



First steps with Aida/Web



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```
self add: self documentTitleElement; add: self documentActionsElement.  
bucketElement := self bucketsElement. "detailed info, references..."  
self add: self infoLineElement. "brief info about document"  
self add: bucketElement. "infoLine needs buckets before"
```



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Prepare your image for tutorial!



➤ <http://www.esug.org/conferences/2009>

-> Current list of talks

-> Tutorials -> First steps in Aida/Web

➤ One-clicks for **Squeak** and **Pharo**

➤ Image or parcels for **VisualWorks**

➤ For the laziest: **AidaTutorial-code.zip**

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Steps



- Domain model
- Web representation
- Ajaxifying it
- Tree-like control flow
- Internationalizing it

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Domain model?

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~~Blog~~

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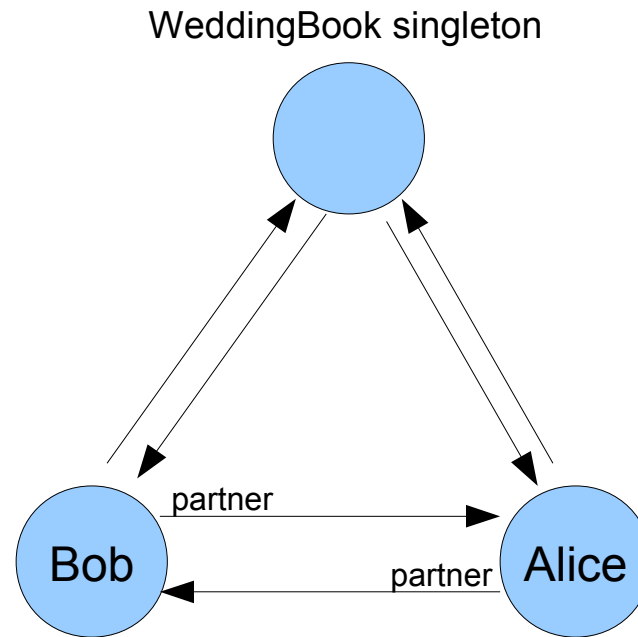
