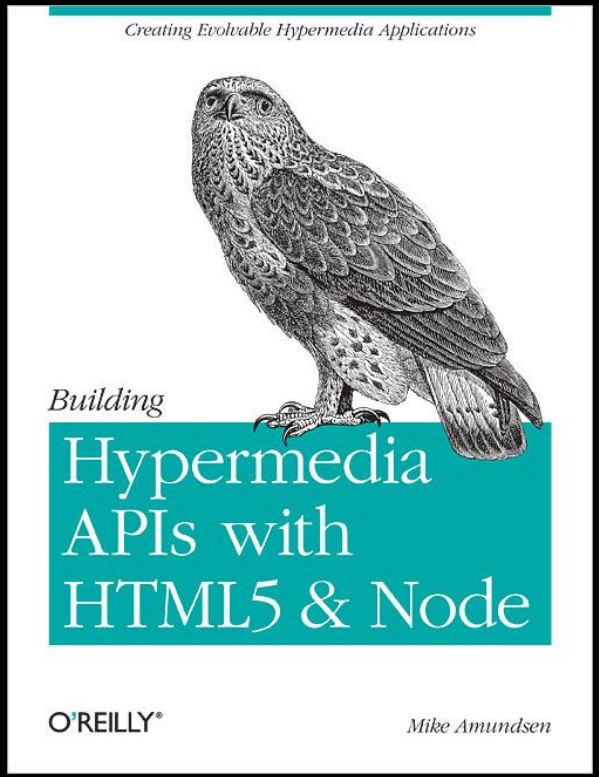
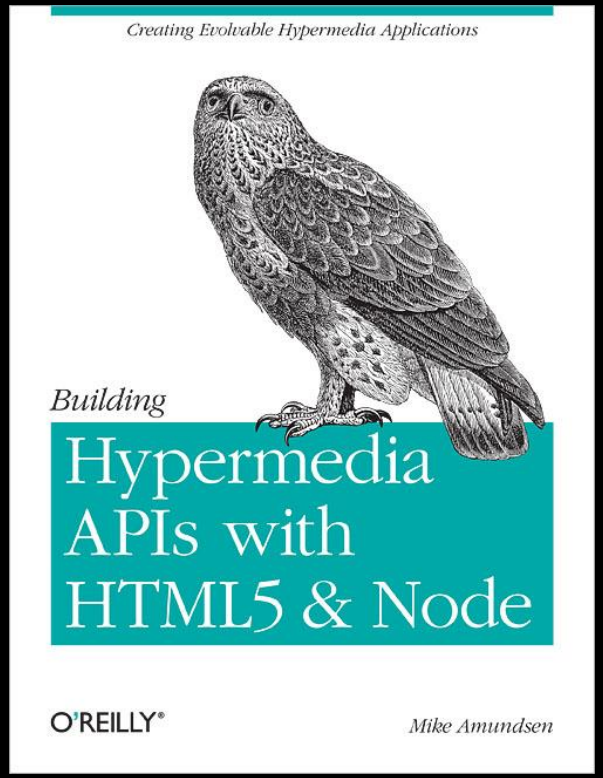
Cathedrals in the Cloud

Musings on APIs for the Web

Mike Amundsen
API Academy / CA
@mamund

Ctrl
PgUp
Mike Amundsen
@mamund


Creating Evolvable Hypermedia Applications
Building
Hypermedia APIs with HTML5 & Node
O'REILLY
Mike Amundsen


Creating Evolvable Hypermedia Applications
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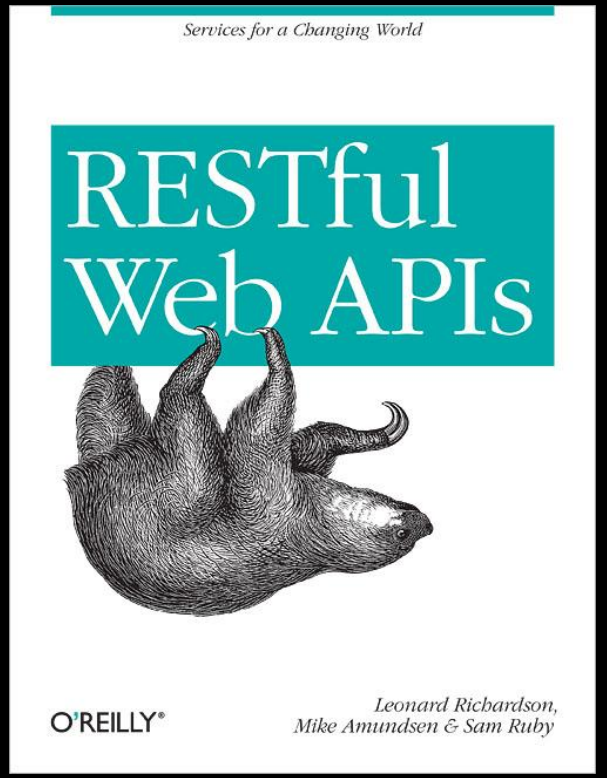
Services for a Changing World
RESTful Web APIs
O'REILLY
Leonard Richardson, Mike Amundsen & Sam Ruby

Creating Evolvable Hypermedia Applications

Building

Hypermedia APIs with HTML5 & Node

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Designing APIs for the Web

Mike Amundsen

VIDEO

Services for a Changing World

RESTful Web APIs

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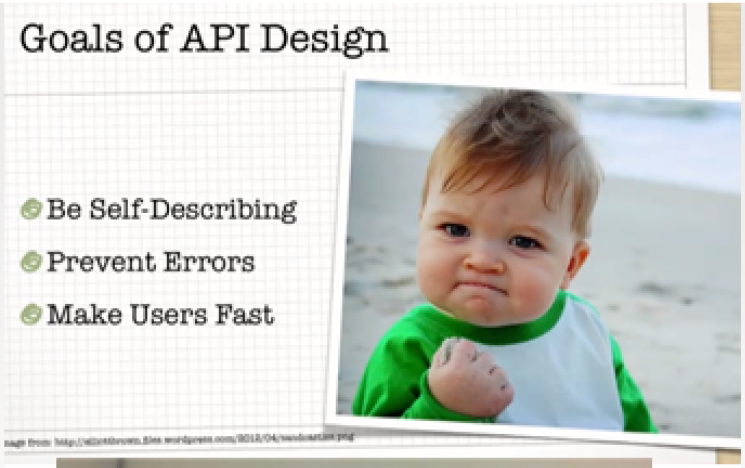
LG


Goals of API Design
Be Self-Describing
Prevent Errors
Make Users Fast

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PgUp
Mike Amundsen
@mamund

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BOURBE

API Design Training | API

www.apiacademy.co

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Your Guide to API Design & Implementation Best Practices

API Academy delivers free online lessons and in-person consulting services covering essential API techniques and tools for business managers, interface designers and enterprise architects

What is an API?

Get an overview of what an API is and what it does, to help you realize the

API Design Basics

Understand the API architecture process and learn basic design and

Web API Architectural Styles

Get a detailed overview of the main architectural styles for Web and

Choosing a Solution

Choose between the various solutions that offer the basic components for

Layer 7 API Academy

GitHub, Inc. [US] https://github.com/apiacademy?query=+only%3Apublic+

Search or type a command

Explore Gist Blog Help

mamund

Layer 7 API Academy

http://www.layer7tech.co...

