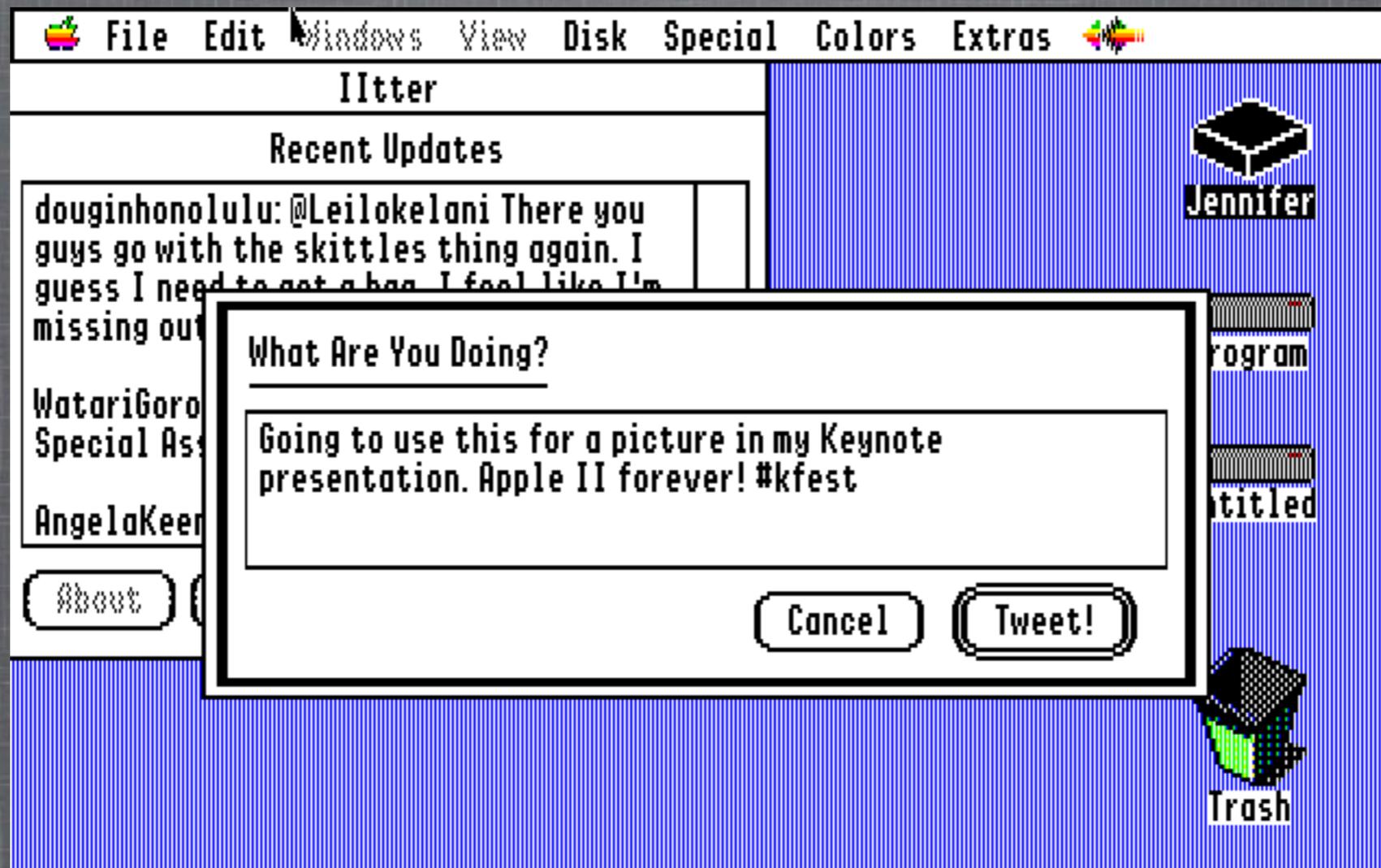


THE UNSUCKABLES

*How Web APIs and Mobile Devices are Shaping the Future of Apple IIgs
TCP/IP Programming (and Other Topics)*



