代码弹幕API总览

基于action script 3.0的API封装

弹幕绘制区域（类型：ScriptDisplay）

舞台弹幕的操作 可使用别名$

访问属性：Display（$）

开放接口：

function get fullScreenWidth() : uint;

function get fullScreenHeight() : uint;

function get width() : uint;

function get height() : uint;

function get frameRate() : Number;

function set frameRate(param1:Number) : void;

function createMatrix(param1:Number = 1, param2:Number = 0, param3:Number = 0, param4:Number = 1, param5:Number = 0, param6:Number = 0) : Matrix;

function createGradientBox(param1:Number, param2:Number, param3:Number, param4:Number, param5:Number) : Matrix;

function createPoint(param1:Number = 0, param2:Number = 0) : Point;

function createComment(param1:String, param2:Object) : ICommentField;

function createShape(param1:Object) : Shape;

function createCanvas(param1:Object) : ICommentCanvas;

function createButton(param1:Object) : ICommentButton;

function createGlowFilter(param1:uint = 16711680, param2:Number = 1.0, param3:Number = 6.0, param4:Number = 6.0, param5:Number = 2, param6:int = 1, param7:Boolean = false, param8:Boolean = false) : GlowFilter;

function createBlurFilter(param1:Number = 0, param2:Number = 0, param3:uint = 1) : BlurFilter;

function createBevelFilter(param1:Number = 4.0, param2:Number = 45, param3:uint = 16777215, param4:Number = 1.0, param5:uint = 0, param6:Number = 1.0, param7:Number = 4.0, param8:Number = 4.0, param9:Number = 1, param10:int = 1, param11:String = "inner", param12:Boolean = false) : \*;

function createColorMatrixFilter(param1:Array = null) : \*;

function createConvolutionFilter(param1:Number = 0, param2:Number = 0, param3:Array = null, param4:Number = 1.0, param5:Number = 0.0, param6:Boolean = true, param7:Boolean = true, param8:uint = 0, param9:Number = 0.0) : \*;

function createDisplacementMapFilter(param1:BitmapData = null, param2:Point = null, param3:uint = 0, param4:uint = 0, param5:Number = 0.0, param6:Number = 0.0, param7:String = "wrap", param8:uint = 0, param9:Number = 0.0) : \*;

function createDropShadowFilter(param1:Number = 4.0, param2:Number = 45, param3:uint = 0, param4:Number = 1.0, param5:Number = 4.0, param6:Number = 4.0, param7:Number = 1.0, param8:int = 1, param9:Boolean = false, param10:Boolean = false, param11:Boolean = false) : \*;

function createGradientBevelFilter(param1:Number = 4.0, param2:Number = 45, param3:Array = null, param4:Array = null, param5:Array = null, param6:Number = 4.0, param7:Number = 4.0, param8:Number = 1, param9:int = 1, param10:String = "inner", param11:Boolean = false) : \*;

function createGradientGlowFilter(param1:Number = 4.0, param2:Number = 45, param3:Array = null, param4:Array = null, param5:Array = null, param6:Number = 4.0, param7:Number = 4.0, param8:Number = 1, param9:int = 1, param10:String = "inner", param11:Boolean = false) : \*;

function toIntVector(param1:Array) : Vector.<int>;

function toNumberVector(param1:Array) : Vector.<Number>;

function toUIntVector(param1:Array) : Vector.<uint>;

function createMatrix3D(param1:\*) : Matrix3D;

function createVector3D(param1:Number = 0.0, param2:Number = 0.0, param3:Number = 0.0, param4:Number = 0.0) : Vector3D;

function createTextFormat(param1:String = null, param2:Object = null, param3:Object = null, param4:Object = null, param5:Object = null, param6:Object = null, param7:String = null, param8:String = null, param9:String = null, param10:Object = null, param11:Object = null, param12:Object = null, param13:Object = null) : TextFormat;

function createTextField() : TextField;

function createColorTransform(param1:Number = 1.0, param2:Number = 1.0, param3:Number = 1.0, param4:Number = 1.0, param5:Number = 0, param6:Number = 0, param7:Number = 0, param8:Number = 0) : ColorTransform;

function pointTowards(param1:Number, param2:Matrix3D, param3:Vector3D, param4:Vector3D = null, param5:Vector3D = null) : Matrix3D;

function projectVector(param1:Matrix3D, param2:Vector3D) : Vector3D;

function projectVectors(param1:Matrix3D, param2:Vector.<Number>, param3:Vector.<Number>, param4:Vector.<Number>) : void;