Filters only:public

+ New repository

tasks-hypermedia

JavaScript ★ 4 0

simple hypermedia-style server and client for a "tasks" service

Updated on Apr 18

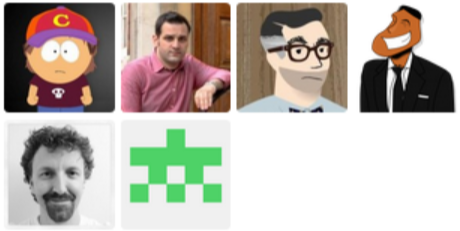
tasks-crud

JavaScript ★ 1 0

simple CRUD-style server and client for a "tasks" service

Updated on Apr 18

Members 6 >

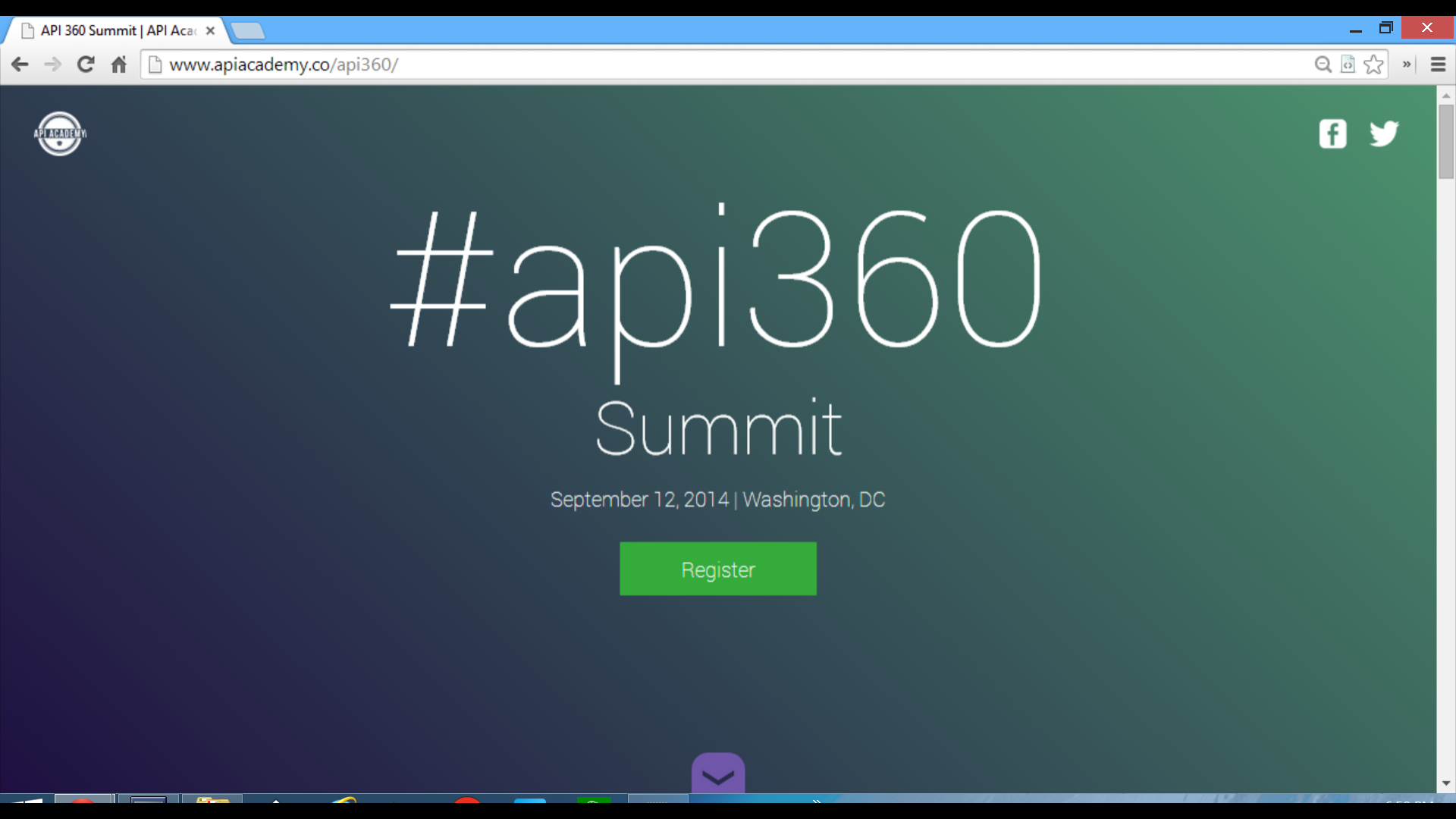


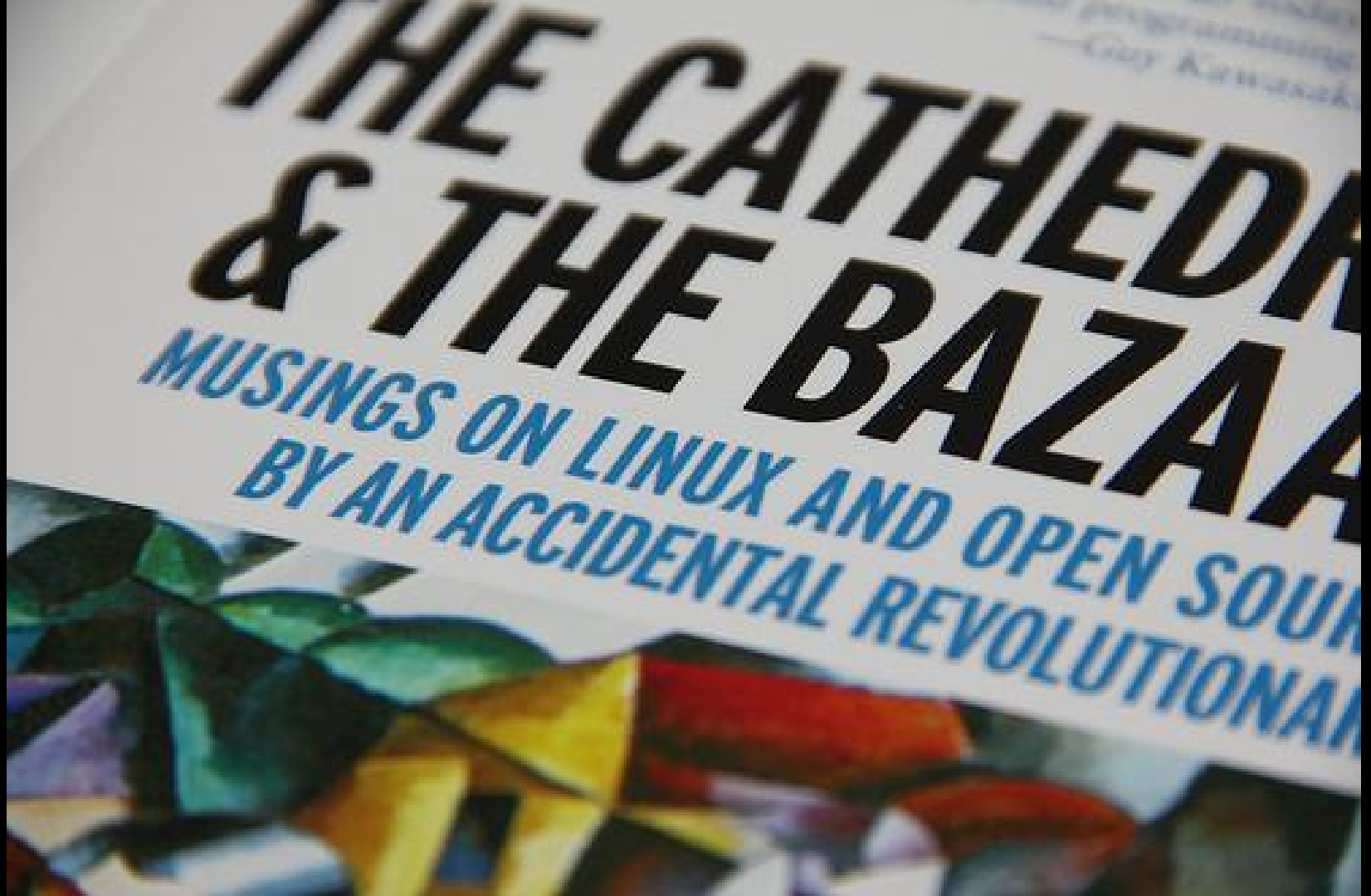
Invite a member by username

Teams 4 >

Jump to a team

Owners


API 360 Summit | API Aca
www.apiacademy.co/api360/
#api360
Summit
September 12, 2014 | Washington, DC
Register


THE CATHEDR
& THE BAZAA
MUSINGS ON LINUX AND OPEN SOUR
BY AN ACCIDENTAL REVOLUTIONAR

4th International Linux Congress in Würzburg at the fortress gleanings

- Slides, abstracts,
- opinions, comments,
- press

Conference program with documents relating to the lectures

Wednesday, May 21

XFree86 Driver Development
Dirk Hohndel , King Harald

"The most important book about technology today, with implications that go far beyond programming."
—Guy Kawasaki

THE CATHEDRAL & THE BAZAAR

MUSINGS ON LINUX AND OPEN SOURCE BY AN ACCIDENTAL REVOLUTIONARY

ERIC S. RAYMOND

WITH A FOREWORD BY BOB YOUNG, CHAIRMAN & CEO OF RED HAT, INC.

