Application Development for Social Networks
TCF IT Professional Conference 2011
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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)**
  - **Past-President (2010-present), President (2007-2009)**
  - **Secretary (2006)**

My Background (2)

Publications

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

Presentations

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

Upcoming Event

🔺 **Emerging Technologies for the Enterprise (ETE) Conference 2011**

- ❑ **April 27-28, 20...**
- ❑ **Sheraton Olde City**
- ❑ **Philadelphia, Pennsy...**
- ❑ **http://www.phillyem...ech.com/**

Sold Out!

CHAR...
SOLUTIO...

ACGNJ

Objectives

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

Social Networks – The Adolescent Years...

1997

Social Networks – All Grown Up...

2002

2004 2006

2006

2003

2003

Other Popular Social Networks

YAHOO! GROUPS

Google groups

flickr

chemistry.com

eHarmony

http://en.wikipedia.org/wiki/List_of_social_networking_websites

The Good…

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

The Bad…

- 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...

- 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 Media Explained

twitter — I need to pee

facebook — I peed

foursquare — This is where I pee

Quora — Why am I peeing?

YouTube — Look at this pee!

LinkedIn — I'm good at peeing

myspace.com a place for friends — Why did everyone pee & leave?
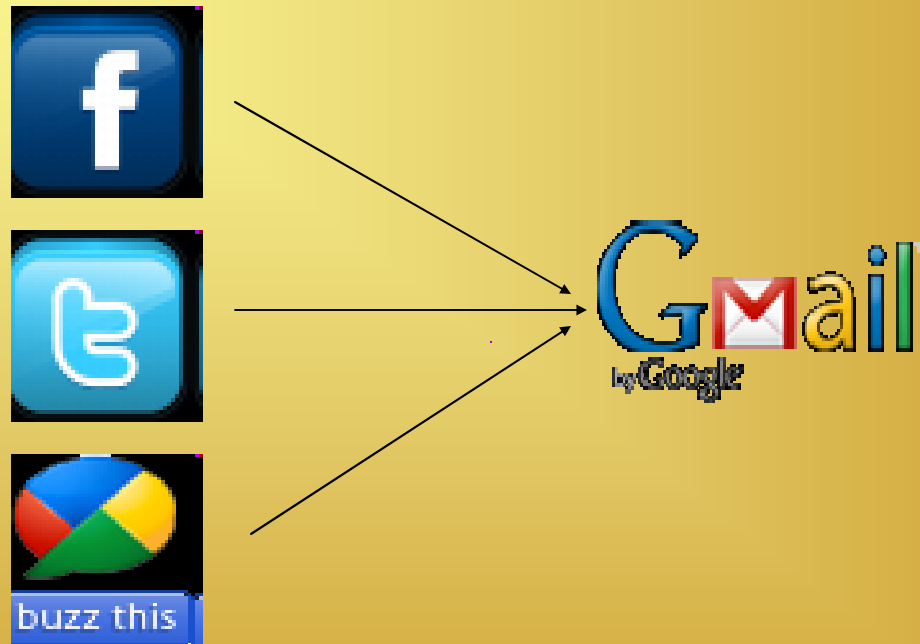
ACGNJ

Social Network Integration (1)
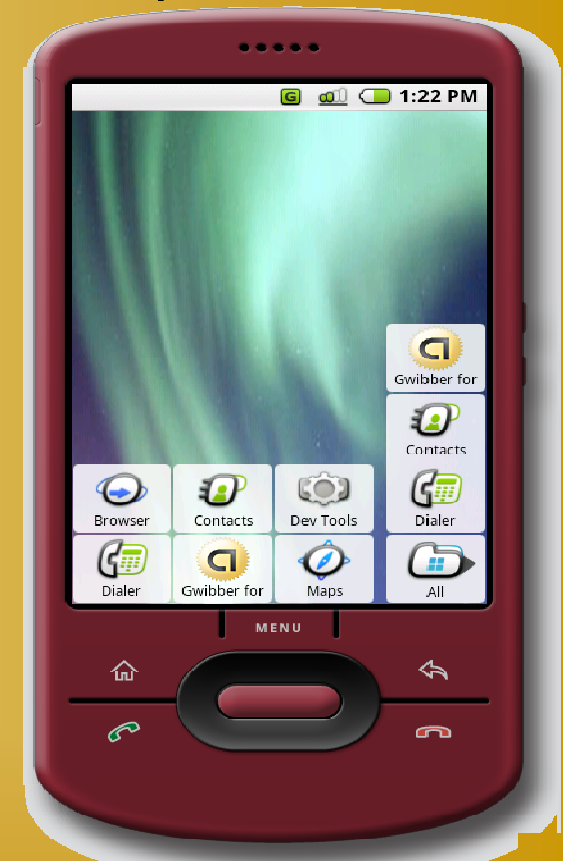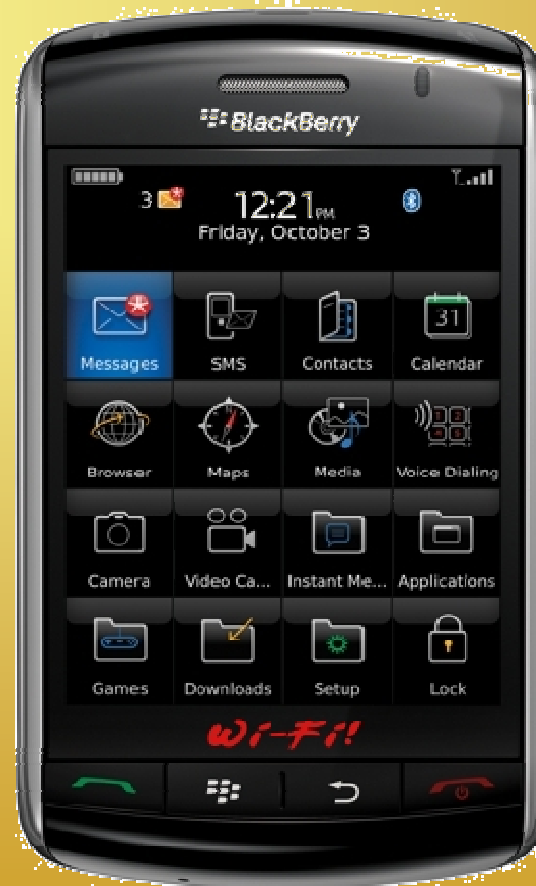
Social Network Integration (2)

