



Flash生態圈 與開放原始碼

高見龍



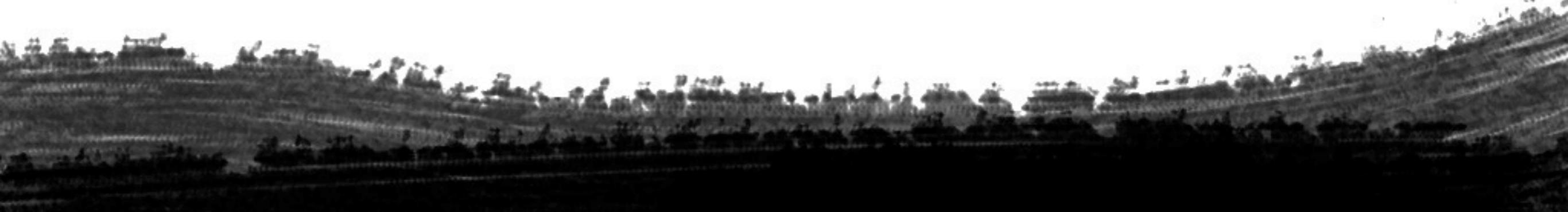
高見龍

a.k.a Eddie or Aquarianboy

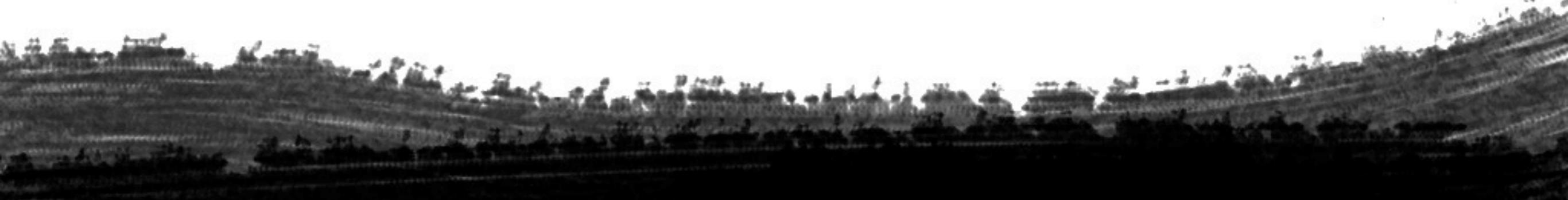
- Live and work in Taipei, Taiwan.
- Serving in my own little tiny company.
- Flash / AS3 / Ruby / Rails / Python programming for living.
- Objective-C for personal interests.
- Technical Education and Consultant.
- PTT Flash BM (since 2007/4).
- Ruby Certified Programmer (Since 2012/1).
- Adobe Certified Flash Developer (Since 2006/7).
- Linux Professional Institute Certification (Since 2005/3).