The Art of UNIX Programming

With contributions from thirteen UNIX pioneers, including its inventor, Ken Thompson

Eric S. Raymond

ADDISON-WESLEY PROFESSIONAL COMPUTING SERIES

Eric S. Raymond (ESR)

"In the beginning, there were Real Programmers" - **ESR**

0 450 05560 4 NEW ENGLISH LIBRARY

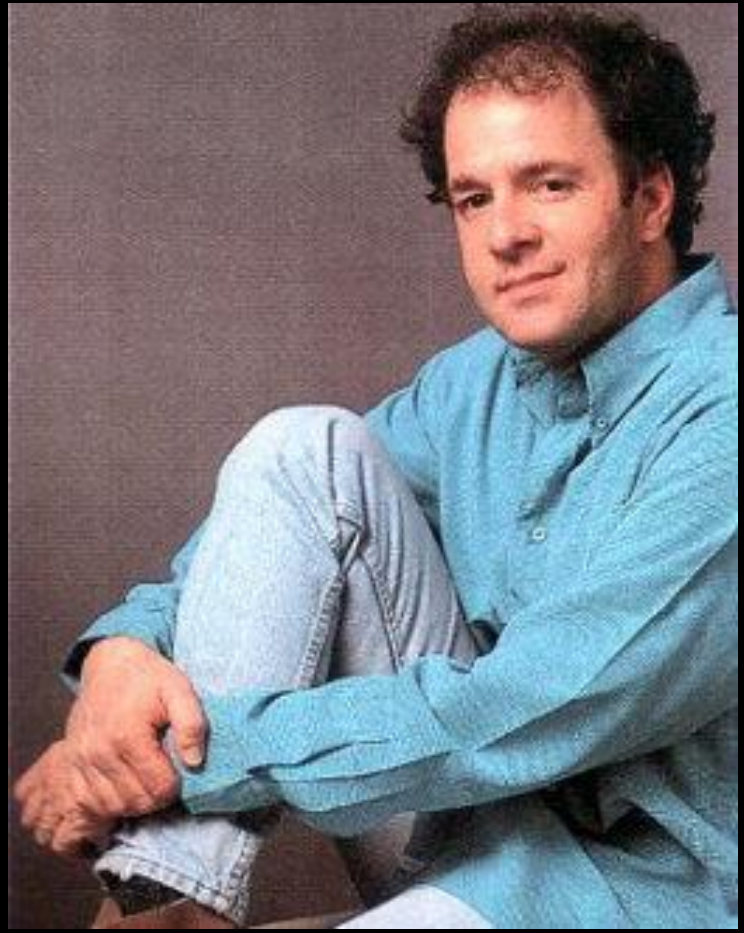
Real Men Don't Eat Quiche

A guidebook to all that is Truly Masculine

special forthright True Brit edition

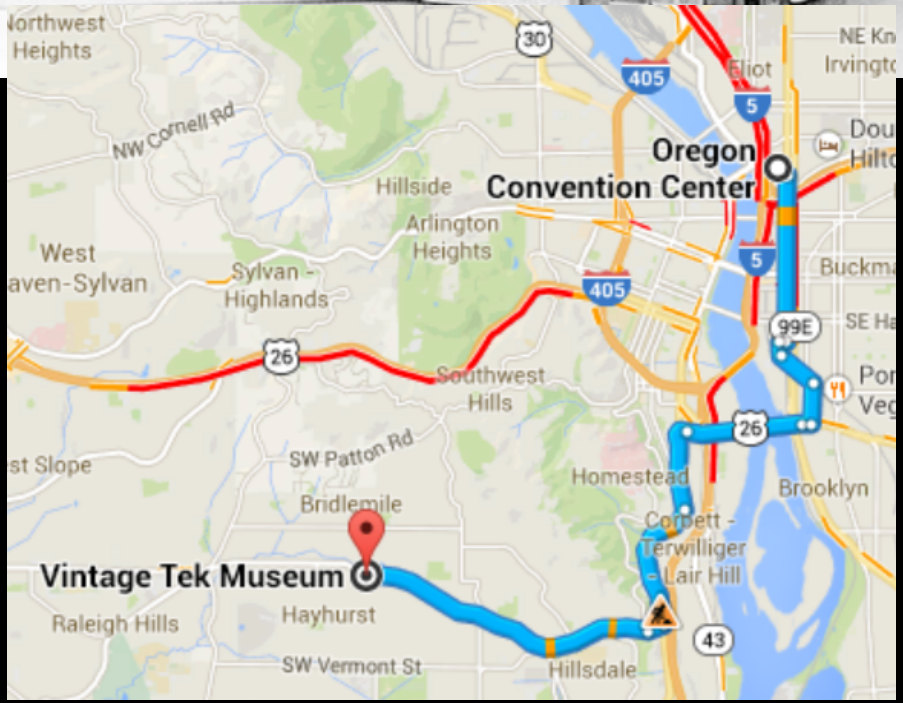
Bruce Feirstein

illustrated by Lee Lorenz and David Austin



Tektronix®

vintageTEK
A Museum of Vintage TEKTRONIX Equipment


Oregon
Convention Center
Vintage Tek Museum
Hillside
Arlington
Heights
West
Sylvan -
Highlands
Southwest
Hills
Homestead
Brooklyn
Bridlemile
Hayhurst
Raleigh Hills
Hillsdale
SW Patton Rd
SW Vermont St
NW Cornell Rd
Eliot
Corbett -
Terwilliger
- Lair Hill
405
5
30
26
99E
43

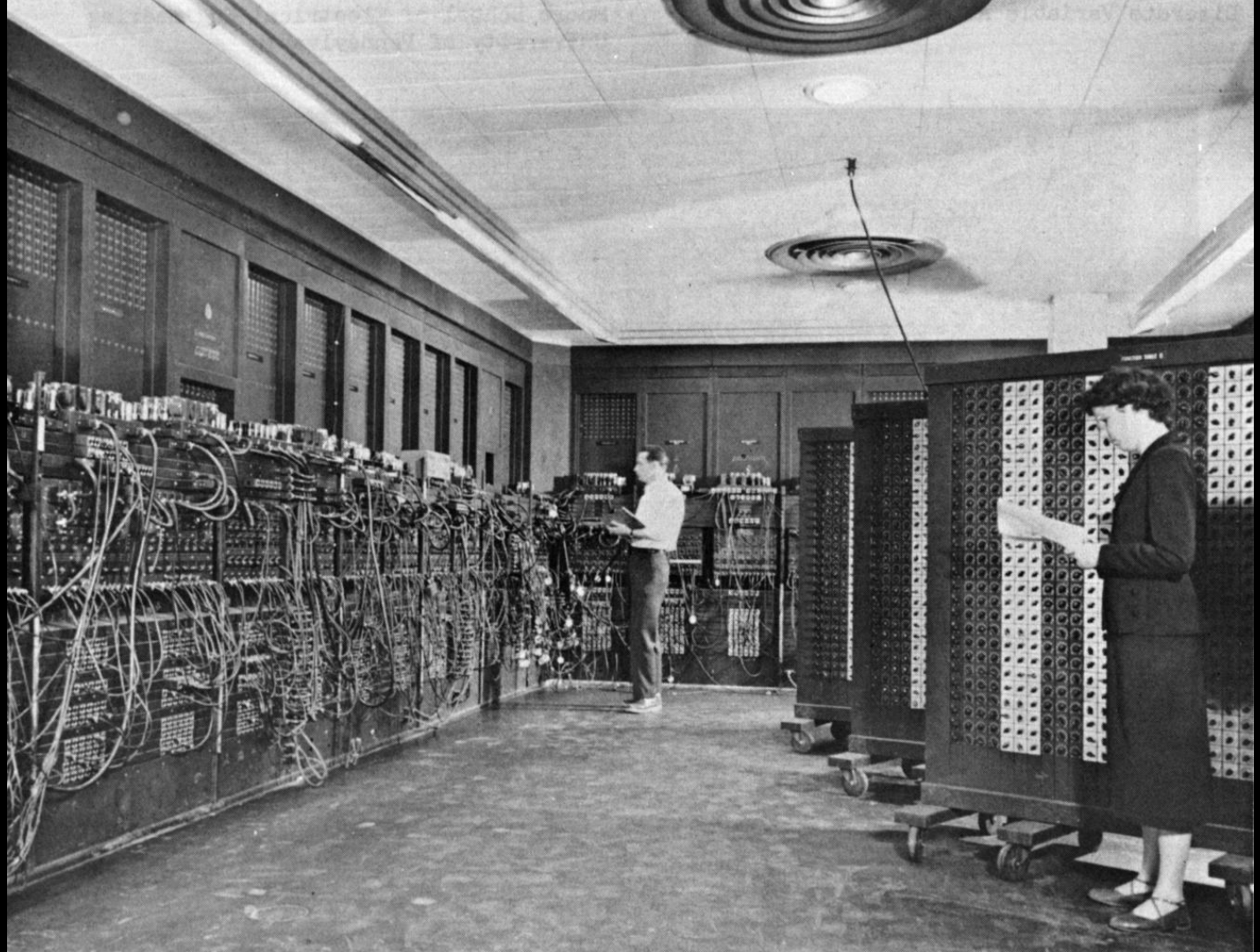
``Real Programmers Don't Use PASCAL''

Ed Post
Tektronix, Inc.
Copyright (C) 1982

Back in the good old days -- the `Golden Era' of computers, it was easy to separate the men from the boys (sometimes called ``Real Men'' and ``Quiche Eaters'' in the literature). During this period, the Real Men were the ones that understood computer programming, and the Quiche Eaters were the ones that didn't. A real computer programmer said things like `DO 10 I=1,10' and `ABEND' (they actually talked in capital letters, you understand), and the rest of the world said things like `computers are too complicated for me' and `I can't relate to computers -- they're so impersonal''. (A previous work [1] points out that Real Men don't `relate' to anything, and aren't afraid of being impersonal.)

"In the beginning, there were Real Programmers" - **ESR**

"In the beginning...

