Application Development for Social Networks

Emerging Technologies for the Enterprise 2010

Michael P. Redlich April 9, 2010

My Background (1)



- ♠ Degree
 - **□**B.S. in Computer Science
 - □ Rutgers University (go Scarlet Knights!)
- "Petrochemical Research Organization"
 - ☐ Senior Research Technician (1988-1998, 2004-present)
 - **□** Systems Analyst (1998-2002)
- ♠ Ai-Logix, Inc. (Now AudioCodes)
 - ☐ Technical Support Engineer (2003-2004)
- Amateur Computer Group of New Jersey (ACGNJ)
 - □ Java Users Group Leader (2001-present)
 - □ President (2007-2009)
 - ☐ Secretary (2006)



My Background (2)



Publications

- □ Java Boutique (http://www.javaboutique.com/)
 - Co-authored with Barry Burd
 - Design Patterns
- □http://publications.redlich.net/

Presentations

- □ Emerging Technologies for the Enterprise (ETE) since 2008
- ☐ Trenton Computer Festival (TCF) since 1998
- □TCF IT Professional Conference since 2006
- □ Princeton Java Users Group
- □ Capital District Java Developers Network
- □ New York Software Industry Association (NYSIA) Java Users Group



Upcoming Event



Trenton Computer Festival (TCF) 2010

- □April 23-25, 2010
- □IT Professional Conference (April 23, 2010)
- **□ General Show (April 24-25, 2010)**
- ☐ The College of New Jersey
- **□Ewing, New Jersey**
- □http://www.tcf-nj.org/









Objectives



- What is a Social Network?
- History of Social Networks
- ♠ The Good, the Bad, and the Ugly
- Social Network Integration
- ♠ Twitter API
- ♠ Facebook API



What is a Social Network?



- A social structure made of individuals (or organizations) called "nodes," which are tied (connected) by one or more specific types of interdependency, such as
 - **□**Friendship
 - **□Kinship**
 - □ Financial exchange
 - **□** Dislike
 - □Sexual relationships, or
 - □ Relationships of beliefs, knowledge or prestige

http://en.wikipedia.org/wiki/Social network





Social Networks - The Early Years...





Monochrome, a modern BBS, still running as of January 2010.



```
Monochrome (1,101j 20-Dec-03) (Last on Mon Jun 21 20;50)
##9&?&H[RH6HM6HH6[d3kSi&??;Z?;;+<;;;'\- -;--;.^;;d.;ISd+L/nHk6Z?Z9kHMHHSH9&HkS
    Scanning makes it easy to find files that have been added to since
                                                                                R6
                                                                               H19
    you last read them. Simply press [SPACE] in a menu to find the next
                                                                               e.fre
    updated file. For more information, press [?][C][M] from this screen.
#RH&&&HSHd/&\H?H$$&$&/6p&?$?$H&v./\\ -.':.'--. ?b?/?7?>`H>HH9&&&&&)Z$H&H##IZ&H?
                          Menu [ESC] = Utilities (inc. Talker & EXIT)
                                  [I] = Help and Information on Monochrome
                                   [N] = News and Media
                           Menu
                                       = Science, Technology and Medicine
                           Menu
                                   [E] = Entertainment
                           Menu
                                      = Society and Culture
                           Menu
 (version 1,101j)
                                   [R] = Recreation
                        Menu [M] = Monochrome Users
Hello '<u>Guest User</u>'. (guest2:2)
     << 5 other users at Tue Jun 22 03:36 GMT (You have new messages) >>
```







Social Networks - The Adolescent Years...















Social Networks - All Grown Up...





2002



2004 2006







2006



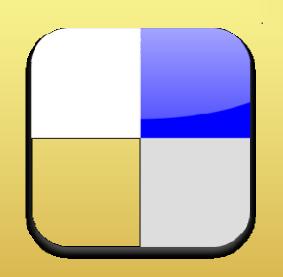
2003

2003



Other Popular Social Networks







Google groups



chemistry.com



http://en.wikipedia.org/wiki/List of social networking websites



The Good...



- A Keep in touch with family, friends and colleagues
- A Reconnect with old friends, colleagues and classmates
- Promote specific interests
 - □ Connect with those like-minded individuals
- ♠ Organizations can easily communicate their message



The Bad...



- A Keep in touch with family, friends and colleagues
- ♠ Difficult to verify age
 - ☐ How many kids under the age of 13 have Facebook accounts?
- ♠ Be careful what you say!



The Ugly...



- A Keep in touch with family, friends and colleagues
- ♠ Be careful what you say!
- Opportunities for identity theft and fraud
- ♠ Easier for you to be stalked and harassed online
- **△** Opportunities for predators



Social Network Integration (1)











Social Network Integration (2)



- ♠ Social networks offer organizations a variety of ways to leverage their users to communicate your message
- Delivering tools that allow information to spread through social networks in novel, thoughtful ways is one of the best uses of the Internet today
- Social media strategies often include integration with major social networking portals

http://www.trellon.com/services/.