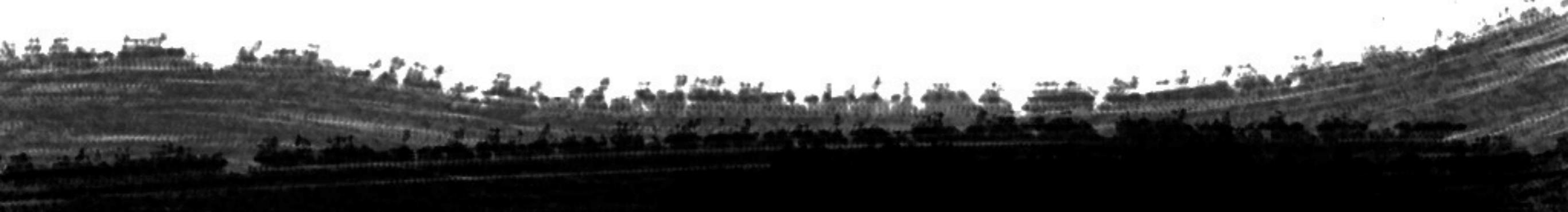
傳教士



說書



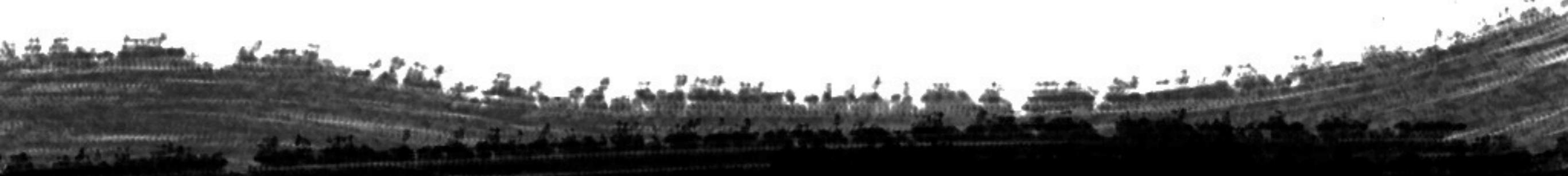
開放原始碼



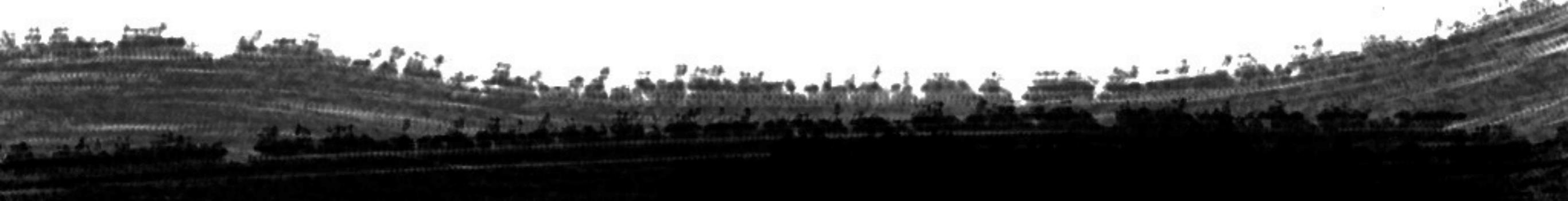
除之而後快



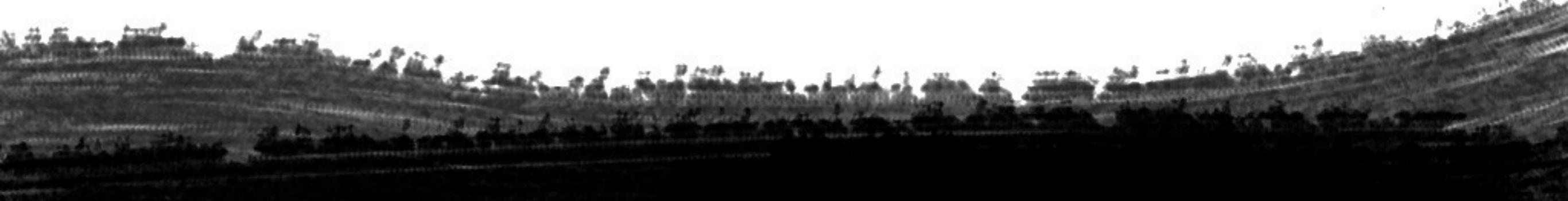
—
波
又
平



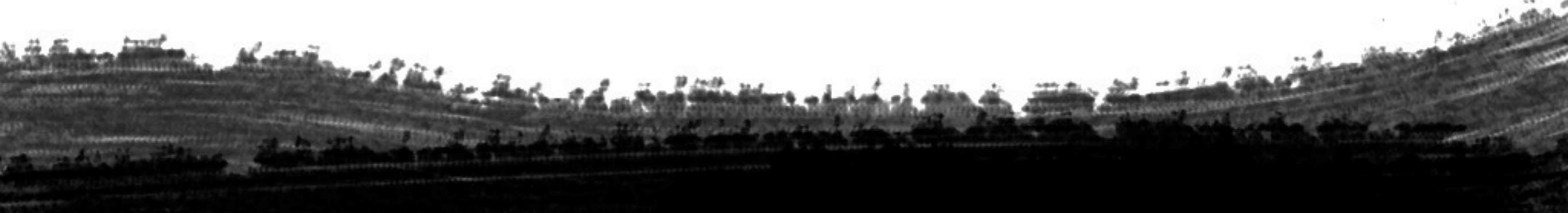
不完美



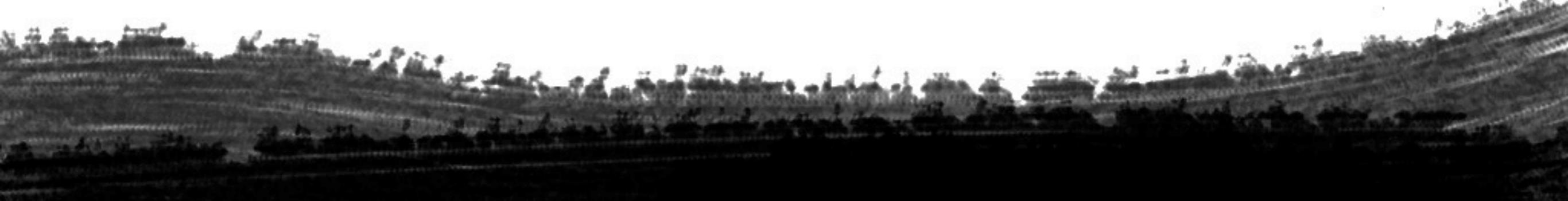
開源



默默耕耘



主
題



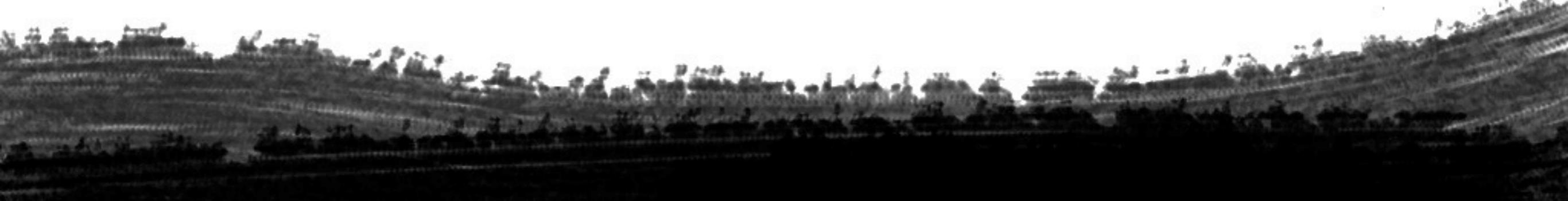
一、主角介紹

二、開放原始碼

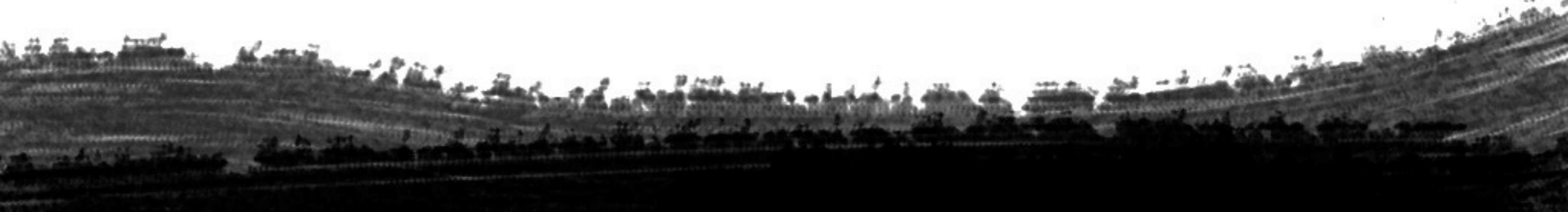
三、生態圈，台灣

四、
經驗值

本文開始

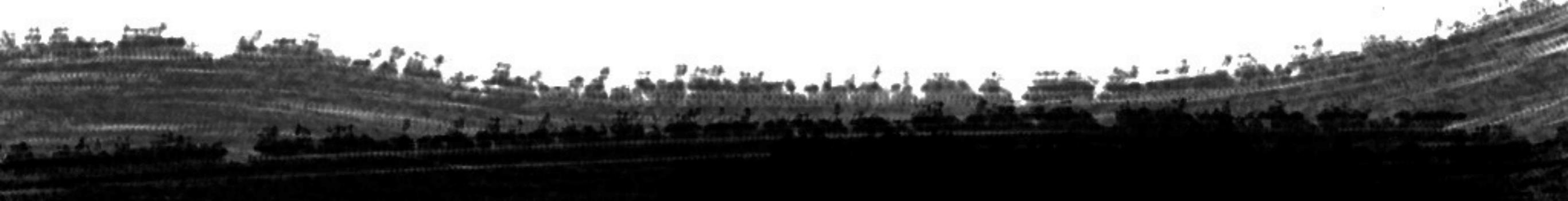


一、主角介紹



能力

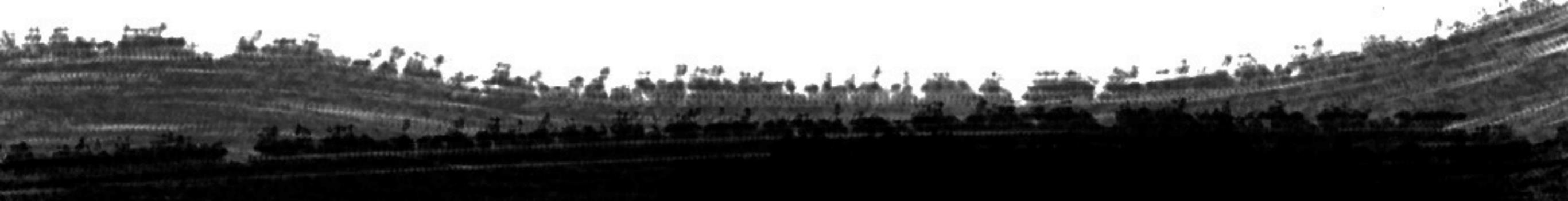
強佔山頭



首選

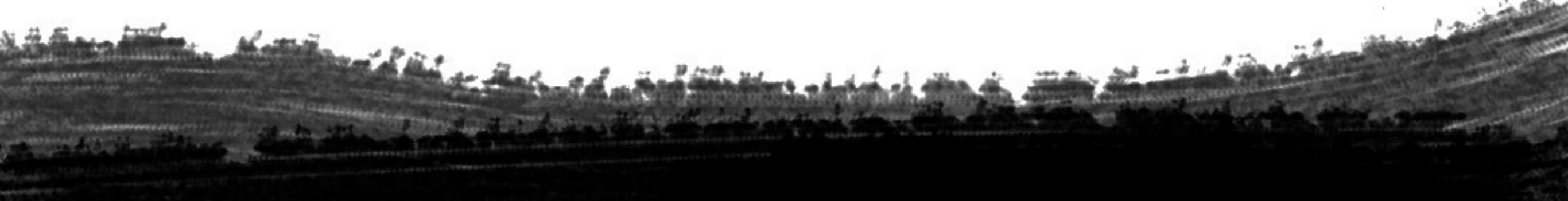
誤解

羅輯

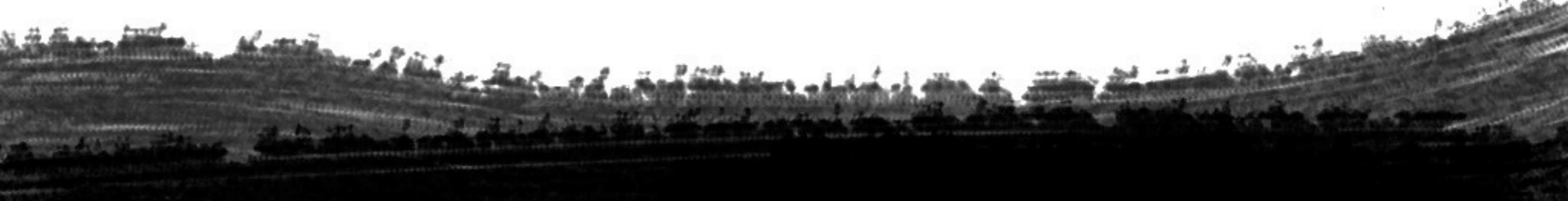


個人修養

歷史



改革

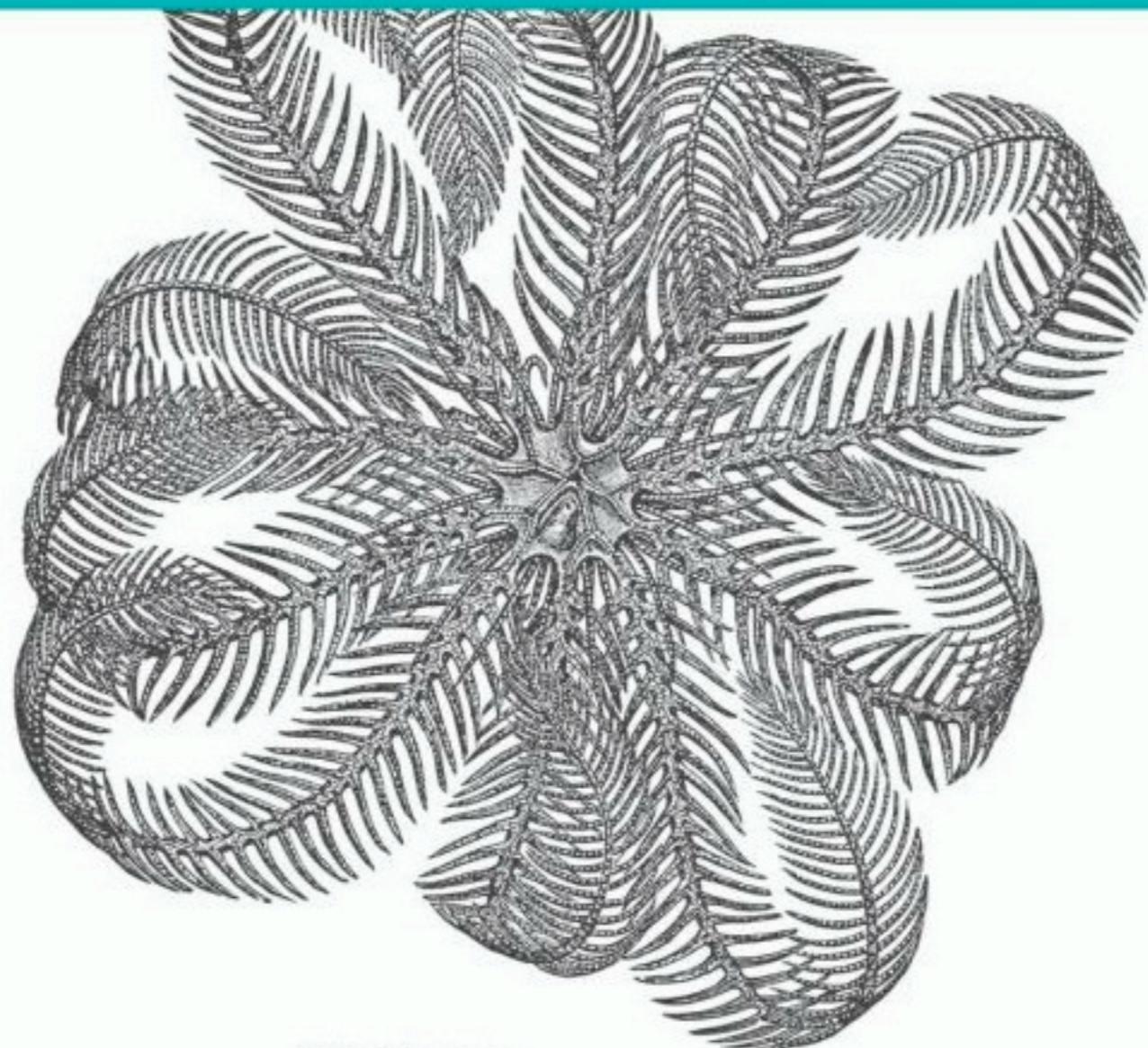


進步

主角介紹

```
AppData.as Main.as List.as Node.as Rule.as UserInterface.as
1 package
2 {
3     import flash.display.Bitmap;
4     import flash.display.BitmapData;
5     import flash.display.Sprite;
6     import flash.display.StageAlign;
7     import flash.display.StageScaleMode;
8     import flash.events.Event;
9     import flash.events.MouseEvent;
10    import flash.geom.ColorTransform;
11    import flash.geom.Rectangle;
12
13    public class Main extends Sprite
14    {
15        private const ATTRACTIVE_CTF:ColorTransform = new ColorTransform(0.7, 0.8, 0.96, 1.0);
16        private const REPULSIVE_CTF:ColorTransform = new ColorTransform(0.96, 0.8, 0.7, 1.0);
17
18        private var _bmp:Bitmap;
19        private var _bmd:BitmapData;
20        private var _bmp_rect:Rectangle;
21
22        private var _force:Number = 200;
23        private var _first:Node;
24        private var _maxnum:int = 100000;
25        private var _count:int = 0;
26
27        private var _color_transform:ColorTransform = ATTRACTIVE_CTF;
28
29        public function Main():void
30        {
31            if (stage)
32            {
33                init(null);
```