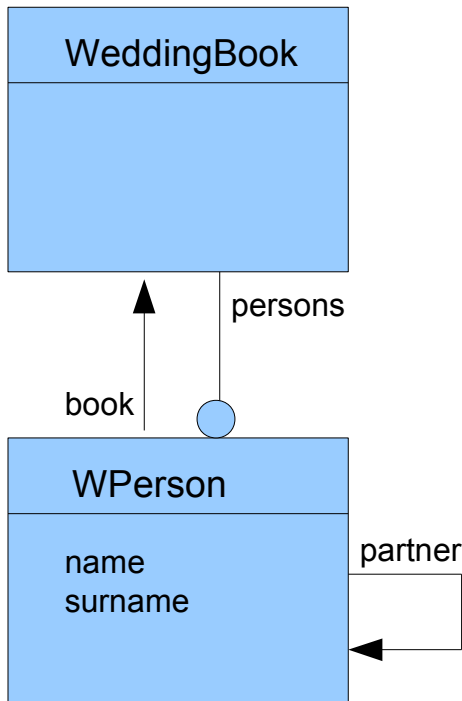


Wedding Book !

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Let we build the model!

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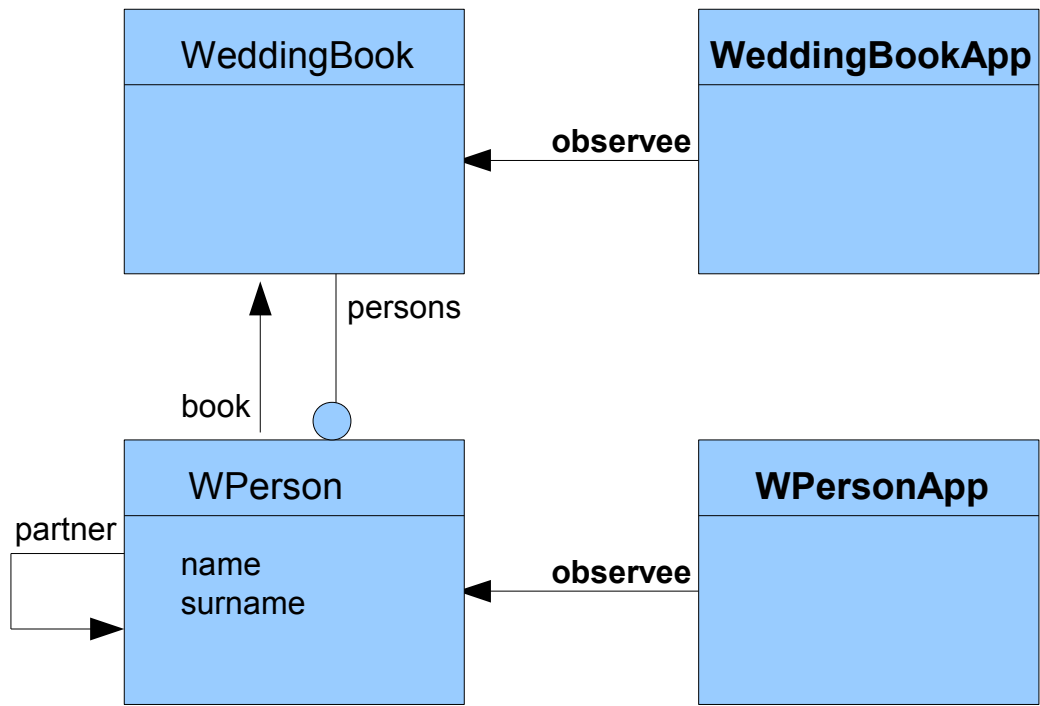
Web presentation



- Presentation classes (Apps)
- convention over configuration
- DomainObject -> DomainObject+**App**

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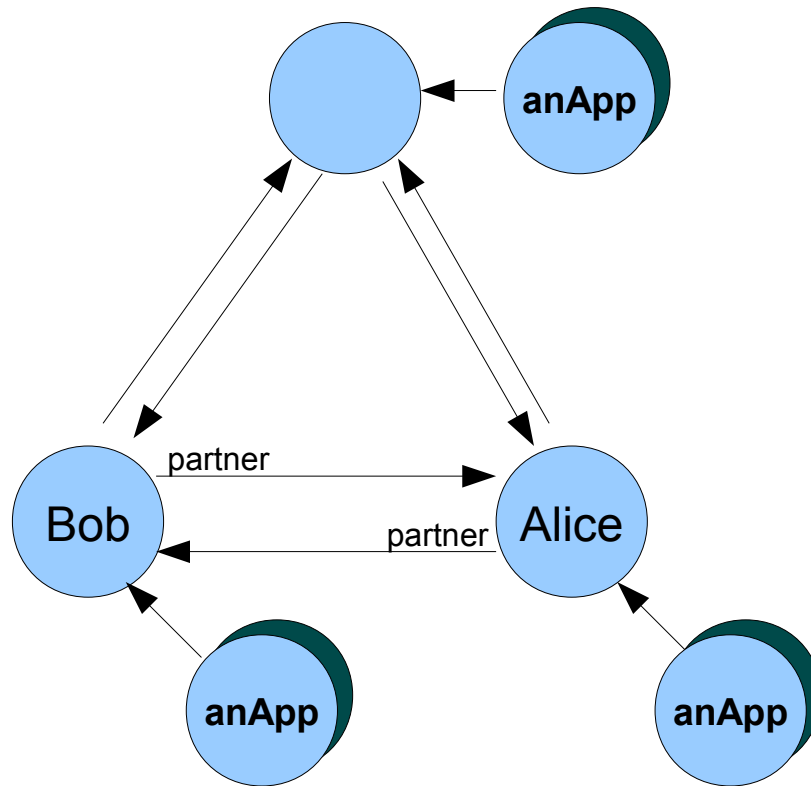




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Let we build the web presentation of the model !

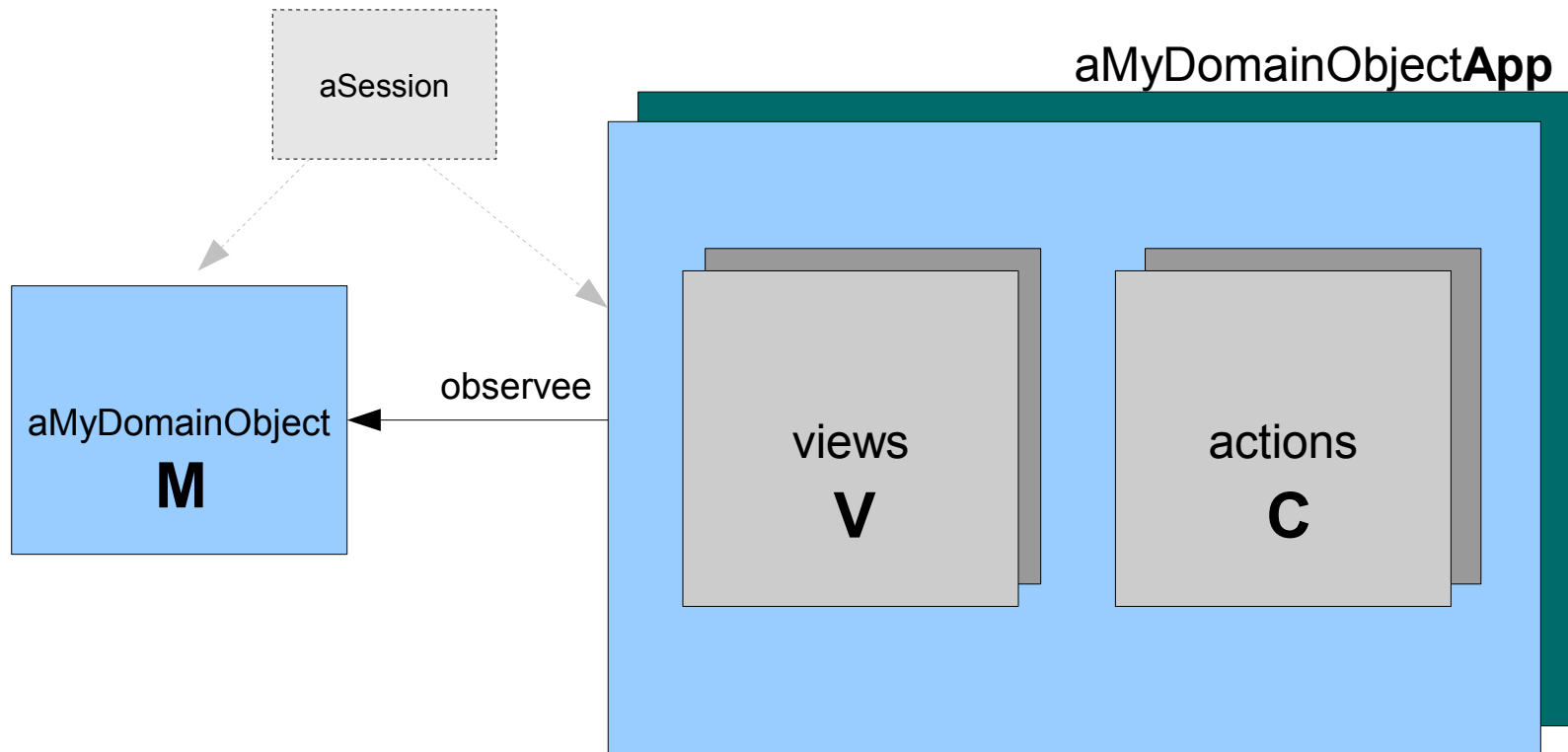
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MVC on the Web



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Let we make our app more live!

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Every object has an URL



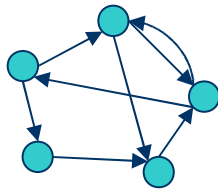
- ▶ Alan Kay: "...I do not know of anybody who is realized that at the very least every object should have an URL"
 - ▶ OOPSLA97 talk: The Computer Revolution hasn't happened yet
- ▶ Aida did this one year before

