Assignment #1, 91.514, Internet and Web II, Professor Levkowitz

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The following references will maintained weekly, a short note describes each, perhaps a longer note. Technical marketing material is sited appropriately. lpi514.bib constitutes the machine readable bibliography.

1 Week ending 01/31/2011

1. Cloud Computing text, in general [35]
2. Google app engine text [52]
3. Google App engine site [23]
5. Hadoop text [60]
6. Azure text [44]
7. SpringNote site [25]
8. SVN Versions site [26]
2 Week ending 02/07/2011

1. Opteros Commercial iphone Demonstration [27]
2. Semantic Web text [53]
3. Collective Intelligence text [28]
4. Scripting Intelligence text [59]
5. Advanced iOS4 text [45]
6. iPhone for programmers, text [1]

3 Week ending 02/14/2011

1. Russian-English Online combinatoric dictionary [20]. Potential cloud project?
2. Amazon, simple DB text [49]
3. MIT Lincoln Laboratories, Interview [13]
5. Amazon simple DB site [2]
6. Mongo DB, site [14]
7. Mongo DB text [36]

4 Week ending 02/21/2011

1. Perceptive Software, Enterprise Content Management (ECM) [16]
2. UMass Medical (Shrewsbury), interview, ECM for all UMass campuses [21]
3. iDisk, a personal experience with cloud for Apple iMac customers [7]
4. Cloud Computing, a Practical Approach [58]
5. Spring on the Grid, Clustering Object State using Terracotta [46]
6. Farming out Execution to a Grid [47]

5  Week ending 02/28/2011

1. iDisk Backup to Mobile-Me Cloud, revisited [8]
2. Semantic Web Programming for Dummies, text [51]
3. Semantic Web Programming, text [40]
4. AI application for legal discovery, impressive [48]
5. Cloud based personal information management, showcase for Ext-JS [39]

6  Week ending 03/07/2011

1. Camel, the Language, text; EIB enterprise Integration Bus [42]
2. Facebook, created account for myself [4]
3. Russian social networking site, must be invited [9]

7  Week ending 03/14/2011

1. Red Laser, iphone App, tracks bar code prices; works great on my Iphone [19]
2. Librarians in an uproar because Harper Collins limits e-book check outs [34]
3. Loopt iphone App. Find people using via email, phone number, in your local geographic area [12]

8  Week ending 03/21/2011

1. Rackspace.com: create instance of OS on cloud, minimum cost: $11/month [17]
2. Apples directory listing of language instruction, many paid for apps, some free [3]
3. Learn Russian iphone App; not bad for vocabulary building, clear enunciation, shows Cyrillic text [10]

9 Week ending 03/28/2011

1. Social Networking, location specific audio story telling iPhone APP [32]
2. iPad App Reviews Guide [56]
3. 2011 iPhone App Guide [55]

10 Week ending 04/04/2011

1. Erlang, a language for backend cloud computing [31]
2. HTML5, Designing Rich Internet Applications (iPhone’s mobile Safari) [37]
3. Brief review of Programming the Semantic Web [54]

11 Week ending 04/11/2011

1. Ipad 2 can run flash, but only using Adobe’s Wallaby [38]
2. RockMelt is a dedicated social app for iphone, OK, but lacking PC browser features [33]

12 Week ending 04/18/2011

1. iphone and Android stores internal unencrypted DB of user’s location for months [29]
2. Amazon Cloud is down for a while [57]
13  Week ending 04/25/2011

1. Foursquare, a free location app, for New Yorkers, lets user check in and win prizes [30]
2. Smart phone study of social network usage [41]
3. Home...Tube, real estate search, iphone; not great [18]

14  Week ending 05/02/2011

1. More sociological correlations; smartphone usage provides the raw data [43]
2. Zillo: iphone app for real estate; horrible [22]
3. homes.com: Homes for sale; rentals. Impressive, because I can find useful information quickly [5]

15  Week ending 05/09/2011

1. Trulia: Homes for sale or rent on iphone. Similar to homes.com [6]
2. Nearby: home is closer than you think; horrible [15]
3. Honeycomb Tablet; android competitor for ipad [50]