ActionScript 3.0 Design Patterns



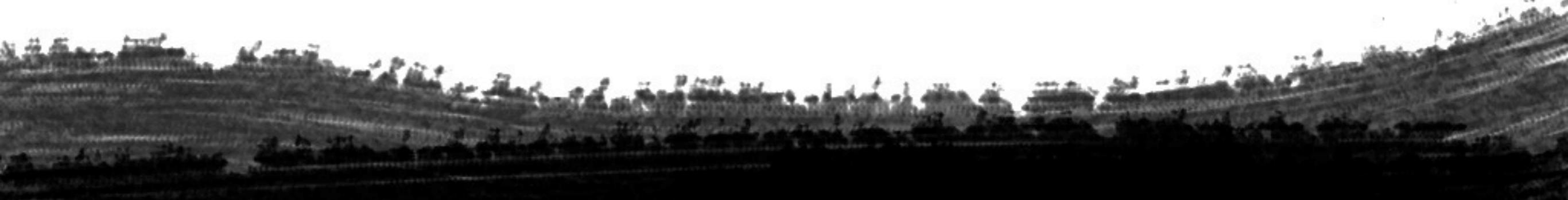
O'REILLY®



Adobe
Developer
Library

William Sanders &
Chandima Cumaranatunge

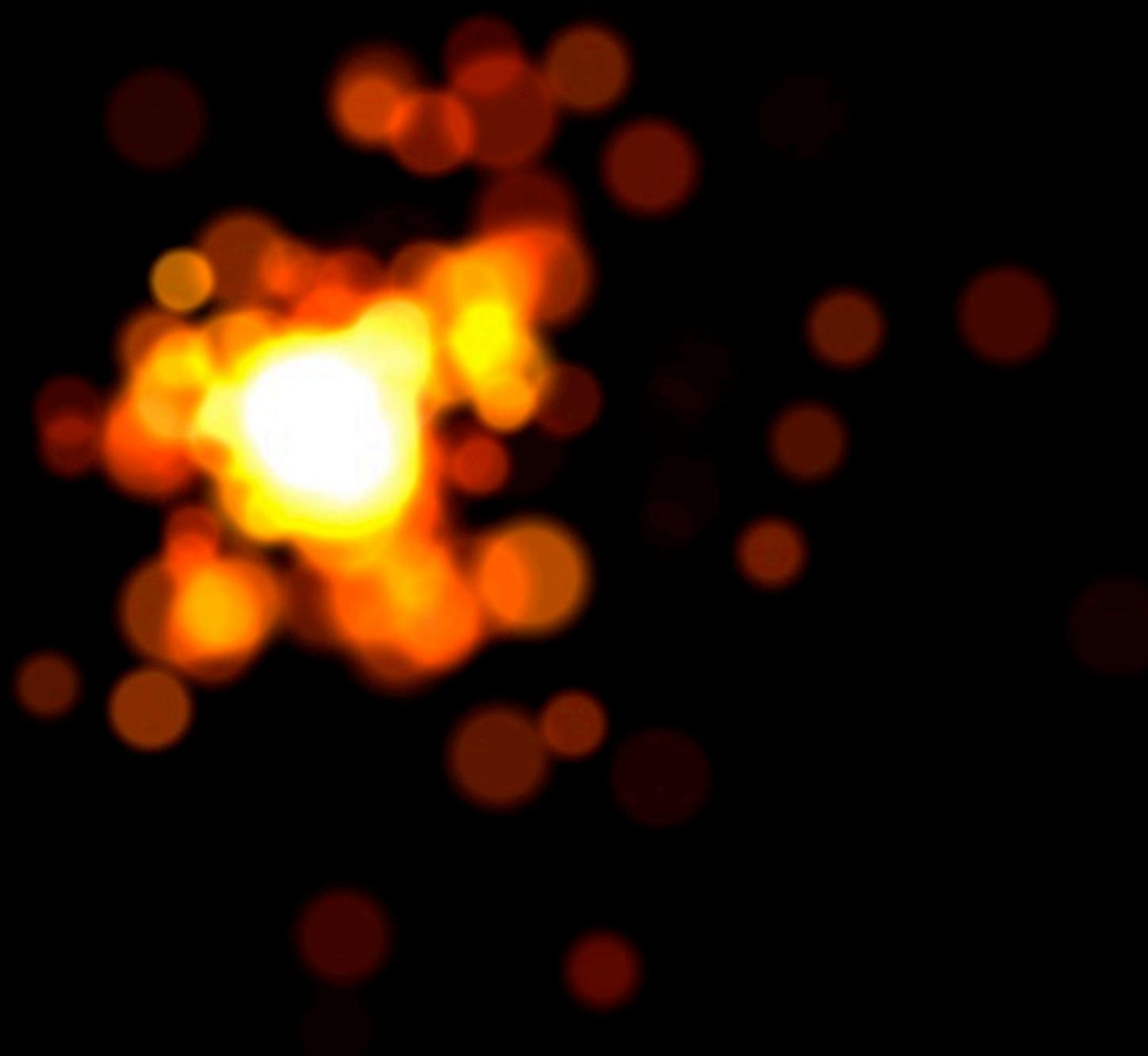
華而不實



安全乎？

封閉乎？

效能



some examples

1 2 3 4 5 6



bounce speed

number of particles

size & random

lifespan & random

blending mode

spread X & Y

sharpness &
random

lifespan & random

speed & random

angle & random

gravity & direction

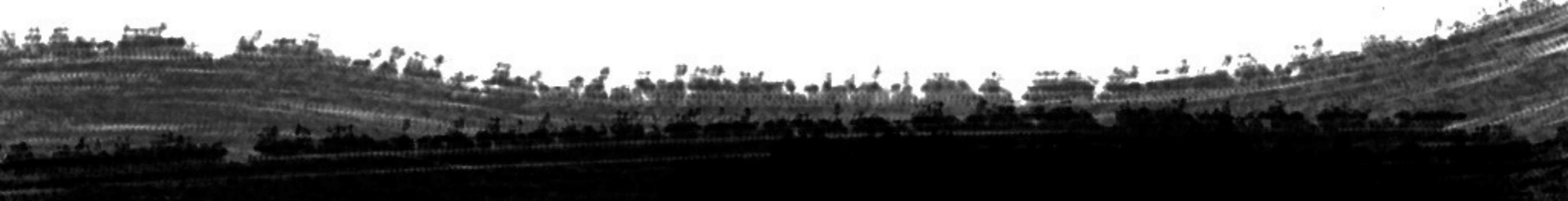
start colour - rgba

end colour - rgba

P A R T I C U L E

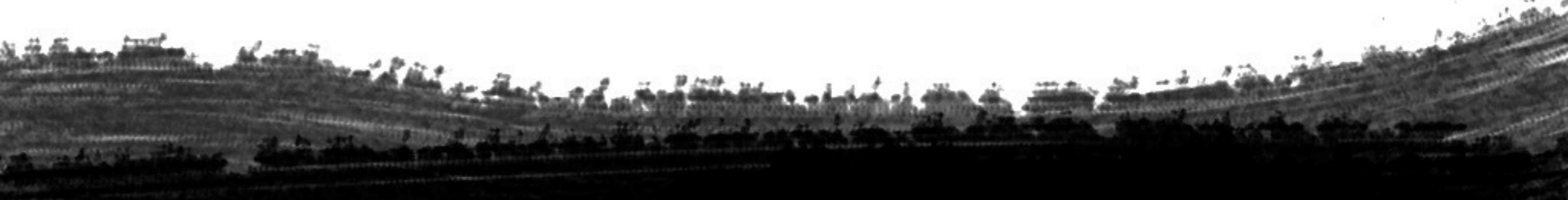
非戰之罪

佳作

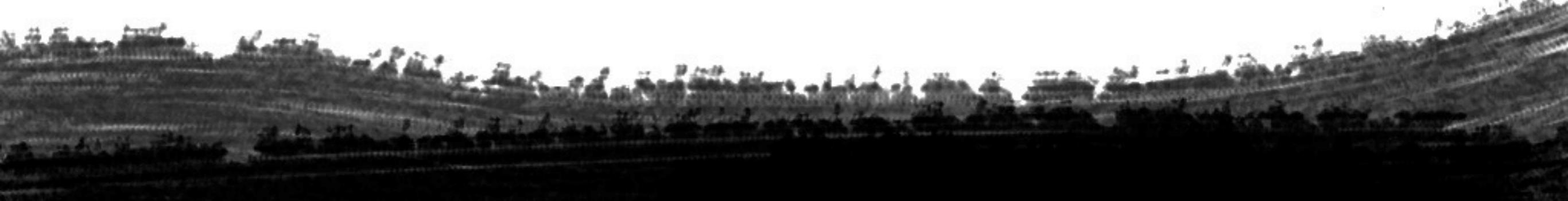


硬體加速

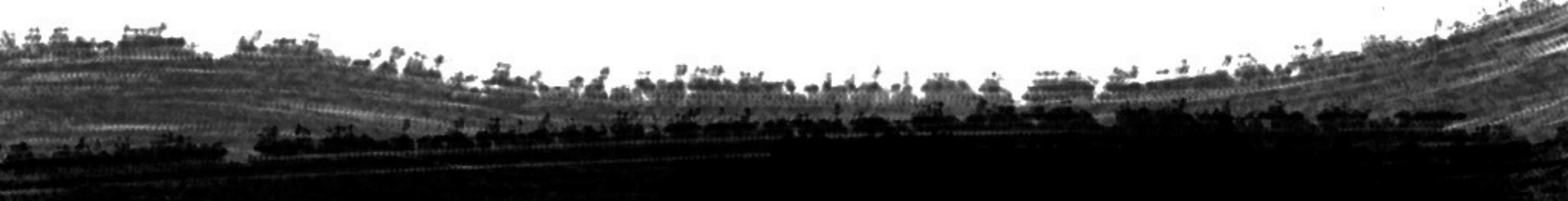
吳下阿蒙



競爭對手



銀光

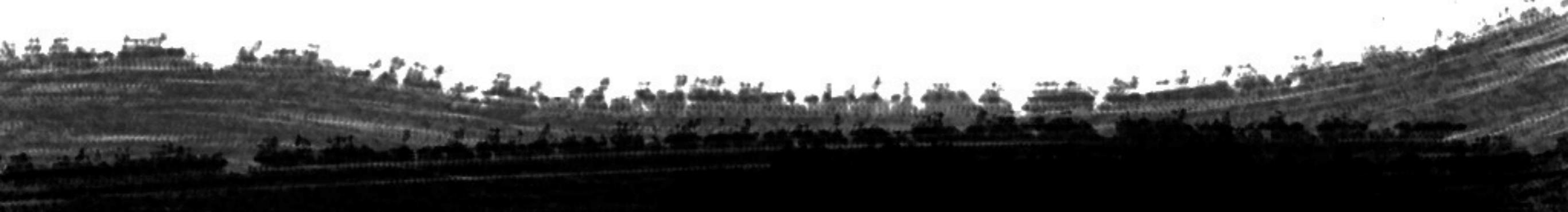


HTML5

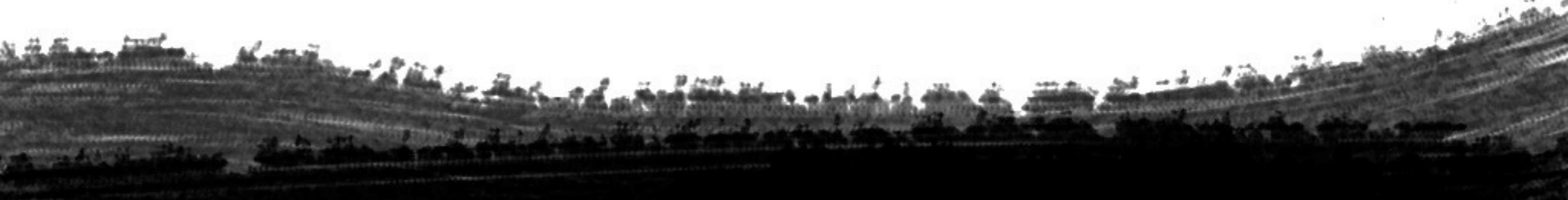
殺手

開發人員

共榮共存



適者生存



這，
就是江湖

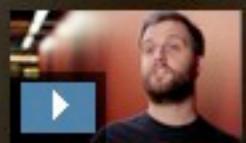
亮點

Adobe AIR 3

[總覽](#) [功能](#) [技術規格](#) [FAQ](#) [Showcase](#)



無論使用哪種平台或裝置，
都可帶來超越瀏覽器的豐富應用



看看 Stage 3D 如何為手機、桌上型電腦和電視
帶來遊戲主機等級的品質
[觀賞視訊 >](#)

什麼是 Adobe AIR?

Adobe® AIR® 執行時期可讓開發人員在多種平台及裝置上 — 包括個人電腦、電視以及 Android™、BlackBerry® 和 iOS 裝置 — 部署使用 HTML、JavaScript、ActionScript®、Flex、Adobe Flash® Professional 和 Adobe Flash Builder® 建立的獨立應用程式。

AIR 中的主要創新功能

[更多資訊](#)



Flash Builder 4.5 Premium
Rapidly develop high-performing
mobile, web, and desktop
applications



[Buy](#)

[Try](#)

★ Includes complimentary Flash
Builder 4.6 update

其他購買方式

[Adobe Store](#)
針對家庭和家庭辦公室

[企業採購](#)
大量授權選項

[尋找經銷商](#)
尋找經銷商

下載

[Adobe AIR](#)

[Adobe AIR SDK](#)

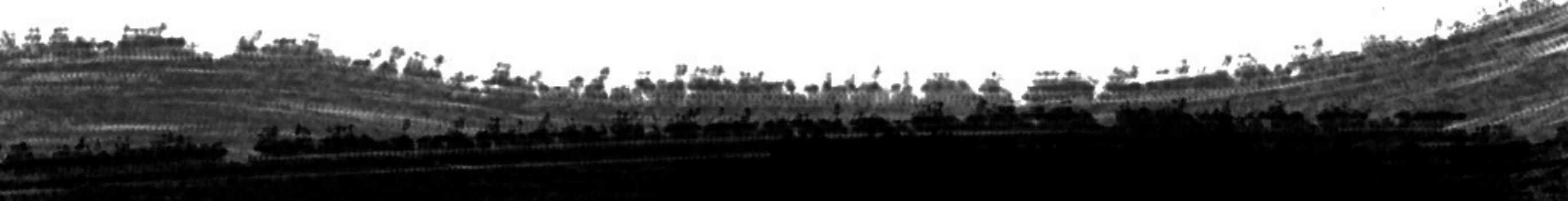
主角介紹

人

互動

行動裝置

願景



ONE TOOLCHAIN, ONE LANGUAGE, ONE CODEBASE, ONE CLIENT

TOOLING/FRAMEWORK



Creative Suite



Flash Builder



Flex

RUNTIMES



Adobe Flash Player



Adobe AIR

CLIENTS



Desktop



Smartphones, Tablets
(others OSs coming soon)



Google TV



Televisions



ONE TOOLCHAIN, ONE LANGUAGE, ONE CODEBASE, ONE CLIENT

TOOLING/FRAMEWORK



RUNTIMES



Adobe Flash Player



Adobe AIR



Desktop



Smartphones, Tablets
(others OSs coming soon)



