HAXE develop

LET HAXEDEVELOP
DO MORE FOR YOU

WHO AM I AND WTF IS THIS ABOUT?

Héctor Espeso.
Currently working as senior developer in Luxembourg.

https://github.com/Neverbirth/flashdevelop

Didn't you read? This is about HaxeDevelop!

TRYING TO IMPROVE WHAT IS THERE

During the day Philippe kicks his team to write more unit tests, and at night he contemplates FlashDevelop's 0% coverage. After 10 years building throw-away marketing websites he moved to Haxe and good engineering, and he doesn't want to come back.

TEST NAME	FILE NAME	DURATION
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.VariableType	ASCompletion.Tests.dll	78 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.GenericTypeParameterInClass	ASCompletion.Tests.dll	0 ms
ASCompletion.Completion.ASGeneratorTests+GetBodyStart.BracketsInGenericConstraint	ASCompletion.Tests.dll	30 ms
ASCompletion.Completion.ASGeneratorTests+GetBodyStart.MultiByteCharacters	ASCompletion.Tests.dll	31 ms
ASCompletion.Model.ASFileParserTests+Haxe.ParseFile_FunctionTypesWithSubTypes	ASCompletion.Tests.dll	3 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.GenericTypeParameterConstrair	ASCompletion.Tests.dll	0 ms
ASCompletion.Model.ASFileParserTests+As3.ParseFile_SimpleClass	ASCompletion.Tests.dll	2 ms
ASCompletion.Model.ASFileParserTests+Haxe.ParseFile_MetadataClass	ASCompletion.Tests.dll	8 ms
ASCompletion.Completion.ASGeneratorTests+GetBodyStart.EndOnSameDeclarationLine	ASCompletion.Tests.dll	40 ms
ASCompletion.Model.ASFileParserTests+As3.ParseFile_CompletionError	ASCompletion.Tests.dll	3 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.HaxeAnonymousStructureOptic	ASCompletion.Tests.dll	30 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.HaxeFunctionOptionalArgumen	ASCompletion.Tests.dll	30 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.ObjectProperty	ASCompletion.Tests.dll	82 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.HaxeTernaryOperatorTruePart	ASCompletion.Tests.dll	30 ms
ASCompletion.Model.ASFileParserTests+Haxe.ParseFile_Comments	ASCompletion.Tests.dll	2 ms
ASCompletion.Completion.ASGeneratorTests+GetBodyStart.EndOnSameLine	ASCompletion.Tests.dll	31 ms
ASCompletion.Model.ASFileParserTests+As3.ParseFile_OverrideFunction	ASCompletion.Tests.dll	2 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.ObjectParameter	ASCompletion.Tests.dll	167 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.HaxeTernaryOperatorFalsePart	ASCompletion.Tests.dll	32 ms
ASCompletion.Completion.ASCompleteTests+DisambiguateComa.FunctionCallSimple	ASCompletion.Tests.dll	33 ms

NEW FEAT. 1: COMPLETION LIST

Results

0   0   0   Filter:

! | Line | Description

sset.as | IAnimator...

matorBase

away3d.animator

class AnimatorBa

alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e
alternativa.e

The String class is a data type that represents a string of characters. The String class provides methods and properties that let you manipulate primitive string value types. You can convert the value of any object into a String data type object using the String() function.

Because all string indexes are zero-based, the index of the last character for any string x is x.length - 1. ...

TerrainT

ationSt

e:String:

away3d.animators.data.AnimationRegisterCache
away3d.animators.data.AnimationSubGeometry
away3d.animators.data.ColorSegmentPoint
away3d.animators.data.JointPose
away3d.animators.data.ParticleAnimationData
away3d.animators.data.ParticleProperties
away3d.animators.data.ParticlePropertiesMode
away3d.animators.data.Skeleton
away3d.animators.data.SkeletonJoint

```
 94            private function mapServices():void
 95            {
 96                injector.map(StageResizeService).asSingleton(tru
 97                injector.map(ITetrisService).toType(TetrisServic
 98            }
 99
100            private function initialize():void
101            {
102                controlManager.setupEvents(contextView.view.stag
103
104                contextView.view.addChild(tetrisStage);
105                tetrisStage.state = new TitleScreenView();
106            }
107        }
108
109 }
```

Immediate

p t

| TetrisConfig | private var tetrisStage : TetrisStage |
| TetrisModel |
| TetrisService |
| tetrisStage |
| TetrisStage |
| TetrisStageMediator |
| this |
| throw |
| TitleScreenView |
| TitleScreenViewMediator |

Stack

Filter:

LIVE DEMO

NEW FEAT. 2: HELP TIP

```
a = data.copy();
in 0
```

concat
copy
filter
indexOf
insert
iterator
join
lastIndexOf
length
map

public function copy (Void) : Array<com.mediamonks.data.enum

Returns a shallow copy of `this` Array.
The elements are not copied and retain their identity, so
`a == a.copy()` is true for any valid `i`. However,
`a == a.copy()` is always false.

```
trace("empty row at: " + x);
for (y in new ReverseIterator(gridWidth-1, 0))
```

static public const ADDED_TO_STAGE : String = "addedToStage"
in flash.events.Event

The Event.ADDED_TO_STAGE constant defines the value of the type
property of an addedToStage event object.

