Collaborative Applications
Comunication, Wiki, Issues

Răzvan Deaconescu

`razvan.deaconescu@cs.pub.ro`

23rd of June 2014

Open Source Summer School

Outline

Why collaboration?

Why collaboration?

- synchronize
- exchange ideas
- review
- the more, the merrier
- in union lies strength

Why software tools for collaboration?

Why software tools for collaboration?

- ubiquitous
- anywhere, anytime
- irrespective of geography, latitude, longitude, time slot
- searchable, linkable, likeable
- history
- customization

How to collaborate/communicate?

- real time: face-to-face, messenger, IRC
- asynchronous: e-mail, mailing lists, forums, StackOverflow
- work together: wiki, issues, bug reports
- repository, code reviews
- gist, pastebin

Mailing lists

- lurk before you leap
- use the rules
- talk to the point
- less is more
- relevant subject lines

Outline

Web-based Software Project Management

- manage software projects
- wiki, issue/ticket tracker, roadmap, repository access
- collaborate, organize, history
- client-server: Trac, Redmine
- hosted: SourceForge, BerliOS, Savannah, Google Code
- GitHub, Gitorious

Why GitHub?

- social coding
- it works!
- by developers for developers
- easy to contribute, report issues, create forks
- wiki
- Git
- issues
- forks, pull requests
- Gist

Outline

Why wiki?

- collaborative editing
- simple formatting, simple links
- easy to install, use, edit (no training)
- revision control
- knowledge base (tutoriale, informații utile, documentare)

What is a wiki?

- web site, easy editing
- simplified markup language
- wiki software (wiki engine)
- support for collaboration
- history, revisions, authentication, ACLs
- Ward Cunningham: "the simplest online database that could possibly work"

Wiki versus . . .

- MS Office / OpenOffice
  - (wiki) collaborative, nice interface, web
  - (office) printer friendly, complex, controlled access (non-professional)
- LATEXfiles in a repository
  - (wiki) easy to edit, instant feedback, WYSIWYG, web
  - (office) printer friendly, professional
- CMS
  - (wiki) easy editing, collaboration
  - (CMS) likeness, presentation
- Google Docs
  - (wiki) open to public, web-friendly
  - (gdocs) access control settings, close to an Office suite

Use cases

- knowledge base (community, company, project)
- collaboration, collaborative editing
- tutorials
- rapid content publishing (fast learning curve)

Known Examples

- `http://www.wikimatrix.org/`
- MediaWiki
- DokuWiki
- TWiki
- MoinMoin
- PhpWiki
- PmWiki
- integrated in other apps/sites (GitHub)

GitHub Wiki Syntax

- GitHub may use multiple wiki syntax flavors
- the default one, also used in issues is GitHub Flavored Markdown
  - `https://help.github.com/articles/github-flavored-markdown`
- lightweight – gets sh*t done
- it uses Git

Creole Syntax

- `http://wikicreole.org/`
- a sort of wiki syntax standard
- many wiki engines use a plugin/module for Creole
- most syntax elements are borrowed from MediaWiki

Comparison chart

Format	Creole	GitHub Flavored Markdown
heading 1	= Name	# Name
bold	**text**	**text**
italic	//text//	_text_
link to page	[[PageName|Link name]]	[Link name](Page URL)
external URLs	[[URL|Link name]]	[Link name](PageName)
unordered lists	*, **	*, \<blank\> . . . *
ordered lists	#, ##	1., \<blank\> . . . 1.
nowiki	{{{ . . . }}}	''' . . . '''

Outline

Issues

- problems, requests to solve problems
- type, author, assignee, status, due time, priority, description descriere
- tickets – help desk, call center
- issue tracking system – manage issues for an organization, project
  - software app
  - web interface, database
  - similar to a bug tracking system (bugtracker)
  - authentication

Issue tracking systems

- Bugzilla, MantisBT – single purpose
- Trac, Redmine – multi purpose
- SourceForge, Launchpad, Google Code, GitHub – hosted

GitHub – New issues

- title
- assigned to
- labels
- message
- milestones
- GitHub Flavored Markdown
- preview

GitHub – View/edit issues

- by assignee
- by label
- open/closed issues
- update label/assignee/milestone
- close/open
- write update – GitHub Flavored Markdown

Outline

Keywords

- collaborate
- communicate
- community
- GitHub
- wiki
- collaborative editing
- easy to install, use, customize
- markup language
- wiki engine

- WikiMatrix
- GitHub wiki
- DokuWiki
- Creole wiki syntax
- issues
- issue tracking
- bug tracking
- create, view, update

Useful Links

- https://github.com/
- https://gist.github.com/
- https://help.github.com/articles/github-flavored-markdown
- http://daringfireball.net/projects/markdown/syntax
- http://www.wikimatrix.org/
- http://www.dokuwiki.org/syntax
- http://www.wikicreole.org/wiki/Creole1.0
- http://en.wikipedia.org/wiki/Issue_tracking_system
- http://www.bugzilla.org/
- http://en.wikipedia.org/wiki/Comparison_of_issue_tracking_systems
- http://www.chiark.greenend.org.uk/~sgtatham/bugs.html
- http://elf.cs.pub.ro/so/wiki/resurse/lista-discutii#
  mailing-list-guidelines

Outline