Google TV



Televisions

一招半式闖江湖



二、開放原始碼



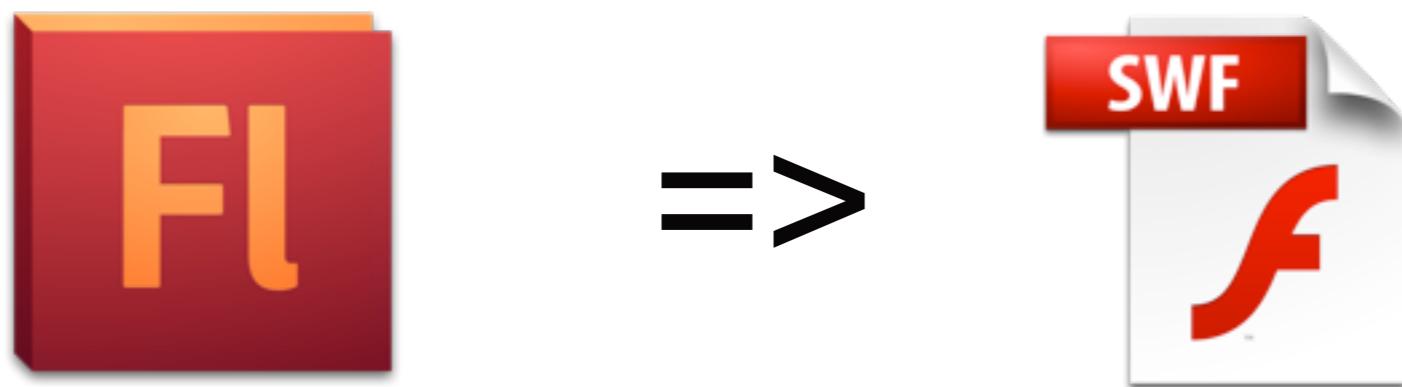
商人

工欲善其事

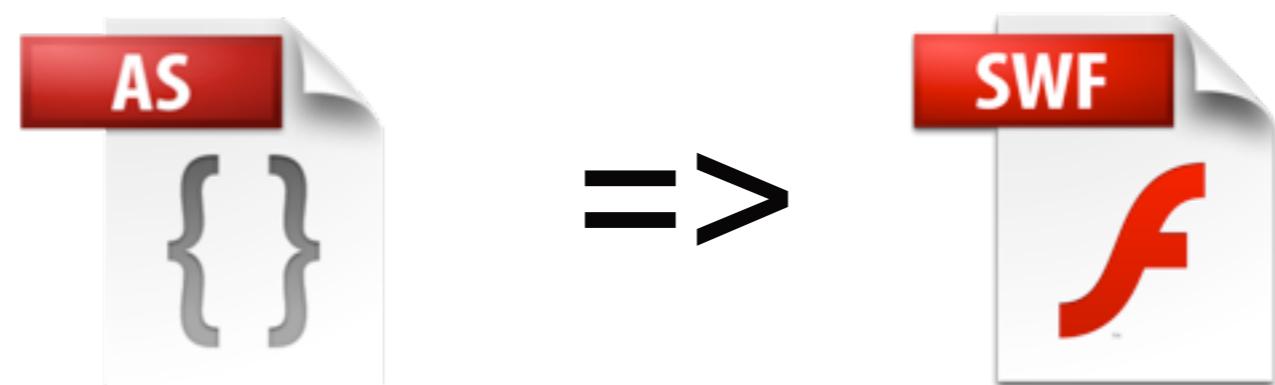
必先利其器

開放原始碼

生產流程

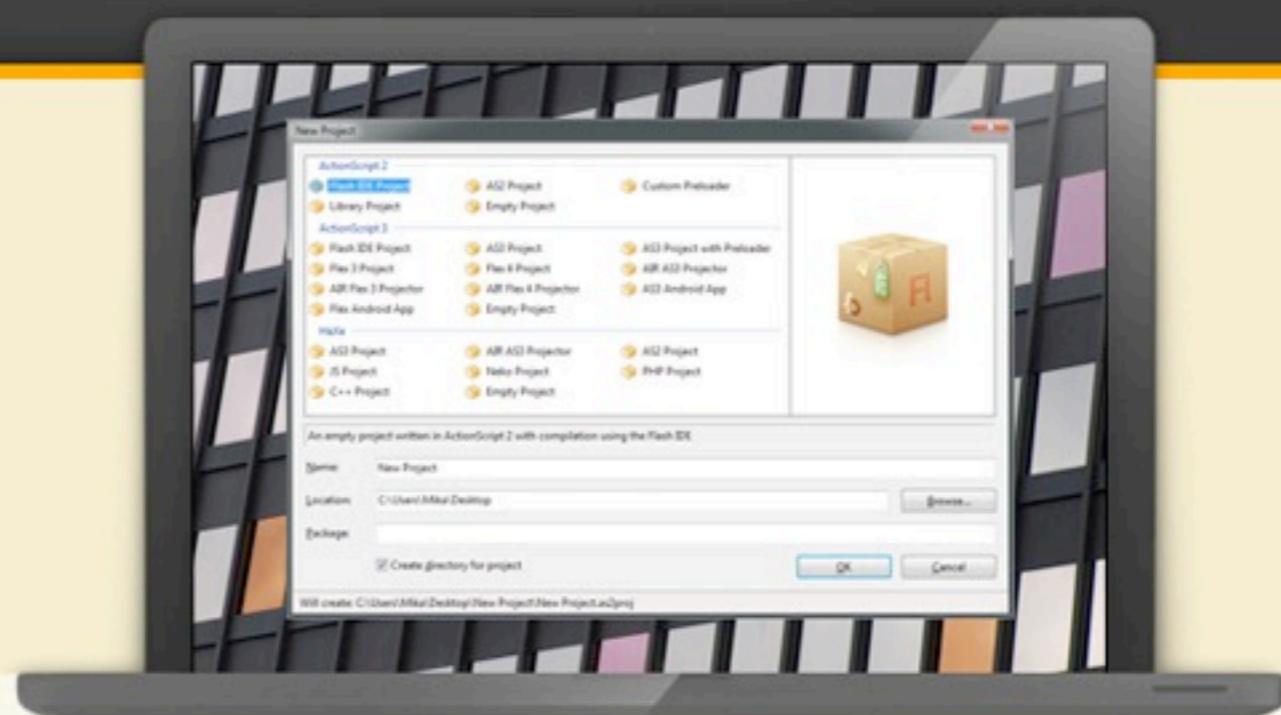






FlashDevelop is a free and open source code editor for every Flash developer

FlashDevelop offers first class support for ActionScript (2 & 3) and HaXe development. Great completion & code generation, projects compilation & debugging, plenty of project templates, SWF/SWC exploration etc. FlashDevelop is also a great web developer IDE with source-control support (svn, git, mercurial), tasks/todo, snippets, XML/HTML completion and zen-coding for HTML.



Open source community feeds FlashDevelop

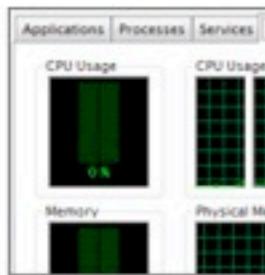
FlashDevelop is an open source story; it was created in 2005 by passionate Flash developers, for Flash developers. It is the product of many contributors which created what is today the best open source Flash development environment. We've received numerous features, bug fixes, feature ideas and even full plugins from community members and it just gets bigger. Be part of this great community and help us in whatever way you can. Open C# Express and code features, send us bug fixes, help us improve the documentation, donate or just spread the word. [Get active and join the community »](#)

DOWNLOAD
FlashDevelop 4.0.2 RTM

EN, JP, DE, EU (~16Mb, WIN)

[All downloads & release notes »](#)

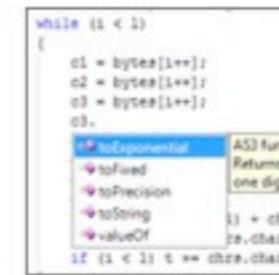
Enjoy a lighter and smarter IDE for your Flash development



FAST & LIGHTWEIGHT

FlashDevelop was created to be a fast and lightweight IDE and to be fast even on slower computers.

[READ MORE](#)



COMPLETION & GENERATION

Enjoy an amazing code completion which helps you also generate and document your valuable code.

[READ MORE](#)



FlashDevelop gives me comfort and features of a full-blown IDE without the bulk & learning curve. Fantastic!

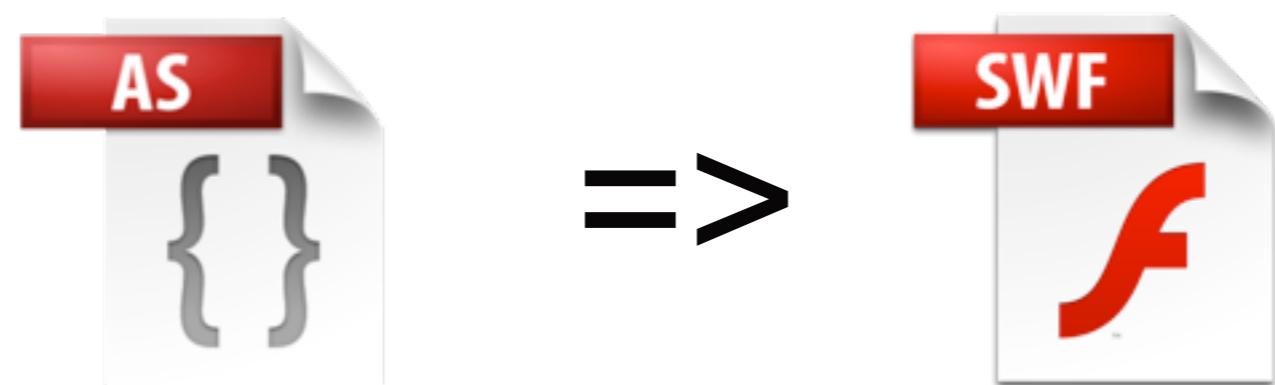
Steve Harvey on Twitter #loveFD

FlashDevelop is like the skinny supermodel girlfriend that still cleans the house and makes you breakfast.

Peter Gardner on Twitter #loveFD

```
37 public var lottery_items:ComboBox;
38 public var lottery_list:LotteryList;
39 public var running_ball:RunningBall;
40 public var lottery_board:LotteryBoard;
41 public var message:Message;
42
43 private var _config:XML;
44 private var _xml_loader:URLLoader;
45 private var _banner_loader:URLLoader;
46 private var _background_loader:URLLoader;
47 private var _banner_image:String;
48 private var _background_image:String;
49 private var _ball_number:uint = 8;
50 private var _background_music:BGMusic;
51 private var _lottery_user:Array = [];
52 private var _current_lottery_item:Object;
53 private var _current_lottery_user:Object;
54 private var _lottery_num:String = '';
55 private var _temp_lottery_user:Array = [];
56 private var _available_amount:uint = 0;
57 private var _items:Array = [];
58
59 public function Lottery()
60 {
61     if (stage) init();
62     else addEventListener(Event.ADDED_TO_STAGE, added_to_stage);
63 }
64
65 private function added_to_stage(e:Event):void
66 {
```

其它





Flex SDK

[Wiki Home](#)[Browse Pages](#)[Browse Labels](#)[Formatting Help](#)

Flex SDK

Overview

Flex is a highly productive, open source framework for building and maintaining expressive web applications that deploy consistently on all major browsers, desktops and operating systems.

This site is focused on the development of the Flex SDK. If you are looking for more information on how to use Flex, you may wish to visit the [Flex Developer Center](#).

[Flex 4.6](#) is the latest production quality release. ([Download](#))

[Flex 4](#) is the prior version ([Download](#))

[[Flex 3](#)] ([Download](#))

[More information](#)

Download

Flex SDK version [4.6.0.23201](#) is the latest production quality release.

Flex SDK version [3.6.0.16995](#) is the most recent update to the Flex 3 code-base.

Please review the [Downloads](#) page for an explanation of the different downloads available.

Adobe also offers these Flex-related products:

[Free Adobe Flex SDK \(Download\)](#)/[Adobe Flex Builder \(Download\)](#)

開放原始碼

玩樂

開放原始碼

遊戲引擎

An open source game-making library...



...free for personal or commercial use.

