



Social Integration

COMP4711
April 2016



Social Integration – Whatzit?

- 1. Facebook
- 2. Twitter
- 3. Blogging
- 4. Google Apps
- Specifically, integrating these into your webapp



facebook

Email

jim_parry@bcit.ca

☒ Keep me logged in

Password

Forgot your password?

Login

Sign Up

Facebook helps you connect and share with the people in your life.



Wall

Info

RSS/Blog

Tweets

YouTube

Flickr

About

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Organization · North Burnaby, British Columbia



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BCIT: The British Columbia Institute of Technology

BCIT Engineering students: have you registered for Presentation Idol yet? \$1000 first prize! Deadline Apr.1st <http://ow.ly/4IRcK>

3 hours ago via HootSuite · [Like](#) · [Comment](#)



Muhammad Shahzeb Khan

BCIT offer any master programs?? or postgraduate Programs??

16 hours ago · [Like](#) · [Comment](#)



BCIT: The British Columbia Institute of Technology We sure do! BCIT recently introduced Western Canada's first ever master's degrees in Building Science: a Master of Engineering and a Master of Applied Science in Building Science (www.bcit.ca/update/node/1606).



Social Networking - Really?



- Set of REST & XMLRPC APIs that you can use server-side, to build pages or snippets (eg fragments for AJAX)
- Authentication
- Personalization



1.1 Some Facebook



There are three levels of integration for Facebook social networking: social plugins, authentication, and personalization.

Social plugins involve embedding appropriate tags or Javascript in your webpages. You do not need a Facebook account.



Getting Started

Core Concepts

- Social Design
- Social Plugins
- Open Graph Protocol
- Social Channels
- Authentication
- Graph API

Advanced Topics

SDKs & Tools

Open Graph Beta

Plugins

- Activity Feed
- Comments
- Facepile
- Like Box
- Like Button
- Live Stream
- Login Button
- Recommendations
- Registration
- Send Button

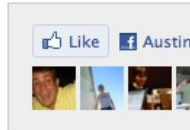
Beta Plugins

- Activity Feed (Beta)
- Add To Timeline (Beta)
- Facepile (Beta)
- Recommendations Bar (Beta)
- Recommendations Box (Beta)

Social Plugins

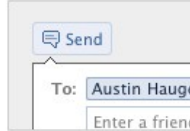
Core Concepts > Social Plugins

Social plugins let you see what your friends have liked, commented on or shared on sites across the web.



Like Button

The Like button lets users share pages from your site back to their Facebook profile with one click.



Send Button

The Send Button allows your users to easily send your content to their friends.



Comments

The Comments plugin lets users comment on any piece of content on your site.



Activity Feed

The Activity Feed plugin shows users what their friends are doing on your site through likes and comments.



Recommendations

The Recommendations plugin gives users personalized suggestions for pages on your site they might like.

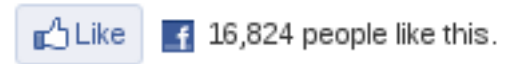


Like Box

The Like Box enables users to like your Facebook Page and view its stream directly from your website.

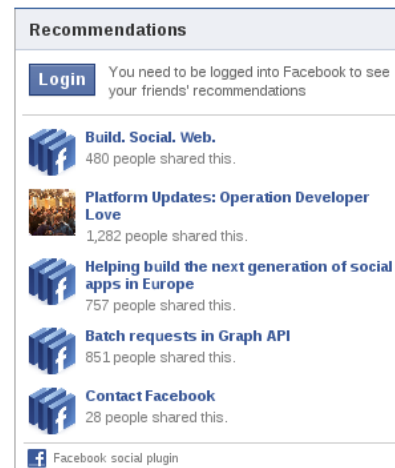
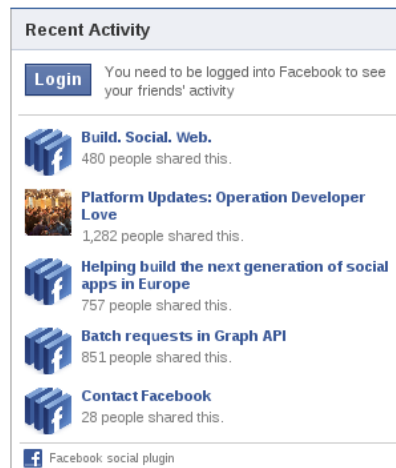


