Sakai - OpenSource consumer.

How Sakai works with Open Source projects

Dr Ian Boston
CTO, Caret, University of Cambridge
Sakai3 lead
Apache Shindig PPMC Member
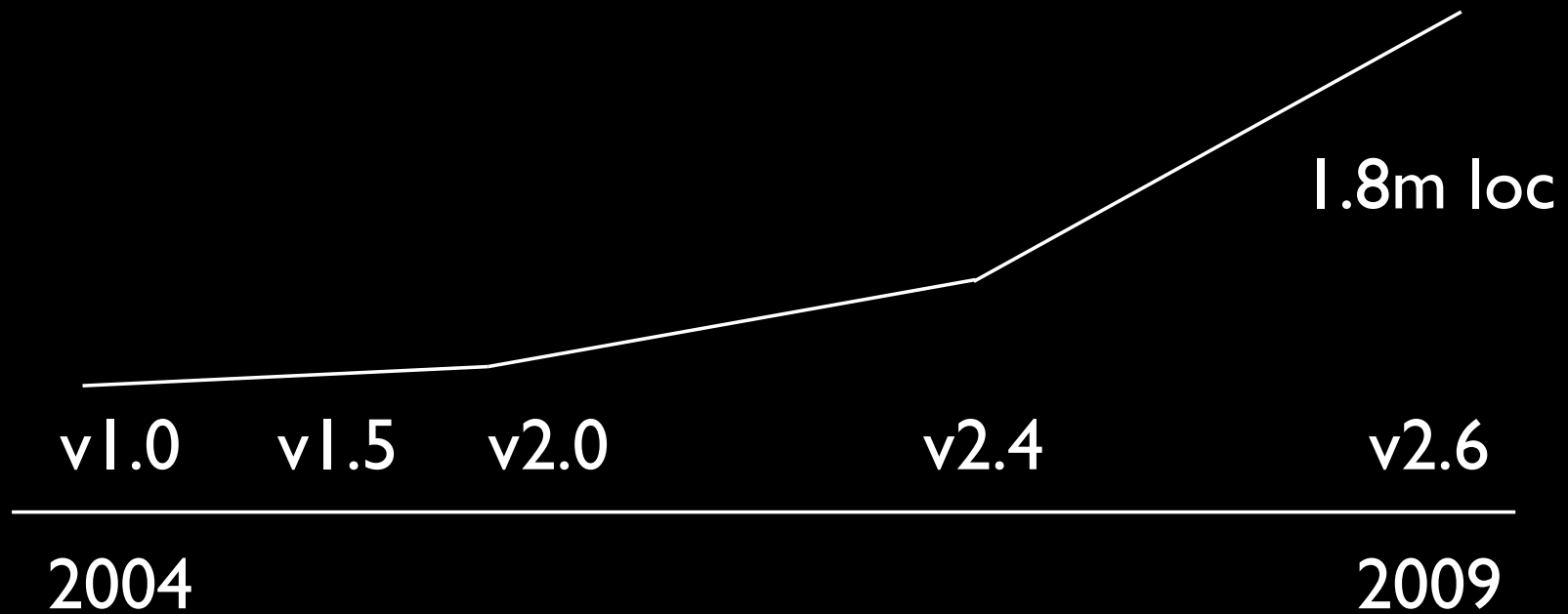Apache Sling PMC Member

What is Sakai ?

Community
  Developers
  Educators
  Researchers

Higher Ed
  Production VLE/VRE
  Global, 161 installations
  Scalable, 100 - 200K users

Open Source
  Sakai Foundation (501c)
  ECL2 (Apache2 like)
  90% Java
  50 - 60 core committers

