



# Design Features for the Social Web: The Architecture of *Deme*

▶ Todd Davies - summary of the paper

Mike Mintz (voiceover) - demo

(see <http://deme.stanford.edu>)



# Overview

The social Web is becoming more important

Users want/need flexible experiences and control over their data

Free/open-source web content management systems (WCMSs), e.g. *Drupal*, provide more flexibility and user-control than commercial sites, but are missing needed features

FOSS web application frameworks, e.g. *Rails*, *Django*, solve many of these problems, but require programming skill

We built a more flexible WCMS (*Deme*) that tries to make the power of web app frameworks available to end-users and nonprogrammer website administrators (***cf model-driven CMS approach of Souer-Kupers, MDWE 2009***)

# Characteristics of the social Web

**User-generated social content**

Social networking

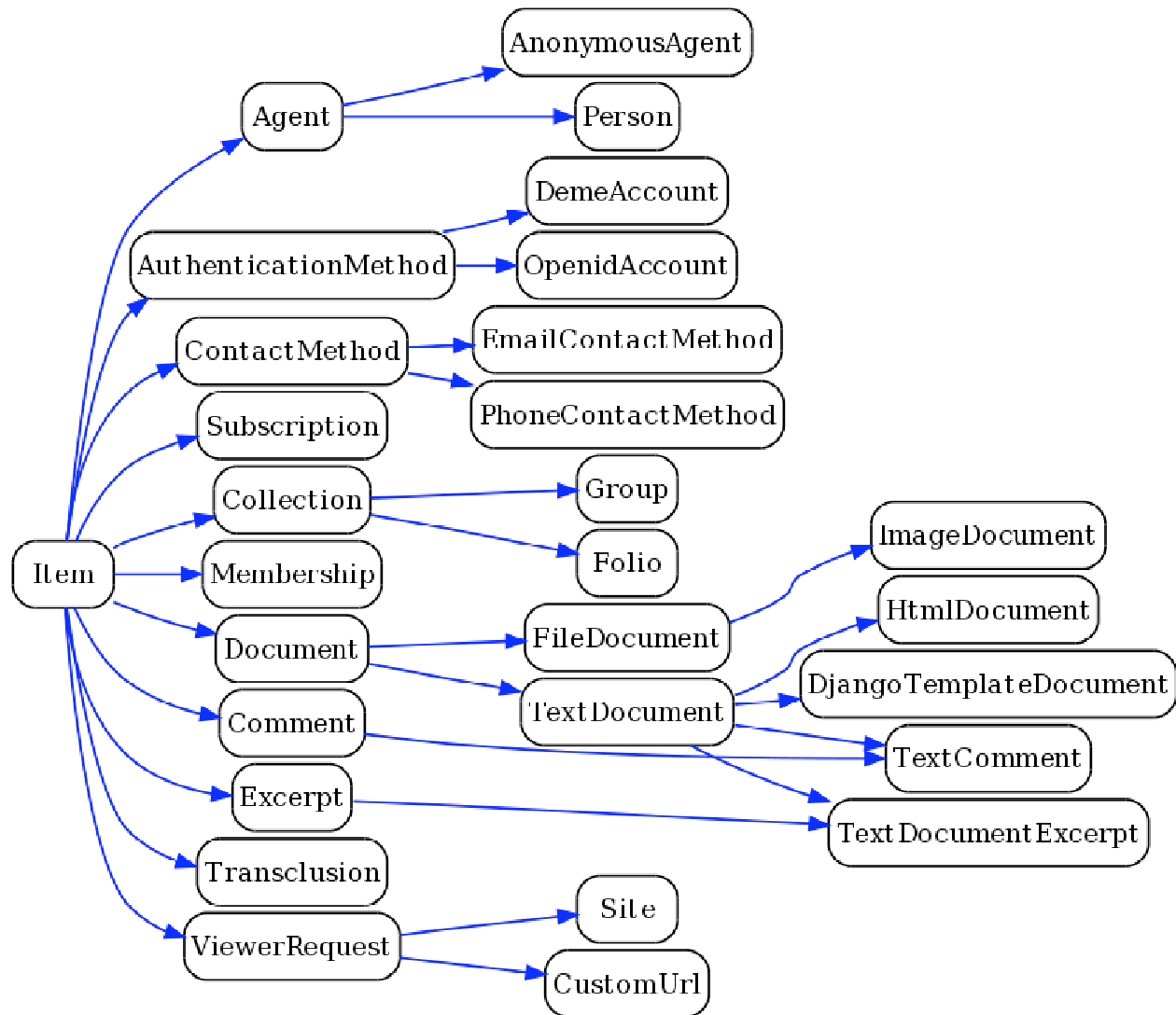
Collaboration

Cross-platform data sharing

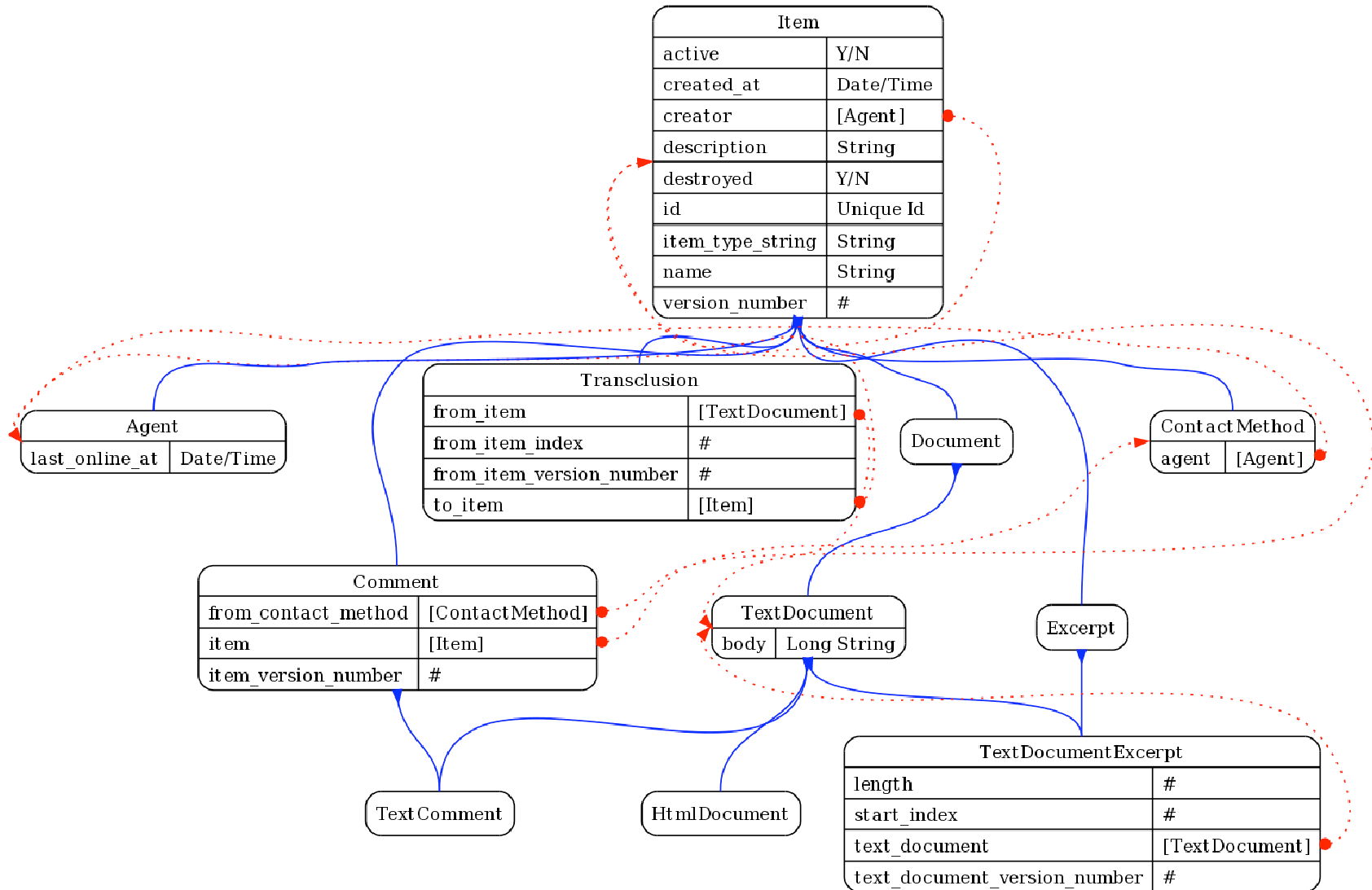
# Summary of *Deme*'s features

Content management concept	Desired social feature	Deme v0.9 WCMS
<i>unit</i>	<i>page independent</i>	<b>item</b>
<i>subsegment</i>	<i>fully pointable</i>	<b>piece, excerpt</b>
<i>unit type</i>	<i>polymorphism</i>	<b>item type</b>
<i>behaviors</i>	<i>extensible</i>	<b>actions</b>
<i>container</i>	<i>referential</i>	<b>collection</b>
<i>type structure</i>	<i>inheritance hierarchy</i>	<b>item type hierarchy</b>
<i>type-viewer matching</i>	<i>server-side specialized</i>	<b>viewer types</b>
