35
4.27.1 Detailed Description . . . 35
4.28 Utility Class Reference . . . 36
4.28.1 Detailed Description . . . 36
4.28.2 Method Documentation . . . 36
4.28.2.1 getRandomNumberBetween:to: . . . 36
4.28.2.2 getRandomNumberUnder: . . . 36
4.28.2.3 getRandomUniformNumberUnder: . . . 37
4.29 UtilityTests Class Reference . . . 37
4.29.1 Detailed Description . . . 38
4.29.2 Member Data Documentation . . . 38
4.29.2.1 testName . . . 38

Index **38**

Chapter 1

Main Page

`Project Home & Wiki`

#Requirements Specification

Interface

- HUD Requirement to render a cursor where the pointable is intersecting with the screen. The cursor should show the color that will be painting on the screen
- Ring and round cursor to indicate drawing or not drawing.

Features

- Change Colors
- Change Brushes
- Eraser
- Change size of brush
- Reset drawing
- Change Opacity of brushes

#Unit Tests

#Libraries & Sub Modules

- `Cocos2d 2.0`
- `CCControlExtension`
- #Build Settings
- Valid Architecture i386 x86_64
- Other Linker Flags -lz -ObjC
- C Language Dialect GNU99 -std=gnu99

- C ++ Language Dialect GNU++11 -std=gnu++11
- C ++ Standard Library libc++ (LLVM C++ standard lib)
- run script after build:

  echo TARGET_BUILD_DIR=${TARGET_BUILD_DIR} echo TARGET_NAME=${TARGET_NAME} cd ${TARGET_BUILD_DIR}/${TARGET_NAME}.app/Contents/MacOS ls -la install_name_tool -change /libLeap.dylib /../Resources/libLeap.dylib ${TARGET_NAME}

#Documentation

Documentation is done using Doxygen

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

b2Draw
- GLESDebugDraw . . . 22

CCLayer
- BackgroundLayer . . . 7
- BrushSelectionLayer . . . 8
- ControlsLayer . . . 9
- DrawScene . . . 14
- FingerPaintingScene . . . 14
- HUDLayer . . . 23
- LPCCControlButtonVariableSize . . . 26
- SketchRenderTextureScene . . . 35

CCScene
- GameManager . . . 15
- GameScene . . . 19

CCSprite
- LPTool . . . 28

<LeapListener>
- FingerPaintingScene . . . 14
- GameManager . . . 15

<NSApplicationDelegate>
- AppDelegate . . . 7

NSObject
- AppDelegate . . . 7
- GameSettings . . . 20
- LPLine . . . 27
- SimplePoint . . . 29
- SimplePointObject . . . 33
- Utility . . . 36

<NSObject>
- <BrushSelectionLayerDelegate> . . . 8
  - ControlsLayer . . . 9
- <ControlsLayerDelegate> . . . 13
  - GameManager . . . 15
- <HUDDelegate> . . . 23

GameManager 15
SenTestCase
GameManagerTests 18
GameSceneTests 19
GameSettingsTests 21
LeapPaintTests 26
LeapPuzzTests 26
LPToolTests 29
SimplePointTests 34
UtilityTests 37

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

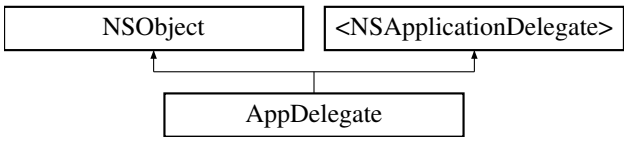
AppDelegate . . . 7
BackgroundLayer . . . 7
BrushSelectionLayer . . . 8
<BrushSelectionLayerDelegate> . . . 8
ControlsLayer . . . 9
<ControlsLayerDelegate> . . . 13
DrawScene . . . 14
FingerPaintingScene . . . 14
GameManager . . . 15
GameManagerTests . . . 18
GameScene . . . 19
GameSceneTests . . . 19
GameSettings . . . 20
GameSettingsTests . . . 21
GLESDebugDraw . . . 22
<HUDDelegate> . . . 23
HUDLayer . . . 23
LeapPaintTests . . . 26
LeapPuzzTests . . . 26
LPCCControlButtonVariableSize . . . 26
LPLine . . . 27
LPTool . . . 28
LPToolTests . . . 29
SimplePoint . . . 29
SimplePointObject . . . 33
SimplePointTests . . . 34
SketchRenderTextureScene . . . 35
Utility . . . 36
UtilityTests . . . 37

Chapter 4

Class Documentation

4.1 AppDelegate Class Reference

Inheritance diagram for AppDelegate:



Properties

- IBOutlet NSWindow ∗ **window**

4.1.1 Detailed Description

Definition at line 11 of file AppDelegate.h.

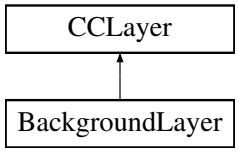
The documentation for this class was generated from the following file:

- LeapPaint/AppDelegate.h

4.2 BackgroundLayer Class Reference

```
#import <BackgroundLayer.h>
```

Inheritance diagram for BackgroundLayer:



4.2.1 Detailed Description

Background Layer Displays a background image for the scene

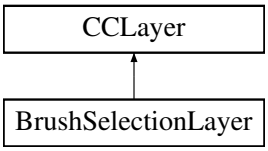
Definition at line 16 of file BackgroundLayer.h.

The documentation for this class was generated from the following file:

- LeapPaint/BackgroundLayer.h

4.3 BrushSelectionLayer Class Reference

Inheritance diagram for BrushSelectionLayer:



Protected Attributes

- NSMutableDictionary ∗ **imageNamesDictionary**

Properties

- id< BrushSelectionLayerDelegate > **delegate**
- bool **layerHidden**

4.3.1 Detailed Description

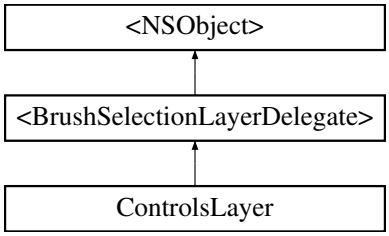
Definition at line 18 of file BrushSelectionLayer.h.