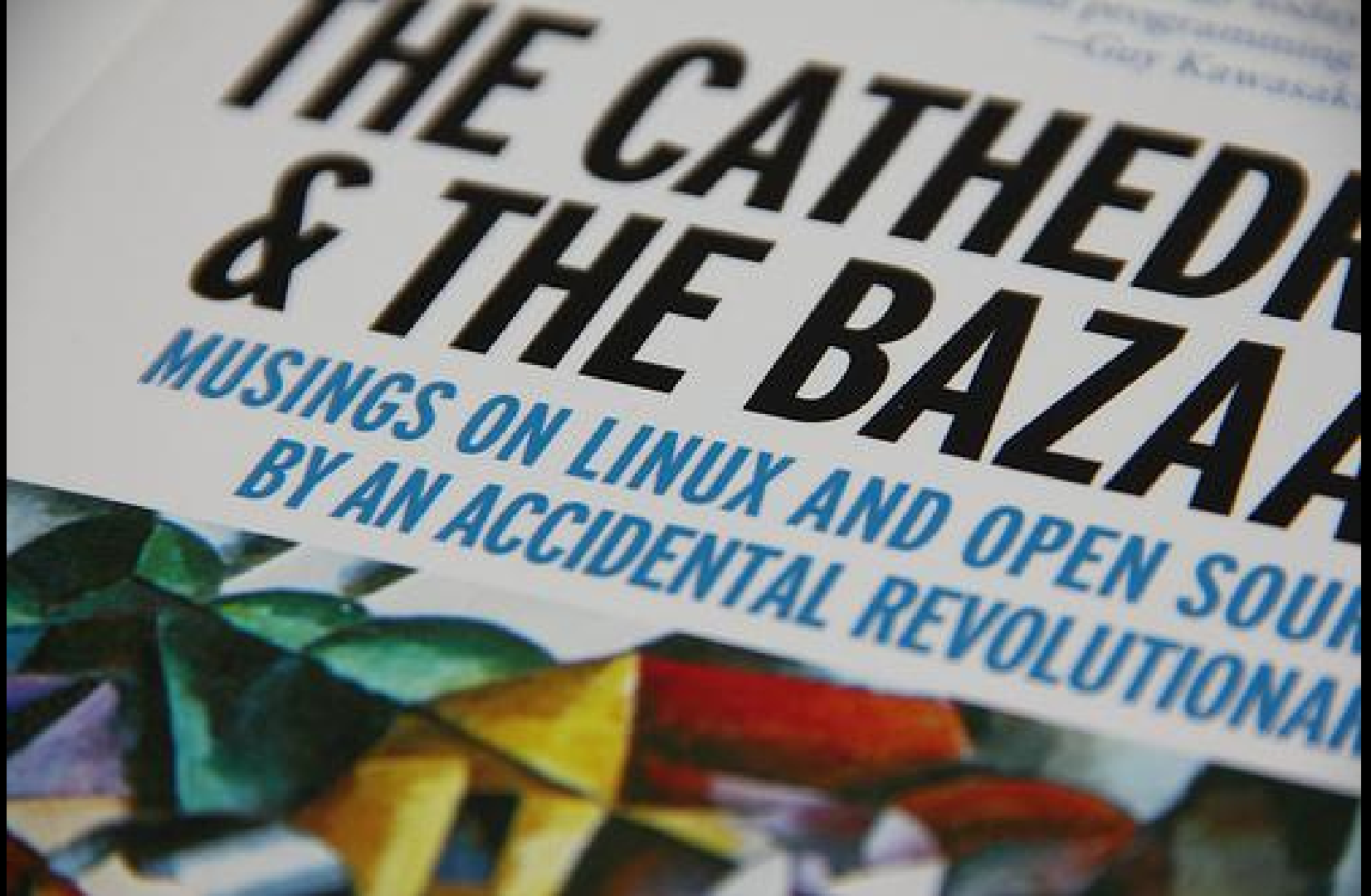


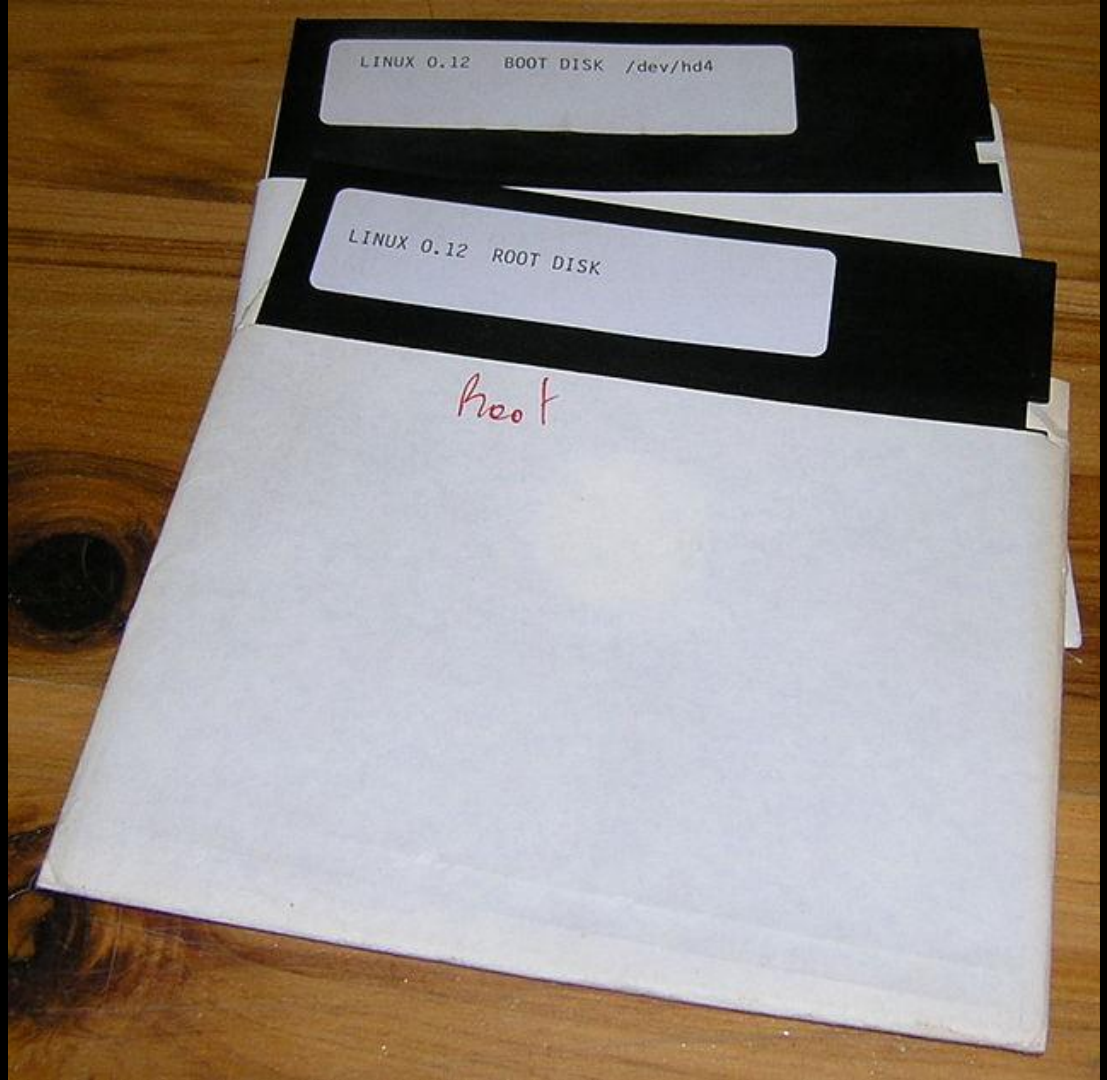
1950's DC Photographs

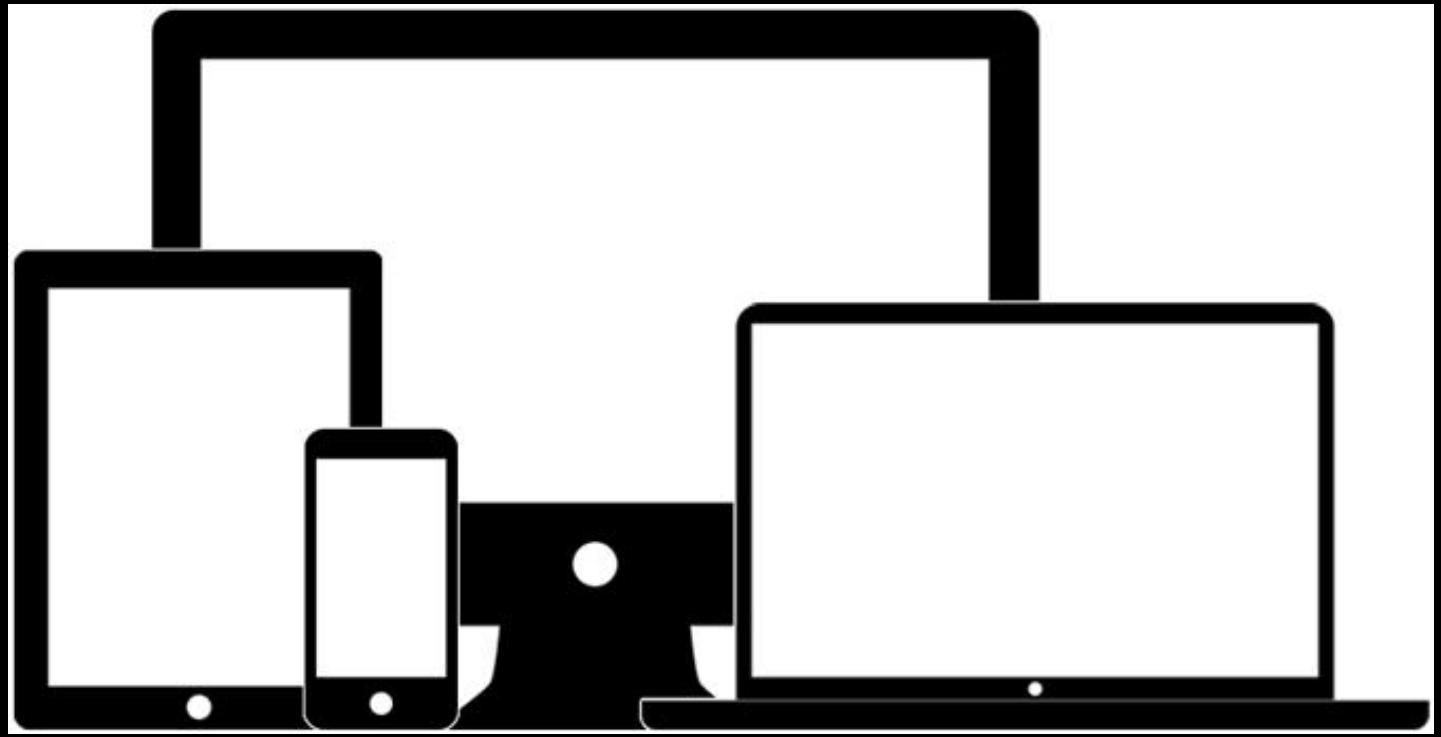
ACHTUNG!

ALLES LOOKENSPEEPERS!

Das computermachine ist nicht fuer gefingerpoken und mittengrabben. Oderwise ist easy schnappen der springenwerk, blowenfusen und poppencorken mit spitzensparken. Ist nicht fuer gewerken bei das dumpkopfen. Das rubbernecken sichtseeren keepen das cotten-pickenen hans in das pockets muss; relaxen und watchen das blinkenlights.


THE CATHEDR
& THE BAZAA
MUSINGS ON LINUX AND OPEN SOUR
BY AN ACCIDENTAL REVOLUTIONAR