```
o add: self documentTitleElement; add: self documentActionsElement.  
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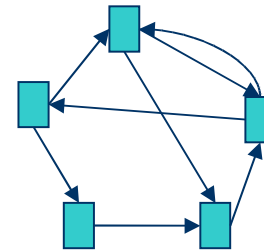
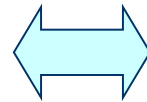




Web of objects, web of pages



Domain model



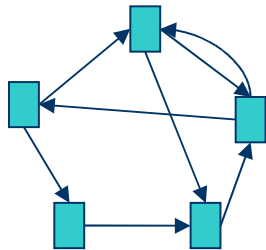
WWW

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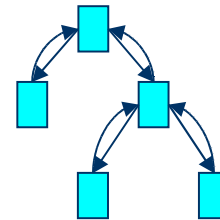




Graph-like vs. Tree-like



Graph-like navigation



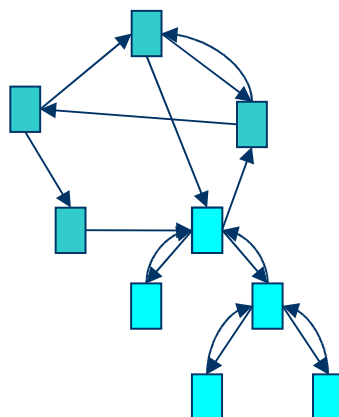
Tree-like navigation

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```





Graph like and Tree-like combined



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```





Tree-like control flow in action



`actionControlFlowDelete`

```
(self ask: (WebDialog newConfirm text: 'Delete?') )  
  ifTrue: [self observee delete]
```

Tree-like control flow examples

Example: Delete with confirmation dialog

Delete

Delete?