History

1.8m loc

v1.0   v1.5   v2.0   v2.4   v2.6

2004   2009

Libraries and IP

Governance
License Clearance
Library Selection

Committer Clearance
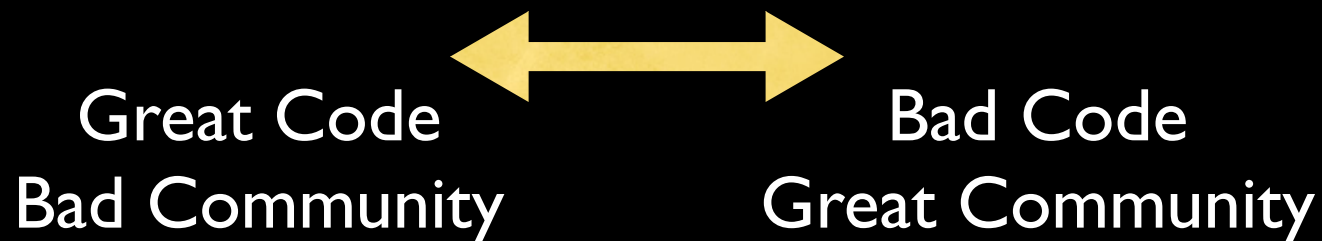CCLA
CLA

v2 Libraries
Spring
Hibernate
Apache Commons
Apache Tomcat

Lessons for V2

Someone else has probably written a
better implementation already

Code is not the only thing that
matters

Great Code → ← Bad Code
Bad Community   Great Community

Sakai 3

Only own what we have to

Write less, keep it simple

Select on community, license
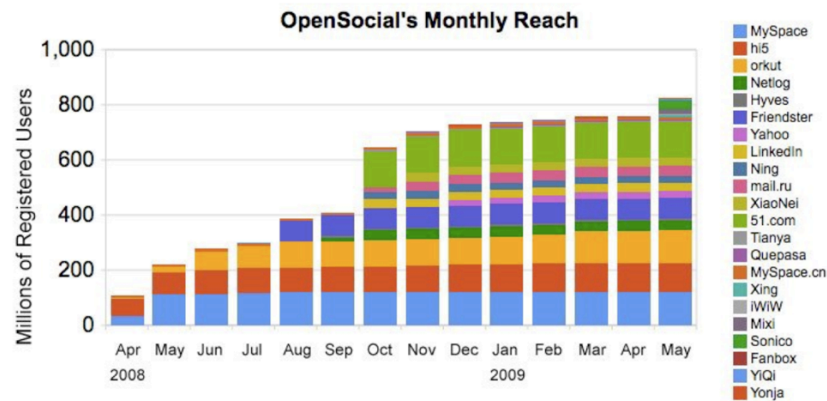then code

Engage, contribute, influence

OpenSocial

Campfire Announcement 11/2007

1,000s of Developers
App Portability
Fantastic UX

1st Birthday 05/2009
800M users
315M app installs

Large Reach

OpenSocial's Monthly Reach

Over 800M in a year — and more to come!

Google Developer Day2009

Sakai Early 2008

Institutional

Academic
Social Networking

Federation/Integration

Gen Y/Z

Technical

Web NG
UX Driven
App Community

Apache Shindig

OpenSocial RI

Incubator

Code donated to the Incubator
Growing Community
Mainly Google

No Container
Unclear SPI

In production

Engage

Read and Understand
Ask stupid questions, listen
Patch, bug fix, make mistakes

———————————————————————

Trust   Read and Understand
Ask questions, listen
Patch, bug fix, make mistakes

Commit to taking eternal responsibility
for every line of code you commit.

First Contact

Lurk
  but not for long

First message
  "Hi, I am a newbee to Jackrabbit. How
  do I ....."

  First Patch
    Spelling mistake?

Community Frustrations

"The code is ugly an broken, I wouldn't do it like that"

"It doesn't address my use cases"

"My patches keep breaking and they won't take them."

explain, educate, help, support, joke, show humility, no arrogance, present evidence, move on

Committer Pain

"I have a life, I volunteered"

"I don't have time to read 10 paragraphs and try and work out what is being said"

"Not that question yet again"

"I cant take responsibility for THAT! (WTF)"

explain, educate, help, support, joke, show humility, no arrogance, present evidence, move on

Apache Invitation

- Trust builds, volume of patches, contributions

- Private PMC Vote or PPMC + IPMC

- Invite, Accept

- Legals

- Commit access

What then.

