



Developing Facebook Applications By

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Objective

- A very basic introduction to developing applications with Facebook using PHP.
- Keep it simple.
- Goal is learning.
- Level:Basic



News Feed

Pages

Status Updates

Photos

Links

More

Agenda

- Presentation [M.ALI] 20 mins
- Demonstration [Amir Latif] 15 mins
- Question/Answer 10 mins



What is Facebook?

- Facebook is a web application that provides a kind of social networking with people near you.
- Facebook was founded by [Mark Zuckerberg](#) in 2004.
- Originally designed to connect different colleges and universities.
- Facebook name has origin in magazine that was distributed to new students



Facebook facts

News Feed

Pages

Status Updates

Photos

Links

More

- World largest social network with over 350 million users.
- An average teen spends about 20 mins daily.
- More than 65 million active users at a time.
- Consists of more than 500,000 active applications.
- 6.5 millions users access FB from mobile
- More facts on <http://www.facebook.com/press/info.php?statistics>



Facebook application

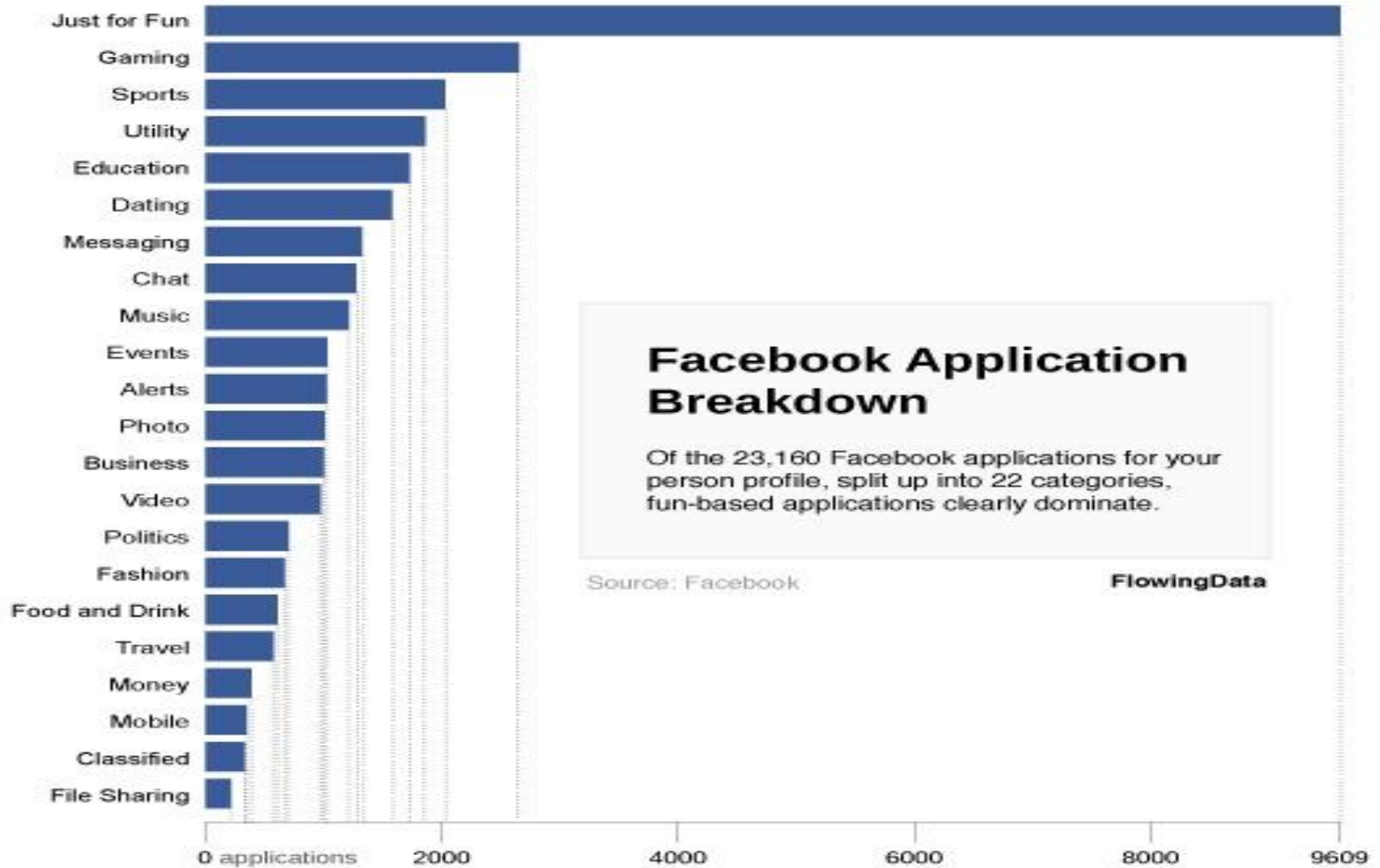
A vertical navigation menu from the Facebook interface. It includes icons and text for 'News Feed', 'Pages', 'Status Updates', 'Photos', 'Links', and 'More'.