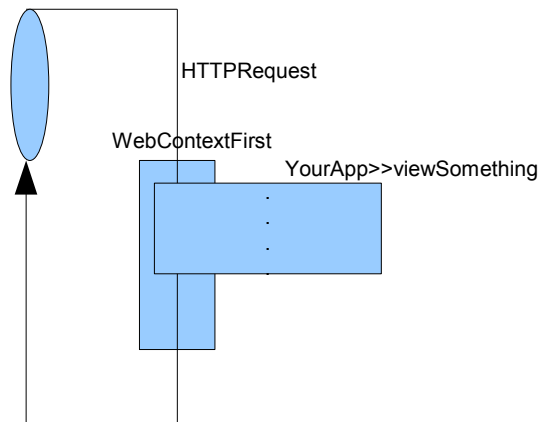




Web contexts – normal page



Swazoo HTTPConnection loop



WebPage (subclass of WebWindow)

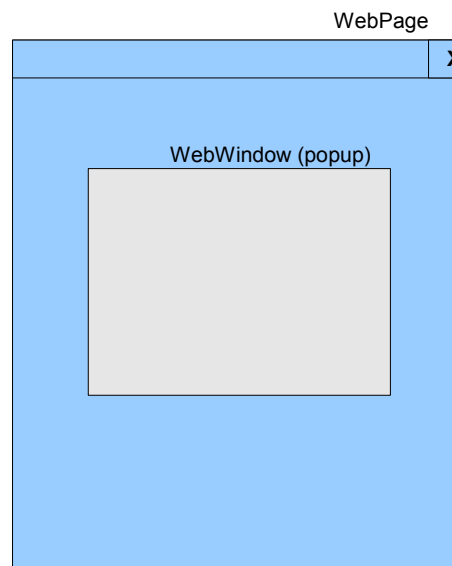
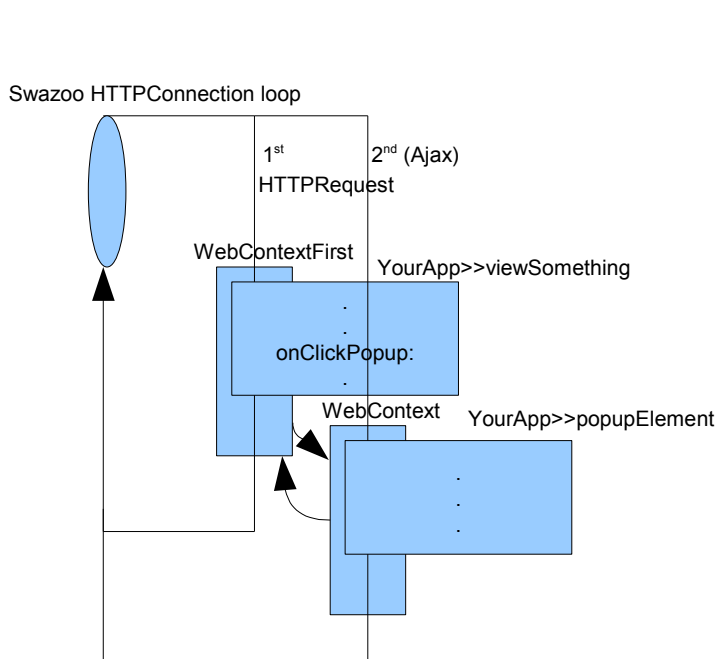