- 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

Social Network Integration (3)

Social Network Integration (4)

Social Network Integration (5)

Social Network Integration (6)

```
<script src="http://widgets.twimg.com/j/2/widget.js"></script>
<script>
      new TWTR.Widget({
            version: 2, type: 'profile', rpp: 5,
            interval: 6000, width: 175, height: 300,
            theme: {
                  shell: {
                        background: '#333333',
                        color: '#ffffff'
                        },
                  tweets: {
                        background: '#000000',
                        color: '#ffffff',
                        links: '#4aed05'
                        }
                  },
            features: {
                  scrollbar: true, loop: true, live: true,
                  hashtags: true, timestamp: true,
                  avatars: true, behavior: 'default'
                  }
            }).render().setUser('mpredli').start();
</script>
```

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
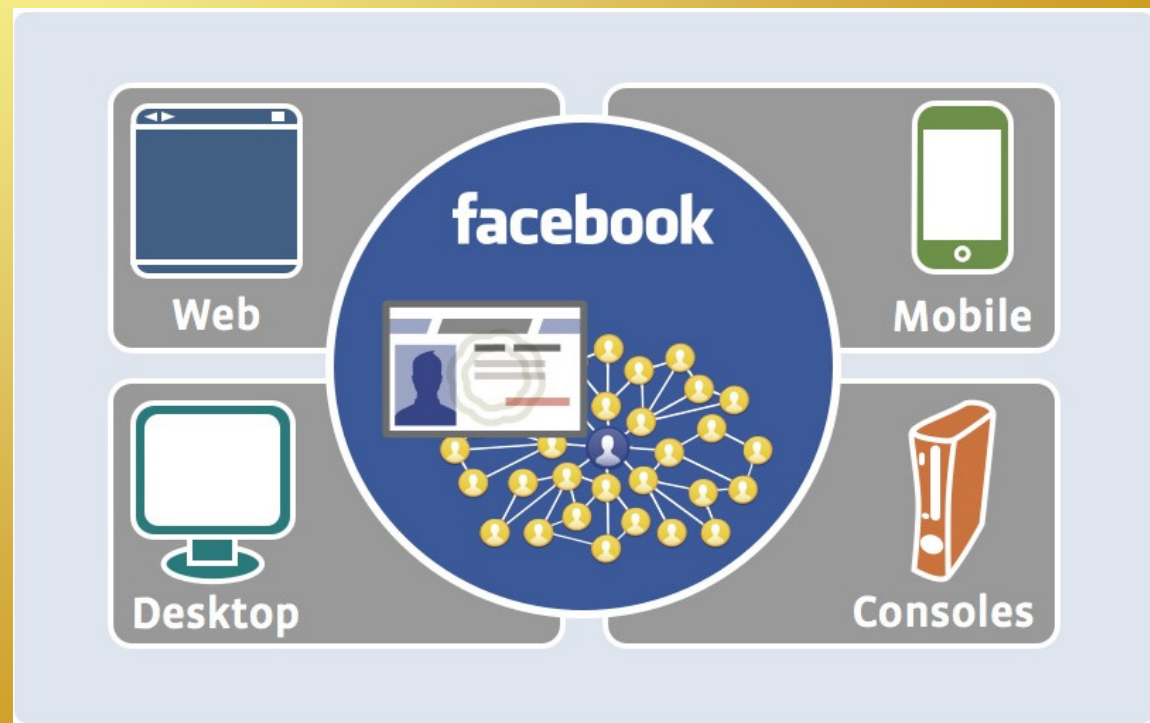
Getting Started with the Facebook API for Java

- **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

Getting Started with the Twitter API for Java

- **Download one of the Java-supported APIs**

- **Obtain an instance of the `TwitterFactory` class**

```
Twitter twitter = new TwitterFactory().getInstance();
```

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

t4j_news

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.redlich.net/publications/
- If you happen to be in the Scotch Plains, NJ area, please visit us at an ACGNJ Java User Group meeting!

Local Java Users Groups

♨ **ACGNJ Java Users Group**
- ❑ **facilitated by Mike Redlich**
- ❑ **http://www.javasig.org/**

javasig

mpredli

♨ **Princeton Java Users Group**
- ❑ **facilitated by Yakov Fain**
- ❑ **http://www.myflex.org/princetonjug/**

♨ **NYJavaSIG**
- ❑ **facilitated by Frank Greco**
- ❑ **http://www.javasig.com/**

nyjavasig

♨ **Capital District Java Developers Network**
- ❑ **facilitated by Anthony DeBonis**
- ❑ **http://www.cdjdn.com/**

Many Thanks…

- **Trenton Computer Festival**
  - **http://www.tcf-nj.org/**