- Commit what you like - No

- Nothing changes except your name appears on "svn blame" - Yes

- When the build breaks at the weekend... you feel like you should fix it - Yes

Apache Sling
Enterprise Content Management
Web app framework

The name "Sling" has been proposed by Roy Fielding who explained it like this:
[The name is] Biblical in nature. The story of David: the weapon he uses to slay the giant Goliath is a sling. Hence, our David's [David Nuescheler, CTO of Day Software] favorite weapon.

Sakai 3
Educational Content Management

50% Enterprise Content Management Use Cases
50% Educational Use Cases
everyone is an editor
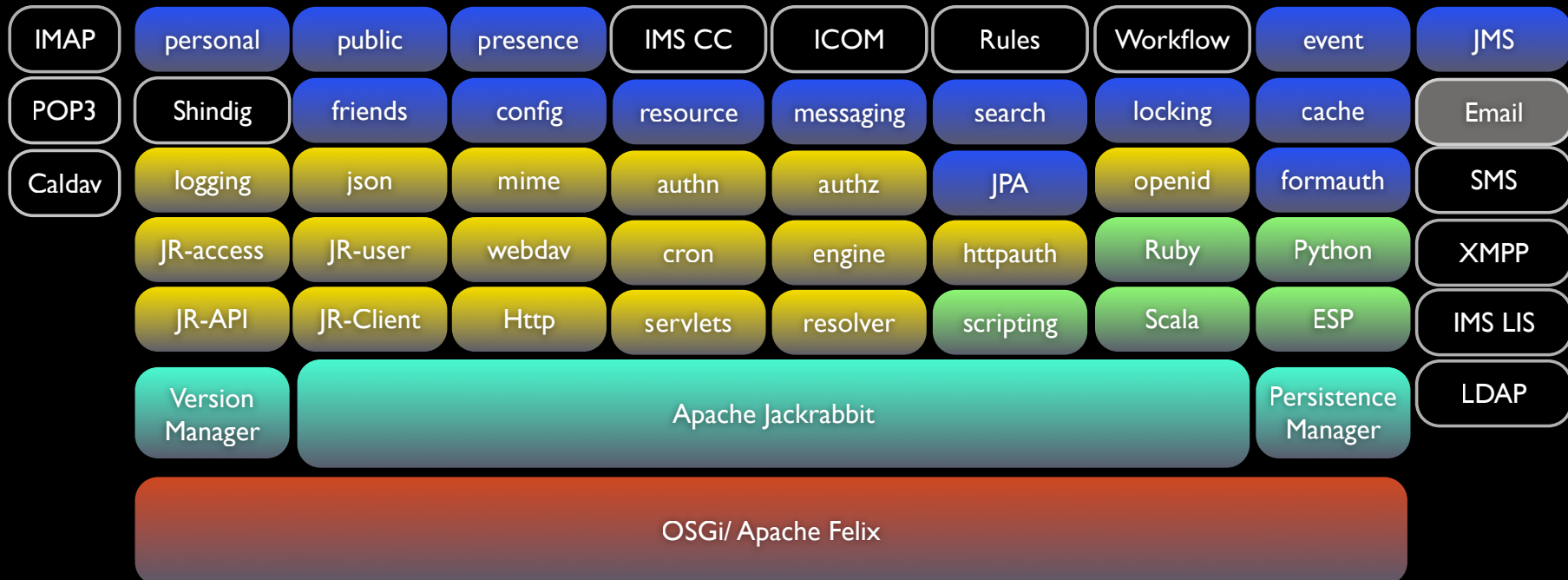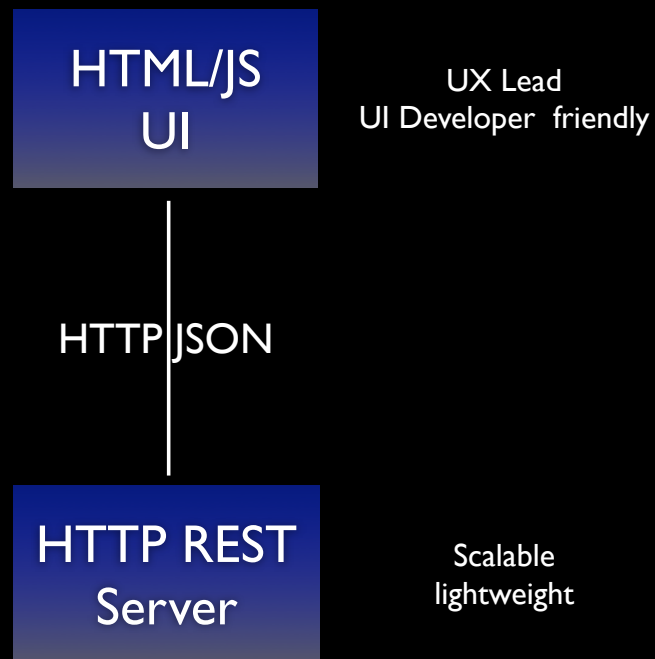groups
educational apps integration
UI/UX