References

[1] IPhone for Programmers: An App-Driven Approach. Deitel Developer Series. ‘iPhone for Programmers covers a wide variety of iPhone programming topics, including advanced features like the CoreLocation API, video playback and asynchronous network communication. A particular strength is that it provides badly-needed advice on how to use XCode, how to submit your app to the App Store, how to set your price, and how to deal with many of the other non-programming issues that surround iPhone development’.
[2] Amazon simple db. http://aws.amazon.com/simpledb, 2011. ‘Amazon SimpleDB is a highly available, scalable, and flexible non-relational data store that offloads the work of database administration. Developers simply store and query data items via web services requests, and Amazon SimpleDB does the rest. Unbound by the strict requirements of a relational database, Amazon SimpleDB is optimized to provide high availability, ease of scalability, and flexibility with little or no administrative burden. Behind the scenes, Amazon SimpleDB creates and manages multiple geographically distributed replicas of your data automatically to enable high availability and data durability. The service responds to changes in traffic by charging you only for the compute and storage resources actually consumed in serving your requests. You can change your data model on the fly, and data is automatically indexed for you. With Amazon SimpleDB, you can focus on application development without worrying about infrastructure provisioning, high availability, software maintenance, schema and index management, or performance tuning.’.

[3] Apple language apps. Apple APP directory, 2011. Search for 'language', and we have approximately 92 entries. Apps check nominal fees, for vocabulary, translation, and so on. Language included are romance, European, Russian, Middle Eastern and Asian. Note that that apps are trivial, in other words, do not expect to gain any significant amount of fluency in target language.

[4] Facebook. http://www.facebook.com, 2011. This is a cloud based social networking site. I set up an account for myself. Site is pretty good. Uploading videos works; but creating new video does not work. One can only add One college/university contact, not several.

[5] Find home for sale or rent on iphone. http://www.homes.com, 2011. Search for homes/rentals. I definitely like this app. Menu Buy, rent, then City, state, zip code, price, number bedrooms, baths. Search shows price, picture, address, photos. Button for directions-this is a nice feature. I can calculate distance to/from work. Map shows house on the street. 'Recents’ menu allows me to view what I have already searched on.

[6] Find home for sale or rent on iphone. http://www.trulia.com/mobile/iphone/, 2011. Nice interface: zip, type: condo or rental..., For sale/Rent, min - max price, x+ bedrooms, bathrooms. x+ is annoying because I wanted JUST 2 bedroom; it displays 3 and 4 bed room. Homes are displayed, when I only wanted condos. A 4 bed room for $189 should have been 4 room, 1 bed room! Even when I put in 02421, Lexington, it shows me Burlington. For comparison, this is useful. If this had a semantic interface, then I could query the myself.

[7] idisk, cloud storage from apple. Disk comes with iMac; serves as cloud storage., 2011. After reading the documentation, and paying for a mobile-me account ($99/year), then we have 20 gigabytes of storage. Except there is one problem. Copying large image directories from one’s desktop to cloud is painfully slow. For example, it takes about 8 hours to copy 2.3 gigabytes. Furthermore, it did not copy completely.

[8] idisk, cloud storage from apple, backup program. Disk comes with iMac; serves as cloud storage., 2011. The Backup program, from Mobile-Me account is required for sound backups. Even though a full backup takes hours, it does work without incident. UI is not intrusive, i.e.,
choose several files, and the main folder. The hard part is organizing this folder to backup, for instance, removing duplicates, .svn directories, and making the structure coherent. Aside: I required more space than the default 20 gigabytes; thus I purchased 20 more for $20.

[9] kontact. http://vkontakte.ru/reg0, 2011. Social networking site in Russia. This is different, I have to be invited by someone FIRST!

[10] Learn russian app, iphone. Apple APP directory, 2011. 2000 word Russian vocabulary. Words are enunciated clearly; Cyrillic text is shown. I could do without the transliteration. If the vocabulary was e.g., 20,000, then it would be far more useful for me.