The documentation for this class was generated from the following file:

- LeapPaint/BrushSelectionLayer.h

4.4 <BrushSelectionLayerDelegate> Protocol Reference

Inheritance diagram for <BrushSelectionLayerDelegate>:



Instance Methods

- (void) - **hidePanel**
- (void) - **brushSelected:**

4.4.1 Detailed Description

Definition at line 12 of file BrushSelectionLayer.h.

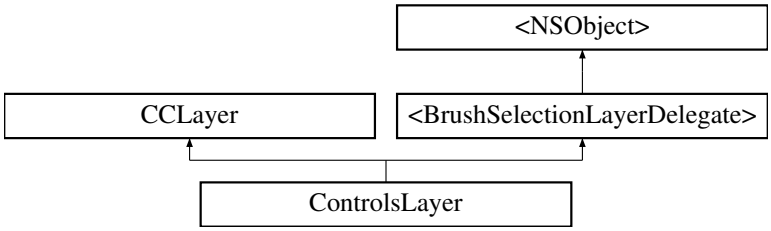
The documentation for this protocol was generated from the following file:

- LeapPaint/BrushSelectionLayer.h

4.5 ControlsLayer Class Reference

`#import <ControlsLayer.h>`

Inheritance diagram for ControlsLayer:



Instance Methods

- (void) - valueChanged:
- (void) - opacitySliderChanged:
- (void) - expandPanel
- (void) - collapsePanel
- (CCControlSwitch *) - makeControlSwitch
- (void) - switchValueChanged:
- (void) - updateOpacitySlider:

Protected Attributes

- CCLabelTTF * colorLabel
- GameSettings * gameSettings

Properties

- CCControlSlider * slider
- CCControlSlider * opacitySlider
- CCControlSwitch * opacitySwitchControl
- CCLabelTTF * opacitydisplayValueLabel

- id< ControlsLayerDelegate > delegate
- BrushSelectionLayer * brushSelection
- CCLabelTTF * displayValueLabel
- CCControlSwitch * switchControl

4.5.1 Detailed Description

Controls Layer User inferface controls for operating buttons, switches, sliders

Definition at line 34 of file ControlsLayer.h.

4.5.2 Method Documentation

4.5.2.1 - (void) collapsePanel

Collapses Brushes Panel

Definition at line 445 of file ControlsLayer.mm.

```
00445                       {
00446
00447 }
```

4.5.2.2 - (void) expandPanel

Expands brushes panel

Definition at line 440 of file ControlsLayer.mm.

```
00440                      {
00441
00442
00443 }
```

4.5.2.3 - (CCControlSwitch *) makeControlSwitch

Creates and returns a new CCControlSwitch.

Definition at line 492 of file ControlsLayer.mm.

```
00493 {
00494     return [CCControlSwitch switchWithMaskSprite:[CCSprite spriteWithFile:@"switch-mask.png"]
00495                                        onSprite:[CCSprite spriteWithFile:@"switch-on.png"]
00496                                       offSprite:[CCSprite spriteWithFile:@"switch-off.png"]
00497                                     thumbSprite:[CCSprite spriteWithFile:@"switch-thumb.png"]
00498                                         onLabel:[CCLabelTTF labelWithString:@"On" fontName:@"Arial-BoldMT"
       fontSize:16]
00499                                        offLabel:[CCLabelTTF labelWithString:@"Off" fontName:@"Arial-BoldMT
      " fontSize:16]];
00500 }
```

4.5.2.4 - (void) opacitySliderChanged: (CCControlSlider *) *sender*

Does something

Parameters

slider	changes

Definition at line 142 of file ControlsLayer.mm.

```
00142                               :(CCControlSlider *)sender
00143 {
00144
00145     // Change value of label.
00146     //NSLog(@"slider value %@", [NSString stringWithFormat:@"Slider value = %.02f", sender.value]);
00147     [self.delegate changeOpacityControl:sender.value];
00148 }
```

4.5.2.5 - (void) switchValueChanged: (CCControlSwitch *) *sender*

Callback for the change value.

Definition at line 503 of file ControlsLayer.mm.

```
00503                              :(CCControlSwitch *)sender
00504 {
00505     if ([sender isOn])
00506     {
00507         displayValueLabel.string    = @"Eraser";
00508
00509         [self.delegate eraserMode:true];
00510     } else
00511     {
00512         displayValueLabel.string    = @"Eraser";
00513         [self.delegate eraserMode:false];
00514     }
00515 }
```

4.5.2.6 - (void) updateOpacitySlider: (float) *value*

Callback for opacity changing with the slider

Definition at line 150 of file ControlsLayer.mm.

```
00150                               :(float)value{
00151
00152
00153     //ensure the value is within its bounds
00154     if(value > self.opacitySlider.maximumValue){
00155         //Max Value
00156         self.opacitySlider.value = self.opacitySlider.maximumValue;
00157     }else if(value < self.opacitySlider.minimumValue){
00158         //Min Value
00159         self.opacitySlider.value = self.opacitySlider.minimumValue;
00160     }else{
00161         self.opacitySlider.value = value;
00162     }
00163 }
```

4.5.2.7 - (void) valueChanged: (CCControlSlider *) *sender*

Does something

Parameters

slider	changes

Definition at line 95 of file ControlsLayer.mm.

```
00095                     :(CCControlSlider *)sender
00096 {
00097     // Change value of label.
00098     //NSLog(@"slider value %@", [NSString stringWithFormat:@"Slider value = %.02f", sender.value]);
00099     [self.delegate changeThicknessControl:sender.value];
00100 }
```

4.5.3 Member Data Documentation

4.5.3.1 - (CCLabelTTF*) colorLabel [protected]

colorLabel displays name of color in hash value

Definition at line 36 of file ControlsLayer.h.

4.5.3.2 - (GameSettings*) gameSettings [protected]

gameSettings global reference to shared settings instance

Definition at line 38 of file ControlsLayer.h.

4.5.4 Property Documentation

4.5.4.1 - (BrushSelectionLayer*) brushSelection [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 45 of file ControlsLayer.h.

4.5.4.2 - (id<ControlsLayerDelegate>) delegate [read], [write], [nonatomic], [weak]

colorLabel displays name of color in hash value

Definition at line 44 of file ControlsLayer.h.