This event has the following properties:PropertyValuebubblesfalsecancelablefalse; there is no default behavior to cancel.currentTargetThe object that is actively processing the Event
object with an event listener.targetThe DisplayObject instance being added to the on stage display list,
either directly or through the addition of a sub tree in which the DisplayObject instance is contained. ...

package haxe.macro

typedef **TypedExpr**

defined in **haxe.macro.Type**

Available on all platforms

Properties

`t:Type`

`pos:Position`

`expr:TypedExprDef`

static public const ADDED_TO_STAGE : String = "addedToStage"
in flash.events.Event

The Event.ADDED_TO_STAGE constant defines the value of the type property of an addedToStage event object.

This event has the following properties:

Property	Value
bubbles	false
cancelable	false; there is no default behavior to cancel.
currentTarget	The object that is actively processing the Event object with an event listener.
target	The DisplayObject instance being added to the on stage display list, either directly or through the addition of a sub tree in which the DisplayObject instance is contained. If the DisplayObject instance is being directly added, the added event occurs before this event.

public function insert (pos:Int, x:T) : Void

Inserts the element x at the position pos.

This operation modifies this Array in place.

The offset is calculated like so:

- If pos exceeds this.length, the offset is this.length.
- If pos is negative, the offset is calculated from the end of this Array, i.e.
  this.length + pos. If this yields a negative value, the offset is 0.
- Otherwise, the offset is pos.

If the resulting offset does not exceed this.length, all elements from and including that offset to the end of this Array are moved one index ahead.

public class flash.display.Sprite

The Sprite class is a basic display list building block: a display list node that can display graphics and can also contain children.

A Sprite object is similar to a movie clip, but does not have a timeline. Sprite is an appropriate base class for objects that do not require timelines. For example, Sprite would be a logical base class for user interface (UI) components that typically do not use the timeline.

The Sprite class is new in ActionScript 3.0. It provides an alternative to the functionality of the MovieClip class, which retains all the functionality of previous ActionScript releases to provide backward compatibility.
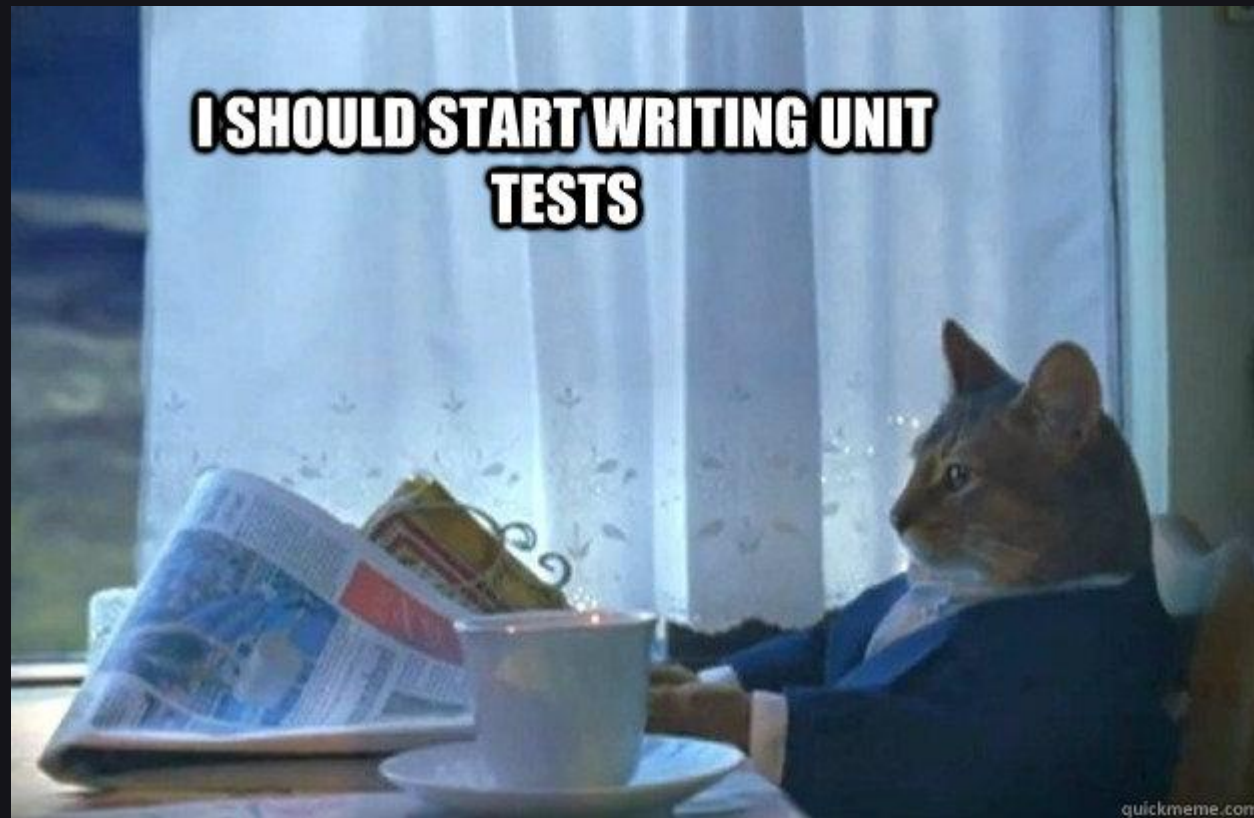
EXAMPLE:

The following example uses the SpriteExample class to draw an orange square on the stage, and then dispatches events whenever the user clicks or drags the square. This task is accomplished by performing the following steps:
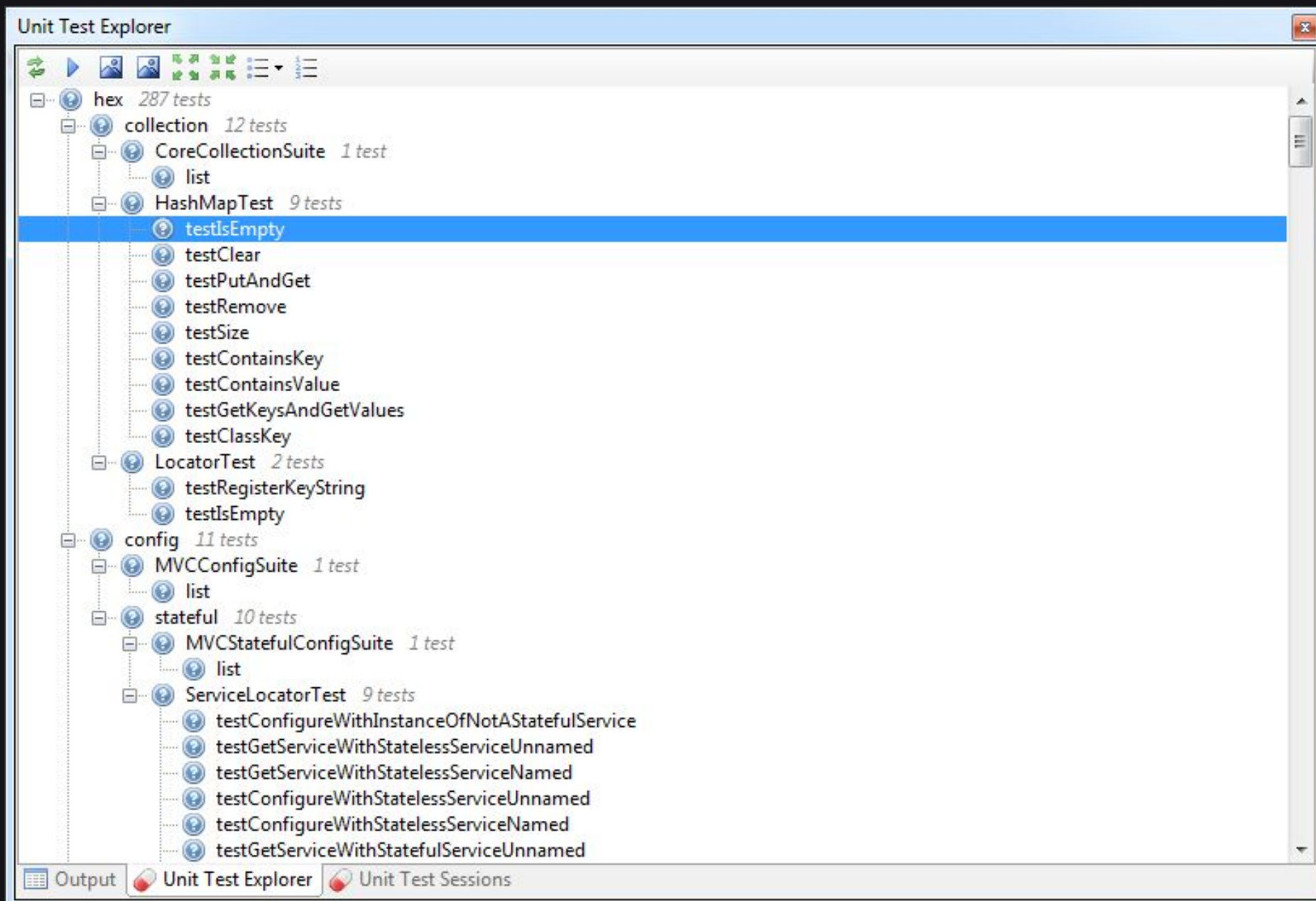
1. Declare the `size` property (100 x 100 pixels) and the background color (orange) for later use in drawing the square.
2. The constructor then creates a new child Sprite object and uses it to add two event listeners and their associated methods: `mouseDownHandler ()` and `mouseUpHandler ()`.
3. The `child` Sprite object is then passed to the `draw ()` method, which draws the orange square.
4. The child is then placed on the display list by a call to the `addChild ()` method.
5. The event listeners work as follows:
   o `mouseDownHandler ()`: when the user clicks the Sprite object, this method adds a mouseMove event listener, the `mouseMoveHandler ()` method, which processes the mouse moves. Then the `startDrag ()` method is called, which allows the Sprite object to be dragged.
   o `mouseUpHandler ()`: when the mouse button is released, the mouseMove event listener is removed and the `stopDrag ()` method is called, which freezes the orange square in place.
   o `mouseMoveHandler`: as long as the left mouse button is being held down, this method instructs the player to continuously redraw the orange square.