- Developing facebook application mean it is accessible from FB.
- Application is exposed to millions of users worldwide.
- There is a chance for the application to become a popular one in FB.
- Applications can be social applications like super wall, games like crazy taxi and quizzes.



- News Feed
- Pages
- Status Updates
- Photos
- Links
- More

Facebook Applications



 News Feed Pages Status Updates Photos Links

More

Some Popular Facebook applications

- News Feed
- Pages
- Status Updates
- Photos
- Links
- More

Farm Ville



[Go to Application](#)

[Suggest to Friends](#)

[Block Application](#)

This game is fun!

Information

★★★★☆ (4.2 out of 5)
Based on 2815 reviews

Users:
72,985,623 monthly active users.

3 Applications

FarmVille

[Become a Fan](#)

Wall Info Reviews

FarmVille Just Fans



FarmVille Season's Greetings Farmers! New Limited Edition Winter items have made their way to FarmVille! Don't forget, the time to presents is also arriving soon! These gifts can be opened from Dec 7th and contain some special surprises. Happy Farming everyone!
8 hours ago

14,775 people like this.

[View all 15,009 comments](#)



FarmVille We're proud to announce a new Mystery Box this week gives you the chance to get great Limited Edition Winter Holiday i fraction of the cost! The time to open your presents is also arriving gifts can be opened from Dec. 24th to Jan. 7th and contain some surprises. Happy Farming everyone!
Wed at 11:42am

17,833 people like this.

[View all 55,810 comments](#)



FarmVille This holiday season we want to see your farms at their Submit photos of your winter themed farms from Dec. 15th - Dec.