4.5.4.3 - (CCLabelTTF *) displayValueLabel [read], [write], [nonatomic], [strong]

displayValueLabel displays coordinate

colorLabel displays name of color in hash value

Definition at line 37 of file ControlsLayer.h.

Referenced by switchValueChanged:.

4.5.4.4 - (CCLabelTTF*) opacitydisplayValueLabel [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 43 of file ControlsLayer.h.

4.5.4.5 - (CCControlSlider*) opacitySlider [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 41 of file ControlsLayer.h.

Referenced by updateOpacitySlider:.

4.5.4.6 - (CCControlSwitch*) opacitySwitchControl [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 42 of file ControlsLayer.h.

4.5.4.7 - (CCControlSlider*) slider [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 40 of file ControlsLayer.h.

4.5.4.8 - (CCControlSwitch*) switchControl [read], [write], [nonatomic], [strong]

colorLabel displays name of color in hash value

Definition at line 47 of file ControlsLayer.h.

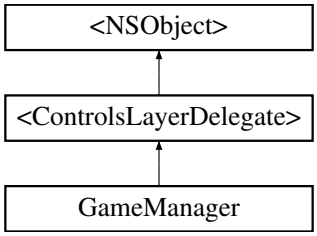
The documentation for this class was generated from the following files:

- LeapPaint/ControlsLayer.h
- LeapPaint/ControlsLayer.mm

4.6 <ControlsLayerDelegate> Protocol Reference

`#import <ControlsLayer.h>`

Inheritance diagram for <ControlsLayerDelegate>:



Instance Methods

- (void) - **changeColorControl:**
- (void) - **changeThicknessControl:**
- (void) - **changeBrushControl:**
- (void) - **changeOpacityControl:**

- (void) - **clearDrawing**
- (void) - **eraserMode:**

4.6.1 Detailed Description

Controls Layer Delegate

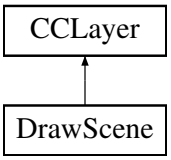
Definition at line 19 of file ControlsLayer.h.

The documentation for this protocol was generated from the following file:

- LeapPaint/ControlsLayer.h

4.7 DrawScene Class Reference

Inheritance diagram for DrawScene:



Protected Attributes

- LeapController * **controller**
- CCTexture2D * **spriteTexture_**
- b2World * **world**
- GLESDebugDraw * **m_debugDraw**
- CCSprite * **targetSprite**
- b2MouseJoint * **_mouseJoint**
- b2World * **_world**
- b2Body * **_groundBody**
- NSMutableDictionary * **trackableList**

4.7.1 Detailed Description

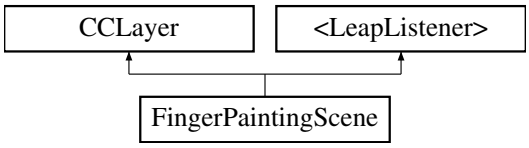
Definition at line 15 of file DrawScene.h.

The documentation for this class was generated from the following file:

- LeapPaint/DrawScene.h

4.8 FingerPaintingScene Class Reference

Inheritance diagram for FingerPaintingScene:



Protected Attributes

- LeapController * **controller**
- CCTexture2D * **spriteTexture_**
- b2World * **world**
- GLESDebugDraw * **m_debugDraw**
- CCSprite * **targetSprite**
- b2MouseJoint * **_mouseJoint**
- b2World * **_world**
- b2Body * **_groundBody**
- CIColor * **brushColor**
- NSMutableDictionary * **trackableList**
- NSMutableDictionary * **brushesList**
- NSTimer * **updateDraw**
- RedDot * **mouseCursor**

4.8.1 Detailed Description

Definition at line 17 of file FingerPaintingScene.h.

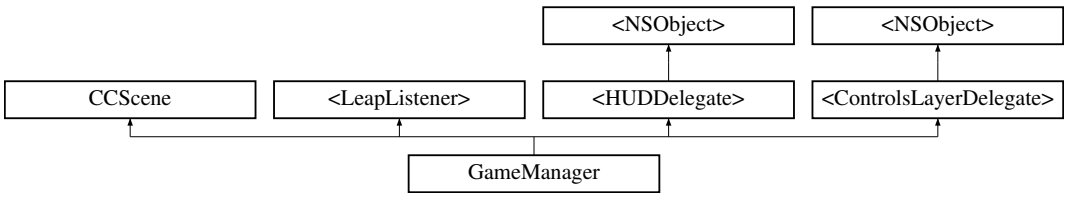
The documentation for this class was generated from the following file:

- LeapPaint/FingerPaintingScene.h

4.9 GameManager Class Reference

`#import <GameManager.h>`

Inheritance diagram for GameManager:



Instance Methods

- (float) - **findPecentageDifference:withMin:withValue:**
- (float) - opacityPercentage:

Protected Attributes

- InputMode inputMode
- LeapPointable * currentPointable
- CGPoint currentPoint
- BOOL **painting**
- GameSettings * gameSettings
- int lastTag
- SimplePoint * lastPoint
- int framesSinceLastFound

Properties

- HUDLayer * hudLayer
- SketchRenderTextureScene * textureScene
- BackgroundLayer * backgroundLayer
- ControlsLayer * controlsLayer
- LeapController * controller
- LeapScreen * leapScreen

4.9.1 Detailed Description

Core Application Management Provides interfaces and controls the various inputs, controls and outputs

Definition at line 27 of file GameManager.h.

4.9.2 Method Documentation

4.9.2.1 - (float) opacityPercentage: (float) *value*

Return the Opacity value based on Z position

Definition at line 328 of file GameManager.mm.

```
00328                           :(float)value{
00329     //NSLog(@"value %0.0f", value);
00330     if (value < kOpMinRange){
00331         return kOpMax;
00332     }else if(value > kOpMaxRange){
00333         return kOpMin;
00334     }else {
00335 
00336         float percentage = [self findPecentageDifference:kOpMaxRange withMin:kOpMinRange withValue:value];
00337         //NSLog(@"percentage %0.0f", percentage);
00338 
00339         percentage = 100 - percentage;
00340 
00341         return percentage;
00342 
00343     }
00344 
00345 }
```

4.9.3 Member Data Documentation

4.9.3.1 - (CGPoint) currentPoint [protected]

colorLabel displays name of color in hash value

Definition at line 32 of file GameManager.h.