LINUX 0.12 BOOT DISK /dev/hd4
LINUX 0.12 ROOT DISK
Root



Back
Address
http://gmail.google.com/gmail/help/about
Search Web
Google
Gmail
BETA
by Google
About Gmail
What's new on Gmail?
Just Launched!
Gmail Overview

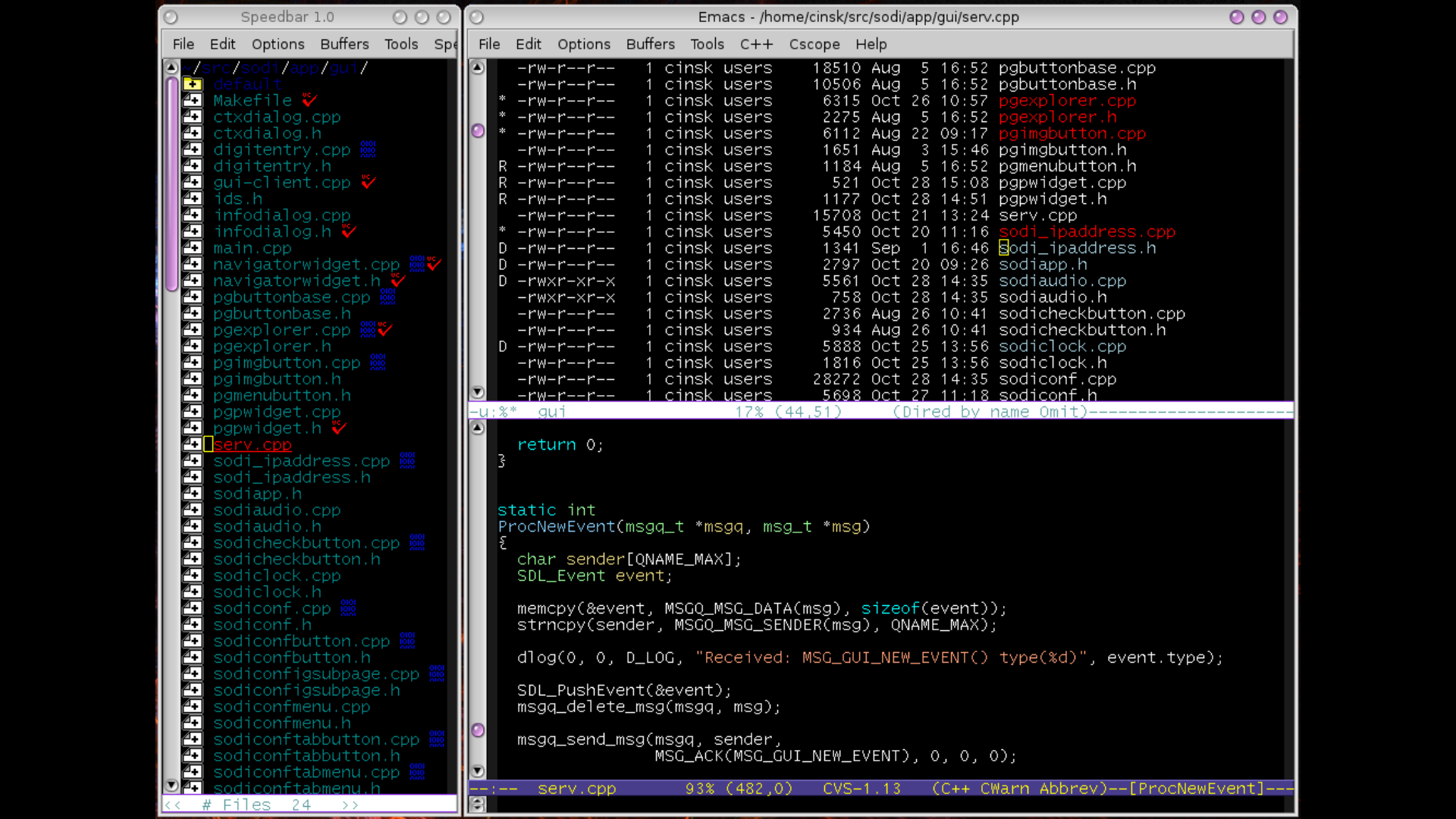
fcomplex Csqrt(fcomplex z)
fcomplex c;
float w;
if ((z.r == 0.0) && (z.i == 0.0)) {
c.r=0.0;
c.i=0.0;
} else {
w = sqrt((sqrt(z.r*z.r + z.i
if (z.r >= 0.0){
c.r=w;
return ans;

Cathedral vs. Bazaar

The Cathedral

The Cathedral

The Cathedral model, in which source code is only available upon each software release.