50% Sling
50% Sakai

Architecture

HTTP REST + JSON

IMAP	personal	public	presence	IMS CC	ICOM	Rules	Workflow	event	JMS
POP3	Shindig	friends	config	resource	messaging	search	locking	cache	Email
Caldav	logging	json	mime	authn	authz	JPA	openid	formauth	SMS
	JR-access	JR-user	webdav	cron	engine	httpauth	Ruby	Python	XMPP
	JR-API	JR-Client	Http	servlets	resolver	scripting	Scala	ESP	IMS LIS
	Version Manager	Apache Jackrabbit						Persistence Manager	LDAP
	OSGi/ Apache Felix								

opensocial shindig Sling APACHE felix Apache Jackrabbit

Basic Architecture

HTML/JS UI

UX Lead
UI Developer friendly

HTTP JSON

HTTP REST Server

Scalable
lightweight

App Development

UX Research   UX Design   UI Development   Server Development

UI Design

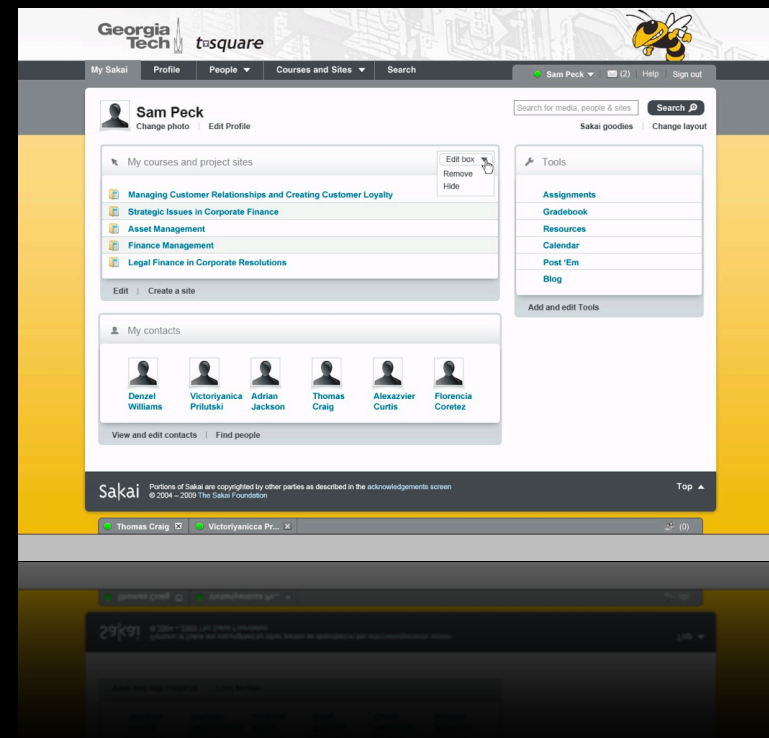Screens designed as wireframes with interactions.
> UX Designer, UI Designer

Implemented as HTML
> UI Designer, UI Developer

Integrated into framework
> UI Designer, UI Developer

Driving REST API Specification