[11] Localot research. http://www.localot.com, 2011. This company will be implementing a cloud, or rather could use a cloud. There current server needs to process 7 million documents. Currently they are using Mongo (non SQL) DB. This database can scale very easily, but, it does not handle transaction management. However, their application do not require transactions e.g., banking.

[12] loopt. http://loopt.com, 2011. This free App, for iPhone, identifies people via cell phone, or email. Its purpose is to find people that might be in geographic area. I tried it, but requires to much authorization setup from the other party. I was purported to act anonymously, e.g. by phone number. I need to play with it more.

[13] Mit lincoln laboratories. http://www.ll.mit.edu, 2011. One of the software engineers, of six, who interviewed me, was quiet unimpressed with Google APP Engine. He much preferred Amazon DB, because of its flexibility. He did not give me any more details. Refer to the Amazon simple DB reference. I would take a sample application, and compare both Amazon simple DB, and google App engine, where possible.


[15] Nearby: your next home is closer than you think. http://nearbuyclassifieds.wordpress.com/, 2011. Nearby Navigation...$3, I was expecting free. There site says I can search for homes and rentals. Click on the app yields ’Not in US store.’ The app tells you about what stores are near your current location. No, I am not impressed. The app should be focussed on houses for sale, or rentals nearby or some target location.

[16] Perceptive software. http://www.perceptivesoftware.com/company/about/index.psi, 2011. ‘Perceptive Software is a leading creator of enterprise content management (ECM) software products and solutions, committed to organic product development and superior engineering. Our flagship product ImageNow document management, document imaging and workflow suite is used today by customers across all industries in more than 30 countries worldwide. In 2010, Perceptive Software joined Lexmark International as a stand-alone business unit, and as a result, our presence is rapidly expanding into the global ECM marketplace.’ In a sense,
they are a cloud of sorts, for the enterprise customers that they serve. Up time is 99.9%,
according to the hiring manager (UMASS Medical).

$11/month. Sales person, via chat window, was very help. Scenario: create instance of OS,
e.g., Ubuntu. Now the clock starts. Install JVM, or whatever server software required. Boot
up server. OK (your) site is now working. When finished delete instance.

tured listing for entire USA. Waste of my time. Enter zip code. Prices slider jumps from
$200k to $300k. It should allow $250k. If you ask minimum bedrooms, don’t say 2+ bed-
rooms. Data source is a problem. When I put in 02421, Lexington, for 2 bedrooms, $300k, I
got 0 listings. Not a great app. I definitely would be mislead, since other apps provide actual
listings for the same criteria. Don’t ask for vacation homes either, this is such a niche market.

reports ascending price list. Works great; I use it whenever I want to record book titles- it
saves typing!

[20] Russian-english online dictionary. desktop right now, 2011. Prototyping with Russian-
English Online (read only) Dictionary, entirely written from scratch. Verb combinatorics are
handled appropriately. Potential cloud project? Output would appear on web page or Flex
via Spring servlet. Servlet would invoke Mercury (compiled prolog) from the command line.
But other applications are possible.

[21] Umass medical. On site Interview (contract to hire), 2011. UMass Medical, Shrewsbury
is managing Enterprise Content Management for various UMass campuses. They are con-
tracting out a cloud to a vendor, Perceptive Software. ‘You get what you pay for.’, he said.
Backend is NOT JAVA, but an interpreted i-javascript. The vendor is dumbing down the back-
end. From a career perspective this does not bode well, since all backends are using JAVA
proper on a e.g., Spring or JBoss J2EE application server. In other words, recruiters will be
confused and unimpressed: ‘javascript on backend? Where is the Spring application server?’
Hiring managers will not take you seriously.

with this! First screen prompts for squarefeet, lot size, year built; these are irrelevant. I
need state and city, which are NOT shown. Number of bedrooms and bathrooms uses a
slider; should have used a pull down menu. Button for ’make move’, which does nothing.
Menus should have been: city, state, then rent—own, then price (appropriate units for buy-
ing/renting). Don’t bother prompting/displaying lot size, square feet.

for extensive J2EE development. Just write the logic as though it was a desktop application.
Minimum eight dollars per month plus transaction and storage fees.

ingly correct, is poor, but fast; no grammatical nor phonetic derivations.