Note: Each of the event listener methods declares a local `sprite` variable, which is assigned the `target` property of the event.

```
package {
    import flash.display.Sprite;
    import flash.events.*;
```

NEW FEAT. 3: UNIT TESTING

Unit Test Explorer

- **hex** *287 tests*
  - **collection** *12 tests*
    - **CoreCollectionSuite** *1 test*
      - list
    - **HashMapTest** *9 tests*
      - **testIsEmpty**
      - testClear
      - testPutAndGet
      - testRemove
      - testSize
      - testContainsKey
      - testContainsValue
      - testGetKeysAndGetValues
      - testClassKey
    - **LocatorTest** *2 tests*
      - testRegisterKeyString
      - testIsEmpty
  - **config** *11 tests*
    - **MVCConfigSuite** *1 test*
      - list
    - **stateful** *10 tests*
      - **MVCStatefulConfigSuite** *1 test*
        - list
      - **ServiceLocatorTest** *9 tests*
        - testConfigureWithInstanceOfNotAStatefulService
        - testGetServiceWithStatelessServiceUnnamed
        - testGetServiceWithStatelessServiceNamed
        - testConfigureWithStatelessServiceUnnamed
        - testConfigureWithStatelessServiceNamed
        - testGetServiceWithStatefulServiceUnnamed

Output | Unit Test Explorer | Unit Test Sessions

245   243   1   1   0

hex *244 tests*	Failed	263ms
config *9 tests*	Success	4ms
control *56 tests*	Failed	131ms
async *11 tests*	Success	4ms
command *8 tests*	Success	9ms
guard *2 tests*	Success	1ms
FrontControllerTest *3 tests*	Success	1ms
macro *22 tests*	Failed	113ms
MacroExecutorTest *10 tests*	Success	109ms
MacroTest *12 tests*	Failed	4ms
testIsAtomic	Success	0ms
testParallelAndSequenceModes	Success	0ms
testPreExecute	Success	1ms
testAddCommand	Success	0ms
testAddMapping	Success	0ms
testAddMapping2	Failed	0ms
testExecuteEmptyMacro	Success	1ms
testExecuteTriggersHandleComplet	Success	1ms
testWithGuardsApproved	Success	0ms
testWithGuardsRefused	Success	0ms
testParallelMode	Success	1ms
testSequenceMode	Success	0ms
payload *10 tests*	Success	3ms
event *46 tests*	Success	13ms
module *1 test*	Success	0ms
service *36 tests*	Success	2ms
viewhelper *4 tests*	Success	2ms
collection *11 tests*	Success	4ms
core *3 tests*	Success	2ms
domain *3 tests*	Success	0ms
inject *75 tests*	Success	105ms
<Default Package> *1 test*	Ignored	0ms