Speedbar 1.0
File Edit Options Buffers Tools Spe
~/src/sodi/app/gui/
default
Makefile
ctxdialog.cpp
ctxdialog.h
digitentry.cpp
digitentry.h
gui-client.cpp
ids.h
infodialog.cpp
infodialog.h
main.cpp
navigatorwidget.cpp
navigatorwidget.h
pgbuttonbase.cpp
pgbuttonbase.h
pgexplorer.cpp
pgexplorer.h
pgimgbutton.cpp
pgimgbutton.h
pgmenubutton.h
pgpwidget.cpp
pgpwidget.h
serv.cpp
sodi_ipaddress.cpp
sodi_ipaddress.h
sodiapp.h
sodiaudio.cpp
sodiaudio.h
sodicheckbutton.cpp
sodicheckbutton.h
sodiclock.cpp
sodiclock.h
sodiconf.cpp
sodiconf.h
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sodiconfigsubpage.cpp
sodiconfigsubpage.h
sodiconfmenu.cpp
sodiconfmenu.h
sodiconftabbutton.cpp
sodiconftabbutton.h
sodiconftabmenu.cpp
sodiconftabmenu.h
<< # Files 24 >>
Emacs - /home/cinsk/src/sodi/app/gui/serv.cpp
File Edit Options Buffers Tools C++ Cscope Help
-rw-r--r-- 1 cinsk users 18510 Aug 5 16:52 pgbuttonbase.cpp
-rw-r--r-- 1 cinsk users 10506 Aug 5 16:52 pgbuttonbase.h
* -rw-r--r-- 1 cinsk users 6315 Oct 26 10:57 pgexplorer.cpp
* -rw-r--r-- 1 cinsk users 2275 Aug 5 16:52 pgexplorer.h
* -rw-r--r-- 1 cinsk users 6112 Aug 22 09:17 pgimgbutton.cpp
-rw-r--r-- 1 cinsk users 1651 Aug 3 15:46 pgimgbutton.h
R -rw-r--r-- 1 cinsk users 1184 Aug 5 16:52 pgmenubutton.h
R -rw-r--r-- 1 cinsk users 521 Oct 28 15:08 pgpwidget.cpp
R -rw-r--r-- 1 cinsk users 1177 Oct 28 14:51 pgpwidget.h
-rw-r--r-- 1 cinsk users 15708 Oct 21 13:24 serv.cpp
* -rw-r--r-- 1 cinsk users 5450 Oct 20 11:16 sodi_ipaddress.cpp
D -rw-r--r-- 1 cinsk users 1341 Sep 1 16:46 sodi_ipaddress.h
D -rw-r--r-- 1 cinsk users 2797 Oct 20 09:26 sodiapp.h
D -rwxr-xr-x 1 cinsk users 5561 Oct 28 14:35 sodiaudio.cpp
-rwxr-xr-x 1 cinsk users 758 Oct 28 14:35 sodiaudio.h
-rw-r--r-- 1 cinsk users 2736 Aug 26 10:41 sodicheckbutton.cpp
-rw-r--r-- 1 cinsk users 934 Aug 26 10:41 sodicheckbutton.h
D -rw-r--r-- 1 cinsk users 5888 Oct 25 13:56 sodiclock.cpp
-rw-r--r-- 1 cinsk users 1816 Oct 25 13:56 sodiclock.h
-rw-r--r-- 1 cinsk users 28272 Oct 28 14:35 sodiconf.cpp
-rw-r--r-- 1 cinsk users 5698 Oct 27 11:18 sodiconf.h
-u:%* gui 17% (44,51) (Dired by name Omit)
return 0;
}
static int
ProcNewEvent(msgq_t *msgq, msg_t *msg)
{
char sender[QNAME_MAX];
SDL_Event event;
memcpy(&event, MSGQ_MSG_DATA(msg), sizeof(event));
strncpy(sender, MSGQ_MSG_SENDER(msg), QNAME_MAX);
dlog(0, 0, D_LOG, "Received: MSG_GUI_NEW_EVENT() type(%d)", event.type);
SDL_PushEvent(&event);
msgq_delete_msg(msgq, msg);
msgq_send_msg(msgq, sender,
MSG_ACK(MSG_GUI_NEW_EVENT), 0, 0, 0);
--:-- serv.cpp 93% (482,0) CVS-1.13 (C++ CWarn Abbrev)--[ProcNewEvent]---

1.0 (1985)

3.1 (1992)

95 (1995)

XP (2001)

VISTA (2006)

7 (2009)

8 (2012)

The Bazaar

The Bazaar

The Bazaar model, in which the code is developed over the Internet in view of the public.

AWARDING
EXCELLEN

Fetchmail Mail Retrieval

Fetchmail version 5.4.0+SSL

Add Fetchmail server for user: [ ] ...

Unix user	Fetchmail configuration

root

Server to poll	Active?	Protocol	Remote and local users
www.pic.com.au	Yes	POP3	foo -> jcameron

Add a new server. | Edit default settings. | Check all servers

fcchan

Server to poll	Active?	Protocol	Remote and local users
www.pic.com.au	Yes	POP3	fcchan -> fcchan

Add a new server. | Edit default settings. | Check all servers

jcameron

Server to poll	Active?	Protocol	Remote and local users
localhost	No	IMAP	jcameron -> jcameron-caldera
florissa	No	POP3	jcameron -> jcameron-caldera
pop-server.bigpond.net.au	No	POP3	jcamero1 -> jcameron@webmin.com
joe.webmin.com	Yes	POP3	os -> os@fudu.webmin.com

Add a new server. | Edit default settings. | Check all servers

mcam

Server to poll	Active?	Protocol	Remote and local users
www.pic.com.au	Yes	POP3	mcam -> mcam

Add a new server. | Edit default settings. | Check all servers

flarestar

Server to poll	Active?	Protocol	Remote and local users
lentor.home	Yes	POP3	jcameron -> flarestar

Add a new server. | Edit default settings. | Check all servers

Add Fetchmail server for user: [ ] ...

Scheduled Checking

Click this button to create, change or remove a Cron job to have Fetchmail run automatically on schedule to check for and download email for all listed users.

"Centrally designed [systems] start out strong and improve logarithmically.

"Centrally designed [systems] start out strong and improve logarithmically.

Evolvable [systems] start out weak and improve exponentially."

The Lessons of Open Source Software

The Mail Must Get Through

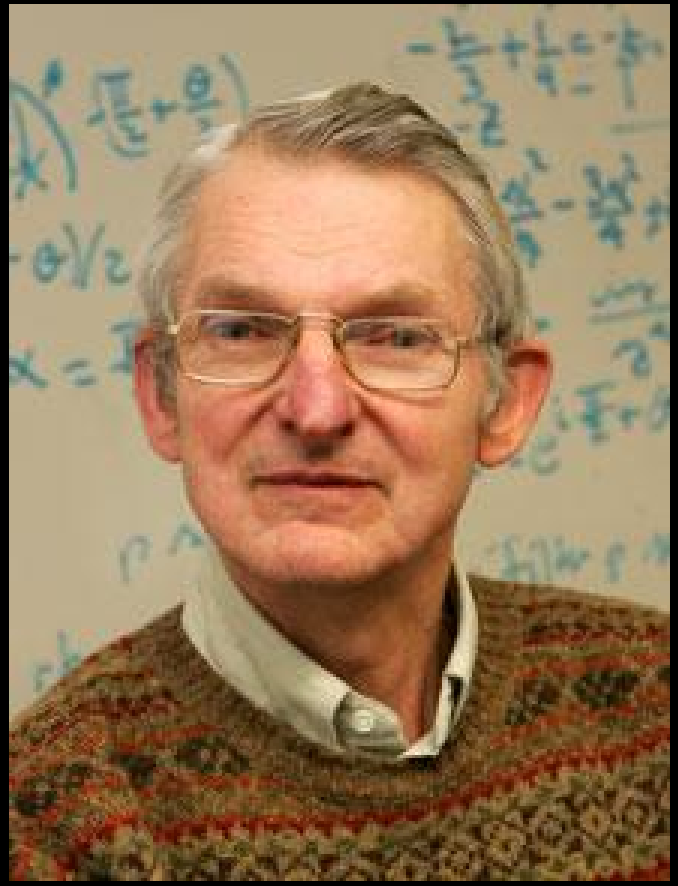
Since 1993 I'd been running the technical side of a small free-access Internet service provider called Chester County InterLink (CCIL) in West Chester, Pennsylvania. I co-founded CCIL and wrote our unique multiuser bulletin-board software—you can check it out by telnetting to locke.ccil.org. Today it supports almost three thousand users on thirty lines. The job allowed me 24-hour-a-day access to the net through CCIL's 56K line—in fact, the job practically demanded it!

I had gotten quite used to instant Internet email. I found having to periodically telnet over to locke to check my mail annoying. What I wanted was for my mail to be delivered on snark (my home system) so that I would be notified when it arrived and could handle it using all my local tools.

The Internet's native mail forwarding protocol, SMTP (Simple Mail Transfer Protocol), wouldn't suit, because it works best when machines are connected full-time, while my personal machine isn't always on the Internet, and doesn't have a static IP address. What I needed was a program that would reach out over my intermittent dialup connection and pull across my mail to be delivered locally. I knew such things existed, and that most of them used a simple application protocol called POP (Post Office Protocol). POP is now widely supported by most common mail clients, but at the time, it wasn't built in to the mail reader I was using.

1. Every good work of software starts by scratching a developer's personal itch.

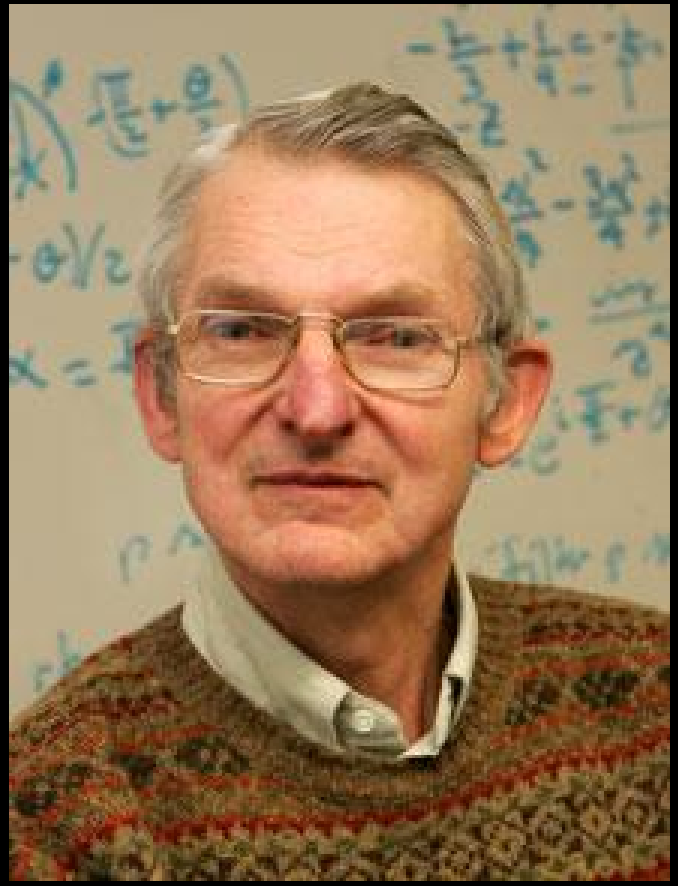
"Write programs that do one thing and do it well."