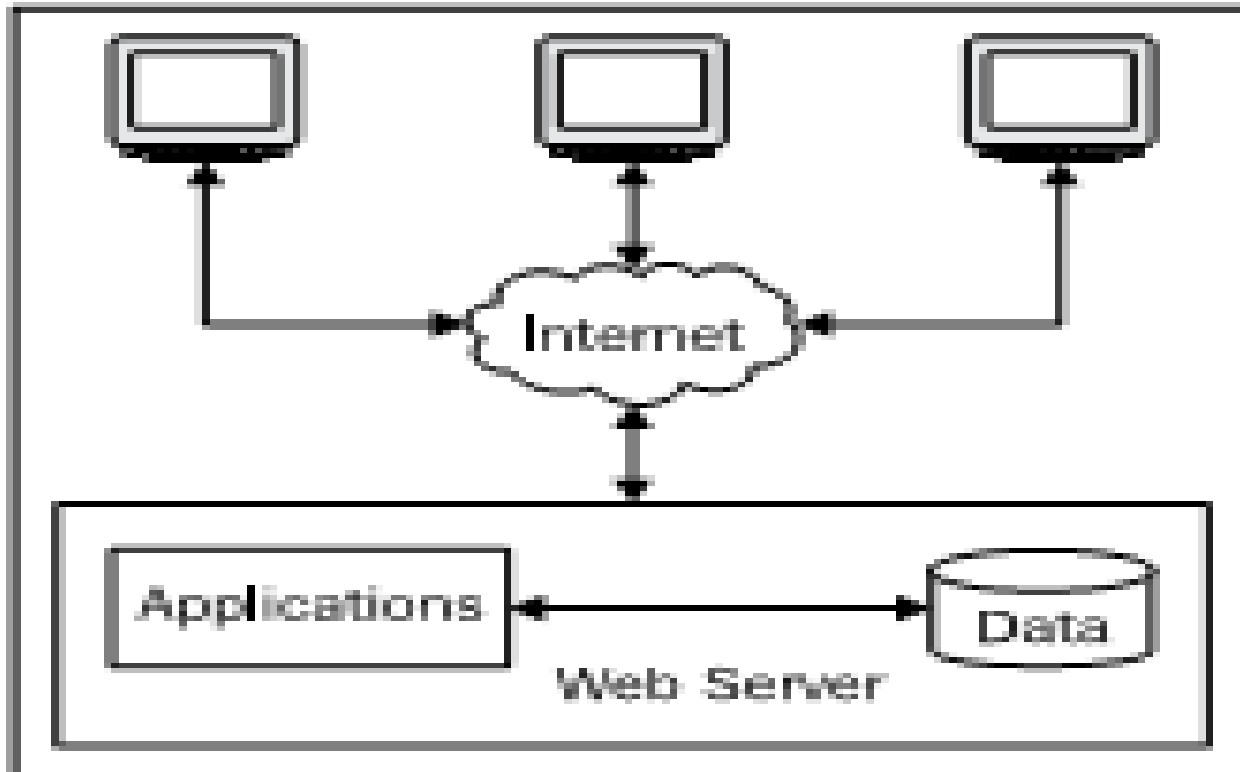


Facebook Platform

- Facebook platform is a framework for developers to interact with the core features of the facebook site.
- Anyone can developed an application in Facebook by pointing their URL to developers.facebook.com
- The idea was to enable everyone to provide content to the facebook site.
- Provides web services