<i>relation specifiers</i>	<i>integrally unitizable</i>	<b>transclusions, memberships</b>
<i>access control</i>	<i>fluid-granular</i>	<b>permissions</b>
<i>addressing</i>	<i>domain independent</i>	<b>(universal) item id</b>
<i>versioning</i>	<i>comprehensive</i>	<b>old versions table</b>
<i>deletion methods</i>	<i>user controlled</i>	<b>deactivate,destroy</b>
<i>software license</i>	<i>free/open-source</i>	<b>Affero GPLv3</b>

# Deme item type hierarchy (simplified)



# Deme item type hierarchy (detail, partial view)



# Comparison of Deme with other web technologies

Content management concept	Desired social feature	File system/Web 1.0 HTML	Web CMS (Drupal)	Commercial Web 2.0 sites	OOP /Web app frameworks	Deme v0.9 WCMS
<i>unit</i>	<b><i>page independent</i></b>	file/page	<b>node</b>	photo, video, etc.	<b>object/row</b>	<b>item</b>
<i>subsegment</i>	<b><i>fully pointable</i></b>	semantic element	<b>field</b>	custom fields	<b>attribute/field</b>	<b>piece, excerpt</b>
<i>unit type</i>	<b><i>polymorphic</i></b>	Internet media type	content type	custom types	<b>class</b>	<b>item type</b>
<i>behaviors</i>	<b><i>extensible</i></b>	HTTP methods	<b>menus</b>	widgets	<b>methods</b>	<b>actions</b>
<i>container</i>	<b><i>referential</i></b>	directory	<b>categories</b>	<b>tags/labels</b>	<b>container classes</b>	<b>collection</b>
<i>type structure</i>	<b><i>inheritance hierarchy</i></b>	MIME type /subtype	(flat)	(flat)	<b>class inheritance</b>	<b>item type hierarchy</b>