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KansasFest 2009

*Rockhurst University * July 23, 2009*

A FLASHBACK TO KANSASFEST 2008

```
The (up to first 255 characters of) text currently on your clipboard is:  
  
http://cgi.ebay.com/Apple-II-Computer-Analog-Joystick-Controller-IBM-PC_W000item  
Z11027192788700cmdZViewItem?hash=item110271927887  
  
Convert to a shorter URL (y/n)? y  
Resolving bit.ly...  
Connecting to bit.ly  
Sending long URL to bit.ly  
Receiving short URL from bit.ly  
Ending connect with bit.ly  
Parsing short URL  
Findreturn is          270  
receivedsize-findreturn is          20  
Your short URL is:  
  
http://bit.ly/bcEeM  
  
Press return to exit■
```

BIT.LY: THE URL SHORTENER WITH AN API

- As URLs have gotten longer, there's been a need to shorten them.
- Several similar sites exist (tinyurl.com and snipurl.com for starters).
- Bit.ly shortens and has an A(application) P(rogrammer) I(nterface)

WHAT'S AN API?

- Besides what it stands for (Application Programmer Interface)
- Wikipedia definition (July 6, 2009):
 - In computer science, an application programming interface (API) is an interface defining the ways by which an application program may request services from libraries and/or operating systems. An API determines the vocabulary and calling conventions the programmer should employ to use the services. It may include specifications for routines, data structures, object classes and protocols used to communicate between the requesting software and the library.

IN NON-GEEK, PLEASE?

- An API tells a coder how to work with a service.
- For Web services, it documents what kind of data needs to be sent to a server in what format and what to expect in return.
- Bit.ly provided a super simple API (since deprecated, but Bitly CDA still works).

FROM THE WEB

- If you were using the old Bit.ly API, to shorten a URL (say `http://athletic-diabetic.com/`), enter this in your Web browser:
 - `http://bit.ly/api?url=http://athletic-diabetic.com/`
- Bit.ly returns:
 - `http://bit.ly/1D4ZCc`

FROM THE WEB, PART 2.0

- If you want to go in reverse (lengthen a Bit.ly shortened URL):
 - `http://bit.ly/resolve?url=http://bit.ly/1D4ZCc`
- Bit.ly will return the original URL of:
 - `http://athletic-diabetic.com/`

ANOTHER API EXAMPLE

- Twitter is another Web site with an API.
- Itter, which is finally being released today, is based on the Twitter API.
- Interestingly, Twitter has a “mobile” Web site and a “standard” Web site.
- In most cases, “mobile” Web sites are more appropriate for the Apple IIGs.

MORE MEAT, LESS FLUFF

The image shows a screenshot of a web browser displaying a Twitter page. The browser's address bar shows the URL `http://twitter.com/replies`. The page title is "Twitter / @rsuenaga". The browser's toolbar includes navigation buttons (back, forward, refresh, home), a search bar with "api site:bit.ly" entered, and various utility icons. Below the browser, the Twitter interface is visible, featuring a "Replies" section. The replies are listed in chronological order, with the most recent at the top. Each reply includes the user's name, their handle, the text of the reply, and the time it was posted. The replies are as follows:

- jlieu** @Alohakatie @emusicmotion @michaelsorenson @MrEricPiRaTe @thedailydish @LaurieCicotello @sishizaki @rsuenaga @rickyli99 @marcorbito Morning! about 1 hour ago
- OahuAJ** RT @mustheartdogs: @typezero3 @OahuAJ @rsuenaga @kamanu @geewhy @ryankanno g'morning! Me:-aloha kakahiaka about 2 hours ago
- mustheartdogs** @typezero3 @OahuAJ @rsuenaga @kamanu @geewhy @ryankanno g'morning! about 4 hours ago
- xoizen** @rsuenaga everybody loved japanese stuff. my ex loves japanese stuff even though she aint japanese. my rate for seeing my ex is 0! about 11 hours ago
- ParkRat** @rsuenaga Same but definitely not same. about 11 hours ago
- ParkRat** @rsuenaga I once baked cookies using the same concept. Even our dog wouldn't eat those cookies. about 11 hours ago
- champururu** @rsuenaga That's not cheating. That's being practical. :) about 11 hours ago
- ParkRat** @rsuenaga I don't think it was for revenge. I think it was for sport. about 11 hours ago
- ParkRat** RT @jeffkang: @sishizaki it's @ParkRat's imagination! - Not me! @rsuenaga started singing and put you in it! about 11 hours ago
- ParkRat** RT @jeffkang: @rsuenaga @ParkRat is having scary thoughts - SCARY doesn't even come close to what I would describe them to be. about 11 hours ago
- ParkRat** @rsuenaga There is NO fashion is the show you put in my head at all. about 11 hours ago
- jeffkang** @rsuenaga @ParkRat is having scary thoughts about 11 hours ago
- ParkRat** @rsuenaga Actually, I can kind of see @jeffkang coaching cheerleaders for some reason. But dressed as one? Yipes! about 11 hours ago
- jeffkang** @rsuenaga I never wore a cheerleader uniform! about 11 hours ago
- typezero3** Nite all & btw @rsuenaga we didn't hear any loud boom sounds but hey maybe we missed it somehow :) aloha about 11 hours ago
- jeffkang** @ParkRat @rsuenaga not the images i needed as i'm falling asleep! Ewww! about 11 hours ago
- ParkRat** @rsuenaga Now @jeffkang is wearing a cheerleader uniform. It is not pretty. He needs @lenahanson to take care of those fuzzy legs. about 11 hours ago
- champururu** @rsuenaga Congratulations on going beta. Better to be accurate than fast. De-bugging is the pits, eh? about 11 hours ago
- ParkRat** @rsuenaga Oh boy. A picture of @jeffkang in Spandex just flashed through my head. How wonderful of you for that. about 11 hours ago

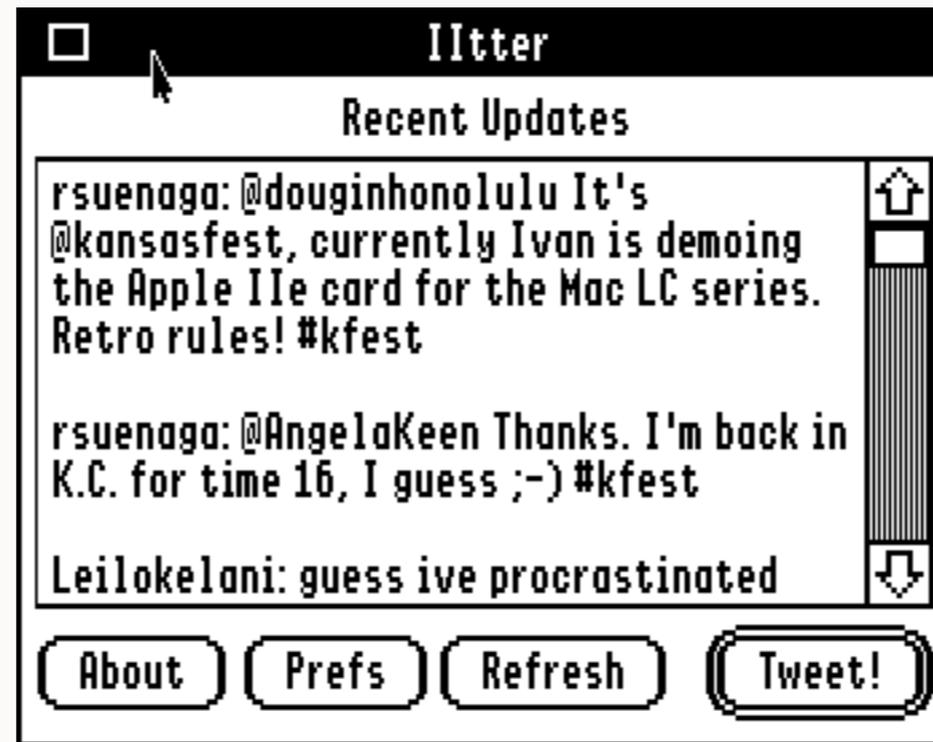
At the bottom of the page, there is a search bar with "Find: api" and buttons for "Next", "Previous", "Highlight all", and "Match case". The browser's status bar at the very bottom shows "Done".