[26] Versions. http://www.versionsapp.com, Accessed 01/2011. SVN source repository, unlimited storage, but slow if repository is e.g. 20 gigabytes.

[27] Opteros. http://www.opteros.com, Accessed 2011. 18 year old girl, is shopping in a dress store; views clothing catalog on her iPad. Then shows her mother, via iPhone, which dress she wants to purchase. She needs to increase her credit card limit; mother approves. While coming home, mother asks her to pick up spinach and milk at the super market. Similarly, the girl drives to the super market, and then views its catalog on her iPad. The catalog shows her exactly which isle to find the items. Each catalog nicely displays the entire inventory. Opteros human resources told me large retail accounts would pay 800,000 dollars for demonstration system described. Video was very well done.


[29] J. ANGWIN. Apple, google collect user data. Wall Street Journal, April 22 2011. Android and iphone keeps internal, unencrypted DB about your whereabouts for months. Privacy is a concern. Data is transmitted intermittently. With Iphone you can turn location OFF; similarly for Android. However, maps will not work. Location based services market is expected to be $8.3 billion in 2014.

[30] S. E. ANTE. Foursquare seeks funds. Wall Street Journal, April 23 2011. ‘Foursquare, based in New York City, is a free application that lets users win prizes and meet people by using their mobile phones to check in at their favorite bars, restaurants and stores. The company says it now has 8 million users, up from less than 500,000 about a year ago.’ Personally, I would not have the time for this, if I was in NYC.

[31] J. Armstrong. Programming Erlang. The Pragmatic Programmers, 2007. This language that should be considered as useful for backend cloud computing. It is functional, lisp-like. It is designed to handle light weight concurrent processes, using data flows. It will run on SMP, and multi-core CPUs.

[32] K. BOEHRET. Find a story to hear wherever it may be. Wall Street Journal, March 2 2011. ‘A new company called Broadcastr (broadcastr.com) launched a free social-networking platform based on location-specific storytelling. Broadcastr stories are recorded and shared in audio format, with each pegged to a specific location. Listeners can search for stories by location or category, or may opt to follow a person who they consider to be a good storyteller, sorting stories by that person into a special tab. Listeners can rate stories as they hear them. Stories can be shared with others via email, Facebook or Twitter.’ Not the most useful APP, for sure.
K. BOEHRET. A social web browser. *Wall Street Journal*, April 20 2011. Rockmelt is browser is dedicated for social networks, and for and iphone (and others). Searching is OK, but much more dynamic on PC browser. I saw the video, and I suppose it has some usefulness, if you really are into social networking, and you are not at a PC or Mac.


K. Chodorow. *MongoDB: The Definitive Guide*. O’reilly Media, 2010. ‘Discover how MongoDB can help you manage a huMONGOus amount of data collected through your web application. With this authoritative introduction, you’ll learn the many advantages of using document-oriented databases, and discover why MongoDB is a reliable, high-performance system that allows for almost infinite horizontal scalability. Written by engineers from 10gen, the company that develops and supports this open source database, MongoDB: The Definitive Guide provides guidance for database developers, advanced configuration for system administrators, and an overview of the concepts and use cases for other people on your project.’ I briefly looked at the introductory chapters, code is very readable; have not installed it yet.


W. Fenton. ipad 2 gets flash with adobe’s wallaby. *PC Magazine.org*, March 8 2011. ‘Despite a new pair of eyes, trimmer figure, and nimbler mind, the new iPad remains flummoxed by Flash. Wallaby, a brand-new tool from Adobe Labs, aims to help the iPad and its iOS brethren manage the once-taboo multimedia format. The free, cross-platform desktop application, available today, makes transforming Adobe Flash files into iOS-appropriate HTML5 as easy as drag and drop.’ This is good to know, since, I need to run flash! Glad I did not buy an ipad yet.