Social Network Integration (3)







Social Network Integration (4)



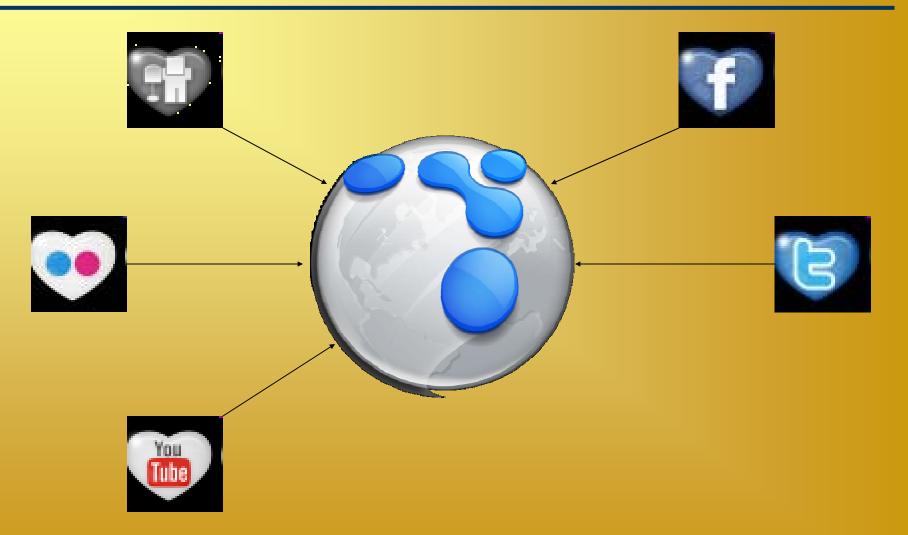






Social Network Integration (5)



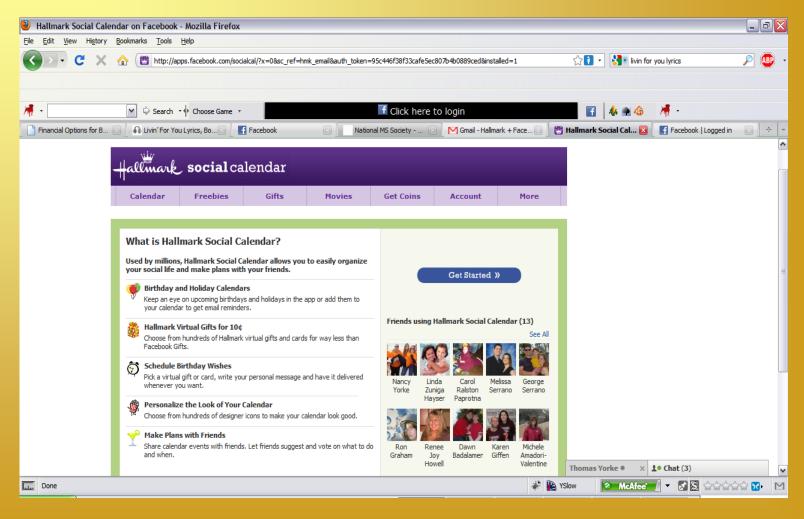






Social Network Integration (6)







Facebook API



- ♠ Facebook Developers
 - □http://developers.facebook.com/
- ♠ Facebook Connect
- Facebook-enabled iPhone applications
 - □iPhone SDK
- ♠ Facebook dropped support for the Java API in May 2008
 - ☐ Third party support



Facebook Connect



♠ A set of APIs for developers

Allows users to bring their identity and connections

everywhere







Getting Started with the Facebook API for Java

- ♠ Download Facebook API for Java
 - □http://code.google.com/p/facebook-java-api/
- ♠ Facebook Java API example to publish on Wall

```
http://blog.theunical.com/facebook-
integration/facebook-java-api-example-to-publish-
on-wall/comment-page-1/
```



Twitter API



- **△ Supported by 17 languages**
 - □http://apiwiki.twitter.com/Libraries
- **Easy to use**
- Develop command-line and GUI apps
- **The Official Twitter Developer Conference**



http://chirp.twitter.com/



Supported Languages for Twitter API



- ActionScript/Flash
- **♠** C++
- ♠ C#/.NET
- Coldfusion
- ♠ Eiffel
- ♠ Erlang
- ≜ Java
- JavaScript
- Objective-C/Cocoa

- ♠ Perl
- **♠ PHP**
- ♠ PL/SQL
- Python
- Ruby
- ♠ Scala
- **♠ T-SQL**
- **♦ VB.NET**



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Getting Started with the Twitter API for Java



♠ Download one of the Java-supported APIs



♠ Obtain an instance of the Twitter class

- From there, you can obtain such data as:
 - **□Obtaining your followers**
 - **□Get your timeline**
 - **□**Update your status



Are You Ready...



...for the demo?



Summary



- ♠ Social networks have evolved significantly since the 1970s
 - □ Social network integration and APIs have contributed to this
- Social networks are a great resource, but...
 - □...be careful
- You can get this presentation and source code from:
 - □http://www.chariotsolutions.com/
 - Dhttp://presentations.redlich.net/
- If you happen to be in the Scotch Plains, NJ area, please visit us at an ACGNJ Java User Group meeting!



References



- ♠ Trellon, LLC
 - □http://www.trellon.com/services/social networks
- Why Social Networks Are Good for the Kids
 - http://techcrunch.com/2009/02/24/why-social-networks-are-good-for-the-kids/
- Social networking sites evolve into powerful job-hunting tools
 - □http://www.startribune.com/37029434.html?page=1&c=y
- The History of Social Networking
 - http://www.digitaltrends.com/features/the-historyof-social-networking/



Local Java Users Groups



- ACGNJ Java Users Group Collowne

javasig

☐ facilitated by Mike Redlich

mpredli

- □http://www.javasig.org/
- ♠ Princeton Java Users Group
 - ☐ facilitated by Yakov Fain
 - □http://www.myflex.org/princetonjug/
- ♠ NYJavaSIG
 - ☐ facilitated by Frank Greco
 - □http://www.javasig.com/
- Capital District Java Developers Network
 - ☐ facilitated by Anthony DeBonis
 - □http://www.cdjdn.com/



Many Thanks...



♦ Chariot Solutions

□http://www.chariotsolutions.com/



