

FBJS

A brief overview

marcel laverdet

facebook

Goals

- Allow application developers to create rich applications on Facebook.
- Don't endanger our user's privacy.

Features

- Large subset of ECMA-262... except
 - eval() and with(){}
 - Prototypes of native objects [Objects, Array, Number, etc]
 - Several undocumented quirks
- DOM manipulation
 - Non-standard getters: getChildNodes, getFirstChild, setValue, etc. Most DOM attributes are supported in some fashion.
 - innerFBML, innerXHTML

Features

- Facebook-specific host objects
 - Ajax (XMLHttpRequest wrapper)
 - Capable of returning blessed FBML strings
 - Breaks same origin policies
 - Animation
 - Dialog
 - Capable of extending an application's DOM authority

DOM Authority

- Applications are granted authority to entire DOM branches
 - There are exceptions -- opaque nodes
- Host objects may grant authority to more branches.

[Add to Profile](#)

Free Gifts

Virtual Gifts Should Be Free

[Settings](#) | [Invite Friends](#)

Free Gifts

Game Gifts

Community

Received

Sent

You are viewing the Storefront collection.

[Show more gift collections](#)

Page: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Page 1 of Storefront



Selected Gift

no gift
selected

Search Gifts

Privacy Setting

Public

Latest Gift

Skunk by Heather
Corey

Birthdays Today: Pedram Keyani, Venkat Venkataramani, Jeff Egbe

Advertise

Radiohead - "In Rainbows"



Radiohead's hit album "In Rainbows" is available now. Watch the video for "House Of Cards," the hit single here!



Want a MacBook for free?



Complete 2 reward offers from the top, prime and premium pages and receive a free MacBook! See if program is available in your area!



[Profile settings](#)[Updates, FAQ and help](#)

Last.fm Music

[+ Invite your friends](#)

Friends' Music

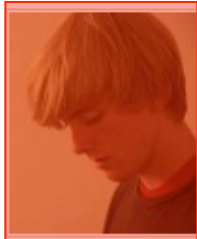
Music you might like

[1](#) [2](#) ... [5](#) [Next](#)

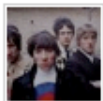
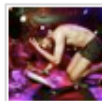
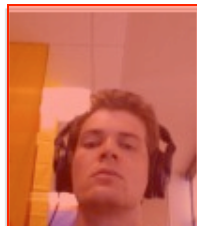
Compare music taste with a friend

[Compare](#)[Sort by musical compatibility](#)

Chris Hughes

[+ Add on Last.fm](#)[▶ Play Chris's favorite music](#)Last track played: [The Ting Tings](#)Total tracks played: 7,508 | [Last.fm profile](#)

Charlie Cheever

[+ Add on Last.fm](#)[▶ Play Charlie's favorite music](#)Now playing: [Duffy - Rockferry](#)Total tracks played: 2,136 | [Last.fm profile](#)

Advertise



Jackie Chang is a fan of [The Visa Business Network](#).

Grow your business.



There's potential to reach millions of people on Facebook. Click to start connecting and receive \$100 of free Facebook ads.

[\[?\]](#)[More Ads](#)



Marcel Georgés Laverdet II

Wall

Info

Photos

Boxes



Graffiti

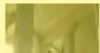
See all | Draw!

Julie Zhuo drew
at March 13 4:12am

Replay

Melissa Holtz (Google) drew
at November 18, 2007 5:49pm

Replay

Valerie Hajdik drew
at November 18, 2007 12:01pm

Replay

Last.fm Music

Last.fm Radio

last.fm

last.fm



Play radio

Compare music

Edit settings

Which Disney Princess Are
You?

Advertise

Looking for a IT job



Apply to the largest
database of Software
companies by state. We
apply to hr of 1500
software companies in
days for you.

Liza Heider
Photography

Are you an actor? A
model? A musician? Then
you need a headshot!
Don't wait. Contact Liza
Heider today for that



Nat Brown

Wall

Info

Photos

Boxes

Music

iLike Sidestage 2

Nat has added 16 songs and likes 154 artists.

[Edit Settings](#)[Post](#)

Songs iLike

[See All \(16\)](#)

- I Like by Men Without Hats
Buy - Dedicate
- Kick Out the Jams by The Presidents Of The United States Of America (on tour)
Buy - Dedicate
- Thunderstruck by AC/DC
Buy - Dedicate - Play video
- Ring Of Fire by Social Distortion (on tour)
Buy - Dedicate

Add music to your profile:

Artists iLike

[See All \(154\)](#)

Photos

2 of 3 albums

[See All](#)**Mobile Uploads**
Updated August 7**Doing the Bauhaus**
Created August 4

Advertise

College Men Needed



We are looking for college men to share their opinions. Quick 60 second survey. Win prizes for your thoughts!



Sell Your Dvd's For Cash



We buy dvds, cds, and video games. We pay cash immediately via check or Paypal. Free shipping.
buybackmadness.com





Nat Brown

Wall

Info

Photos

Boxes

Music

iLike Sidestage 2

Nat has added 16 songs and likes 154 artists

Write a comment about my music...

Post

Songs iLike

- ▶ I Like by Men Without Hats
Buy + - Dedicate
- ▶ Kick Out the Jams by The Presidents of the United States of America (on tour)
Buy + - Dedicate
- ▶ Thunderstruck by AC/DC
Buy + - Dedicate - Play video
- ▶ Ring Of Fire by Social Distortion (on tour)
Buy + - Dedicate

Add music to...

Artists iLike



Thunderstruck by AC/DC

Thunderstruck
by AC/DC

Buy + - Dedicate - Write a comment (see all)

Is this the right video?

Close

Advertise

College Men Needed



We are looking for college men to share their opinions. Quick 60 second survey. Win prizes for your thoughts!



Sell Your Dvd's For Cash



We buy dvds, cds, and video games. We pay cash immediately via check or Paypal. Free shipping. buybackmadness.com



More Ads

facebook

Entry Points

- Canvas pages may execute Javascript onDOMReady
- FBJS embedded on a profile must receive an “active” DOM event before being activated

Implementation

- Lexer [not a parser :(]
 - Namespaces identifiers by using a unique application id
- Statically removes known evils:
 - constructor, caller, __proto__, __parent__, etc
- Run-time which also imposes the static limitations

What We Don't Address

- Communication between applications
- Information leakage: `img.src`, Ajax (`XMLHttpRequest`)
- Method stealing, and mutability

The Future

- Secure and implicit getters and setters -- getParentNode is cumbersome
- Browser eccentricities be gone!
- Allow simulated mutability of native objects
- ``eval(str)`` and ``new Function(str)`` under controlled circumstances
- Selected features from future iterations of Javascript

Thanks

facebook