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Web Contexts – popup window



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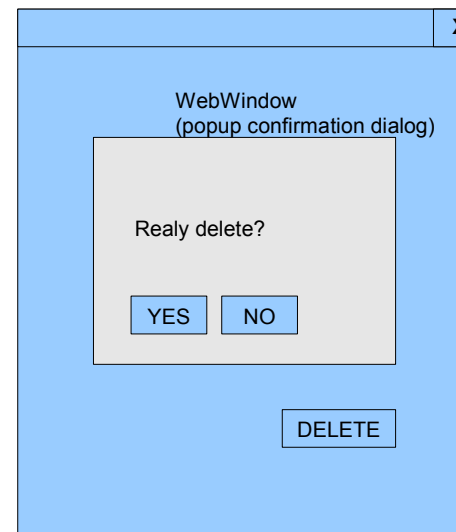
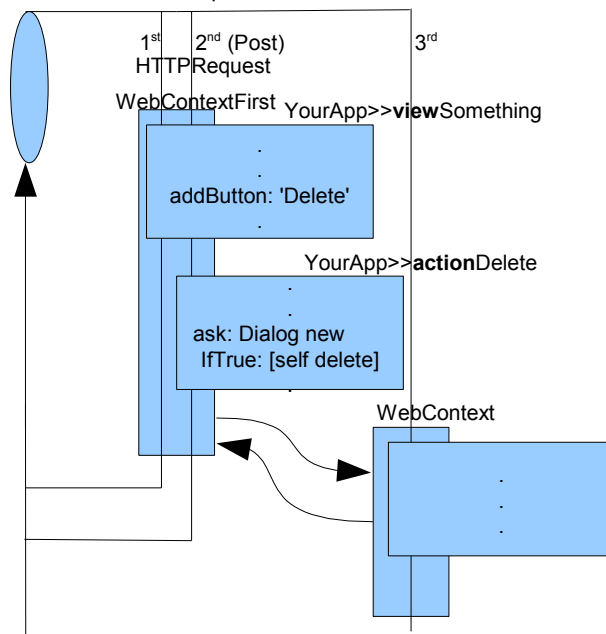




Contexts – tree-like control flow



Swazoo HTTPConnection loop



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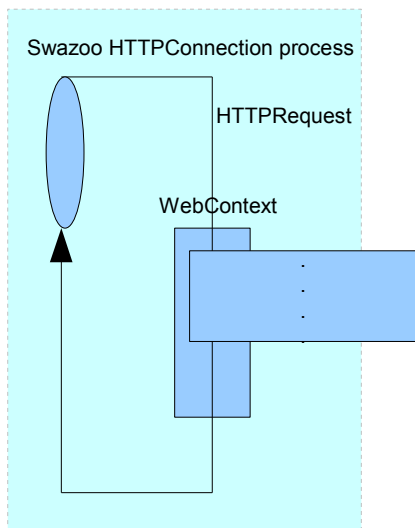




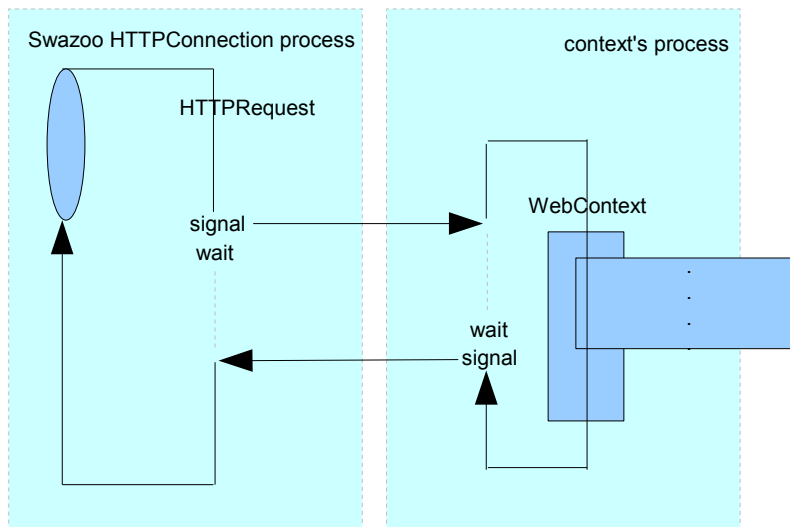
Contexts and processes



1. One process only



2. Context executing in separate process



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Internationalization



- ▶ UTF-8 on the Web
- ▶ Unicode in the image

- ▶ Aida covers i18n of two things:
 - ▶ Content
 - ▶ Text on the pages

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Internationalization



- ▶ Multilingual content
 - ▶ Like on Wikipedia, same topic in multiple languages, but content not necessary the same
 - ▶ Squeak website in many languages

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In-place translation



- ▶ Translation of page text
- ▶ Translated directly (in-place) on the page
- ▶ Translations saved in methods
 - ▶ Like method images for pictures