Standard web application



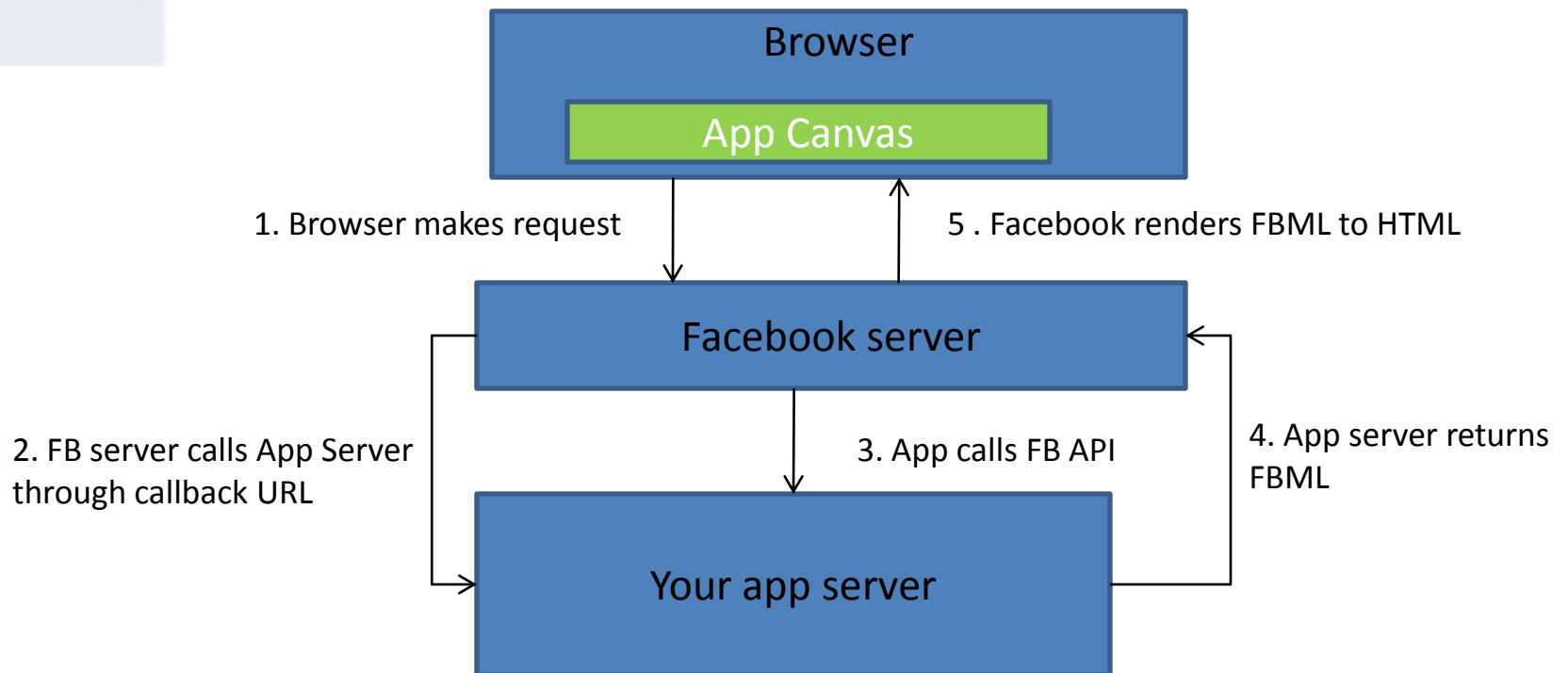
Facebook Application Platform

- Platform components:

1. Users' machine
2. Facebook Server(s)
3. Application Server

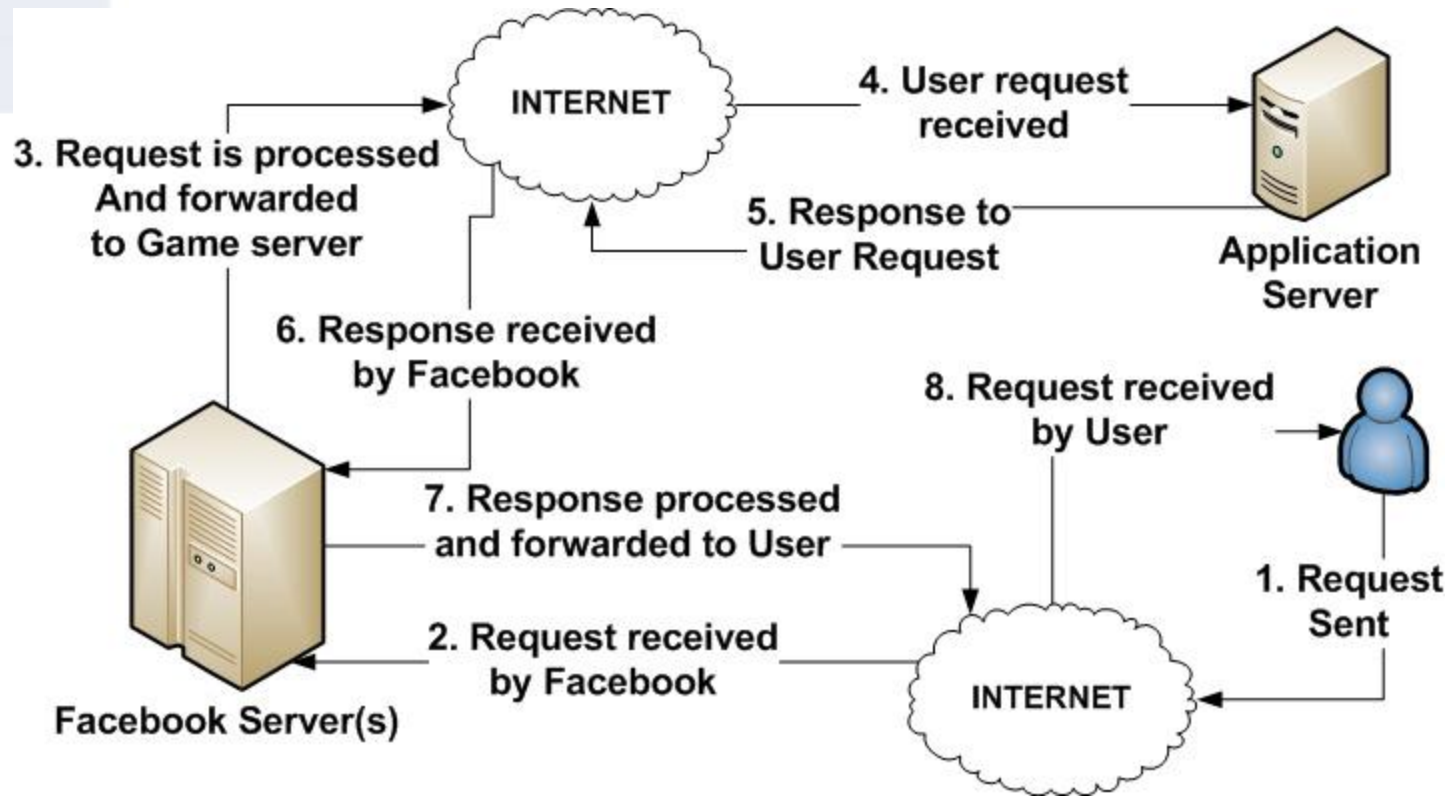



Client/Server Interaction





How Facebook application works?



A vertical navigation menu on the left side of the page. It contains several items: 'News Feed' (highlighted in blue), 'Pages', 'Status Updates', 'Photos', 'Links', and 'More'.

Pages

Status Updates

Photos

Links

More

Creating your first Facebook application

Before you begin

- A PHP editor available in Netbeans or Eclipse
- A php enabled web server to host your application
- A facebook client library for php ;can be downloaded from

http://wiki.developers.facebook.com/index.php/User:Client_Libraries



Step-by-step Guide to Creating Facebook App

http://developers.facebook.com/step_by_step.php

facebook DEVELOPERS

Get Started Documentation Resources Tools News

RESOURCES

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Resources Home
Anatomy of a Facebook Application
Guide to Creating an Application
Platform High-Level Specification
Quick Videos
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Facebook Developers Wiki
Facebook Developer Garage

Step-by-step Guide to Creating an Application

Contents

1. Introduction
2. Integrating Hello World
3. Pushing FBML to the profile box
4. Using mock-AJAX in the profile box
5. Using MySQL to create a counter
6. Putting the examples together
7. Downloads



Extract data with your App

<http://developers.facebook.com/documentation.php>

DOCUMENTATION

Overview

Authentication

FQL

FBML

Installation

Other Functionality

Errors

Pages

Photo Uploads

Extended Permissions

Marketplace

Miscellaneous

auth

fbml

feed

fql

friends

notifications

profile

users

pages

Documentation / Overview

Documentation

The Facebook Platform is a standards-based web service with methods for accessing and contributing Facebook data. We've made the methods as easy to understand as possible, and included full documentation to help you learn more.

Facebook Developers Wiki

A deep resource for anyone developing on the Facebook Platform.

Interface (API)

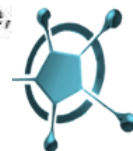
The Facebook API uses a REST-based interface. This means that our Facebook method calls are made over the internet by sending HTTP GET or POST requests to our REST server. With the API, you can add social context to your application by utilizing profile, friend, photo, and event data.

Query (FQL)

Facebook Query Language, or FQL, allows you to use a SQL-style interface to more easily query the same data that you can access through other Facebook API methods.

Markup (FBML)

Facebook Markup enables you to build full Facebook Platform applications that deeply integrate into a user's Facebook experience. You can hook into several Facebook integration points, including the Profile, Profile Actions, Canvas, News Feed and Mini-Feed.