4.9.3.2 - (LeapPointable*) currentPointable [protected]

colorLabel displays name of color in hash value

Definition at line 31 of file GameManager.h.

4.9.3.3 - (int) framesSinceLastFound [protected]

framesSinceLastFound number of frames since last finding a LeapPointable

Definition at line 41 of file GameManager.h.

4.9.3.4 - (GameSettings*) gameSettings [protected]

gameSettings singleton to global seetings

Definition at line 36 of file GameManager.h.

4.9.3.5 - (InputMode) inputMode [protected]

colorLabel displays name of color in hash value

Definition at line 30 of file GameManager.h.

4.9.3.6 - (SimplePoint*) lastPoint [protected]

lastPoint is the last known point on the screen of the LeapPointable

Definition at line 40 of file GameManager.h.

4.9.3.7 - (int) lastTag [protected]

lastTag is the last tag value tracked of a LeapPointable

Definition at line 39 of file GameManager.h.

4.9.4 Property Documentation

4.9.4.1 - (BackgroundLayer*) backgroundLayer [read], [write], [nonatomic], [strong]

backgroundLayer is the layer for setting up the background

Definition at line 48 of file GameManager.h.

4.9.4.2 - (LeapController*) controller [read], [write], [nonatomic], [strong]

controller is the leapController

Definition at line 51 of file GameManager.h.

4.9.4.3 - (ControlsLayer*) controlsLayer [read], [write], [nonatomic], [strong]

controlsLayer is the layer for managing interface controls

Definition at line 49 of file GameManager.h.

4.9.4.4 - (HUDLayer*) hudLayer [read], [write], [nonatomic], [strong]

hudLayer displays the icons for tracking where a leapPointable is pointing

Definition at line 46 of file GameManager.h.

4.9.4.5 - (LeapScreen*) leapScreen [read], [write], [nonatomic], [strong]

leapScreen references the screen being used on the system

Definition at line 52 of file GameManager.h.

4.9.4.6 - (SketchRenderTextureScene*) textureScene [read], [write], [nonatomic], [strong]

textureScene is the drawing layer

Definition at line 47 of file GameManager.h.

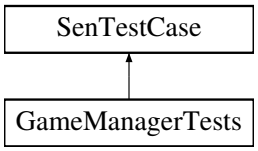
The documentation for this class was generated from the following files:

- LeapPaint/GameManager.h
- LeapPaint/GameManager.mm

4.10 GameManagerTests Class Reference

`#import <GameManagerTests.h>`

Inheritance diagram for GameManagerTests:



Protected Attributes

- GameManager * node

4.10.1 Detailed Description

Tests the SimplePoint object

Definition at line 15 of file GameManagerTests.h.

4.10.2 Member Data Documentation

4.10.2.1 - (GameManager*) node [protected]

gameManager instance

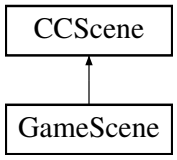
Definition at line 16 of file GameManagerTests.h.

The documentation for this class was generated from the following file:

- LeapPaint/GameManagerTests.h

4.11 GameScene Class Reference

Inheritance diagram for GameScene:



Class Methods

- (CCScene *) + **scene**

4.11.1 Detailed Description

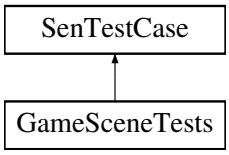
Definition at line 20 of file GameScene.h.

The documentation for this class was generated from the following files:

- LeapPaint/GameScene.h
- LeapPaint/GameScene.mm

4.12 GameSceneTests Class Reference

Inheritance diagram for GameSceneTests:



4.12.1 Detailed Description

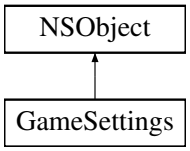
Definition at line 11 of file GameSceneTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/GameSceneTests.h

4.13 GameSettings Class Reference

Inheritance diagram for GameSettings:



Class Methods

- (GameSettings ∗) + sharedInstance

Properties

- BOOL depthOpacityMode
- BOOL eraserMode
- InputMode inputMode

4.13.1 Detailed Description

Definition at line 35 of file GameSettings.h.

4.13.2 Method Documentation

4.13.2.1 + (GameSettings ∗) sharedInstance

Singleton Intiailizes and Returns a shared instance of the class

Definition at line 23 of file GameSettings.mm.

```
00024 {
00025     static GameSettings *sharedInstance;
00026
00027     @synchronized(self)
00028     {
00029         if (!sharedInstance)
00030             sharedInstance = [[GameSettings alloc] init];
00031
00032         return sharedInstance;
00033     }
00034 }
```

4.13.3 Property Documentation

4.13.3.1 - (BOOL) depthOpacityMode [read], [write], [nonatomic], [assign]

depthOpacityMode controls use of z axis control of opacity

Definition at line 40 of file GameSettings.h.

4.13.3.2 - (BOOL) eraserMode [read], [write], [nonatomic], [assign]

eraserMode controls erasing on drawing canvas

Definition at line 41 of file GameSettings.h.

4.13.3.3 - (InputMode) inputMode [read], [write], [nonatomic], [assign]

inputMode controller input mode for leapmotion

Definition at line 42 of file GameSettings.h.

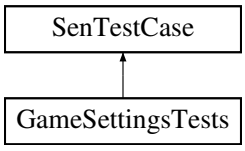
The documentation for this class was generated from the following files:

- LeapPaint/GameSettings.h
- LeapPaint/GameSettings.mm

4.14 GameSettingsTests Class Reference

`#import <GameSettingsTests.h>`

Inheritance diagram for GameSettingsTests:



Protected Attributes

- GameSettings * gameSettings

4.14.1 Detailed Description

Tests the GameSettings object

Definition at line 16 of file GameSettingsTests.h.