<i>type-viewer matching</i>	<b><i>server-side specialized</i></b>	browser application preferences	<b>views and modules</b>	<b>site-defined viewer</b>	<b>model-view separation</b>	<b>viewer types</b>
<i>relation specifiers</i>	<b><i>integrally unitizable</i></b>	one-way hyperlinks	<b>relation nodes</b>	limited bidirectional links	<b>relation objects</b>	<b>transclusion, membership</b>
<i>access control</i>	<b><i>fluid-granular</i></b>	restricted directories	<b>admins and roles</b>	custom permissions	<b>customizable</b>	<b>permissions</b>
<i>addressing</i>	<b><i>domain independent</i></b>	URL	node ID	permalink	<b>object identity</b>	<b>(universal) item id</b>
<i>versioning</i>	<b><i>comprehensive</i></b>	old files	<b>content versioning</b>	none or <b>wiki diffs</b>	<b>version control system</b>	<b>old versions table</b>
<i>deletion methods</i>	<b><i>user controlled</i></b>	file system delete	<b>node delete</b>	limited data removal	<b>file edit and delete</b>	<b>deactivate, destroy</b>
<i>software license</i>	<b><i>free/open-source</i></b>	default copyright	<b>GPLv2</b>	usually proprietary	<b>open source</b>	<b>Affero GPLv3</b>



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# Deme: thanks and contact info

## The Deme team (2003- ):

Alex Cochran, Todd Davies, Jonathan Effrat, Joseph Marrama, Mike Mintz,  
Mic Mylin, Ben Newman, Brendan O'Connor, Andrew Parker, Leo Perry,  
Aaron Tam

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## Project site:

<http://deme.stanford.edu>