实现：

package tv.bilibili.script

{

import tv.bilibili.script.interfaces.IScriptDisplay;

import flash.display.DisplayObjectContainer;

import com.longtailvideo.jwplayer.player.IPlayer;

import flash.geom.Matrix;

import flash.geom.Point;

import tv.bilibili.script.interfaces.ICommentField;

import flash.display.Shape;

import tv.bilibili.script.interfaces.ICommentCanvas;

import tv.bilibili.script.interfaces.ICommentButton;

import flash.events.MouseEvent;

import flash.filters.GlowFilter;

import flash.filters.BlurFilter;

import tv.bilibili.script.interfaces.IMotionElement;

import flash.display.DisplayObject;

import flash.geom.Matrix3D;

import flash.geom.ColorTransform;

import flash.text.TextFormat;

import flash.geom.Vector3D;

import flash.text.TextField;

import flash.filters.BevelFilter;

import flash.filters.ColorMatrixFilter;

import flash.filters.ConvolutionFilter;

import flash.display.BitmapData;

import flash.filters.DisplacementMapFilter;

import flash.filters.DropShadowFilter;

import flash.filters.GradientBevelFilter;

import flash.filters.GradientGlowFilter;

import flash.geom.Utils3D;

public class ScriptDisplay extends Object implements IScriptDisplay

{

protected var \_layer:DisplayObjectContainer;

protected var \_player:IPlayer;

bilibili var \_defaultConfig:Object;

protected var \_scriptManager:ScriptManager;

public function ScriptDisplay(param1:IPlayer, param2:DisplayObjectContainer, param3:ScriptManager)

{

super();

this.\_player = param1;

this.\_layer = param2;

this.\_scriptManager = param3;

bilibili::\_defaultConfig = {

"x":0,

"y":0,

"z":null,

"scale":1,

"alpha":1,

"parent":this.\_layer,

"lifeTime":3,

"motion":null

};

}

bilibili static function extend(param1:Object, param2:Object) : void

{

var \_loc3\_:String = null;

for(\_loc3\_ in param2)

{

if(!param1.hasOwnProperty(\_loc3\_))

{

param1[\_loc3\_] = param2[\_loc3\_];

}

}

if(param2.hasOwnProperty("motion") && param1["motion"] === null)

{

param1.motion = {};

}

}

public function get fullScreenWidth() : uint

{

return this.\_layer.stage.fullScreenWidth;

}

public function get fullScreenHeight() : uint

{

return this.\_layer.stage.fullScreenHeight;

}

public function get screenWidth() : uint

{

return this.\_layer.stage.fullScreenWidth;

}

public function get screenHeight() : uint

{

return this.\_layer.stage.fullScreenHeight;

}

public function get stageWidth() : uint

{

return this.\_layer.stage.stageWidth;

}

public function get stageHeight() : uint

{

return this.\_layer.stage.stageHeight;

}

public function get width() : uint

{

return this.\_player.config.width;

}

public function get height() : uint

{

return this.\_player.config.height;

}

public function get root() : DisplayObjectContainer

{

return this.\_layer;

}

public function createMatrix(param1:Number = 1, param2:Number = 0, param3:Number = 0, param4:Number = 1, param5:Number = 0, param6:Number = 0) : Matrix

{

return new Matrix(param1,param2,param3,param4,param5,param6);

}

public function createGradientBox(param1:Number, param2:Number, param3:Number, param4:Number, param5:Number) : Matrix

{

var \_loc6\_:Matrix = new Matrix();

\_loc6\_.createGradientBox(param1,param2,param3,param4,param5);

return \_loc6\_;

}

public function createPoint(param1:Number = 0, param2:Number = 0) : Point

{

return new Point(param1,param2);

}

public function createComment(param1:String, param2:Object) : ICommentField

{

bilibili::extend(param2,bilibili::\_defaultConfig);

bilibili::extend(param2,{

"color":16777215,

"font":"黑体",

"fontsize":25

});

var \_loc3\_:CommentField = new CommentField();