4.14.2 Member Data Documentation

4.14.2.1 - (GameSettings∗) gameSettings [protected]

gameSettings singleton instance

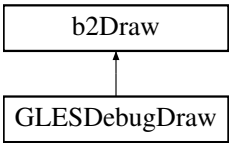
Definition at line 18 of file GameSettingsTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/GameSettingsTests.h

4.15 GLESDebugDraw Class Reference

Inheritance diagram for GLESDebugDraw:



Public Member Functions

- **GLESDebugDraw** (float32 ratio)
- void **DrawPolygon** (const b2Vec2 ∗vertices, int32 vertexCount, const b2Color &color)
- void **DrawSolidPolygon** (const b2Vec2 ∗vertices, int32 vertexCount, const b2Color &color)
- void **DrawCircle** (const b2Vec2 &center, float32 radius, const b2Color &color)
- void **DrawSolidCircle** (const b2Vec2 &center, float32 radius, const b2Vec2 &axis, const b2Color &color)
- void **DrawSegment** (const b2Vec2 &p1, const b2Vec2 &p2, const b2Color &color)
- void **DrawTransform** (const b2Transform &xf)
- void **DrawPoint** (const b2Vec2 &p, float32 size, const b2Color &color)
- void **DrawString** (int x, int y, const char ∗string,...)
- void **DrawAABB** (b2AABB ∗aabb, const b2Color &color)

4.15.1 Detailed Description

Definition at line 43 of file GLES-Render.h.

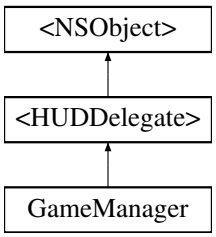
The documentation for this class was generated from the following files:

- LeapPaint/GLES-Render.h
- LeapPaint/GLES-Render.mm

4.16 <HUDDelegate> Protocol Reference

`#import <HUDLayer.h>`

Inheritance diagram for <HUDDelegate>:



Instance Methods

- (void) - **changeMode:**
- (void) - **painting:**

4.16.1 Detailed Description

HUD Delegate Protocol User inferface controls for operating buttons, switches, sliders

Definition at line 20 of file HUDLayer.h.

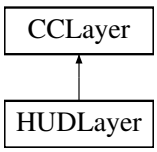
The documentation for this protocol was generated from the following file:

- LeapPaint/HUDLayer.h

4.17 HUDLayer Class Reference

`#import <HUDLayer.h>`

Inheritance diagram for HUDLayer:



Instance Methods

- (void) - **toolMoved:toolID:**
- (void) - **startTrackingTool:toolID:**
- (void) - **moveTrackingTool:toolID:**
- (void) - **endTrackingTool**
- (void) - **changeColor:**
- (void) - **changeBrush:**

- (void) - **changeScale:**
- (void) - **erasingMode:**

Protected Attributes

- NSString ∗ primaryToolID
- LPTool ∗ primaryTool
- InputMode inputMode
- ccColor3B lastColor
- ccColor3B previousColor
- NSString ∗ lastBrush
- float lastScale
- CCSprite ∗ paintingIndicator
- BOOL eraseMode
- GameSettings ∗ gameSettings

Properties

- id< HUDDelegate > delegate
- CCLabelTTF ∗ **xyzcoords**

4.17.1 Detailed Description

HUD Layer Tracks the position of the LeapCursor on the screen

Definition at line 30 of file HUDLayer.h.

4.17.2 Member Data Documentation

4.17.2.1 - (BOOL) eraseMode [protected]

eraseMode determines weather the pointable is painting or erasing

Definition at line 44 of file HUDLayer.h.

4.17.2.2 - (GameSettings∗) gameSettings [protected]

gameSettings singleton to global seetings

Definition at line 47 of file HUDLayer.h.

4.17.2.3 - (InputMode) inputMode [protected]

inputMode is the current mode of input

Definition at line 34 of file HUDLayer.h.

4.17.2.4 - (NSString*) lastBrush [protected]

lastBrush is last brush to be selected

Definition at line 38 of file HUDLayer.h.

4.17.2.5 - (ccColor3B) lastColor [protected]

lastColor is the lastColor to be selected

Definition at line 36 of file HUDLayer.h.

4.17.2.6 - (float) lastScale [protected]

lastScale is last scale to be selected

Definition at line 39 of file HUDLayer.h.

4.17.2.7 - (CCSprite*) paintingIndicator [protected]

paintingIndicator shows the state at which the object is currently paintg

Definition at line 43 of file HUDLayer.h.

4.17.2.8 - (ccColor3B) previousColor [protected]

previousColor is the color before the lastcolor to be selected

Definition at line 37 of file HUDLayer.h.

4.17.2.9 - (LPTool*) primaryTool [protected]

primaryTool points to the current pointable object

Definition at line 32 of file HUDLayer.h.

4.17.2.10 - (NSString*) primaryToolID [protected]

primaryToolID stores the id tag to the pointable in reference

Definition at line 31 of file HUDLayer.h.

4.17.3 Property Documentation

4.17.3.1 - (id<HUDDelegate>) delegate [read], [write], [nonatomic], [weak]

colorLabel displays name of color in hash value

Definition at line 52 of file HUDLayer.h.

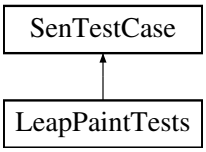
The documentation for this class was generated from the following files:

- LeapPaint/HUDLayer.h

- LeapPaint/HUDLayer.mm

4.18 LeapPaintTests Class Reference

Inheritance diagram for LeapPaintTests:



4.18.1 Detailed Description

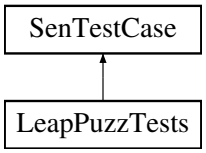
Definition at line 11 of file LeapPaintTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/LeapPaintTests.h

4.19 LeapPuzzTests Class Reference

Inheritance diagram for LeapPuzzTests:



4.19.1 Detailed Description

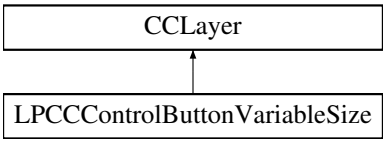
Definition at line 11 of file LeapPuzzTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/LeapPuzzTests.h

4.20 LPCCControlButtonVariableSize Class Reference

Inheritance diagram for LPCCControlButtonVariableSize:



Instance Methods

- (CCControlButton ∗) - standardButtonWithTitle:

4.20.1 Detailed Description

Definition at line 11 of file LPCCControlButtonVariableSize.h.

