





@rmanalan

Rich Manalang

Final day of [#atlascamp](#). Sadly, I've lost my voice just in time for my presentation this afternoon. Incredibly great conference though!

22 minutes ago via web

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from Los Altos Hills, CA



Get Some REST

JIRA 5.0 REST API deep dive

#jirarest

Rich Manalang (@rmanalan)
Developer Advocate, Atlassian





JIRA 5.0 REST API deep dive

#jirarest

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I NEED SOME REST!

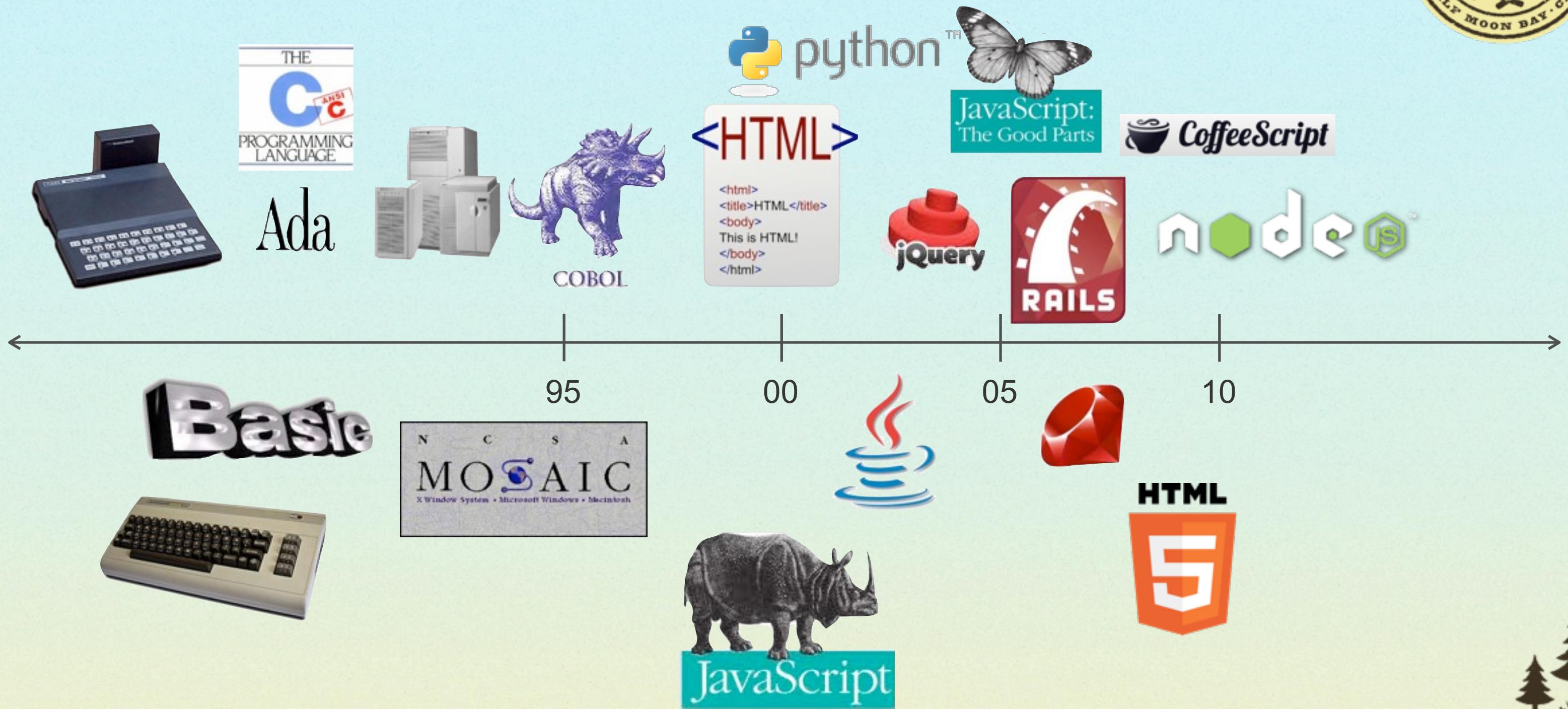
JIRA 5.0 REST API deep dive

#jirarest

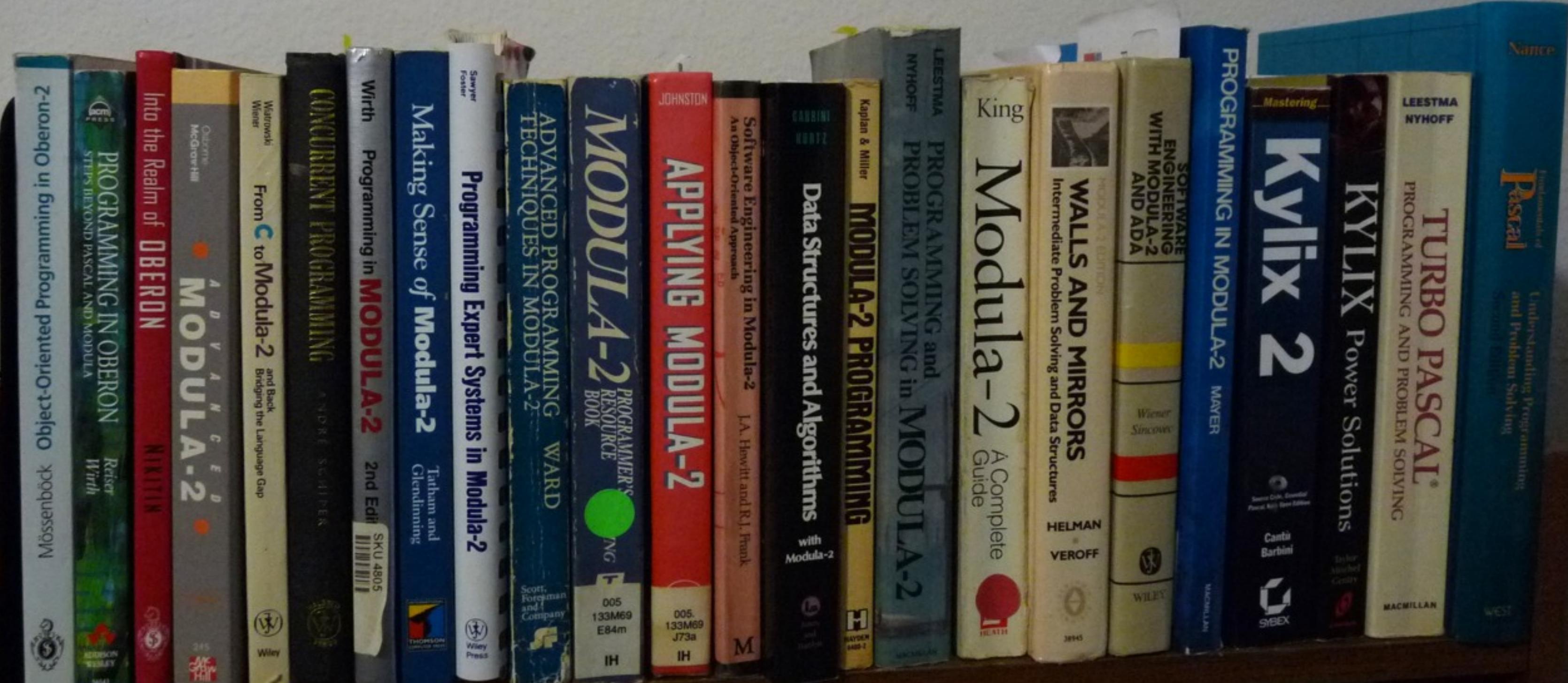
Rich Manalang (@rmanalan)
Developer Advocate, Atlassian