"Write programs that do one thing and do it well."

"Write programs to work together."

- Douglas McIlroy



3. Plan to throw one [version] away; you will, anyhow.

(Copied from Frederick Brooks' The Mythical Man Month)

ANNIVERSARY EDITION WITH FOUR NEW CHAPTERS

ESSAYS ON SOFTWARE ENGINEERING

THE MYTHICAL MAN-MONTH

FREDERICK P. BROOKS, JR.

3. Plan to throw one [version] away; you will, anyhow.

(Copied from Frederick Brooks' The Mythical Man Month)

If you want to succeed, double your failure rate."

- Thomas J. Watson

5. When you lose interest in a program, your last duty to it is to hand it off to a competent successor.

The brilliant life, stupid death, and improbable return of Upcoming.org

Yahoo killed this beloved scion of the Web 2.0 era. Now it's coming back

By Casey Newton on May 29, 2014 09:30 am Email @CaseyNewton

7. Release early. Release often. And listen to your customers.

Etsy - Your place to buy a

https://www.etsy.com

Etsy

What are you looking for? Search

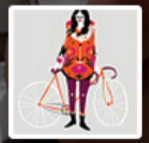
Sign In | Cart 0

Art Home & Living Jewelry Women Men Kids Vintage Weddings More

Shop directly from people around the world.

Karolin Schnoor *of* KarolinSchnoor

United Kingdom



20 items

"We onboard engineers quickly and their first goal is simple: deploy on your first day."

- Chad Dickerson

*"We onboard engineers quickly and their first goal is simple: **deploy on your first day**."*

- Chad Dickerson

9. Smart data structures and dumb code works a lot better than the other way around.

"Bad programmers worry about the code.

Good programmers worry about data structures and their relationships."

-- Linus Torvalds

Media Types

Last Updated

2014-07-09

Registration Procedure(s)

Expert Review for Vendor and Personal Trees.

Expert(s)

Ned Freed, primary; Mark Baker, secondary; Bjoern Hoehrmann, secondary

Reference

[RFC6838][RFC4855]

Note

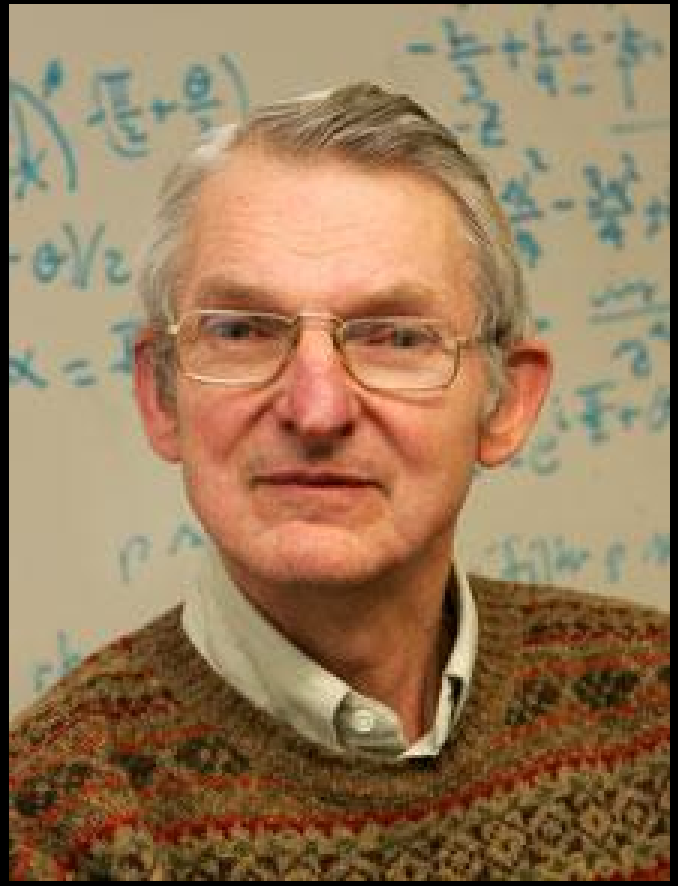
Per Section 3.1 of [RFC6838], Standards Tree requests made through IETF documents will be reviewed and approved by the IESG, while requests made by other recognized standards organizations will be reviewed by the Designated Expert in accordance with the Specification Required policy. IANA will verify that this organization is recognized as a standards organization by the IESG.

Note

[RFC2046] specifies that Media Types (formerly known as MIME types) and Media

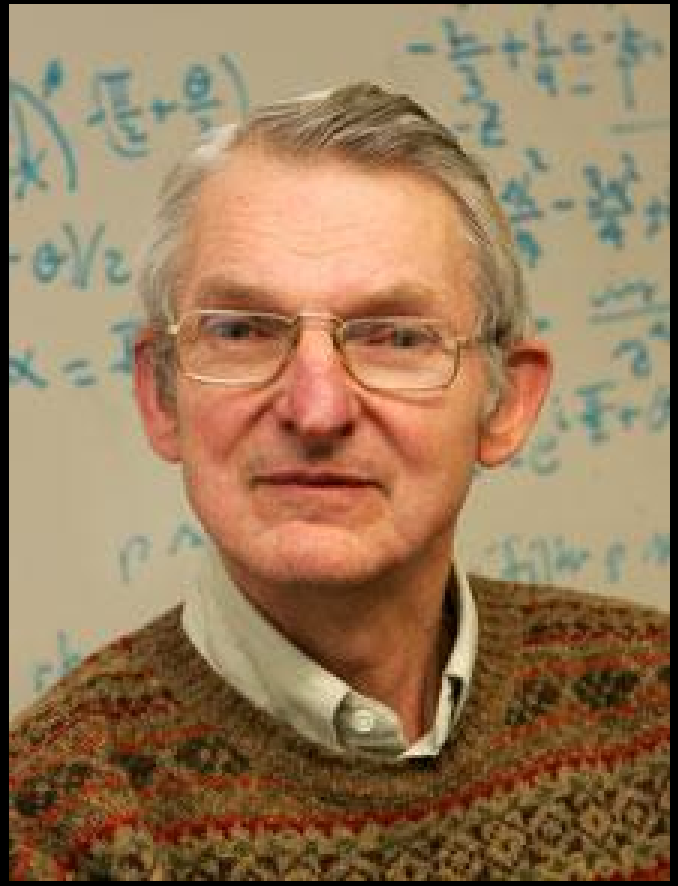
"Write programs to handle text streams, because that is a universal interface."

- Douglas McIlroy



*"Write programs to handle **negotiated message models**, because that is a universal interface."*

- ala Douglas McIlroy



14. Any tool should be useful in the expected way, but a truly great tool lends itself to uses you never expected.

"The value of a well-designed object is that the people who use it can do things with it that the designer never imagined."

- Donald Norman

"Web architecture is all about serendipity"

- Stu Charlton

Key Lessons

- Scratch a (small) itch
- Throw early iterations away
- Plan to hand off the project
- Release early and often
- Smart messages beats dumb code
- Build-in serendipitous reuse

One more thing...