4.20.2 Method Documentation

4.20.2.1 - (CCControlButton ∗) standardButtonWithTitle: (NSString ∗) *title*

Creates and return a button with a default background and title color. Creates and return a button with a default background and title color.

Definition at line 57 of file LPCCControlButtonVariableSize.m.

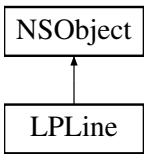
```
00057                                           :(NSString *)title
00058 {
00060     CCScale9Sprite *backgroundButton = [CCScale9Sprite spriteWithFile:@"button.png"];
00061     CCScale9Sprite *backgroundHighlightedButton = [CCScale9Sprite spriteWithFile:@"buttonHighlighted.png"];
00062
00063 #ifdef __IPHONE_OS_VERSION_MAX_ALLOWED
00064     CCLabelTTF *titleButton = [CCLabelTTF labelWithString:title fontName:@"HelveticaNeue-Bold" fontSize:30]
      ;
00065 #elif __MAC_OS_X_VERSION_MAX_ALLOWED
00066     CCLabelTTF *titleButton = [CCLabelTTF labelWithString:title fontName:@"Marker Felt" fontSize:30];
00067 #endif
00068     [titleButton setColor:ccc3(159, 168, 176)];
00069
00070     CCControlButton *button = [CCControlButton buttonWithLabel:titleButton backgroundSprite:
     backgroundButton];
00071     [button setBackgroundSprite:backgroundHighlightedButton forState:CCControlStateHighlighted];
00072     [button setTitleColor:ccWHITE forState:CCControlStateHighlighted];
00073
00074     return button;
00075 }
```

The documentation for this class was generated from the following files:

- LeapPaint/LPCCControlButtonVariableSize.h
- LeapPaint/LPCCControlButtonVariableSize.m

4.21 LPLine Class Reference

Inheritance diagram for LPLine:



Properties

- NSMutableArray ∗ **points**
- float **width**

4.21.1 Detailed Description

Definition at line 11 of file LPLine.h.

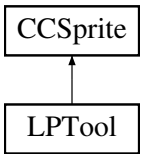
The documentation for this class was generated from the following file:

- LeapPaint/LPLine.h

4.22 LPTool Class Reference

`#import <LPTool.h>`

Inheritance diagram for LPTool:



Properties

- NSString * toolID
- BOOL updated

4.22.1 Detailed Description

Extends CCSprite object with two properties for tracking sprites with pointable objects

Definition at line 16 of file LPTool.h.

4.22.2 Property Documentation

4.22.2.1 - (NSString*) toolID [read], [write], [nonatomic], [strong]

toolID is the ID number assigned by the LeapMotion SDK

Definition at line 18 of file LPTool.h.

4.22.2.2 - (BOOL) updated [read], [write], [nonatomic], [assign]

updated is if the sprite has been updated in that frame.

Definition at line 19 of file LPTool.h.

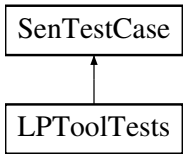
The documentation for this class was generated from the following file:

- LeapPaint/LPTool.h

4.23 LPToolTests Class Reference

`#import <LPToolTests.h>`

Inheritance diagram for LPToolTests:



Protected Attributes

- NSString * testName

4.23.1 Detailed Description

Tests the GameSettings object

Definition at line 13 of file LPToolTests.h.

4.23.2 Member Data Documentation

4.23.2.1 - (NSString*) testName [protected]

name of the test

Definition at line 14 of file LPToolTests.h.

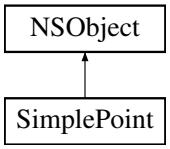
The documentation for this class was generated from the following file:

- LeapPaintTests/LPToolTests.h

4.24 SimplePoint Class Reference

`#import <SimplePoint.h>`

Inheritance diagram for SimplePoint:



Instance Methods

- (id) - initWithPosition:

- (id) - initWithX:withY:
- (id) - initWithPosition:withZ:
- (id) - initWithX:withY:withZ:
- (CGPoint) - point

Properties

- float x
- float y
- float z
- BOOL is3d

4.24.1 Detailed Description

2D or 3D space coordinate for temporarily maniulapting points

Definition at line 18 of file SimplePoint.h.

4.24.2 Method Documentation

4.24.2.1 - (id) initWithPosition: (CGPoint) *p*

Init constructor with existing point to create a 2d Point

Parameters

p	an point (x,y)

Returns

object instance

init 2d point with CGPoint

Definition at line 18 of file SimplePoint.mm.

```
00018                       :(CGPoint)p{
00019     if (self = [super init]) {
00020 
00021         self.x = p.x;
00022         self.y = p.y;
00023         self.z = 0.0f;
00024         self.is3d = false;
00025 
00026     }
00027     return self;
00028 }
```

4.24.2.2 - (id) initWithPosition: (CGPoint) *p* withZ:(float) *zVal*

Init constructor with existing point to create a 3d Point

Parameters

p	a point (x,y)
zVal	coordinateValue

Returns

object instance

Init 3d point with CGPoint and z Value

Definition at line 46 of file SimplePoint.mm.

```
00046                       :(CGPoint)p withZ:(float)zVal{
00047     if (self = [super init]) {
00048 
00049         self.x = p.x;
00050         self.y = p.y;
00051         self.z = zVal;
00052         self.is3d = true;
00053 
00054     }
00055     return self;
00056 }
```

4.24.2.3 - (id) initWithX: (float) *xVal* withY:(float) *yVal*

Init constructor with existing point to create a 2d Point

Parameters

xVal	coordinate value
yVal	coordinate value

Returns

object instance

Init 2d Point with 2 separate values

Definition at line 31 of file SimplePoint.mm.

```
00031                 :(float)xVal withY:(float)yVal{
00032 
00033     if (self = [super init]) {
00034 
00035         self.x = xVal;
00036         self.y = yVal;
00037         self.z = 0.0f;
00038         self.is3d = false;
00039 
00040     }
00041     return self;
00042 }
```

4.24.2.4 - (id) initWithX: (float) *xVal* withY:(float) *yVal* withZ:(float) *zVal*

Init constructor with existing point to create a 2d Point

Parameters

xVal	coordinate value
yVal	coordinate value
zval	coordinate value

Returns

object instance

Init 3d Point with 3 separate values

Definition at line 60 of file SimplePoint.mm.

```
00060                 :(float)xVal withY:(float)yVal withZ:(float)zVal{
00061
00062     if (self = [super init]) {
00063
00064         self.x = xVal;
00065         self.y = yVal;
00066         self.z = zVal;
00067         self.is3d = true;
00068
00069     }
00070     return self;
00071 }
```

4.24.2.5 - (CGPoint) point

Returns point based on x and y

Returns

CGPoint

Return the CGPoint type from the object

Definition at line 74 of file SimplePoint.mm.

```
00074                 {
00075     return CGPointMake(self.x, self.y);
00076 }
```

4.24.3 Property Documentation

4.24.3.1 - (BOOL) is3d [read], [write], [nonatomic], [assign]

is3d is 2d or 3d point type

Definition at line 26 of file SimplePoint.h.