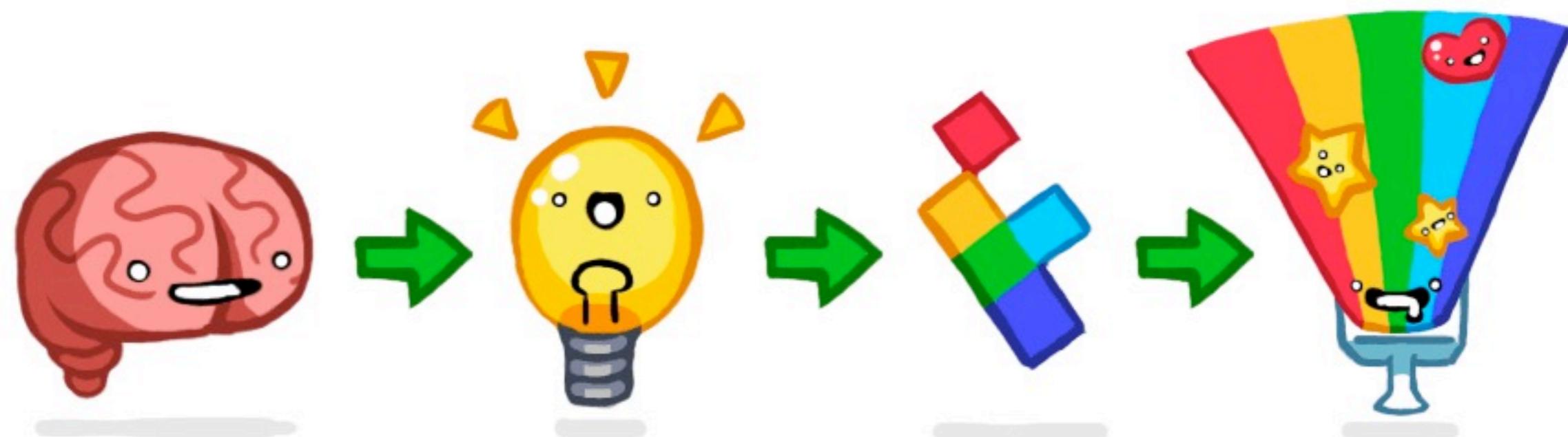
download

about

features

contribute

help



Flixel is an open source game-making library that is completely free for personal or commercial use. Written entirely in Actionscript 3, and designed to be used with free development tools, Flixel is easy to learn, extend and customize.

featured games

[more ➔](#)
[submit ➔](#)

updates



Canabalt

by Adam Atomic and
Danny Baranowsky

"The game that, for
better or worse,



Mode

by Adam Atomic
"Silly demo game
created for the first
public release of

★ showcase

Showcase of projects using the as3isolib

Updated Jan 25, 2011 by [jwopitz](#)

Zex Lex Duel

This is a facebook game which you can check out here - http://apps.facebook.com/cp_zexlexduel/



物理碰撞

Box2DFlashAS3 2.0.1



Drag objects with the mouse. 'Left'/'Right' arrows to go to previous/next example. 'R' to reset.

Update: Version 2.0.1 released!.

Box2DFlashAS3 is an open source port of Erin Catto's powerful c++ physics library [Box2D](#).
Cycle through the demos above to see some of the features.

Full source code for the engine and examples can be downloaded from the project's sourceforge page found [Here](#).

For further information check the ReadMe included with the download, post on the [Box2D forums](#), or contact me at skatehead [at] gmail [dot] com

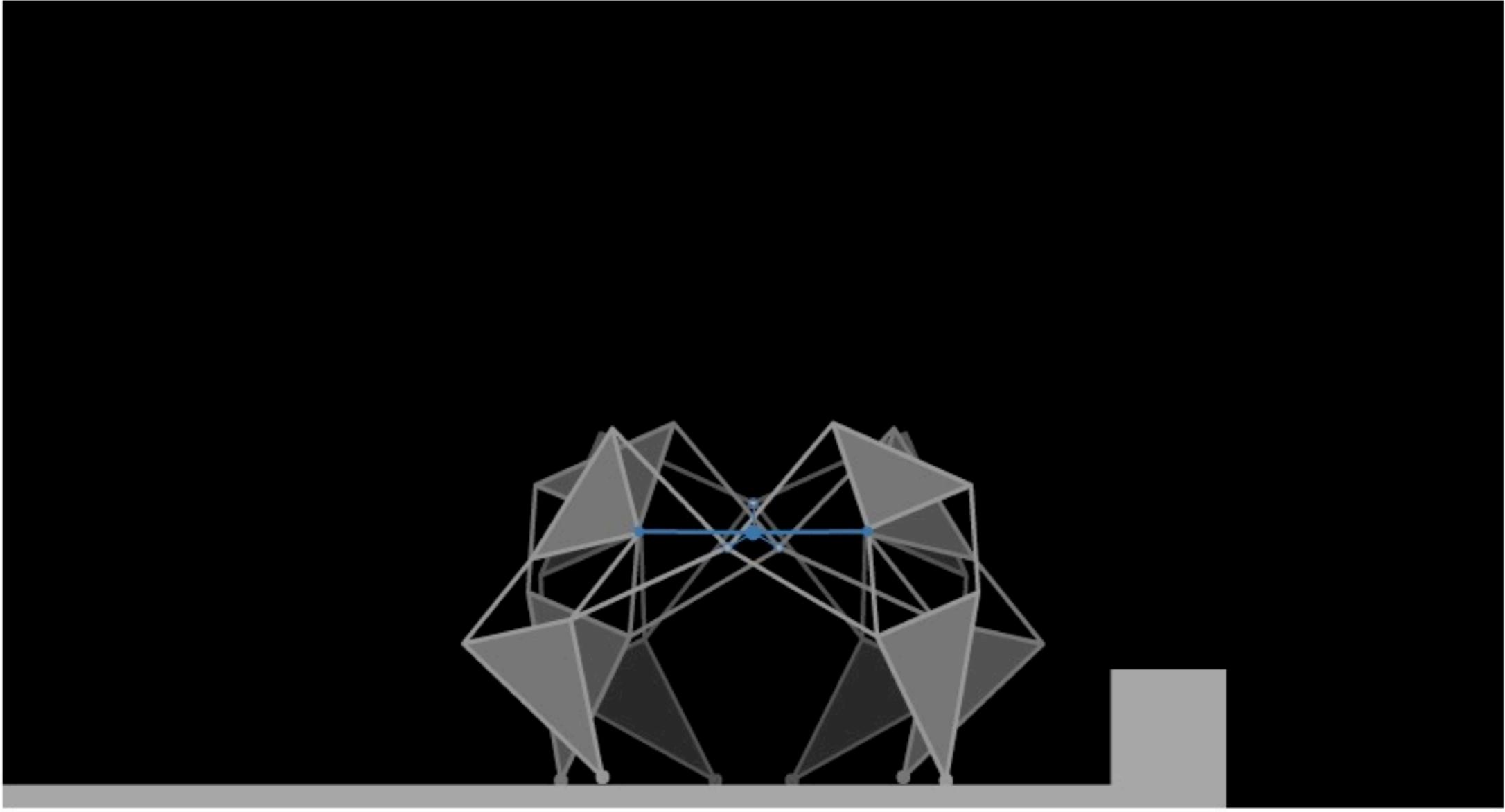
SOURCEFORGE.NET®



Huge thanks to those who have supported this project with their generous donations:

APE

ACTIONSCRIPT PHYSICS ENGINE



Click inside the demo, then use:

- P** key to toggle power
- R** key to reverse direction
- H** key to toggle hiding the back legs

The robot design is based on sculptures by the great Dutch artist [Theo Jansen](#).

[<back](#)

**Project Information**

+2 Recommend this on Go

 Starred by 192 users
[Project feeds](#) **Code license**
[MIT License](#) **Labels**
ActionScript, AS3, Flash,
Flex, particle **Members**
[cicat2266](#)
[1 committer](#)**Featured** **Downloads**
[Stardust 1.3.186.rar](#)
[Show all »](#) **Wiki pages**
[Books](#)
[Changelog](#)
[MigrationForStardust1_3](#)
[activeTutsPlus](#)
[Show all »](#)**Links** **Blogs**
[CJ's Blog](#) **External links**
[Manual \(PDF\)](#)
[Documentation](#)
[FlashDevelop Templates](#)**Stardust is now version 1.3****Migrating to Stardust 1.3**

You can grab the latest revision from the SVN repository using [TortoiseSVN](#).

Read the [manual](#) first. You'll have a far better understanding of the API.

A playlist of [video tutorials](#) is also available.

You can support this project by donating.

[Donate](#)

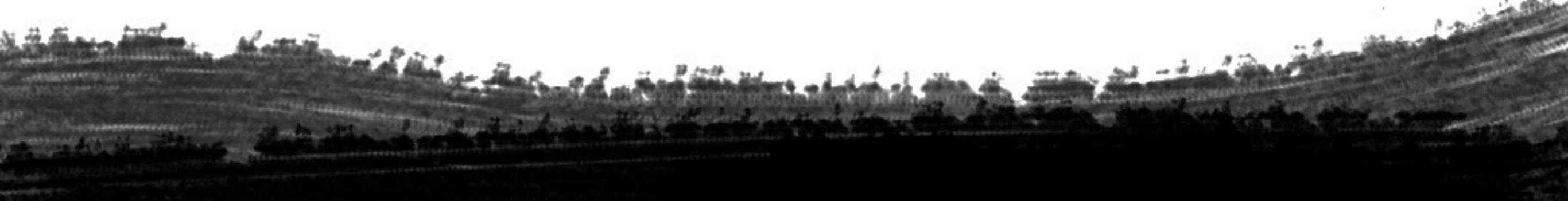
If you've made anything using Stardust, be it a website, game, or even just a simple demo, you can [email the link to me](#). I'd really love to see Stardust being used on other projects.

TortoiseSVN Tutorial	Downloads	Manual (PDF)	Video Tutorials	ActiveTuts+ Tutorials
Documentation	FlashDevelop Templates	Blog	Forum	Facebook Group
Books	Update Feed (Atom)	Downloads Feed (Atom)	Issues Feed (Atom)	

Stardust depends on and includes the compiled SWC file of [CJSignals](#), included in the *libs* folder.

The core class structure was inspired by [Flint Particle System](#).

立體世界





Flash. 3D. Realtime. Multiplayer.

Technology for creating multiplayer browser games, virtual worlds, demos and promotional projects

alternativa3d

Free Flash 3D engine!

OPEN
SOURCE!

alternativagui

It is easy to create an integrated interface!

alternativaphysics

Flash-based physics engine!

Try Alternativa3D right now!

alternativaplayer

Upload your models to online viewer and meet real 3D in the browser!

We created [Alternativa3D](#), a 3D engine that allows developers to work with 3D graphics and physics in Adobe Flash. Also available is our [high-performance server](#) that developers can use to create real-time multiplayer games.

Our solutions are used in several browser games, such as [Tanki Online](#), and in dozens of



09.04.2012

[AlternativaGUI 5.21.0 update](#)

03.04.2012

[New AlternativaPlayer features](#)



Search



HOME BLOG FEATURES DOWNLOAD DOCS & REFERENCE COMMUNITY & SUPPORT TEAM DONATE



GET AWAY3D
DOWNLOAD IT FOR
FREE

GET INVOLVED
JOIN THE
COMMUNITY

UPDATES
WE'RE ALWAYS
BUSY. VERY.

BLOG.PAPERVISION3D.ORG



Papervision3D training in the UK

July 13, 2010 by sebstar55

Although my Lynda.com video tutorial is now live, I appreciate that some of you may prefer the live interactive experience! There are still a few spaces left for my training course in Birmingham at the end of this month.



[Papervision3D and Flash games training – sign up and information](#)

I'll also be running a [Flash games workshop in FITC San Francisco](#) in August.

Posted in [Training](#) | [1 Comment »](#)

Papervision3D video tutorials on Lynda.com

July 12, 2010 by sebstar55

Papervision3D.org

- » [Official site](#)
- » [Developers Blog](#)
- » [Project home](#)
- » [Mailing list](#)
- » [Mailing list archive](#)
- » [Submit Site](#)
- » [Submit News & Tutorials](#)
- » [Submit Job Offer](#)
- » [PapervisionShowcase.com](#)
- » [Daily Showcase](#)
- » [Documentation](#)
- » [Forum](#)

Development



High-End Interactive 3D
for the Web and mobile

Downloads

- » [Subversion](#)
([subversion client](#) required)
- » [ZIP or SWC](#)

設計模式

O'Reilly PureMVC Book



PureMVC TV

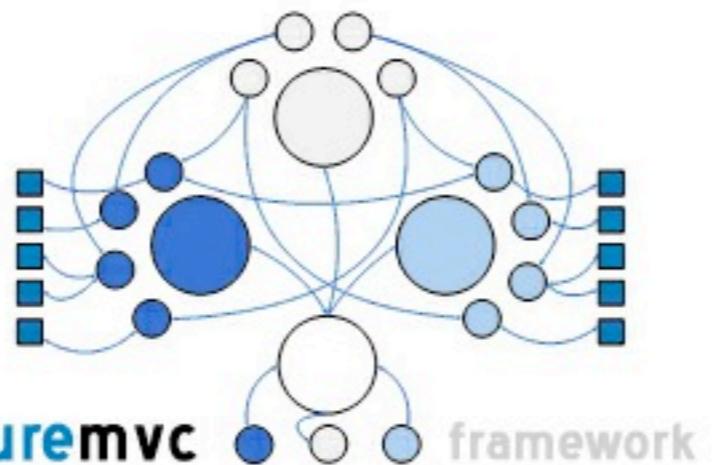


PureMVC on the Web



About

SATURDAY, 19 APRIL 2008



Beyond that, the **MultiCore Version** allows multiple PureMVC applications to run within the same virtual machine; modular programming.