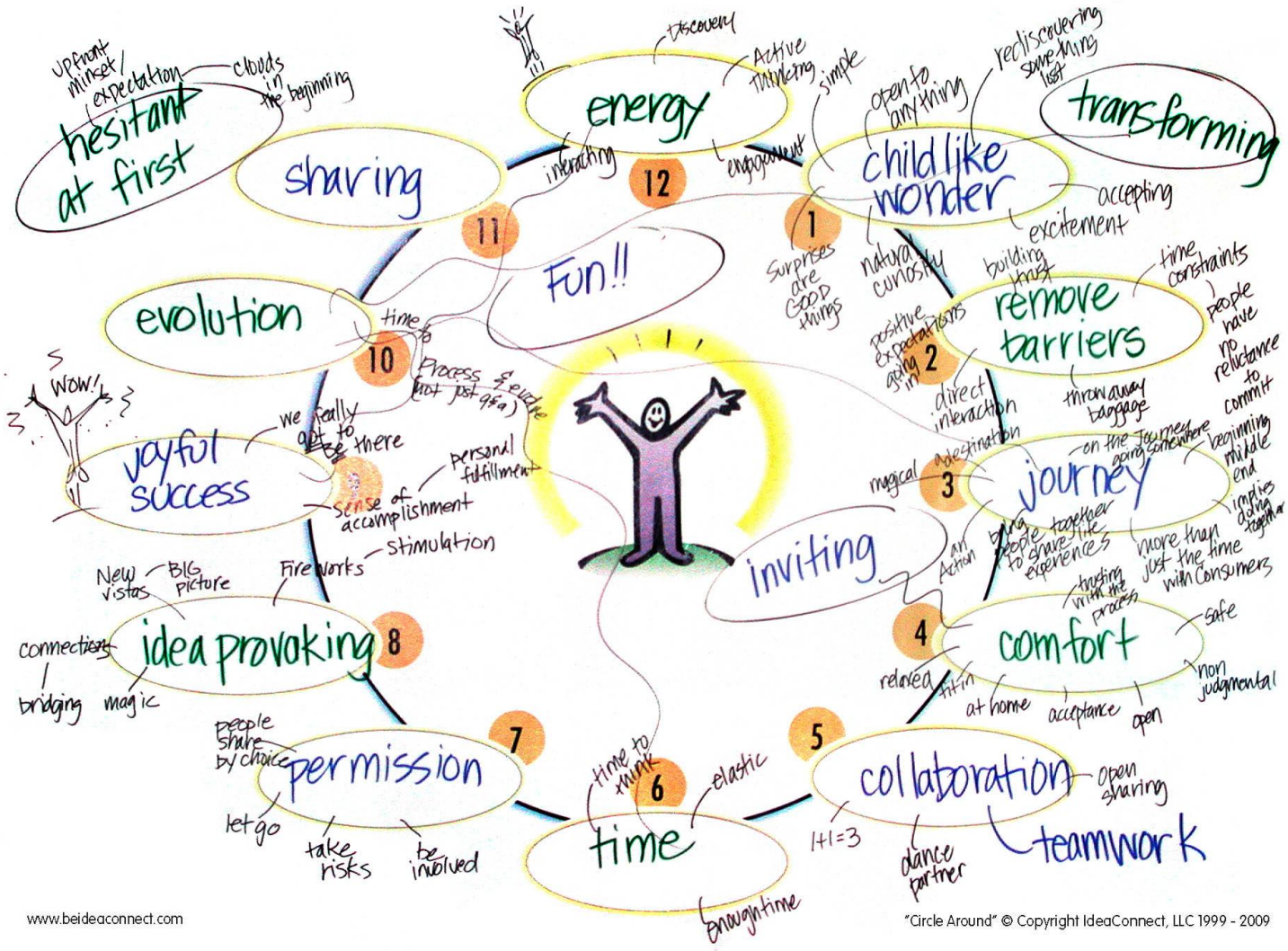
19. Provided the development coordinator has a communications medium at least as good as the Internet,

19. Provided the development coordinator has a communications medium at least as good as the Internet, and knows how to lead without coercion,

19. Provided the development coordinator has a communications medium at least as good as the Internet, and knows how to lead without coercion, many heads are inevitably better than one.

AWARDING
EXCELLEN

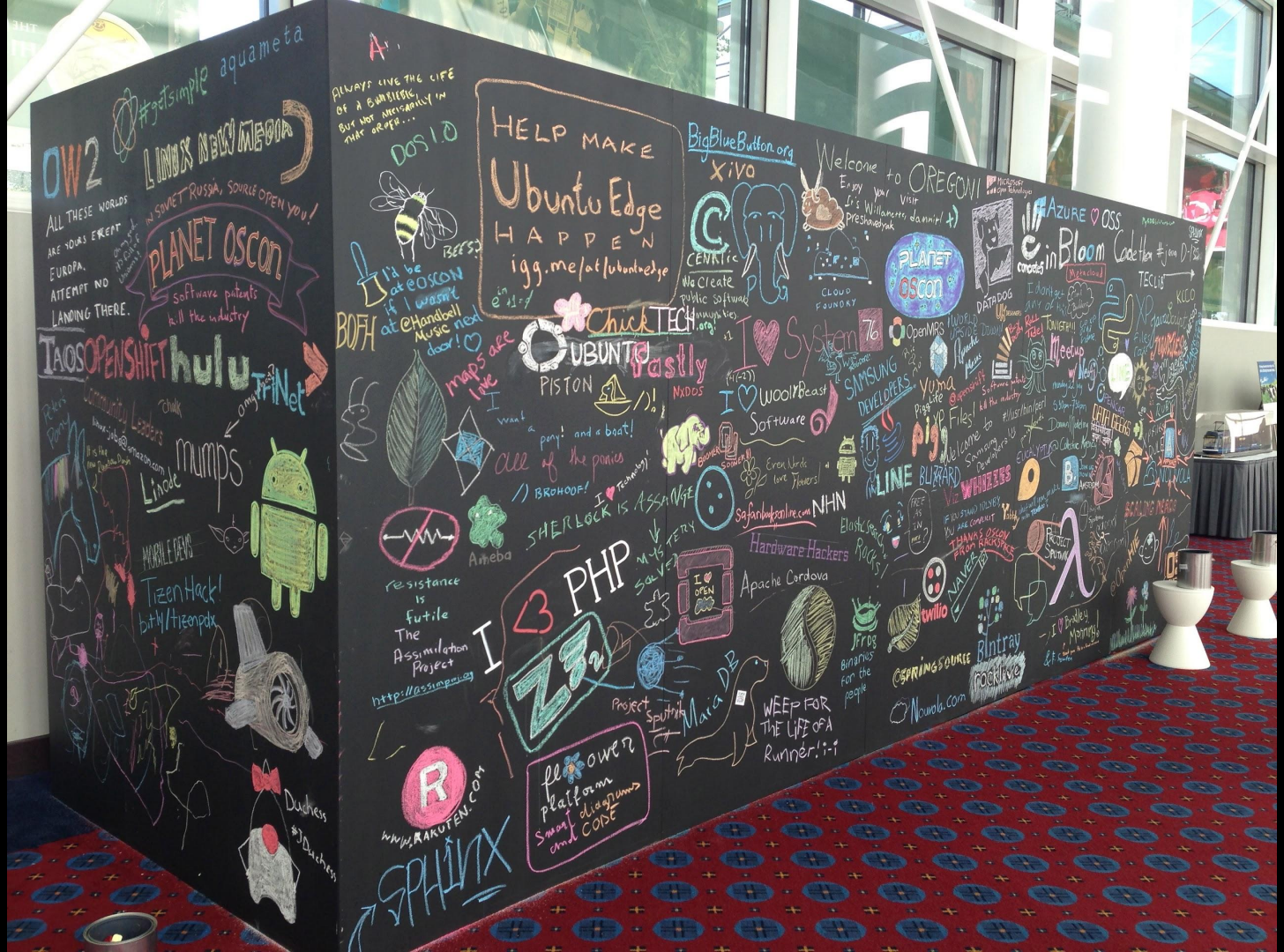
The Bazaar



www.beideaconnect.com

"Circle Around" © Copyright IdeaConnect, LLC 1999 - 2009

Welcome
We are building an
inclusive community



#getsimple aquameta
OW2
LINUX NEW MEDIA
ALL THESE WORLDS ARE YOURS EXCEPT EUROPA. ATTEMPT NO LANDING THERE.
IN SOVIET RUSSIA, SOURCE OPEN YOU!
PLANET OSCON
software patents kill the industry
TAOS OPENSHIFT hulu TFINet
mumps
Linode
MOBILE DEVS
TizenHack!
bitly/tizenpdx
Duchess
#JDuchess
ALWAYS LIVE THE LIFE OF A BUNBLEBIE, BUT NOT NECESSARILY IN THAT ORDER...
DOS 1.0
HELP MAKE Ubuntu Edge HAPPEN
igg.me/at/ubuntuedge
BigBlueButton.org
Xivo
Welcome to OREGON!
Enjoy your visit
It's Willamette, dammit!
Preshavedyak
CENTRIC
We Create public software
CLOUD FOUNDRY
PLANET OSCON
AZURE ♡ OSS
inBloom
Code then #jeng D-Bus
TECLIB
KCCO
BEES
I'd be at @OSCON if I wasn't at @Handbell Music next door!
BOFH
maps are love
ChickTECH
UBUNTU
Fastly
PISTON
NXDOS
System 76
OpenMRS
SAMSUNG DEVELOPERS
Yuma
I ♡ WoolyBeast Software
I want a pony! and a boat!
all of the ponies
BROHOOF!
I ♡ Technology!
SHERLOCK IS ASSANGE
Ameba
resistance is futile
The Assimilation Project
http://assimpro.org
PHP
MYSTERY SOLVED
I ♡ OPEN
Apache Cordova
Hardware Hackers
NHN
LINE
BLIZZARD
WHIZZES
THANKS OSCON FROM RACKSPACE
NAVER
twilio
Bintray
rocklive
SPRINGSOURCE
Nowola.com
Project Sputnik
Maia DB
WEEP FOR THE LIFE OF A Runner! i-i
flower platform
Smart diagrams and CODE
WWW.RAKUTEN.COM
SPHINX

We're all Real Programmers

Cathedrals in the Cloud
Musings on APIs for the Web
http://g.mamund/2014-oscon-cathedrals
Mike Amundsen
API Academy / CA
@mamund