FLUFF, NICE BUT TOUGH TO DEAL WITH

The image shows a screenshot of a Twitter profile page for user @rsuenaga, viewed in a browser window. The browser's address bar shows the URL <http://twitter.com/#replies>. The page features the Twitter logo and navigation links: Home, Profile, Find People, Settings, Help, and Sign out. The main content area is titled "What are you doing?" and shows a text input field with a character count of 140. Below the input field, the latest tweet is displayed: "@jlieu: Hi Jenn. That picture on Facebook is so great I think that when you get married it needs to be in the ... about 1 hour ago". The "Updates mentioning @rsuenaga" section lists several tweets, including one from @jlieu mentioning @Alohakatie, @emusicmotion, @michaelsorenson, @MrEricPiRaTe, @thedailydish, @LaurieCicotello, @sishizaki, @rsuenaga, @rickyli99, and @marcorbito. Another tweet is from @OahuAJ RT @mustheartdogs: @typezero3 @OahuAJ @rsuenaga @kamanu @geewhy @ryankanno g'morning! Me:-aloha kakahiaka. A third tweet is from @mustheartdogs @typezero3 @OahuAJ @rsuenaga @kamanu @geewhy @ryankanno g'morning!. The bottom tweet is from @xoizen @rsuenaga: everybody loved japanese stuff. my ex loves japanese stuff even though she aint japanese. my rate. The right sidebar shows the user's profile information: rsuenaga, 317 following, 1,026 followers, and 27,317 updates. It also includes a "Trazz-ler Buzz" section, a search bar, and trending topics like #musicmonday, Michael Jackson, MJ's, iTwitter, and #iranelection. The browser's search bar at the bottom contains the text "Find: api" and has buttons for "Next", "Previous", "Highlight all", and "Match case".

IITTER

- Closer to the mobile site than the full version



A VERY SIMPLE API

- Let's say, "I want to get a stock quote."
- I use `http://finance.yahoo.com/` to get a quote for Apple, Inc. (AAPL)
- Wow, that's pretty cool...
- There's also an API that will return a plain old fashioned CSV file of stock values.

AS SIMPLE AS IT GETS

- `http://finance.yahoo.com/d/quotes.csv?s=` followed by stock ticker symbol(s) separated by + then `&f=` followed by special tag(s)
- For example:
 - `http://finance.yahoo.com/d/quotes.csv?s=AAPL&f=11`
- Returns a CSV (comma separated values) result of:
 - 157.86

STOCK QUOTE BY YAHOO! CDA

- Classic Desk Accessory to get a single stock quote using Yahoo!'s Web service
- Public domain, including source code
- Nothing special to look at, but...
- ...includes source to show how to check if Marinetti is installed, if a link is up, resolve a domain name, open a connection, send data, receive data, and close a port.
- Meaning I never want to hear from an aspiring coder again that they don't know how to do these things with Marinetti.

STOCK QUOTE CDA 1.0

```
Stock Quote CDA 1.0 using Yahoo! Finance
```

```
Contains libraries from ORCA Pascal,  
Copyright 1991-2009, Byte Works Inc.  
Released at KansasFest 2009  
Originally written by Ryan M. Suenaga, M.S.W., L.C.S.W.  
Public domain, do with it what you want!
```

```
Enter stock ticker for a quote: aapl  
Resolving download.finance.yahoo.com...  
Connecting to download.finance.yahoo.com  
Sending data to download.finance.yahoo.com  
Receiving quote from download.finance.yahoo.com  
Ending connect with download.finance.yahoo.com  
Parsing the quote  
Your stock quote is: 157.86
```

```
Press return to exit■
```

MORE WEB APIS

- A quick Google search will find lots of different Web APIs.
- Here's some quick ideas:
 - Weather, horoscope, IP data, Brightkite and other location services, thesaurus, dictionary... and more.
- Look at <http://www.trynt.com/apis> or <http://www.programmableweb.com/apis/directory>

SOME MORE THINGS

- A2Unplugged awards the geocaching prize to Tony Diaz
- A2Unplugged comes off hiatus effective Saturday
- A2Unplugged sponsors Krispy KremeFest tonight!
- Blatant plugs:
 - Uncommon-Cents.net
 - Athletic-Diabetic.com
 - A2Unplugged.com
 - RyansAppleSoftware.com

ONE LAST THING

- A long time ago, at a college not far away...
- ...not only was there a TCP/IP stack named Marinetti, there was a user FAQ that went with it...
- ...and then disappeared.
- Today, the Marinetti 3.0 FAQ for users is officially being announced as back.
- Soon at fine Apple II Web sites everywhere.