\_loc3\_.text = param1;

\_loc3\_.initStyle(param2);

bilibili::setupMotionElement(param2,\_loc3\_);

return \_loc3\_;

}

public function createShape(param1:Object) : Shape

{

bilibili::extend(param1,bilibili::\_defaultConfig);

var \_loc2\_:CommentShape = new CommentShape();

\_loc2\_.initStyle(param1);

bilibili::setupMotionElement(param1,\_loc2\_);

return \_loc2\_;

}

public function createCanvas(param1:Object) : ICommentCanvas

{

bilibili::extend(param1,bilibili::\_defaultConfig);

var \_loc2\_:CommentCanvas = new CommentCanvas();

\_loc2\_.initStyle(param1);

bilibili::setupMotionElement(param1,\_loc2\_);

return \_loc2\_;

}

public function createButton(param1:Object) : ICommentButton

{

var param:Object = param1;

bilibili::extend(param,bilibili::\_defaultConfig);

bilibili::extend(param,{

"text":"Button",

"width":60,

"height":30

});

var cb:CommentButton = new CommentButton();

cb.initStyle(param);

cb.text = param.text;

if(param.onclick)

{

cb.addEventListener(MouseEvent.CLICK,function(param1:MouseEvent):void

{

param.onclick();

});

}

bilibili::setupMotionElement(param,cb);

return cb;

}

public function createGlowFilter(param1:uint = 16711680, param2:Number = 1.0, param3:Number = 6.0, param4:Number = 6.0, param5:Number = 2, param6:int = 1, param7:Boolean = false, param8:Boolean = false) : GlowFilter

{

return new GlowFilter(param1,param2,param3,param4,param5,param6,param7,param8);

}

public function createBlurFilter(param1:Number = 0, param2:Number = 0, param3:uint = 1) : BlurFilter

{

return new BlurFilter(param1,param2,param3);

}

bilibili function setupMotionElement(param1:Object, param2:IMotionElement) : void

{

var complete:Function = null;

var motionConfig:Object = null;

var config:Object = param1;

var elm:IMotionElement = param2;

complete = function():void

{

if(elm["parent"])

{

elm["parent"].removeChild(elm);

}

\_scriptManager.popEl(elm);

};

if(elm.motionManager == null)

{

elmbilibili::["motionManager"] = new MotionManager(elm as DisplayObject);

}

elm.motionManager.setPlayTime(this.\_player.stime \* 1000);

if(config.motionGroup)

{

elm.motionManager.initTweenGroup(config.motionGroup,config.lifeTime);

}

else

{

motionConfig = config.motion;

if(isNaN(motionConfig.lifeTime))

{

motionConfig.lifeTime = config.lifeTime;

}

if(motionConfig.lifeTime < 0)

{

motionConfig.lifeTime = 0.001;

}

elm.motionManager.initTween(motionConfig);

}

elm.motionManager.setCompleteListener(complete);

this.\_scriptManager.pushEl(elm);

if(config.parent && config.parent.hasOwnProperty("addChild"))

{

config.parent.addChild(elm);

}

else

{

this.\_layer.addChild(elm as DisplayObject);

}

if(this.\_player.state == "PLAYING")

{

elm.motionManager.play();

}

}

public function toIntVector(param1:Array) : Vector.<int>

{

return Vector.<int>(param1);

}

public function toUIntVector(param1:Array) : Vector.<uint>

{

return Vector.<uint>(param1);

}

public function toNumberVector(param1:Array) : Vector.<Number>

{

return Vector.<Number>(param1);

}

public function createMatrix3D(param1:\*) : Matrix3D

{

if(param1 is Vector.<Number>)

{

return new Matrix3D(param1);

}

return new Matrix3D(Vector.<Number>(param1));

}

public function createColorTransform(param1:Number = 1.0, param2:Number = 1.0, param3:Number = 1.0, param4:Number = 1.0, param5:Number = 0, param6:Number = 0, param7:Number = 0, param8:Number = 0) : ColorTransform

{

return new ColorTransform(param1,param2,param3,param4,param5,param6,param7,param8);