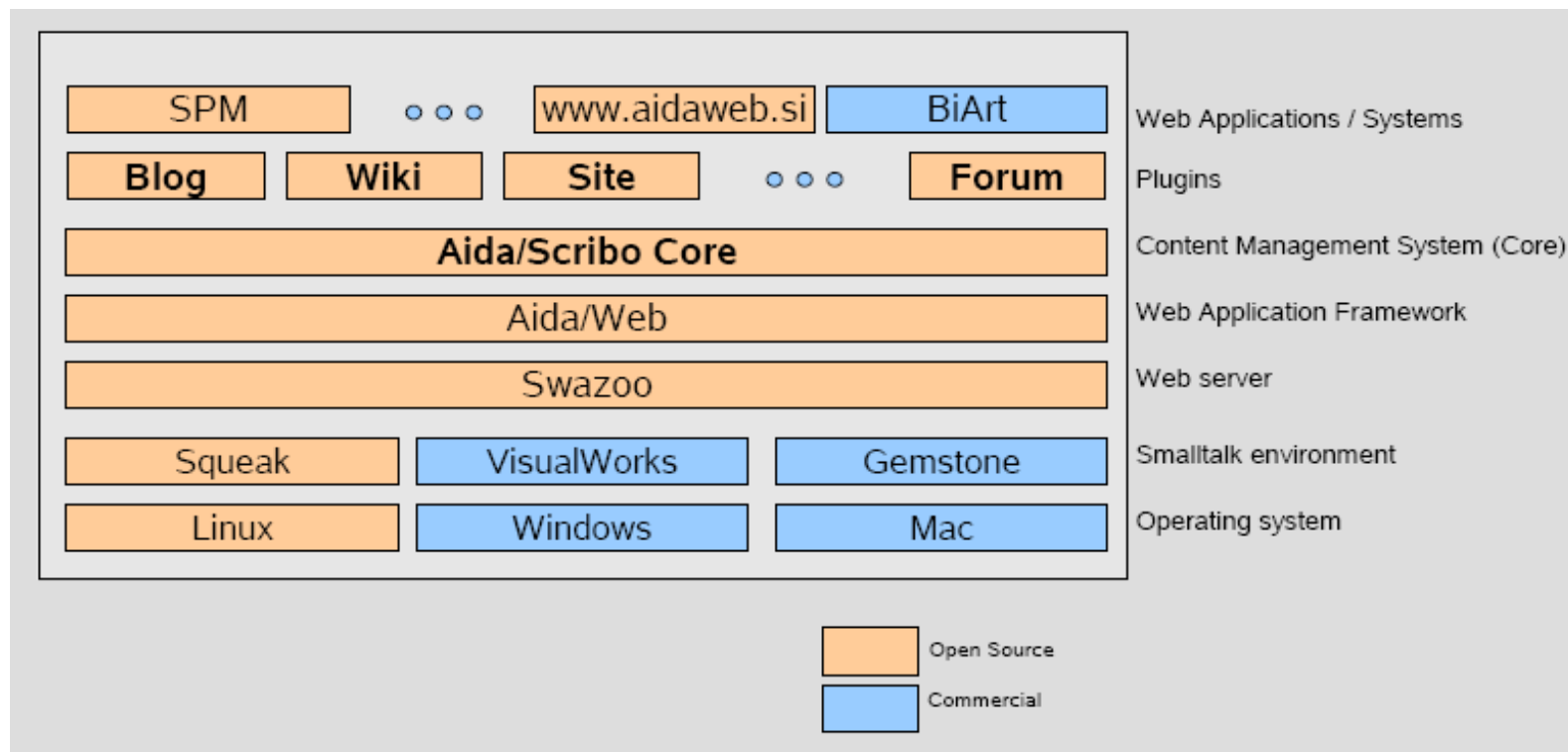
e addText: #fr -> 'Maintenant'

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Architecture of AIDA web apps



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Supported Smalltalk dialects



- ▶ Six dialects
 - ▶ Squeak
 - ▶ Gemstone GLASS
 - ▶ VisualWorks, ObjectStudio
 - ▶ Dolphin
 - ▶ Smalltalk/X
- ▶ Planned
 - ▶ GNU Smalltalk

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Future: callbacks?



- ▶ action blocks
- ▶ (e addButtonText: 'Save'
 onSubmitDo: [self observee save])
- ▶ Breaks MVC?
 - ▶ Spagethi code?
- ▶ Security?
- ▶ For validation only?

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Future: Validation



- Ajax immediate feedback near input field
- Submit fails automatically if not validated

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Thanks for your attention!

www.aidaweb.si

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