R. L. HOTZ. The really smart phone. *Wall Street Journal*, April 23 2011. ‘Researchers are harvesting a wealth of intimate detail from our cellphone data, uncovering the hidden patterns of our social lives, travels, risk of diseaseeven our political views.’ Smart phone study of social networks. Insights: we are more influenced by the people we spend time with,
than the people we consider our close friends. This is interesting research for a social
scientist.

[42] C. Ibsen. *Camel in Action*. Manning Publications, 2011. This is a Domain Specific Language
for Routing and Messaging, in Java. End points are routers, and other devices. A must read
for Enterprise Integration Bus implementers, where EIB is on the server end of the cloud.

cell phone usage, psychology and statistics then gain more insight into human behavior.
Consider the correlation: ‘Physicists at the Sante Fe Institute have found that when people
move to a city that’s twice as large as where they had been living, they earn, on average, 15%
more money and invent 15% more patents. They also walk down the sidewalk 15% faster.’.

generation cloud-computing operating system and is designed to provide companies with
new business opportunities as they migrate toward hosted services’.

[45] A. Maher. *Advanced iOS 4 Programming: Developing Mobile Applications for Apple iPhone,
iPad, and iPod touch*. John Wiley and Sons, 2010. ‘With Advanced iOS 4 Programming,
developers have the expert guidance they need to create amazing applications for Apples
iPhone, iPad, and iPod touch. Inside, veteran mobile developer Dr. Maher Ali begins with
a foundation introduction to Objective C and Cocoa Touch programming, and then guides
readers through building apps with Apples iPhone SDK 4 including coverage of the major
categories of new APIs and building apps for the new Apple iPad’.

[46] G. Mak. *Spring Recipes, a Problem-Solution Approach*, chapter 22–1 Spring on the Grid:
object state across multiple JVMs. POJOs are used, no annotations, just configuration with
Spring app server. The deltas of the changed memory, e.g. integer state, are propagated to
other nodes in cluster. JAVA code and configuration provided.

[47] G. Mak. *Spring Recipes, a Problem-Solution Approach*, chapter 22–2 Spring on the Grid:
Farming out Execution to a Grid, pages 921–26. Apress, 2010. We want to distribute pro-
cessing over many nodes, and return results transparently. In GridGain you annotate method
to be farmed out, and configure mechanism for return values. Like HaDoop, GridGain uses
map/reduce pattern. JAVA code and configuration provided.

page 1, March 5 2011. e-discovery, an AI company uses NLP and statistical techniques
to parse 1.5 of documents. Application involves legal discovery. Cost is $100k, versus $2.2
million for human staff. Impressive.

One has more programming issues to contend with, contrasted with Google App Engine.
‘Amazon SimpleDB is a highly available, scalable, and flexible non-relational data store that
offloads the work of database administration. Developers simply store and query data items
via web services requests, and Amazon SimpleDB does the rest’.
[50] W. Mossberg. Honeycomb tablet has 4g and 3-d but is no ipad. *Wall Street Journal*, March 28 2011. ‘A Korean company LG released an android OS variant, Honeycomb, T-Mobile G Slate. It offers 4-G cellular and 3-D viewing. User need special glasses to view 3-D. Only outstanding feature is 4-G which is faster than ipad. $750 for base model with out phone contract; ipad is $500.’ I do not think I would buy this.


[54] T. Segran. *Programming the Semantic Web*. O’reilly Media, 2009. My own brief review of the text is as follows. Python is used for parsing RDF, which is helpful. RDF serialization formats, i.e., N3, RDF/XML, N-triples are discussed in detail. Graphviz, for display RDF/OWL graphs is explained. Good examples of Protege, SPARQL. A contract for meaning, i.e., ontological modeling is discussed in detail.


database metadata, web scraping, Wikipedia, Freebase), combining information from multiple sources, and strategies for publishing processed information’.

[60] T. White. *Hadoop: The Definitive Guide*. O’reilly Media, 2009. Useful text for Hadoop development. ‘Hadoop is a huge internet DB with parallel processing. SQL like syntax is employed, but data model is more flexible. However, no type checking is provided. Apache Hadoop is ideal for organizations with a growing need to process massive application datasets’.