NEW FEAT. 4: BUILD PIPELINE

ExMachina (Haxe) Properties

Output | SDK | Classpaths | **Build** | Compiler Options

Pre-Build Command Line
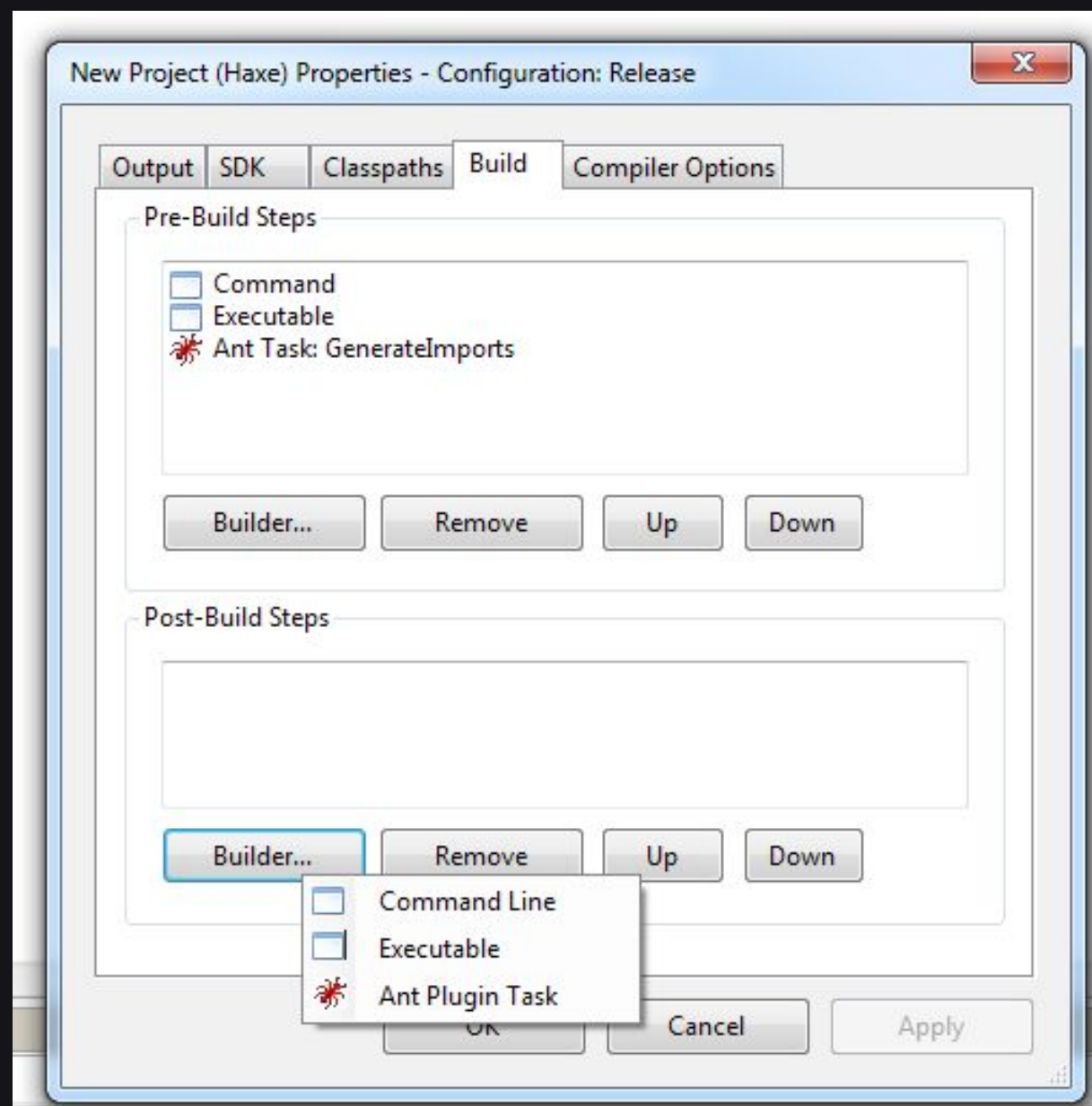
Builder...

Post-Build Command Line
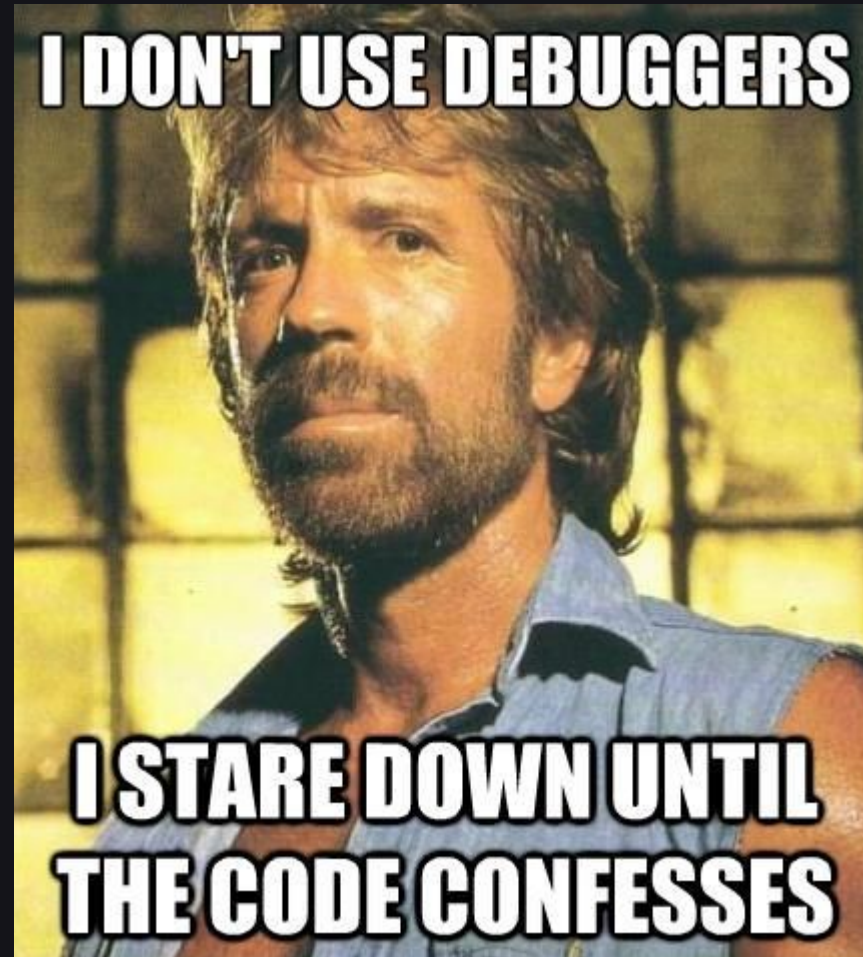
☐ Always execute   Builder...