Though the two versions are very similar they are maintained separately, because for applications that don't need modular functionality (or on development platforms that lack support for it), the Standard Version is adequate.

Standard Version

The Model, View and Controller application tiers are represented by three Singletons (a class where only one instance may be created).

The MVC Singletons maintain named caches of Proxies, Mediators and Commands, respectively. The Façade, also a Singleton, provides a single interface for communications throughout the application. These four Singletons are referred to as the Core Actors.

- Data objects, be they local or remote, are managed by Proxies.
- The View Components that make up the User Interface are managed by Mediators.
- Commands may interact with Proxies, Mediators, as well as trigger or execute other Commands.

All actors discover and communicate with each other via the Façade, rather than work directly with Model, View and Controller.

PureMVC is a lightweight framework for creating applications based upon the classic [Model, View and Controller](#) concept.

Based upon proven design patterns, this free, open source framework which was originally implemented in the ActionScript 3 language for use with Adobe Flex, Flash and AIR, is now being ported to all major development platforms.

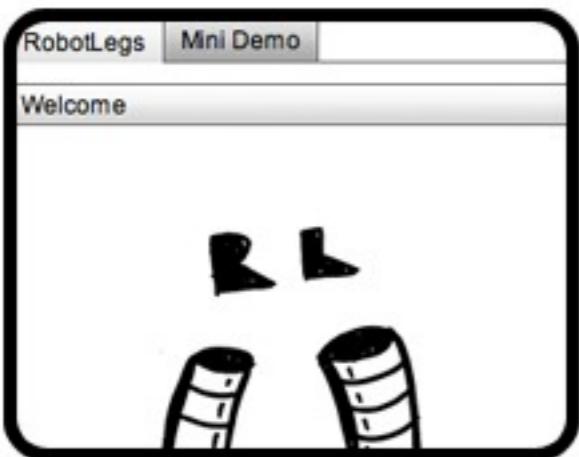
Two versions of the framework are supported with reference implementations; Standard and MultiCore.

In short, the **Standard Version** provides a simple methodology for separating your coding interests according to the **MVC** concept.



[robotlegs]

These examples are part of the **Robotlegs Demo Bundle** which can be downloaded from [Github](#).



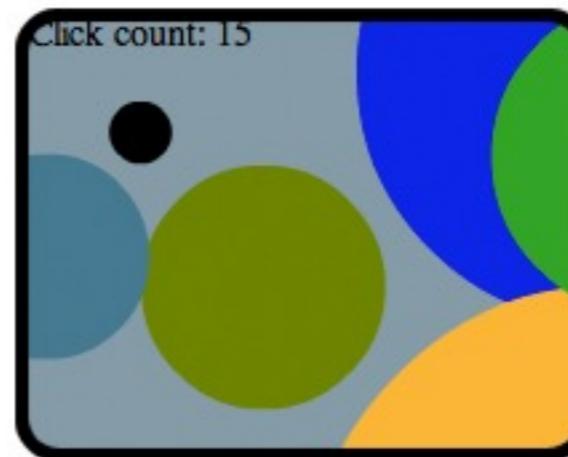
Hello Flex

This example demonstrates a minimal Flex application.

Concepts Covered:

- Core Framework

Platform: Flex 3



Hello Flash

This example demonstrates a minimal Flash/AS3 application.

Concepts Covered:

- CoreFramework

Platform: Flash/AS3



Lazy Stack

This example demonstrates deferred instantiation in a Flex application.

Concepts Covered:

- Core Framework
- Deferred instantiation

Platform: Flex 3



Flickr Image Gallery



Widget Factory



Google Maps


[特徴と機能](#) [ダウンロード](#) [ドキュメント](#) [ショーケース](#) [Wiki & SVN](#) [サービス](#) [サポート](#)

作りたいものは、楽しいところだけ作る。

美しい Web サイトを作りたいのに、システム開発にばかり手間を取られていませんか？

[Progression 3 ダウンロード](#)

version 3.1.62 Package

[リリースノート](#)

[他のダウンロード](#)



Progression 開発者アカウント



フラムル
FLAML
/* SWF → HTML 変換サービス */

Flash サイトを
HTML5 に変換！

[詳しくはココをクリック!!](#)



有償ライセンスサービススタート

特徴と機能

[もっと読む](#)

新機能

Progression 4 に搭載されている数々の新機能をご紹介します。

同梱ライブラリ

Progression 4 に同梱されているライブラリをご紹介します。

システム要件

Progression 4 で開発、または閲覧する際に必要となるマシン環境など。

ショーケース

[もっと読む](#)

vima

LOOKBOOK
UPDATES
CONTACT

© 2011 vima inc.
All rights reserved.

お知らせ

[もっと読む](#)

2011/05/27

[制作事例] vima

2011/05/23

[制作事例] わいすみ！

2011/05/18

[制作事例] マイフォトキャンバス

2011/05/13

[制作事例] Hacienda del cielo -



Gallery



Toshiba Tablet



Mercedes-Benz AMG



Keith Urban



Midtown Miami

Download Gaia

Version 3.2.6 - Release Date 04.12.2011

Gaia 3.2.6 switches to using Greensock's swc, Pages class now uses ids not titles, you can now exit a project without saving, cleans up the AS3 code via FDT, fixes a bug where site-wide ApplicationDomain wasn't working, Demonster Debugger native support has been removed, and Gaia is now under MIT License. 3.2.6 also fixes the errors thrown about DemonsterDebugger, and with GaiaSWFAddress.as



What is the Gaia Framework for Adobe Flash?

Speed Up Your Workflow

Gaia is an open-source front-end Flash Framework for AS3 and AS2 designed to dramatically reduce development time.

With Gaia's revolutionary scaffolding engine, you can build a fully functional Flash site in less than 10 minutes without writing a single line of Actionscript!

Code Less, Do More

Gaia is packed with features and provides a simple way to do all the things you do on every Flash site including:

- Navigation
- Transitions
- Preloading

Learn Gaia

English

Deutsch

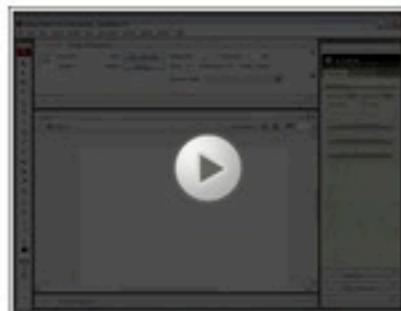
Español

Italiano

Português

日本語

Watch the Demo



Steven Sacks, author of Gaia, provides an in-depth introduction to the Gaia Framework.

Who's Online

13 Guests, 0 Users

Recent Posts

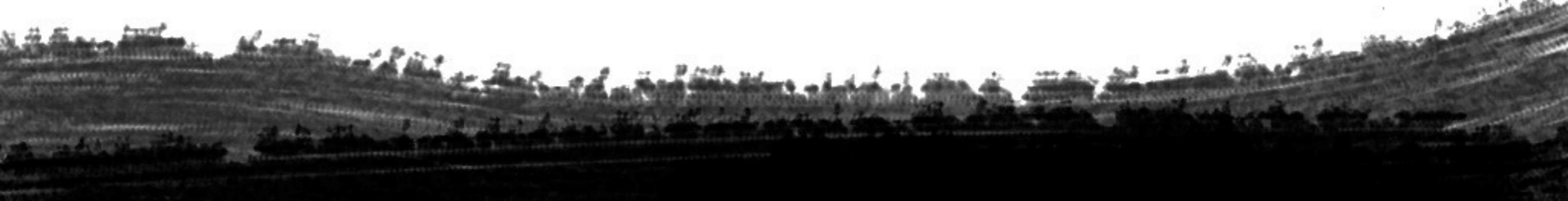
New version (for steven ...

by rschalch [May 26, 2012, 07:39:29 AM]