Non-API



- Social plugins ...

- ```
<iframe
src="http://www.facebook.com/plugin/
like.php?href=YOUR_URL"
scrolling="no" frameborder="0"
style="border:none; width:450px;
height:80px"></iframe>
```



# 1.2 More Facebook



**Authentication** uses the Facebook server to authenticate users of your site, using OAuth 2.0 protocol.

Such users must have an existing Facebook account.

The authentication can be done server-side, explicitly in your webapp code, or client-side, implicitly by links in your webpages to the Facebook signon dialog.

Domains need to be registered with Facebook to use this, and individual webapps can be registered too.





Login | Facebook

**f Facebook Login**

Log in to use your Facebook account with [My Great Website](#).

Email:

Password:

☒ Keep me logged in

[Forgot your password?](#)

[Sign up for Facebook](#)



# 1.3 Most Facebook



**Personalization** involves using the Facebook Javascript library to interact with the Facebook server, using their openGraph API. You can build a very rich user experience, and even look like Facebook (see the demo), but you are buying into the whole social networking framework, with its privacy concerns.



[Getting Started](#)**Core Concepts** >[Social Design](#)[Social Plugins](#)[Open Graph Protocol](#)[Social Channels](#)[Authentication](#)[Graph API](#)[Advanced Topics](#)[SDKs & Tools](#)[Open Graph Beta](#)**Concepts**[Batch Requests](#)[Permissions](#)[Real-time Updates](#)**Objects**[Achievement\(Instance\)](#)[Album](#)[Application](#)[Checkin](#)[Comment](#)

# Graph API

[Core Concepts](#) > [Graph API](#)

At Facebook's core is the social graph; people and the connections they have to everything they care about. The simple, consistent view of the Facebook social graph, uniformly representing objects in the graph (e.g., [people](#), [pages](#)) and the connections between them (e.g., friend relationships, shared content, and photo tags).

Every object in the social graph has a unique ID. You can access the properties of an object by requesting <https://graph.facebook.com/ID>. For example, the official page for the Facebook Platform has id 1929 fetch the object at <https://graph.facebook.com/19292868552>:

```
{
 "name": "Facebook Platform",
 "type": "page",
 "website": "http://developers.facebook.com",
 "username": "platform",
 "founded": "May 2007",
 "company_overview": "Facebook Platform enables anyone to build...",
 "mission": "To make the web more open and social.",
 "products": "Facebook Application Programming Interface (API)...",
 "likes": 449921,
 "id": 19292868552,
 "category": "Technology"
}
```

Alternatively, people and pages with usernames can be accessed using their username as an ID. Since "platform" for the page above, <https://graph.facebook.com/platform> will return what you expect. All responses are JSON objects.

All objects in Facebook can be accessed in the same way:

• Users: <https://graph.facebook.com/ltaylor/BretTaylor>



# Facebook API



- Setup...
- Libraries ... PHP, Javascript
- Configuration ...
- GetUser, session ...
- GetLoginURL, getLogoutURL, ...
- Api(...)
- “graph” API





## Request for Permission



### Request for Permission

**My Great Website** is requesting permission to do the following:



#### Access my basic information

Includes name, profile picture, gender, networks, user ID, list of friends, and any other information I've shared with everyone.



#### Send me email

Which address would you like to use?

An Anonymous email address (xxxx@prox) ▾



#### Check-ins

My Great Website may read my check-ins.