The Facebook Platform Elements

- There are three elements to the Facebook Platform:
 - The Facebook API (Application Programming Interface).
 - FBML—Facebook Markup Language
 - FQL—Facebook Query Language



Facebook APIs

http://wiki.developers.facebook.com/index.php/API#API_Methods

- A lot of handy functions provided with a Facebook Object.
- For example: `Users.getInfo`
 - Returns a **wide array** of user-specific information for each user identifier passed, **limited by the view of the current user**.



FBML

<http://wiki.developers.facebook.com/index.php/FQBML>

- **Facebook Markup Language (FBML)**
- Subset of HTML
- Br,div,h1,li,pre,span etc
- Facebook specific tags
- Fb: create-button, fb:dashboard, fb:error,fb:message,fb:name etc
- Used in application which use canvas user profile,mini feed etc



Facebook API Test Console

News Feed

Pages

Status Updates

Photos

Links

More

TOOLS

API Test Console

FBML Test Console

API Test Console

You can experiment with functions and responses, and see what content Facebook Platform makes available. Select the method you wish want to call and the format of the return values.

You need to be logged in to use the console. Log in here.

User ID

Response Format

Callback

Method

The results of your method call will show up here.



News Feed

Pages

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More

FBML

Tools

API Test Console

FBML Test Console

Facebook Connect Playground

Feed Template Console

Registered Templates Console

User

Position

Profile

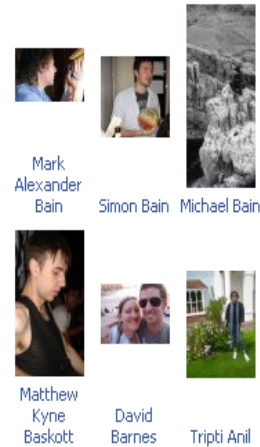
API Key

```
<fb:user-table cols="3">
  <fb:user-item uid="614902533"/>
  <fb:user-item uid="286603790"/>
  <fb:user-item uid="505543152"/>
  <fb:user-item uid="515482742"/>
  <fb:user-item uid="517311956"/>
  <fb:user-item uid="521240370"/>
</fb:user-table>
```

Preview

Preview

Facebook FBML Test Console



HTML Source

```
<table class="friendTable" cellpadding="0" cellspacing="0" border="0" height="100%">
<tr>
<td>
<table height="100%">
<tr>
<td height=100% style="vertical-align: middle;"><a href="http://www.facebook.com/profile.php?id=614902533"></a>
</td></tr>
<tr>
<td ><a href="http://www.facebook.com
```



News Feed

Pages

Status Updates

Photos

Links

More

Facebook Query Language (FQL)

- FQL = subset of SQL
 - Only select-statements, no updates/deletes
- Exposed Facebook data/tables:
 - User, Friend, Group, Group_member, Event, Event_member, Photo, AlbumPhoto_tag
- ```
SELECT name, affiliations
FROM user
WHERE uid IN (SELECT uid2
 FROM friend
 WHERE uid1=211031)
```




# Facebook Database tables

|            |             |
|------------|-------------|
| album      | Application |
| Comment    | Event       |
| connection | Family      |
| friend     | group       |
| photo      | user        |

URL: [http://wiki.developers.facebook.com/index.php/FQL\\_Tables](http://wiki.developers.facebook.com/index.php/FQL_Tables)



 News Feed Pages Status Updates Photos Links

More

# Understanding FBML and IFRAMES

# FBML – Facebook Markup Language

- Subset of HTML + Facebook elements
- Functionalities:
  - Enforce uniform/standard look and feel for shared components: navigation, wall, dashboard, friend-selector, buttons, time-dates, dialog, notification.
  - Implementing privacy designs: e.g., restrict the content to be only visible to the current viewer.
- Syntax just like well-formed HTML/XML.

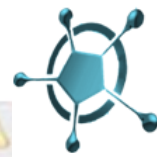


# Understanding the Types of FBML Tags

- The goal of FBML is to support a versatile tag set in order to help developers target these different settings.