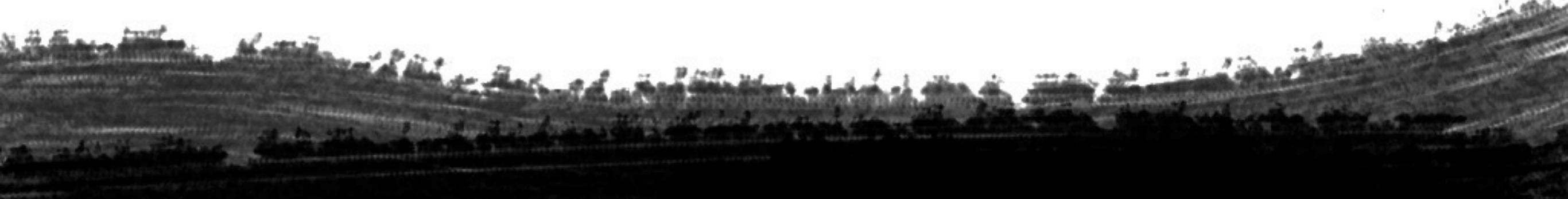


三、生態圈，
台灣

訓練

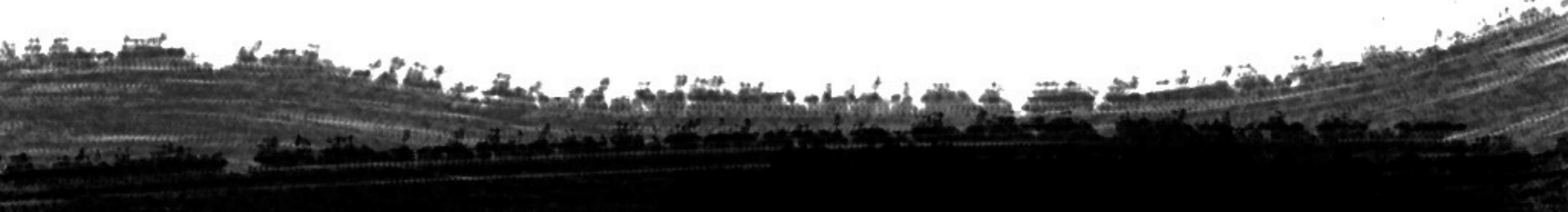


速成

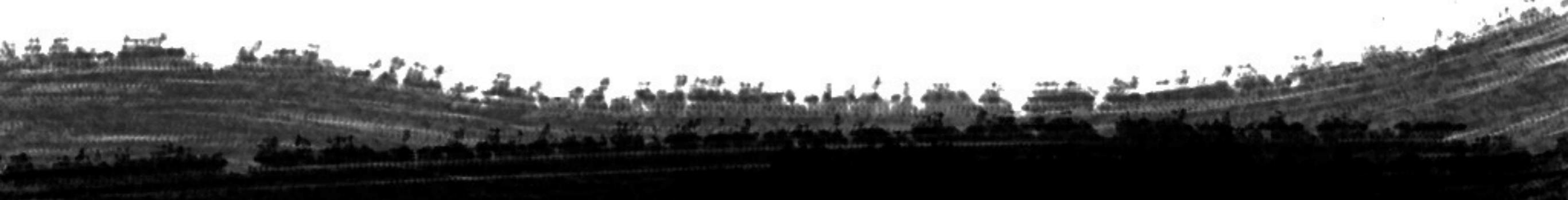


責任歸屬

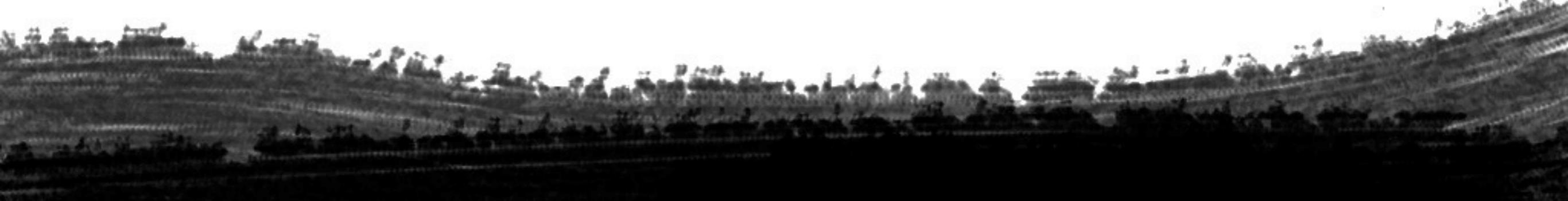
互相推諉



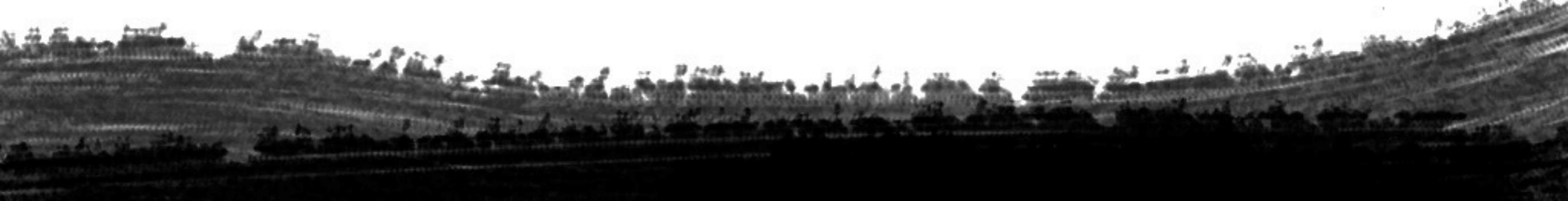
共通語言



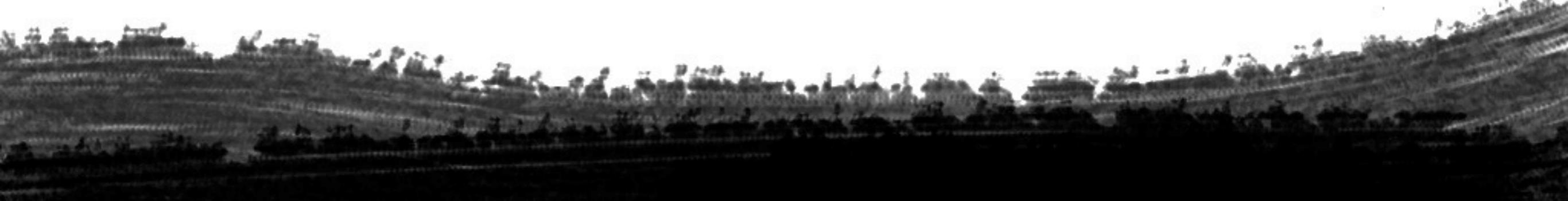
開發環境



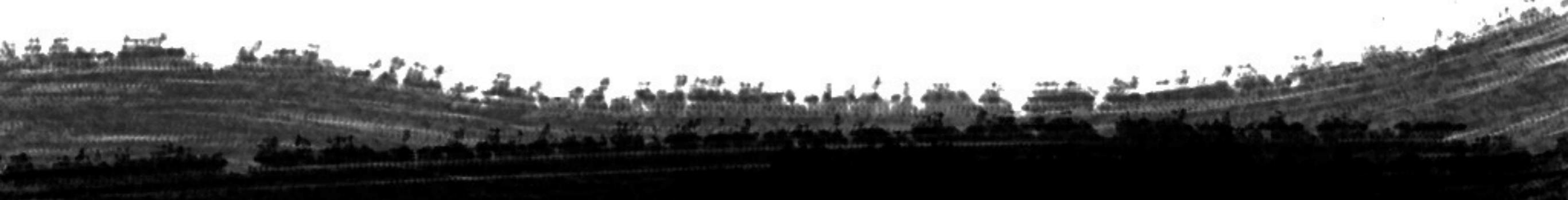
同業



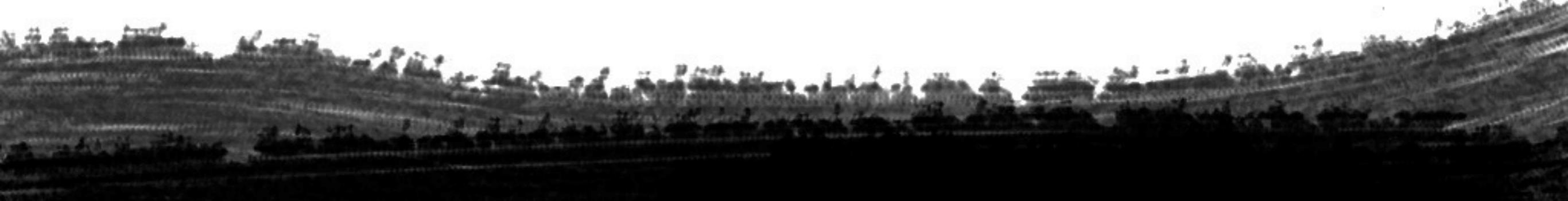
社群



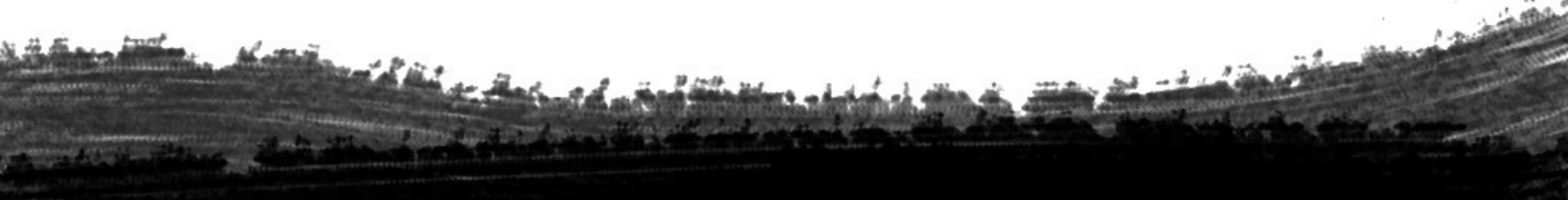
活力不再



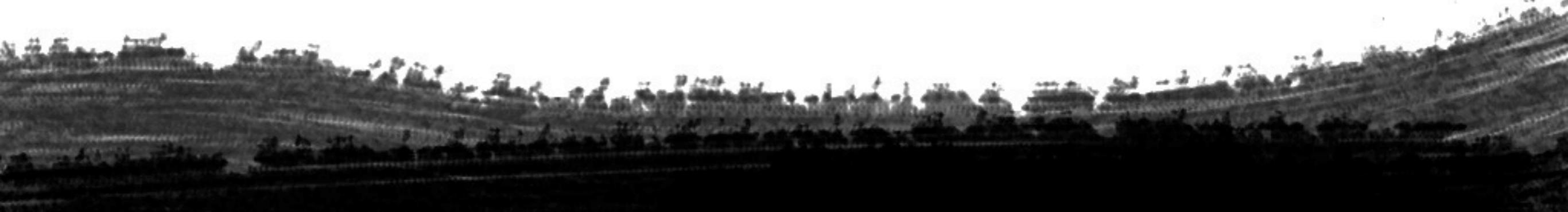
商業



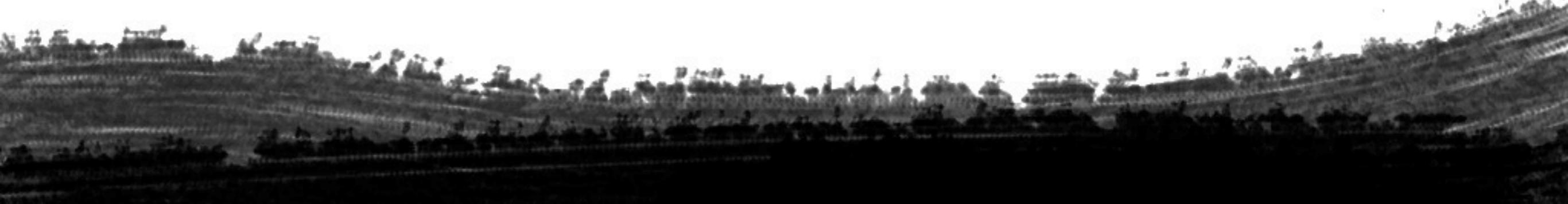
在商言商



不
滿



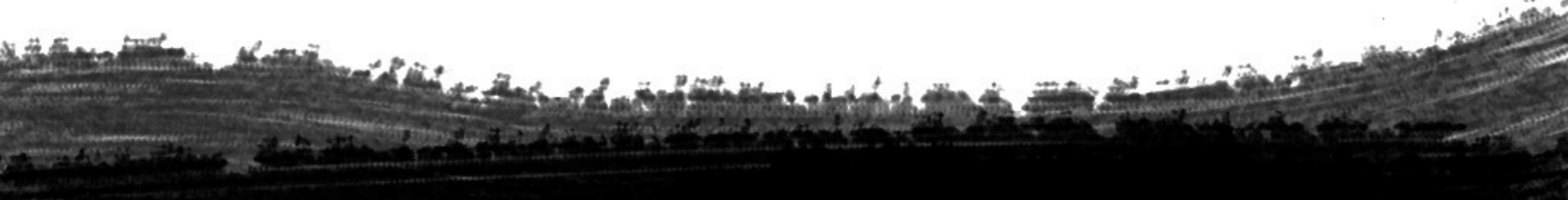
同樂會



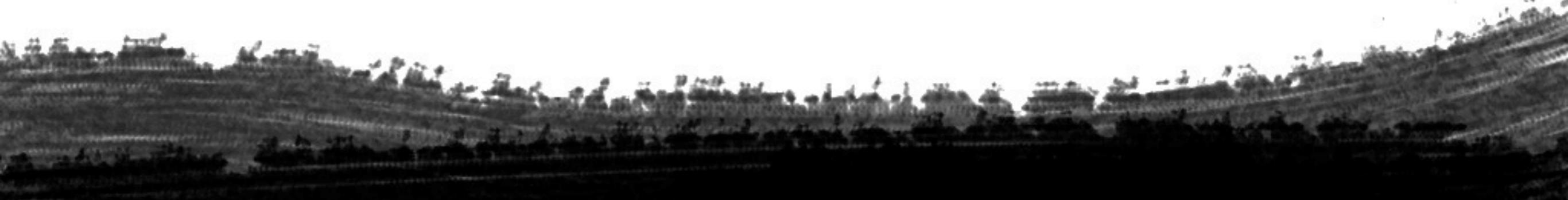




牛刀小試



自立自強



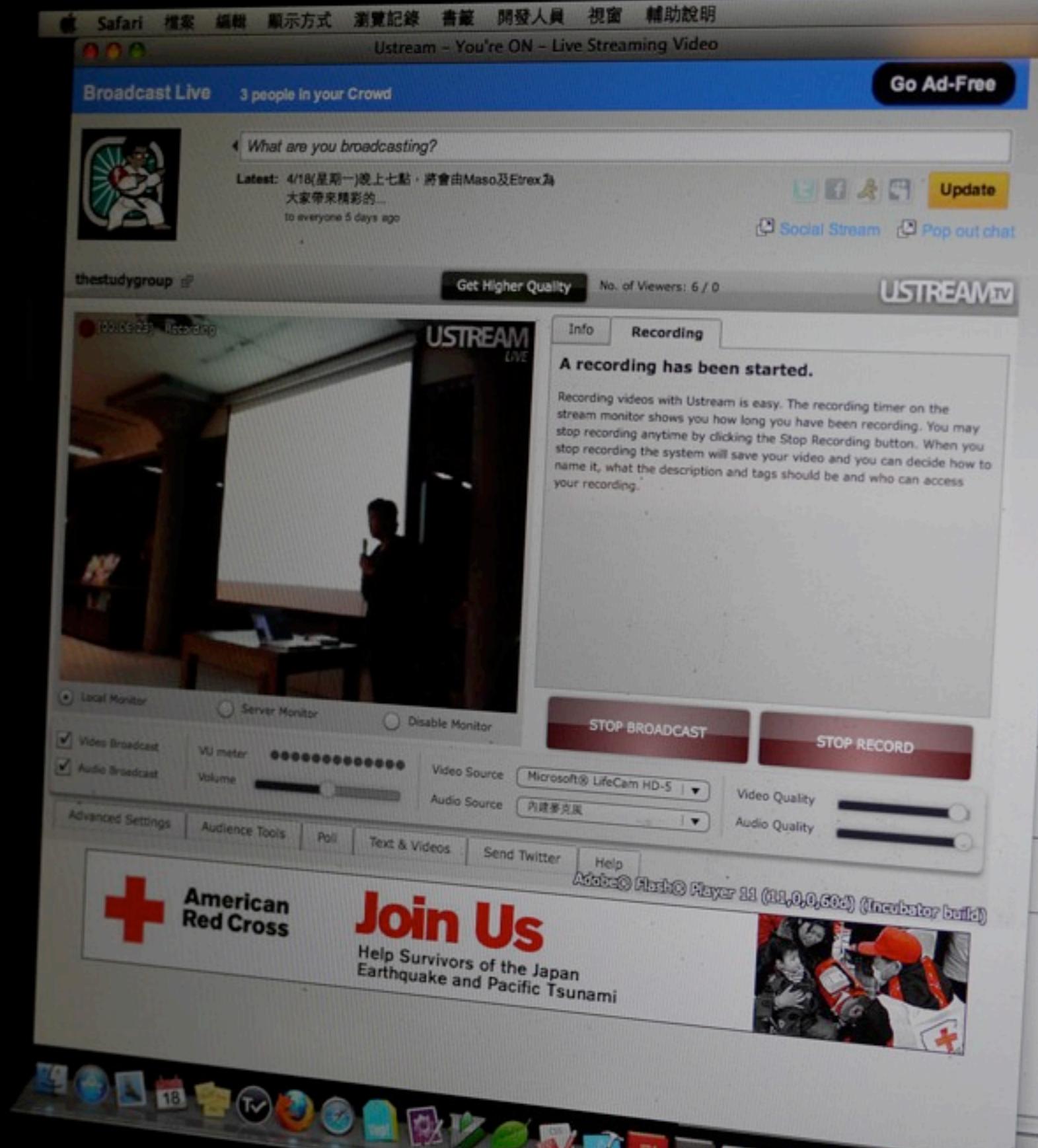
精武強身

人人有怪打

第2次AS面面書 2011/3/9		
1 張翰	19	林依姍
2 孟令秋	20	陳子伯
3 楊翠蓮	21	李鴻輝
4 鄭昭良	22	吳汝貽
5 江喬芸	23	宋芝楓
6 蕭山	24	李紀銘
7 邱志強	25	翁小美
8 林亮融	26	郭靜博
9 張智誠	27	羅黑權
10 林亮融	28	潘雲志
11 吳東書	29	張庭不容
12 王杰霖	30	黃文毅
13 何漢修	31	Walterfat
14 何錦銘	32	何漢修
15 羅菊欽	33	羅菊欽
16 劉首元	34	劉首元
17 楊曉	35	楊曉
18 ETA	36	ETA
19 陳耀吉	37	林有為
20 周宇卿	38	周宇卿
21 朴平輝	39	朴平輝
22 陳曉紅	40	陳曉紅
23 李鴻輝	41	郭有富
24 吳汝貽	42	吳汝貽
25 宋芝楓	43	宋芝楓
26 李紀銘	44	李紀銘
27 翁小美	45	翁小美
28 郭靜博	46	王少東
29 羅黑權	47	羅黑權
30 潘雲志	48	潘雲志
31 張庭不容	49	張庭不容
32 黃文毅	50	MAXINE
33 WALTERFAT	51	WALTERFAT
34 何漢修	52	何漢修
35 羅菊欽	53	COFEEL
36 劉首元	54	劉首元
37 楊曉	55	楊曉
38 ETA	56	ETA
39 陳耀吉	57	林有為
40 周宇卿	58	周宇卿
41 朴平輝	59	朴平輝
42 陳曉紅	60	陳曉紅

第2次AS面面書 2011/3/9		
61 李鴻輝	61	李鴻輝
62 亂動	62	章尊詒
63 吳健葉	63	鄭世
64 吳志霖	64	李志佑
65 雷志偉	65	麥振仁
66 麥國鳳	66	劉志偉
67 陳志勝	67	陳俊軒
68 楊凌花	68	胡志暉
69 吳文亮	69	張詒吉
70 何祐平	70	黃綸
71 朱偉峰	71	黃樹甲
72 重金樹	72	Boria
73 魏伊璇	73	鄭國玉
74 行一	74	張志華
75 陳革屏	75	陳革屏
76 吳育輝	76	王嘉慶