OK   Cancel   Apply
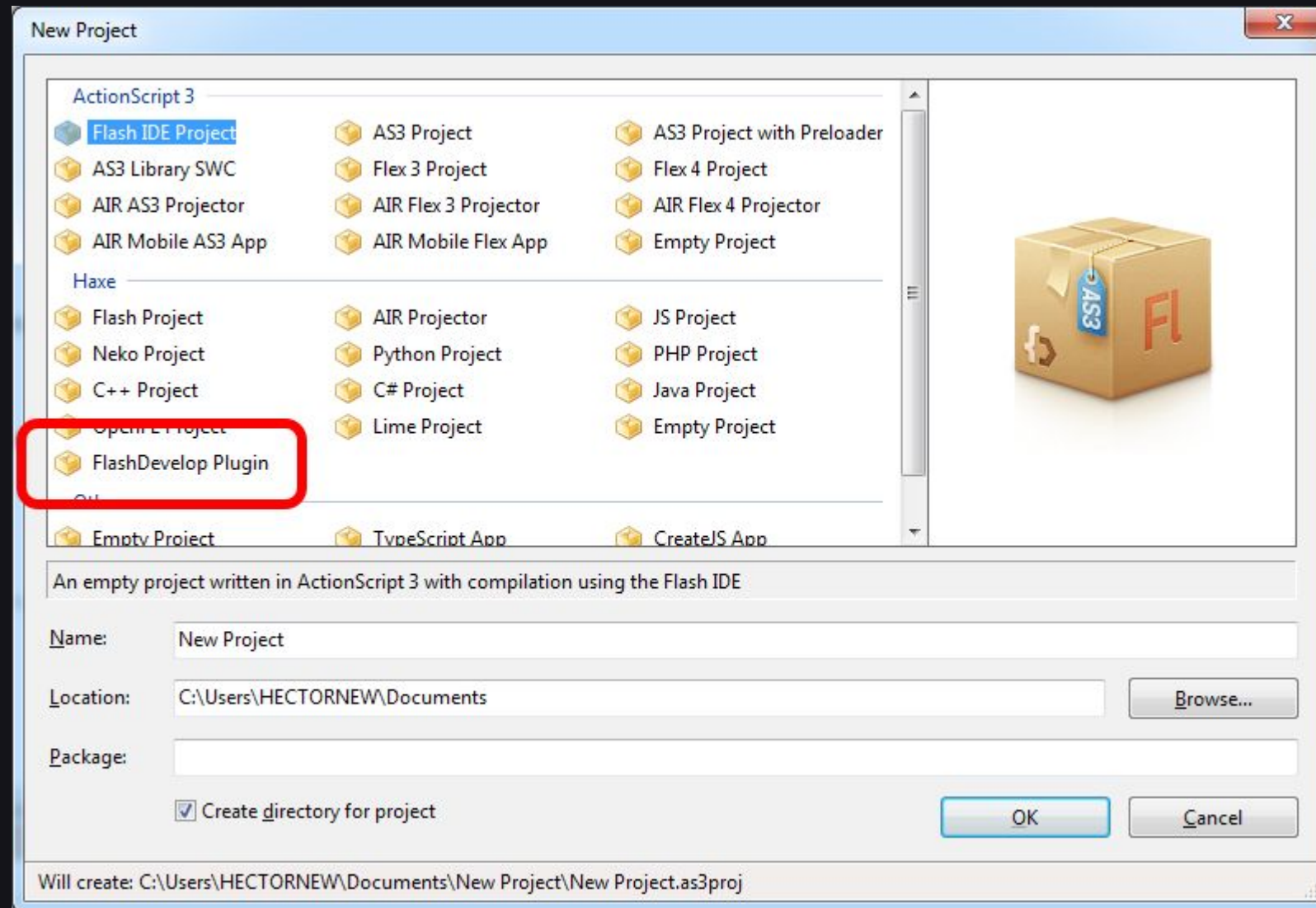
NEW FEAT. 4: DEBUGGER ABSTRACTION

HXJS !