\$ whoami



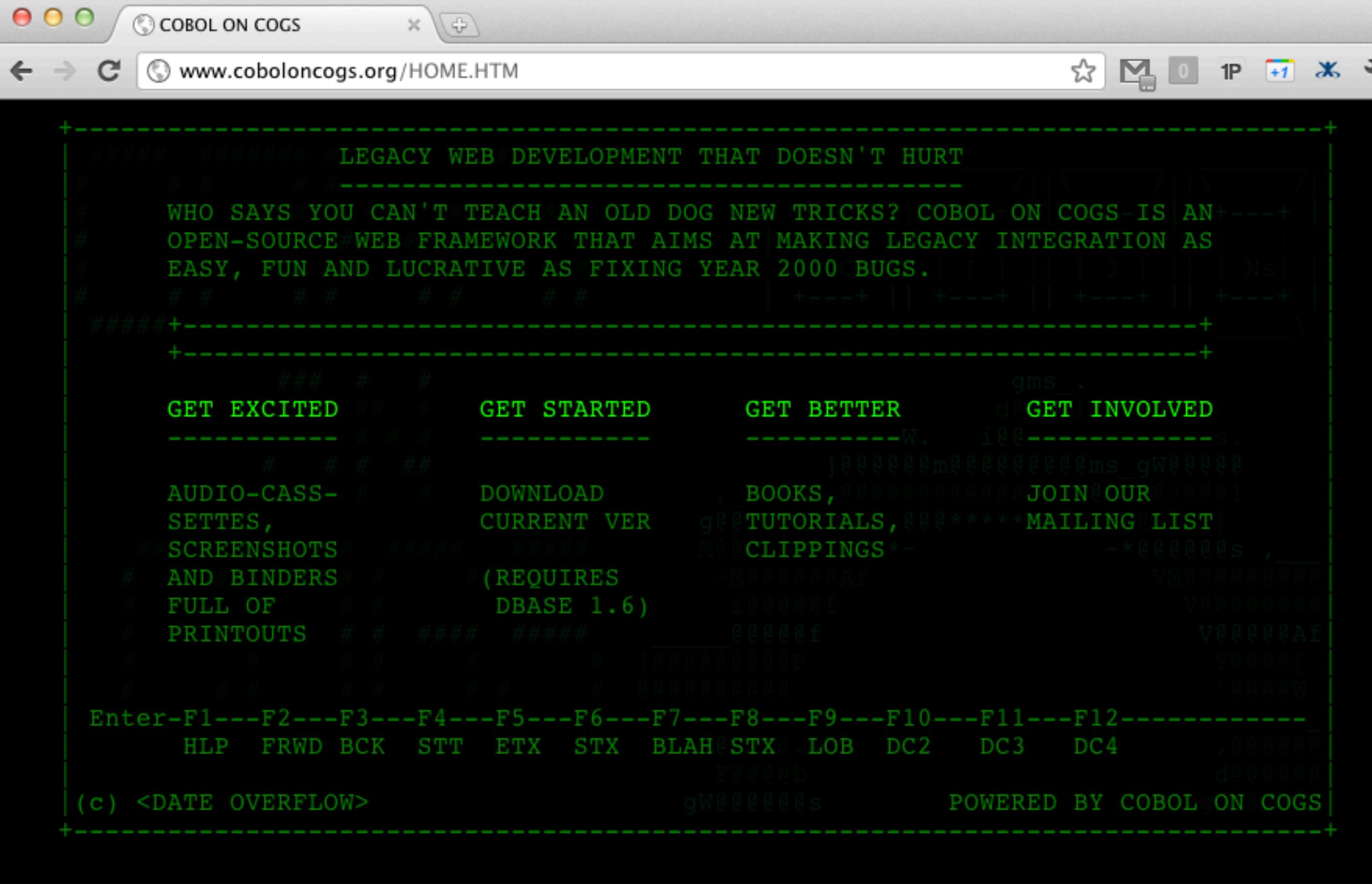
You're a polyglot



Common things...