}

public function createTextFormat(param1:String = null, param2:Object = null, param3:Object = null, param4:Object = null, param5:Object = null, param6:Object = null, param7:String = null, param8:String = null, param9:String = null, param10:Object = null, param11:Object = null, param12:Object = null, param13:Object = null) : TextFormat

{

return new TextFormat(param1,param2,param3,param4,param5,param6,param7,param8,param9,param10,param11,param12,param13);

}

public function createVector3D(param1:Number = 0.0, param2:Number = 0.0, param3:Number = 0.0, param4:Number = 0.0) : Vector3D

{

return new Vector3D(param1,param2,param3,param4);

}

public function createTextField() : TextField

{

return new CommentField();

}

public function createBevelFilter(param1:Number = 4.0, param2:Number = 45, param3:uint = 16777215, param4:Number = 1.0, param5:uint = 0, param6:Number = 1.0, param7:Number = 4.0, param8:Number = 4.0, param9:Number = 1, param10:int = 1, param11:String = "inner", param12:Boolean = false) : \*

{

return new BevelFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9,param10,param11,param12);

}

public function createColorMatrixFilter(param1:Array = null) : \*

{

return new ColorMatrixFilter(param1);

}

public function createConvolutionFilter(param1:Number = 0, param2:Number = 0, param3:Array = null, param4:Number = 1.0, param5:Number = 0.0, param6:Boolean = true, param7:Boolean = true, param8:uint = 0, param9:Number = 0.0) : \*

{

return new ConvolutionFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9);

}

public function createDisplacementMapFilter(param1:BitmapData = null, param2:Point = null, param3:uint = 0, param4:uint = 0, param5:Number = 0.0, param6:Number = 0.0, param7:String = "wrap", param8:uint = 0, param9:Number = 0.0) : \*

{

return new DisplacementMapFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9);

}

public function createDropShadowFilter(param1:Number = 4.0, param2:Number = 45, param3:uint = 0, param4:Number = 1.0, param5:Number = 4.0, param6:Number = 4.0, param7:Number = 1.0, param8:int = 1, param9:Boolean = false, param10:Boolean = false, param11:Boolean = false) : \*

{

return new DropShadowFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9,param10,param11);

}

public function createGradientBevelFilter(param1:Number = 4.0, param2:Number = 45, param3:Array = null, param4:Array = null, param5:Array = null, param6:Number = 4.0, param7:Number = 4.0, param8:Number = 1, param9:int = 1, param10:String = "inner", param11:Boolean = false) : \*

{

return new GradientBevelFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9,param10,param11);

}

public function createGradientGlowFilter(param1:Number = 4.0, param2:Number = 45, param3:Array = null, param4:Array = null, param5:Array = null, param6:Number = 4.0, param7:Number = 4.0, param8:Number = 1, param9:int = 1, param10:String = "inner", param11:Boolean = false) : \*

{

return new GradientGlowFilter(param1,param2,param3,param4,param5,param6,param7,param8,param9,param10,param11);

}

public function get frameRate() : Number

{

return this.\_layer.stage.frameRate;

}

public function set frameRate(param1:Number) : void

{

if(param1 > 0 && param1 < 120)

{

this.\_layer.stage.frameRate = param1;

}

}

public function pointTowards(param1:Number, param2:Matrix3D, param3:Vector3D, param4:Vector3D = null, param5:Vector3D = null) : Matrix3D

{

return Utils3D.pointTowards(param1,param2,param3,param4,param5);

}

public function projectVector(param1:Matrix3D, param2:Vector3D) : Vector3D

{

return Utils3D.projectVector(param1,param2);

}

public function projectVectors(param1:Matrix3D, param2:Vector.<Number>, param3:Vector.<Number>, param4:Vector.<Number>) : void

{

return Utils3D.projectVectors(param1,param2,param3,param4);