- Social data tags e.g **fb:name**.
- Sanitization tags e.g **fb:swf**
- Design tags e.g **fb:tabs**
- Component tags e.g **fb:comments**
- Control tags e.g **fb:visible-to-owner**

URL:<http://developers.facebook.com/specification.php>



# FBML

News Feed

Pages

Status Updates

Photos

Links

More

```

• <fb:editor action="?do-it" labelwidth="100">
 <fb:editor-text label="Title" name="title" value=""/>
 <fb:editor-text label="Author" name="author" value=""/>
 <fb:editor-custom label="Status">
 <select name="state">
 <option value="0" selected>have read</option>
 <option value="1">am reading</option>
 <option value="2">want to read</option>
 </select>
 </fb:editor-custom>
 <fb:editor-textarea label="Comment" name="comment"/>
 <fb:editor-buttonset>
 <fb:editor-button value="Add"/>
 <fb:editor-button value="Recommend"/>
 <fb:editor-cancel />
 </fb:editor-buttonset>
</fb:editor>

```

Title:

Author:


Status:

Comment:

or



# FBML


 A screenshot of the Facebook navigation menu showing options: News Feed, Pages, Status Updates, Photos, Links, and More.
 

News Feed

Pages

Status Updates

Photos

Links

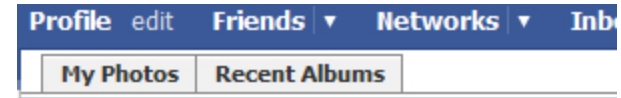
More

- `<fb:tabs>`

```
<fb:tab-item href='http://apps.facebook.com/yourapp/myphotos.php' title='My
Photos' selected='true' />
```

```
<fb:tab-item href='http://apps.facebook.com/yourapp/recentalbums.php'
title='Recent Albums' />
```

```
</fb:tabs>
```




- `<fb:success>`

```
<fb:message>Success message</fb:message>
```

```
This is the success message text.
```

```
</fb:success>
```


 A screenshot of a yellow success message box with a black border.
 

Success message

This is the success message text.



# FBML vs IFrames

## FBML

- Is Quick; suitable for beginners
- Ease of access to the facebook elements
- Pages have nice URLs

## IFrames

- Easier and faster for existing applications
- Faster experience for users over the long run and faster for AJAX
- Let you use the JavaScript, HTML, and standard



News Feed

Pages

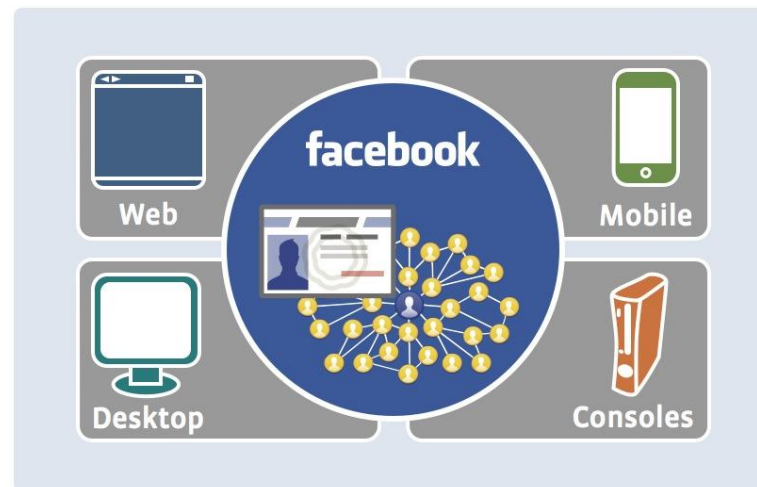
Status Updates

Photos

Links

More

# Facebook Connect



URL: [http://wiki.developers.facebook.com/index.php/Facebook\\_Connect](http://wiki.developers.facebook.com/index.php/Facebook_Connect)



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# Demonstration



- News Feed
- Pages
- Status Updates
- Photos
- Links
- More

# Q/A session