- Transport: HTTP
- Data formats: XML, JSON
- Patterns: authentication, authorization, UI, algorithms, etc.
- Data exchange/integration: REST, SOAP



JIRA 5 REST API

What's
Changed?

jira4.txt vs. jira5.txt

jira4.txt - /Users/rmanalang/Downloads	jira5.txt - /Users/rmanalang/Downloads
/application-properties [GET] /application-properties/{id} [PUT] /attachment /attachment/{id} [GET] /comment /comment/{id} [GET] /component [POST] /component/{id} [DELETE, GET, PUT] /component/{id}/relatedIssueCounts [GET] /customFieldOption /customFieldOption/{id} [GET] /groups /groups/picker [GET]	/application-properties [GET] /application-properties/{id} [PUT] /attachment /attachment/{id} [GET] /comment /comment/{id} [GET] /component [POST] /component/{id} [DELETE, GET, PUT] /component/{id}/relatedIssueCounts [GET] /customFieldOption /customFieldOption/{id} [GET] /groups /groups/picker [GET]
/issue /issue/{issueKey} [GET] /issue/{issueKey}/attachments [POST] /issue/{issueKey}/transitions [GET, POST] /issue/{issueKey}/votes [DELETE, POST, GET] /issue/{issueKey}/watchers [GET, POST, DELETE]	/issue [POST] /issue/createmeta [GET] /issue/{issuelDOrKey} [DELETE] /issue/{issuelDOrKey} [GET, PUT] /issue/{issuelDOrKey}/attachments [POST] /issue/{issuelDOrKey}/editmeta [GET] /issue/{issuelDOrKey}/remotelink [GET, POST, DELETE] /issue/{issuelDOrKey}/remotelink/{linkId} [GET, PUT, DELETE] /issue/{issuelDOrKey}/transitions [GET, POST] /issue/{issuelDOrKey}/votes [DELETE, POST, GET] /issue/{issuelDOrKey}/watchers [GET, POST, DELETE]
/issueLink [POST] /issueLinkType [GET] /issueLinkType/{issueLinkTypeId} [GET] /issueType /issueType/{id} [GET] /priority /priority/{id} [GET] /project [GET] /project/{key} [GET] /project/{key}/components [GET] /project/{key}/versions [GET] /project/{projectKey}/role [GET] /project/{projectKey}/role/{id} [GET, PUT, POST, DELETE] /resolution /resolution/{id} [GET] /search [GET, POST] /serverInfo [GET] /status /status/{id} [GET] /user [GET] /version [POST] /version/{id} [DELETE, GET, PUT] /version/{id}/move [POST] /version/{id}/relatedIssueCounts [GET] /version/{id}/unresolvedIssueCount [GET] /worklog /worklog/{id} [GET] Resources http://example.com:8080/jira/rest/auth/1/session [POST, GET, DELETE] http://example.com:8080/jira/rest/auth/1/websudo [DELETE]	1 → /issueLink [POST] /issueLinkType [GET] /issueLinkType/{issueLinkTypeId} [GET] /issueType /issueType/{id} [GET] /priority /priority/{id} [GET] /project [GET] /project/{key} [GET] /project/{key}/avatar [POST, PUT] /project/{key}/avatar/temporary [POST, POST] /project/{key}/avatar/{id} [DELETE] /project/{key}/avatars [GET] /project/{key}/components [GET] /project/{key}/versions [GET] /project/{projectKey}/role [GET] /project/{projectKey}/role/{id} [GET, PUT, POST, DELETE] /resolution /resolution/{id} [GET] /search [GET, POST] /serverInfo [GET] /status /status/{id} [GET] /user [GET] /user/assignable/search [GET] /user/search [GET] /user/{username}/avatar [POST, PUT] /user/{username}/avatar/temporary [POST, POST] /user/{username}/avatar/{id} [DELETE] /user/{username}/avatars [GET] /version [POST] /version/{id} [DELETE, GET, PUT] /version/{id}/move [POST] /version/{id}/relatedIssueCounts [GET] /version/{id}/unresolvedIssueCount [GET] /worklog /worklog/{id} [GET] Resources http://example.com:8080/jira/rest/auth/1/session [POST, GET, DELETE] http://example.com:8080/jira/rest/auth/1/websudo [DELETE]
	2 → /issueLink [POST] /issueLinkType [GET] /issueLinkType/{issueLinkTypeId} [GET] /issueType /issueType/{id} [GET] /priority /priority/{id} [GET] /project [GET] /project/{key} [GET] /project/{key}/avatar [POST, PUT] /project/{key}/avatar/temporary [POST, POST] /project/{key}/avatar/{id} [DELETE] /project/{key}/avatars [GET] /project/{key}/components [GET] /project/{key}/versions [GET] /project/{projectKey}/role [GET] /project/{projectKey}/role/{id} [GET, PUT, POST, DELETE] /resolution /resolution/{id} [GET] /search [GET, POST] /serverInfo [GET] /status /status/{id} [GET] /user [GET] /user/assignable/search [GET] /user/search [GET] /user/{username}/avatar [POST, PUT] /user/{username}/avatar/temporary [POST, POST] /user/{username}/avatar/{id} [DELETE] /user/{username}/avatars [GET] /version [POST] /version/{id} [DELETE, GET, PUT] /version/{id}/move [POST] /version/{id}/relatedIssueCounts [GET] /version/{id}/unresolvedIssueCount [GET] /worklog /worklog/{id} [GET] Resources http://example.com:8080/jira/rest/auth/1/session [POST, GET, DELETE] http://example.com:8080/jira/rest/auth/1/websudo [DELETE]
	3 → /issueLink [POST] /issueLinkType [GET] /issueLinkType/{issueLinkTypeId} [GET] /issueType /issueType/{id} [GET] /priority /priority/{id} [GET] /project [GET] /project/{key} [GET] /project/{key}/avatar [POST, PUT] /project/{key}/avatar/temporary [POST, POST] /project/{key}/avatar/{id} [DELETE] /project/{key}/avatars [GET] /project/{key}/components [GET] /project/{key}/versions [GET] /project/{projectKey}/role [GET] /project/{projectKey}/role/{id} [GET, PUT, POST, DELETE] /resolution /resolution/{id} [GET] /search [GET, POST] /serverInfo [GET] /status /status/{id} [GET] /user [GET] /user/assignable/search [GET] /user/search [GET] /user/{username}/avatar [POST, PUT] /user/{username}/avatar/temporary [POST, POST] /user/{username}/avatar/{id} [DELETE] /user/{username}/avatars [GET] /version [POST] /version/{id} [DELETE, GET, PUT] /version/{id}/move [POST] /version/{id}/relatedIssueCounts [GET] /version/{id}/unresolvedIssueCount [GET] /worklog /worklog/{id} [GET] Resources http://example.com:8080/jira/rest/auth/1/session [POST, GET, DELETE] http://example.com:8080/jira/rest/auth/1/websudo [DELETE]