4.24.3.2 - (float) x [read], [write], [nonatomic], [assign]

x coordinate

Definition at line 23 of file SimplePoint.h.

Referenced by point.

4.24.3.3 - (float) y [read], [write], [nonatomic], [assign]

y coordinate

Definition at line 24 of file SimplePoint.h.

Referenced by point.

4.24.3.4 - (float) z [read], [write], [nonatomic], [assign]

z coordinate

Definition at line 25 of file SimplePoint.h.

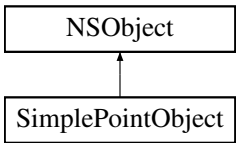
The documentation for this class was generated from the following files:

- LeapPaint/SimplePoint.h
- LeapPaint/SimplePoint.mm

4.25 SimplePointObject Class Reference

`#import <SimplePointObject.h>`

Inheritance diagram for SimplePointObject:



Instance Methods

- (id) - **initWithPosition:**
- (id) - **initWithX:withY:**

Properties

- CGPoint point

4.25.1 Detailed Description

2D space coordinate for temporarily maniulapting points

Definition at line 16 of file SimplePointObject.h.

4.25.2 Property Documentation

4.25.2.1 - (CGPoint) point [read], [write], [nonatomic], [assign]

point is the X and Y coordinates

Definition at line 21 of file SimplePointObject.h.

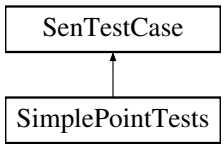
The documentation for this class was generated from the following files:

- LeapPaint/SimplePointObject.h
- LeapPaint/SimplePointObject.m

4.26 SimplePointTests Class Reference

`#import <SimplePointTests.h>`

Inheritance diagram for SimplePointTests:



Protected Attributes

- NSString * testName
- SimplePoint * twoValuePoint
- SimplePoint * threeValuePoint

4.26.1 Detailed Description

Tests the SimplePoint object

Definition at line 16 of file SimplePointTests.h.

4.26.2 Member Data Documentation

4.26.2.1 - (NSString*) testName [protected]

name of the test

Definition at line 18 of file SimplePointTests.h.

4.26.2.2 - (SimplePoint*) threeValuePoint [protected]

three coordinate point (x,y,z)

Definition at line 20 of file SimplePointTests.h.

4.26.2.3 - (SimplePoint*) twoValuePoint [protected]

two coordinate point (x,y)

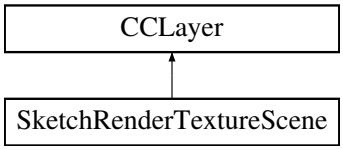
Definition at line 19 of file SimplePointTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/SimplePointTests.h

4.27 SketchRenderTextureScene Class Reference

Inheritance diagram for SketchRenderTextureScene:



Instance Methods

- (void) - **beginDraw:withZ:**
- (void) - **updateDraw:withZ:**
- (void) - **endDraw:**
- (void) - **changeColor:**
- (void) - **changeBrush:**
- (void) - **changeScale:**
- (void) - **changeOpacity:**
- (void) - **erasingMode:**
- (void) - **clearDrawing**

Protected Attributes

- CCSprite * **brush**
- NSMutableArray * **touches**
- ccColor3B **lastColor**
- ccColor3B **previousColor**
- NSString * **lastBrush**
- float **lastScale**
- bool **eraseMode**

Properties

- float **opacity**

4.27.1 Detailed Description

Definition at line 12 of file SketchRenderTextureScene.h.

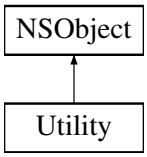
The documentation for this class was generated from the following files:

- LeapPaint/SketchRenderTextureScene.h
- LeapPaint/SketchRenderTextureScene.mm

4.28 Utility Class Reference

`#import <Utility.h>`

Inheritance diagram for Utility:



Class Methods

- (int) + getRandomNumberBetween:to:
- (int) + getRandomUniformNumberUnder:
- (int) + getRandomNumberUnder:

4.28.1 Detailed Description

Utility class provides common usage function throughout the application.

Definition at line 17 of file Utility.h.

4.28.2 Method Documentation

4.28.2.1 + (int) getRandomNumberBetween: (int) *from* to:(int) *to*

Generates a random number between two designated integers

Parameters

from	is the bottom of the range
to	is the top of the range

Returns

a random number between the from and to parameters

returns random number within a range with defined upper and lower bounds

Definition at line 14 of file Utility.m.

```
00014                               :(int)from to:(int)to {
00015
00016     //Check that one isn't greater than the other
00017     //if so, flip them
00018
00019     return (int)from + arc4random() % (to-from+1);
00020 }
```

4.28.2.2 + (int) getRandomNumberUnder: (int) *to*

Generates a random number between 0 designated integer

Parameters

to	is the top of the range

Returns

a random number between 0 and to parameters

Returns a random number from 0 to an upper bound

Definition at line 23 of file Utility.m.

```
00023                             :(int)to{
00024     return (arc4random() % to);
00025 }
```

4.28.2.3 + (int) getRandomUniformNumberUnder: (int) *to*

Generates a random number between 0 designated integer

Parameters

to	is the top of the range

Returns

a random number between 0 and to parameters

Returns a Uniform Random Number from 0 to an upper bound

Definition at line 29 of file Utility.m.

```
00029                                   :(int)to{
00030     //Check if uniform available
00031     if (arc4random_uniform != NULL)
00032         return  arc4random_uniform (to);
00033     else
00034         return  (arc4random() % to);
00035 }
```

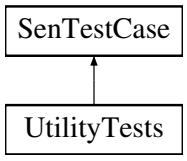
The documentation for this class was generated from the following files:

- LeapPaint/Utility.h
- LeapPaint/Utility.m

4.29 UtilityTests Class Reference

`#import <UtilityTests.h>`

Inheritance diagram for UtilityTests:



Protected Attributes

- NSString * testName

4.29.1 Detailed Description

Tests the GameSettings object

Definition at line 15 of file UtilityTests.h.