LIVE DEMO

Current known problems

- Still some Haxe generation flaws.
- Only Chrome planned (work-arounds).
- No work threads support planned (but can be done).
- No developer console (minor solution planned).
- Some old debugger parts not 100 % abstracted yet (eg.: Live Data Tip)
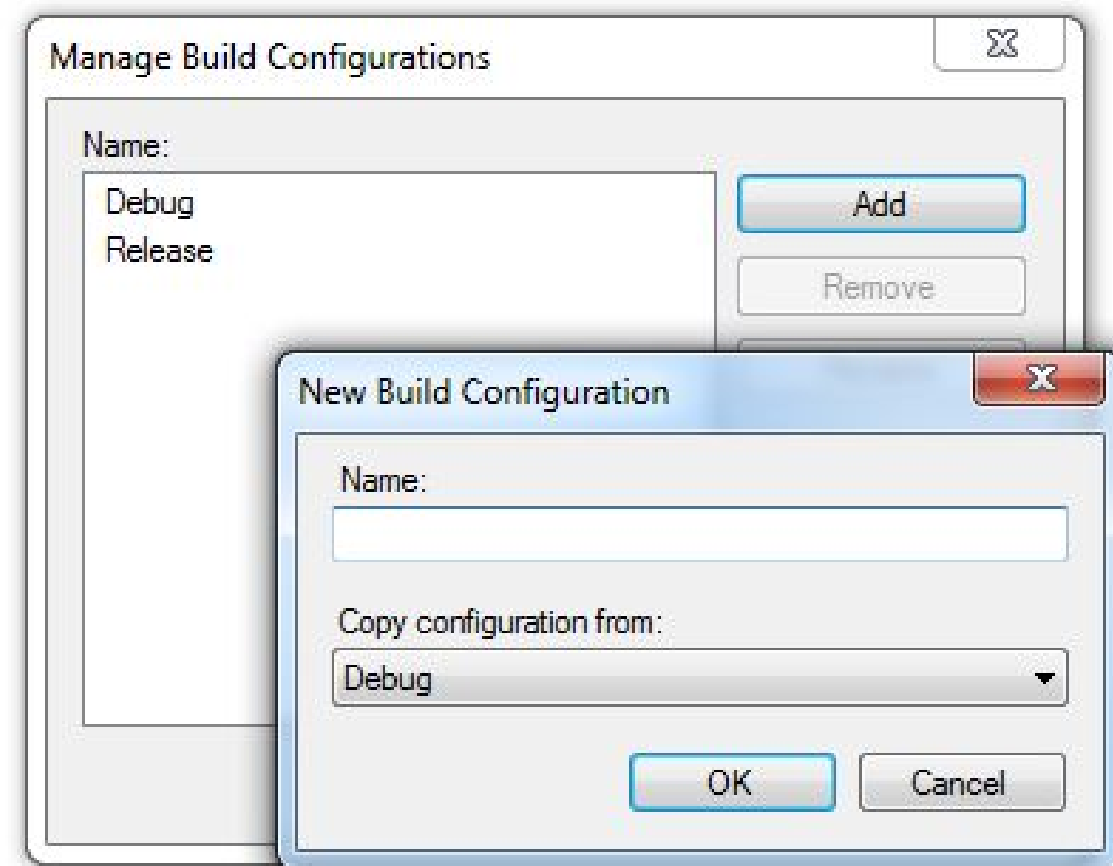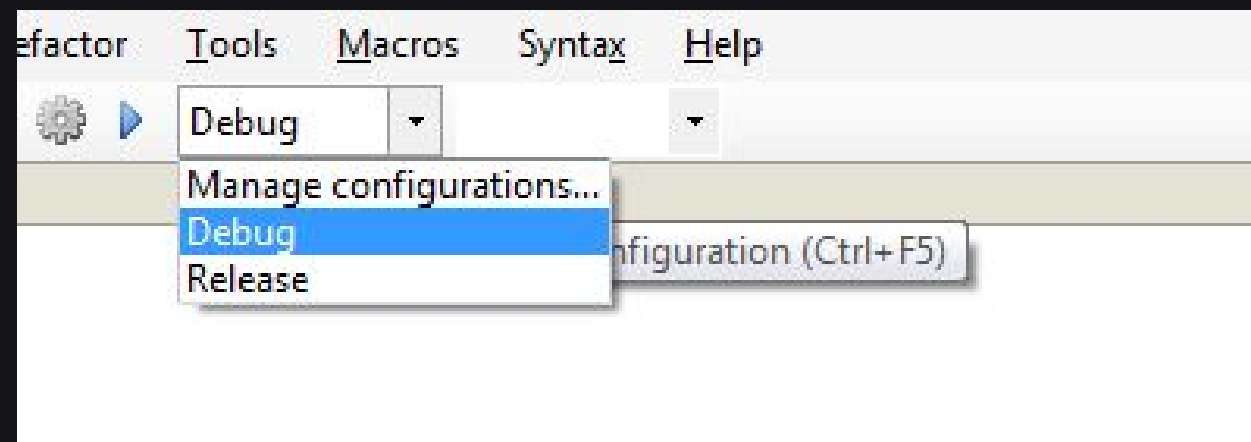
HXCS