**My Great Website**

[Report App](#)

Logged in as Douglas Purdy ([Not You?](#))

**Allow**

**Don't Allow**



## 2. Twitter



- REST API to manage timelines, status data and user information
- Stream API to pull tweets
- Need user account ... OAuth
- App needs to be registered
- Limited to 800-3200 status requests per cycle



# Non-API

- Point & click wizard

Preview your button, grab your code. Done!

Your Tweet Button will look like this.  
Click on it to try it out!



55px x 62px

Copy and paste this code into the HTML for your website wherever you want the button to appear.

```
Tweet<script type="text/javascript" src="http://platform.twitter.com/widgets.js"></script>
```



# Twitter API

- Example... Streaming API: Methods
  - statuses/filter
  - statuses/firehose
  - statuses/links
  - statuses/retweet
  - statuses/sample
  - <http://stream.twitter.com/1/statuses/filter.json?count=&delimited=&follow=&>
  - ...
  - <http://stream.twitter.com/1/statuses/filter.json>  
-uAnyTwitterUser:Password





# 3. Blogging



- Several APIs defined for multiple blogging platforms
- the Blogger API, metaWeblog API, and the Movable Type API
- WordPress API extends MovableType



# 3.1 Blogger API

- Uses Google Data API (Atom or JSON format) for blog entries
- You need a Blogger account
  - ClientLogin username/password authentication
- Retrieving a list of blogs
- Creating posts (publish or create draft)
- Retrieving posts (all or queried)
- Updating posts
- Deleting posts
- Comments (create, retrieve, delete)



# Blogger Blog Entry

```
<?xml version='1.0' encoding='utf-8'?>
<entry
 xmlns='http://www.w3.org/2005/Atom'>
 <author>
 <name>Elizabeth Bennet</name>
 <email>liz@gmail.com</email>
 </author>
 <title type='text'>Entry 1</title>
 <content type='text'>This is my
entry</content>
</entry>
```



# WordPress Blogging Config

- If your WordPress root is `http://example.com/wordpress/`, then you have:
  - Server: `http://example.com/` (some tools will just want the 'example.com' hostname part)
  - Path: `/wordpress/xmlrpc.php`
  - complete URL (just in case):  
`http://example.com/wordpress/xmlrpc.php`



# WordPress API – PHP class

- All return an array or struct of entries, basically
- wp.getUsersBlogs (username, pw)
- wp.getTags(blogID, user, pw)
- wp.getCommentCount(id, user, pw, postID)
- wp.getPostStatusList(...)
- wp.getPageStatusList(..)
- wp.getPageTemplates(..)
- wp.getOptions(...)
- wp.setOptions(...)
- wp.getComments
- wp.newComment(...)
- wp.getCommentStatusList(...)
- wp.getPage(...)
- wp.getPages(...)
- wp.getPageList(...)
- wp.newPage(...)
- wp.deletePage(...)
- wp.getAuthors(...)
- wp.getCategories(...)
- wp.setCategories
- wp.deleteCategory(...)
- wp.suggestCategories(..)
- wp.uploadFile
- wp.getComment



## 4. Google Apps



- Anything Google, but specifically...
- Application
  - Apps script
  - Calendar, Email, Group
  - Sitemap
- Domain
  - Admin, calendar, contacts, email, reporting
- Marketplace
  - Manifests, billing/licensing
- Other
  - Geolocation :)



# Non-API

- Google gadgets – snippets of code to embed goodies in your



## Organize your schedule and share events with friends

With Google's free online calendar, it's easy to keep track of life's important events all in one place.



### Share your schedule

Let your family and friends see your calendar, and view schedules that others have shared with you.



### Get your calendar on the go

Access your calendar from your phone using its built-in calendar or mobile browser.



### Never forget another event

Get event reminders via email or have text messages sent right to your mobile phone.

[Learn more about Google Calendar »](#)



# API-based

- You need a Google account
- Example from Calendar API
  - Retrieve calendar lists
  - Manage calendars
  - Manage subscriptions
  - Retrieve events
  - Create / update / delete events
  - Share calendars, share busy times