4.29.2 Member Data Documentation

4.29.2.1 - (NSString*) testName [protected]

name of the test

Definition at line 16 of file UtilityTests.h.

The documentation for this class was generated from the following file:

- LeapPaintTests/UtilityTests.h

Index

<BrushSelectionLayerDelegate>, 8
<ControlsLayerDelegate>, 13
<HUDDelegate>, 23

AppDelegate, 7

BackgroundLayer, 7
backgroundLayer
    GameManager, 17
brushSelection
    ControlsLayer, 12
BrushSelectionLayer, 8

collapsePanel
    ControlsLayer, 10
colorLabel
    ControlsLayer, 12
controller
    GameManager, 17
ControlsLayer, 9
    brushSelection, 12
    collapsePanel, 10
    colorLabel, 12
    delegate, 12
    displayValueLabel, 12
    expandPanel, 10
    gameSettings, 12
    makeControlSwitch, 10
    opacitySlider, 12
    opacitySliderChanged:, 10
    opacitySwitchControl, 13
    opacitydisplayValueLabel, 12
    slider, 13
    switchControl, 13
    switchValueChanged:, 11
    updateOpacitySlider:, 11
    valueChanged:, 11
controlsLayer
    GameManager, 18
currentPoint
    GameManager, 17
currentPointable
    GameManager, 17

delegate
    ControlsLayer, 12
    HUDLayer, 25
depthOpacityMode
    GameSettings, 21
displayValueLabel
    ControlsLayer, 12
DrawScene, 14

eraseMode
    HUDLayer, 24
eraserMode
    GameSettings, 21
expandPanel
    ControlsLayer, 10

FingerPaintingScene, 14
framesSinceLastFound
    GameManager, 17

GLESDebugDraw, 22
GameManager, 15
    backgroundLayer, 17
    controller, 17
    controlsLayer, 18
    currentPoint, 17
    currentPointable, 17
    framesSinceLastFound, 17
    gameSettings, 17
    hudLayer, 18
    inputMode, 17
    lastPoint, 17
    lastTag, 17
    leapScreen, 18
    opacityPercentage:, 16
    textureScene, 18
GameManagerTests, 18
    node, 19
GameScene, 19
GameSceneTests, 19
GameSettings, 20
    depthOpacityMode, 21
    eraserMode, 21
    inputMode, 21
    sharedInstance, 20
gameSettings
    ControlsLayer, 12
    GameManager, 17

GameSettingsTests, 22
HUDLayer, 24
GameSettingsTests, 21
gameSettings, 22
getRandomNumberBetween:to:
Utility, 36
getRandomNumberUnder:
Utility, 36
getRandomUniformNumberUnder:
Utility, 37

HUDLayer, 23
delegate, 25
eraseMode, 24
gameSettings, 24
inputMode, 24
lastBrush, 24
lastColor, 25
lastScale, 25
paintingIndicator, 25
previousColor, 25
primaryTool, 25
primaryToolID, 25
hudLayer
GameManager, 18

initWithPosition:
SimplePoint, 30
initWithPosition:withZ:
SimplePoint, 30
initWithX:withY:
SimplePoint, 31
initWithX:withY:withZ:
SimplePoint, 31
inputMode
GameManager, 17
GameSettings, 21
HUDLayer, 24
is3d
SimplePoint, 32

LPCCControlButtonVariableSize, 26
standardButtonWithTitle:, 27
LPLine, 27
LPTool, 28
toolID, 28
updated, 28
LPToolTests, 29
testName, 29
lastBrush
HUDLayer, 24
lastColor
HUDLayer, 25
lastPoint
GameManager, 17
lastScale
HUDLayer, 25
lastTag
GameManager, 17
LeapPaintTests, 26
LeapPuzzTests, 26
leapScreen
GameManager, 18

makeControlSwitch
ControlsLayer, 10

node
GameManagerTests, 19

opacityPercentage:
GameManager, 16
opacitySlider
ControlsLayer, 12
opacitySliderChanged:
ControlsLayer, 10
opacitySwitchControl
ControlsLayer, 13
opacitydisplayValueLabel
ControlsLayer, 12

paintingIndicator
HUDLayer, 25
point
SimplePoint, 32
SimplePointObject, 33
previousColor
HUDLayer, 25
primaryTool
HUDLayer, 25
primaryToolID
HUDLayer, 25

sharedInstance
GameSettings, 20
SimplePoint, 29
initWithPosition:, 30
initWithPosition:withZ:, 30
initWithX:withY:, 31
initWithX:withY:withZ:, 31
is3d, 32
point, 32
x, 32
y, 32
z, 32
SimplePointObject, 33
point, 33
SimplePointTests, 34
testName, 34
threeValuePoint, 34

twoValuePoint, 34
SketchRenderTextureScene, 35
slider
ControlsLayer, 13
standardButtonWithTitle:
LPCCControlButtonVariableSize, 27
switchControl
ControlsLayer, 13
switchValueChanged:
ControlsLayer, 11

testName
LPToolTests, 29
SimplePointTests, 34
UtilityTests, 38
textureScene
GameManager, 18
threeValuePoint
SimplePointTests, 34
toolID
LPTool, 28
twoValuePoint
SimplePointTests, 34

updateOpacitySlider:
ControlsLayer, 11
updated
LPTool, 28
Utility, 36
getRandomNumberBetween:to:, 36
getRandomNumberUnder:, 36
getRandomUniformNumberUnder:, 37
UtilityTests, 37
testName, 38

valueChanged:
ControlsLayer, 11

x
SimplePoint, 32

y
SimplePoint, 32

z
SimplePoint, 32