CRUD Issues

/groups	
/groups/{idOrKey}	[GET]
/issue [POST]	
/issue/crowdmeta	[GET]
/issue/{issueIdOrKey}	[DELETE]
/issue/{issueIdOrKey}	[GET, PUT]
/issue/{issueIdOrKey}/attachments	[POST]
/issue/{issueIdOrKey}/editmeta	[GET]
/issue/{issueIdOrKey}/remotelink	[GET, POST, DELETE]
/issue/{issueIdOrKey}/remotelink/{linkId}	[GET, PUT, DELETE]
/issue/{issueIdOrKey}/transitions	[GET, POST]
/issue/{issueIdOrKey}/votes	[DELETE, POST, GET]
/issue/{issueIdOrKey}/watchers	[GET, POST, DELETE]
/issueLink	[POST]
/issueLinkType	[GET]



Search for issues, get back issues

```
{  
  "expand": "names,types",  
  "startAt": 0,  
  "maxResults": 1,  
  "total": 76,  
  "issues": [  
    {  
      "expand": "html",  
      "id": "36580",  
      "self": "https://jdog.atlassian.com/rest/api/2/issue/ANGRY-87",  
      "key": "ANGRY-87",  
      "fields": {  
        "summary": "subby",  
        "customfield_11350": null,  
        "issuetype": {  
          "self": "https://jdog.atlassian.com/rest/api/2/issueType/7",  
          "id": "7",  
          "iconUrl": "https://jdog.atlassian.com/images/icons/task.gif",  
          "name": "Story Task",  
          "subtask": true  
        },  
        "customfield_10110": null,  
        "votes": {  
          "self": "https://jdog.atlassian.com/rest/api/2/issue/ANGRY-87/votes",  
          "votes": 0,  
          "hasVoted": false  
        },  
        "resolution": null,  
        "fixVersions": [  
          {  
            "self": "https://jdog.atlassian.com/rest/api/2/version/17296",  
            "id": "17296",  
            "description": "The next one!",  
            "name": "2.0",  
            "overdue": true,  
            "openUntilDate": "21/Aug/11"  
          }  
        ]  
      }  
    }  
  ]  
}
```

... more

- Filter the fields you get back in a response
- Metadata
- Add/delete remote issue links



Other goodies you should know about



- Representations in JSON, JSONP, and XML
- Hypermedia inside entities
- Versioned URI (/rest/api/2, /rest/api/latest)
- HTTP caching support
- ActivityStreams API



THE TECHNOLOGY DEMO

THE SOFTWARE
ISN'T 100%
COMPLETE.

scottadams@aol.com

www.dilbert.com

IF IT HAD A USER
INTERFACE YOU
WOULD SEE SOME-
THING HERE...
HERE...AND SOME-
TIMES HERE.

2/24/00 © 2000 United Feature Syndicate, Inc.

AND THEN YOU'D
BE SAYING, "I
GOTTA GET ME
SOME OF THAT."

ANY
QUESTIONS?

Authentication



- OAuth 1.0a
 - Examples: <https://bitbucket.org/rmanalan/atlassian-oauth-examples>
 - Tutorial at <https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+Example+-+OAuth+authentication>
 - Basic authentication



Tools for your toolbox



- rest-console for Chrome: <http://bit.ly/q7lGic>
- http-console: <https://github.com/cloudhead/http-console>
- Documentation: <https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+Tutorials>
- Interactive REST API documentation coming soon to developer.atlassian.com!

JIRA 5.0

[Toggle All Endpoints](#) | [Toggle All Methods](#)

Projects

[List Methods](#) | [Expand Methods](#)

GET All projects /rest/api/2/project

GET A specific project /rest/api/2/project/:key

Retrieves a specific projects

Parameter	Value	Type	Description
key	CAMP	string	The project's key

[Try it!](#)

[Clear results](#)

Call

```
localhost/jira/rest/api/2/project/CAMP
```

Response Headers

```
{
  "server": "Apache-Coyote/1.1",
  "x-arequestid": "742x130x1",
  "set-cookie": [
    "atlassian.xsrf.token=BV8N-OK2J-IQUQ-YNNK|3b0849ea0bd3a41c557602c84ca4c43078cf87e3|lout; Path=/jira"
  ],
  "x-ausername": "anonymous",
  "cache-control": "no-cache, no-store, no-transform",
  "content-type": "application/json; charset=UTF-8",
  "date": "Thu, 22 Sep 2011 19:22:40 GMT",
  "connection": "close"
}
```

Response Body [Select body](#)

```
{
  "self": "http://localhost:2990/jira/rest/api/2/project/CAMP",
  "id": "100000"
```



INSPIRATION

The act of forgetting where you stole your ideas.