}

}

}

CommentButton类

package tv.bilibili.script

{

import flash.display.Sprite;

import tv.bilibili.script.interfaces.ICommentButton;

import flash.filters.DropShadowFilter;

import tv.bilibili.script.interfaces.IMotionManager;

import flash.text.TextField;

import flash.geom.Matrix;

import flash.display.GradientType;

import flash.events.MouseEvent;

import flash.text.TextFormat;

import flash.text.TextFieldAutoSize;

public class CommentButton extends Sprite implements ICommentButton

{

protected static var \_shadow:Array = [new DropShadowFilter(1,45,0,0.3,2,2)];

protected var \_motionManager:IMotionManager;

protected var \_label:TextField;

protected var \_colors:Array;

protected var \_alphas:Array;

protected var \_over:Boolean = false;

protected var \_fillMatrix:Matrix;

protected var \_width:Number = 0;

protected var \_height:Number = 0;

public function CommentButton()

{

this.\_colors = [];

this.\_alphas = [];

super();

this.\_motionManager = new MotionManager(this);

mouseEnabled = true;

buttonMode = true;

useHandCursor = true;

this.\_label = new TextField();

var \_loc1\_:TextFormat = new TextFormat(null,12,0,true);

this.\_label.defaultTextFormat = \_loc1\_;

this.\_label.autoSize = TextFieldAutoSize.LEFT;

this.\_label.selectable = false;

this.\_label.mouseEnabled = false;

addChild(this.\_label);

this.\_fillMatrix = new Matrix();

addEventListener(MouseEvent.MOUSE\_OVER,this.overHandler);

addEventListener(MouseEvent.MOUSE\_OUT,this.outHandler);

}

public function get motionManager() : IMotionManager

{

return this.\_motionManager;

}

public function initStyle(param1:Object) : void

{

this.x = param1.x;

this.y = param1.y;

this.z = param1.z;

this.width = param1.width;

this.height = param1.height;

this.alpha = param1.alpha;

this.scaleX = this.scaleY = param1.scale;

}

public function get text() : String

{

return this.\_label.text;

}

public function set text(param1:String) : void

{

if(this.\_label.text != param1)

{

this.\_label.text = param1;

this.updateRect();

}

}

protected function updateRect() : void

{

if(this.\_width <= 0)

{

this.\_width = this.\_label.width + 12;

}

if(this.\_height <= 0)

{

this.\_height = this.\_label.height + 5;

}

this.\_label.x = (this.\_width - this.\_label.width) / 2;

this.\_label.y = (this.\_height - this.\_label.height) / 2;

var \_loc1\_:Array = [];

var \_loc2\_:Array = [];

var \_loc3\_:Array = [];

if(this.\_colors.length == 0)

{

\_loc1\_ = [16777215,14540253];

}

else

{

\_loc1\_ = this.\_colors;

}

var \_loc4\_:uint = 0;

var \_loc5\_:uint = \_loc1\_.length;

while(\_loc4\_ < \_loc5\_)

{

if(\_loc4\_ < this.\_alphas.length)

{

\_loc2\_[\_loc4\_] = this.\_alphas[\_loc4\_];

}

else

{

\_loc2\_[\_loc4\_] = this.\_over?0.8:0.618;

}

\_loc3\_[\_loc4\_] = Math.floor(\_loc4\_ / \_loc5\_ \* 255);

\_loc4\_++;

}

this.graphics.clear();

this.graphics.lineStyle(1,8947848);

if(\_loc1\_.length == 1)

{

this.graphics.beginFill(\_loc1\_[0],0.8);

}

else

{

this.\_fillMatrix.createGradientBox(this.\_width,this.\_height,Math.PI / 2);

this.graphics.beginGradientFill(GradientType.LINEAR,\_loc1\_,\_loc2\_,\_loc3\_,this.\_fillMatrix);

}

this.graphics.drawRoundRect(0,0,this.\_width,this.\_height,4,4);

this.graphics.endFill();

this.filters = this.\_over?[]:\_shadow;

}

public function setStyle(param1:String, param2:\*) : void

{

switch(param1)

{

case "fillColors":

this.fillColors = param2;

break;

case "fillAlphas":

this.fillAlphas = param2;

break;

}

}

public function get fillColors() : Array

{

return this.\_colors;

}

public function set fillColors(param1:Array) : void

{

this.\_colors = param1;

this.updateRect();

}

public function get fillAlphas() : Array

{

return this.\_alphas;

}

public function set fillAlphas(param1:Array) : void

{

this.\_alphas = param1;

this.updateRect();

}

public function remove() : void

{

try

{

this.\_motionManager.stop();

this.parent.removeChild(this);

return;