Preliminar state

HXCPP

Not yet. Sorry! :'(

But I'm committed to working on it!

NEW FEAT. 5: BUILD CONFIGURATIONS

EXPERIMENTAL!!

<> Code   ⊘ Issues 303   ⑂ Pull requests 7   ▤ Wiki   ⟋ Pulse   ⅠⅰⅠ Graphs

Filters ▾   🔍 is:pr is:open   Labels   Milestones   **New pull request**

☐ ⑂ **7 Open**   ✓ 537 Closed   Author ▾   Labels ▾   Milestones ▾   Assignee ▾   Sort ▾

☐ ⑂ **Fixes generate static variable and static function**   💬 2
      #1239 opened 4 days ago by SlavaRa

☐ ⑂ **Modifying a bit weighting of completion list SmartMatch**   💬 0
      #1173 opened on 10 Apr by elsassph

☐ ⑂ **ASCompletion.Tests: clean up some redundanices**   💬 12
      #1055 opened on 29 Jan by Gama11

☐ ⑂ **Decoupled CompletionList and MethodCallTip from Scintilla.**   ▨   💬 18
      #1026 opened on 11 Jan by Neverbirth

☐ ⑂ **Modifier order**   💬 27
      #997 opened on 12 Dec 2015 by wise0704

☐ ⑂ **Inline renaming support**   💬 20
      #952 opened on 11 Nov 2015 by wise0704

☐ ⑂ **Improved AddClosingBraces feature**   💬 42
      #947 opened on 28 Oct 2015 by wise0704

```haxe
461
462     /**
463      * Helper function that tweens this sound's volume.
464      *
465      * @param    Duration     The amount of time the fade-in operation should take.
466      * @param    From         The volume to tween from, 0 by default.
467      * @param    To           The volume to tween to, 1 by default.
468      */
469     public inline function fadeIn(Duration:Float = 1, From:Float = 0, To:Float = 1, ?onComplete:FlxTween->Void = null):FlxSound
470     {
471         if (!playing)
472             play();
473         FlxTween.num(From, To, Duration, { onComplete:onComplete }, volumeTween);
474         return this;
475     }
```

Results

🛑 0 Errors   ⚠️ 81 Warnings   💬 0 Messages   Filter:

Line	Description	File	Path
FlxSound.hx			
⚠️ 455	characters 96-100 : Warning: Parameter 'onComplete' is marked as optional with '?' and has a default value of 'null', which is redundant	FlxSound.hx	C:\Haxe
⚠️ 469	characters 110-114 : Warning: Parameter 'onComplete' is marked as optional with '?' and has a default value of 'null', which is redundant	FlxSound.hx	C:\Haxe
FlxAnimationController.hx			
⚠️ 632	character 0 : Warning: Parameter 'name' should be marked as optional with '?' instead of using a null default value	FlxAnimationController.hx	C:\Haxe
FlxAtlas.hx			
⚠️ 119	character 0 : Warning: Parameter 'minSize' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
⚠️ 119	character 0 : Warning: Parameter 'maxSize' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
⚠️ 253	character 0 : Warning: Parameter 'firstGrandChildData' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
⚠️ 253	character 0 : Warning: Parameter 'firstGrandChildKey' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
⚠️ 581	character 0 : Warning: Parameter 'tileBorder' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
⚠️ 581	character 0 : Warning: Parameter 'region' should be marked as optional with '?' instead of using a null default value	FlxAtlas.hx	C:\Haxe
FlxNode.hx			

FUTURE

SUPPORT THE PROJECT !

http://www.haxedevelop.org/

http://www.flashdevelop.org/

https://github.com/fdorg/flashdevelop

THANKS

Mika Palmu   Philippe Elsas

Gama11   Slavara

Daniel Jeong   Many others

Will your name appear the next
time?

QUESTIONS

Don't hesitate to contact me for further info or suggestions:
neverbirth@gmail.com

WHAT DO YOU LOOK AT? NOTHING HERE