RedAnt's Ultimate Wallboard

Projects

These are milestones that are coming up – so how many days to go and how many issues are outstanding. We compare the information we have in Jira (our issue tracker) to Harvest (our time sheet system). If there are more issues than we have time left in the budget, the project goes red.

Be nice

This pulls information from a tool we've made to track interactions. We look at lots of different things to measure how well a project is going - number of issues, whether it is on budget, etc. One thing we weren't looking at is how well customer interactions were going- how well did that meeting or phone call go? So we built a tool to measure this- hopefully it will provide some interesting data.

Alert message - calling all cars

We have various alerts popping up down the bottom - this one is from Capistrano letting us know that Dan has just deployed to Staging (really helpful if you just happen to be walking the client through the site at the same time). These also pop up in Campfire. Other alerts include ones from Hoptoad and New Relic RPM.



Issues for the week

We wanted to create an overall list of issues for the week. On some projects we have sprints or deadlines where we are trying to close off a certain number of issues. But we wanted to have something that would give the overall numbers at a glance. The point being to get as many closed this week as we can.

Who is working on what

This is a list of what everyone is working on- the project name and the specific task. Next to that is the number of issues they have this week. Since not all issues are created equal (one might take 10min, another might take 10h), the graph shows the amount of time. This goes red if a person has more time than everyone else (a hint to PMs to reschedule something)

Can I deploy?

This was designed to answer one of our most common Campfire questions - "Am I OK to deploy Project X?" Our PMs had an issue where work was being done, but then it was unclear whether it had been done and committed, or also moved onto staging or production. There was a separate problem where some tasks were "deploy blockers", and had to get completed before the next deploy. This answers those - it tells everyone how many issues are ready to deploy, and whether there is anything lurking around that they should be aware of.



Share an idea



Idea



Question



Problem



Praise

Describe your idea

Sum it up with a short title

Add more details ▾

(Optional)

Continue

POWERED BY
get satisfaction

Or, Post it privately (?)

Popular ideas from the community

Offer Get Satisfaction in multiple languages

1127 people like this idea. Do you?

Me too!

Offer private messaging capabilities

322 people like this idea. Do you?

Me too!

Adopt Gravatar support

266 people like this idea. Do you?

Me too!

[See and rate more ideas »](#)



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rich.manalang@gmail.com ▾

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- Family
- Games
- Lifestyle
- News & weather
- Productivity
- Shopping
- Social & communication
- Utilities

wanderfly

Where will you go next?

PHOTO BY PHIL OF OTTAWA

GET GOING!

springpad

The smart note app

Cycling the Alps

Cycling the Alps

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- Developer tools
- Fun Shopping
- Sports
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New & Noteworthy

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Web
Wireframing
and
Prototyping



Green Farm



Cargo Bridge:
Armor Games
Edition



Gojee



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Calendar

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- LucidChart - Collaborative Diagramming
- Smartsheet Project Management



The image shows the JIRA Hero plugin interface and a promotional graphic. On the left, a screenshot of the JIRA interface displays the "Achievements" section with a progress bar for "User" tasks at 75%, "Developer" at 65%, and "Tester" at 55%. Below it is the "LeaderBoard" section showing user profiles for "User", "Developer", and "Tester". On the right, a large promotional graphic for "JIRA HERO plugin for JIRA" features a superhero character with a red cape and a blue suit with an "X" logo, standing next to the text "With great power comes great responsibility". A small banner at the bottom left of the graphic says "JIRA Hero Installed!"



A composite image showing the JIRA Hero plugin interface. On the left, there's a screenshot of a JIRA profile page for 'admin' showing achievement stats and a leader board. On the right, the main promotional image for 'JIRA HERO plugin for JIRA' features a superhero character with a red cape and a blue suit with an 'X' logo, standing next to the text "With great power comes great responsibility". A small banner at the bottom says "JIRA Hero Installed!"



Contacts

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Thank you!