77 魏國正	77	楊師全
78 詹年紀	78	詹年紀
79 楊尚南	79	陳思誠
80 林郭維	80	王建元
81 2011-3-9	81	陳志華
82 章尊詒	82	莫志偉
83 鄭世	83	Moto
84 李志佑	84	Ticora
85 麥振仁	85	Dano
86 劉志偉	86	戴志達
87 陳俊軒	87	阿著
88 胡志暉	88	Oster
89 張詒吉	89	359
90 黃綸	90	張詒吉
91 黃樹甲	91	111
92 Boria	92	112
93 鄭國玉	93	113
94 張志華	94	114
95 陳革屏	95	115
96 王嘉慶	96	116
97 楊師全	97	117
98 詹年紀	98	118
99 陳思誠	99	119
100 王建元	100	120





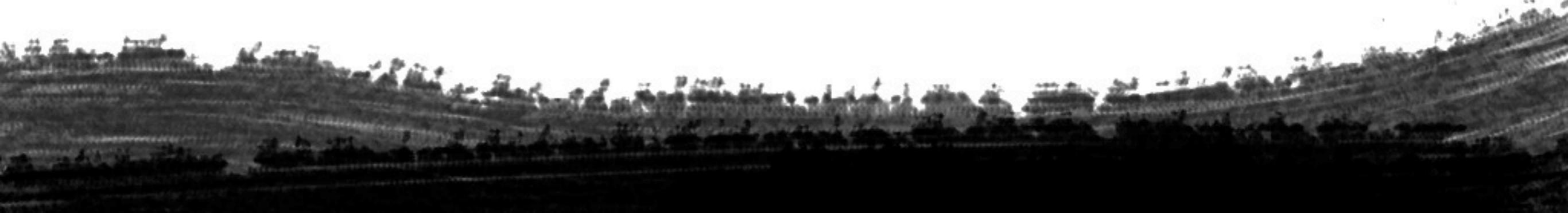
關於 PureMVC Command 的 那點事

Eru Lin
<http://labo.kneebone.com>

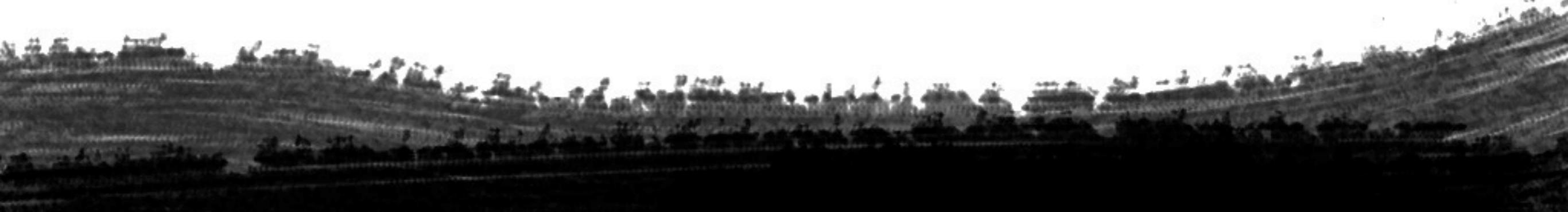


第六回 + 4th PTT Flash版聚?

樂在其中



四、經驗值



經驗值

自學

經驗值

挫
折

Advancce
進階操作
2AU023

AWS

雲端企業實戰

隱藏的智慧
17個成功事

EXCEL
表格分析

26

Perl 程式訊
Programming Perl

第二版

Macromedia

Flash 2

網百

網頁閃電

Macromedia

經驗值

熱
血

經驗值

座右銘

經驗值

蹲馬步

經驗值

創業

前途、
錢途

經驗值

苦其心志

經驗值

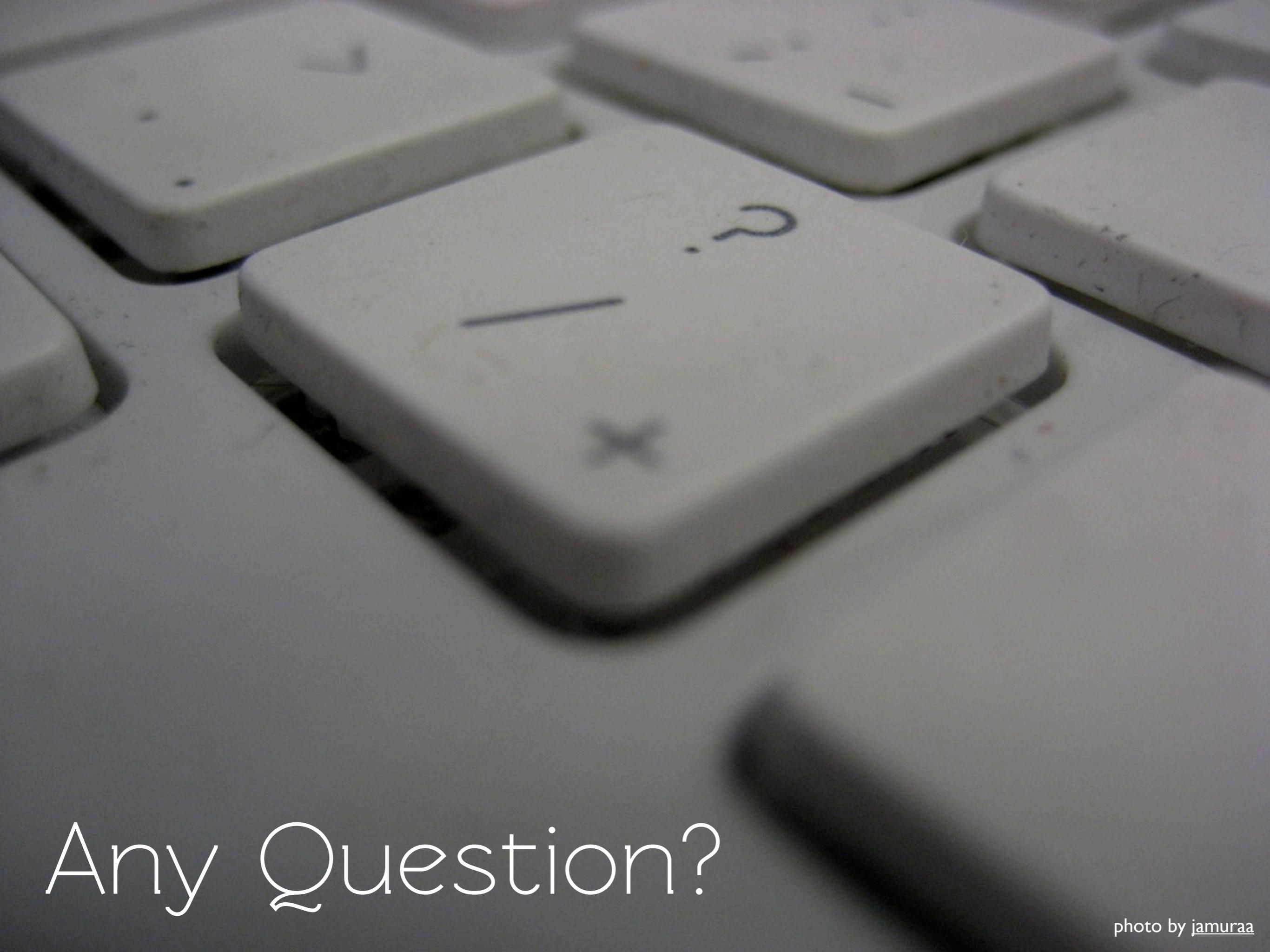
不
歸
路

經驗值

冷暖自知

想像力是你的超能力



A close-up photograph of a light-colored keyboard, likely made of wood or bamboo. The focus is on the key labeled with a question mark (?). The keyboard has a natural, slightly textured appearance. The lighting is soft, highlighting the grain of the material.

Any Question?

Contacts

高見龍

- Website <http://www.eddie.com.tw>
- Blog <http://blog.eddie.com.tw>
- Plurk <http://www.plurk.com/aquarianboy>
- Facebook <http://www.facebook.com/eddiekao>
- Google Plus [http://www.eddie.com.tw/+](http://www.eddie.com.tw/)
- Twitter <https://twitter.com/#!/eddiekao>
- Email eddie@digik.com.tw
- Mobile +886-928-617-687

高見龍數位網路有限公司
Digital Network Ltd.
電話: 02-2629-7639 網址: www.digik.com.tw
傳真: 02-2629-7639 電子郵件: eddie@digik.com.tw

photo by Eddie