}

catch(error:Error)

{

return;

}

}

override public function set width(param1:Number) : void

{

if(this.\_width != param1)

{

this.\_width = param1;

this.updateRect();

}

super.width = param1;

}

override public function set height(param1:Number) : void

{

if(this.\_height != param1)

{

this.\_height = param1;

this.updateRect();

}

super.height = param1;

}

protected function overHandler(param1:MouseEvent) : void

{

this.\_over = true;

this.updateRect();

}

protected function outHandler(param1:MouseEvent) : void

{

this.\_over = false;

this.updateRect();

}

}

}

CommentCanvas类

package tv.bilibili.script

{

import flash.display.Sprite;

import tv.bilibili.script.interfaces.ICommentCanvas;

import tv.bilibili.script.interfaces.IMotionManager;

public class CommentCanvas extends Sprite implements ICommentCanvas

{

protected var \_motionManager:IMotionManager;

public function CommentCanvas()

{

super();

this.\_motionManager = new MotionManager(this);

}

public function get motionManager() : IMotionManager

{

return this.\_motionManager;

}

public function initStyle(param1:Object) : void

{

this.x = param1.x;

this.y = param1.y;

this.z = param1.z;

this.alpha = param1.alpha;

this.scaleX = this.scaleY = param1.scale;

this.mouseEnabled = false;

}

public function remove() : void

{

try

{

this.\_motionManager.stop();

this.parent.removeChild(this);

return;

}

catch(error:Error)

{

return;

}

}

}

}

CommentField类

package tv.bilibili.script

{

import flash.text.TextField;

import tv.bilibili.script.interfaces.ICommentField;

import tv.bilibili.script.interfaces.IMotionManager;

import flash.text.TextFormat;

import org.lala.utils.CommentConfig;

import flash.text.AntiAliasType;

import flash.text.TextFieldAutoSize;

import flash.text.GridFitType;

public class CommentField extends TextField implements ICommentField

{

protected var \_motionManager:IMotionManager;

protected var \_format:TextFormat;

public function CommentField()

{

super();

this.\_motionManager = new MotionManager(this);

selectable = false;

mouseEnabled = false;

}

public function get motionManager() : IMotionManager

{

return this.\_motionManager;

}

public function initStyle(param1:Object) : void

{

this.x = param1.x;

this.y = param1.y;

this.z = param1.z;

this.alpha = param1.alpha;

this.scaleX = this.scaleY = param1.scale;

var \_loc2\_:TextFormat = new TextFormat(param1.font,param1.fontsize,param1.color,CommentConfig.getInstance().bold);

this.\_format = \_loc2\_;

this.defaultTextFormat = \_loc2\_;

this.setTextFormat(\_loc2\_);

this.embedFonts = false;

this.antiAliasType = AntiAliasType.NORMAL;

this.autoSize = TextFieldAutoSize.LEFT;

this.gridFitType = GridFitType.NONE;

this.filters = CommentConfig.getInstance().getFilterByColor(param1.color);

}

public function remove() : void

{

try

{

this.\_motionManager.stop();

this.parent.removeChild(this);

return;

}

catch(error:Error)

{

return;

}

}

public function get align() : String

{

return this.\_format.align;

}

public function set align(param1:String) : void

{

this.\_format.align = param1;

this.setTextFormat(this.\_format);

}

public function get bold() : Boolean

{

return this.\_format.bold as Boolean;

}

public function set bold(param1:Boolean) : void

{

this.\_format.bold = param1;

this.setTextFormat(this.\_format);

}

public function get font() : String

{

return this.\_format.font;

}

public function set font(param1:String) : void

{

this.\_format.font = param1;

this.setTextFormat(this.\_format);

}

public function get fontsize() : uint

{

return this.\_format.size as uint;

}

public function set fontsize(param1:uint) : void

{

this.\_format.size = param1;

this.setTextFormat(this.\_format);

}

public function get color() : uint

{

return this.\_format.color as uint;

}

public function set color(param1:uint) : void

{

this.\_format.color = param1;

this.setTextFormat(this.\_format);

}

override public function get htmlText() : String

{

return super.text;

}

override public function set htmlText(param1:String) : void

{

super.text = param1;

}

}

}