Team

Ram Joshi
Walter Koning
Chulki Lee

Advisor

Coye Cheshire

Master’s Final Project
UC Berkeley School of Information
Welcome

Introduce the problem space

Addressing the problem

Developing Grepvine

Features and demo

Closing words
Information Overload

Irrelevant Comments

Original Post

COMMENTS

ORIGINAL POST

THREAD DIRECTION

SERVICES
2 MILES
The three problems

1. Information overload

   Duplication of popular content.

   Authors/publishers and users have different goals.

2. Search bubble

   Exploration is increasingly constrained.

3. Comments are neglected

   No ideal way to find online discussion.

   There is no exclusive search for online comments and opinions.

Comments are far below the viewport.

Relevant comments are buried within irrelevant noise.

Readers have no way of knowing what users are saying about a similar article on other sites.
Facebook to buy Instagram

By Brian Heater • posted Apr 9th 2012 1:05PM

How's this for some big news on an otherwise slow Monday? Facebook CEO Mark Zuckerberg has let slip that his company plans to buy popular photo-sharing app Instagram (pending all of the standard regulatory approvals, naturally). According to a report from All Things D's Kara Swisher, Facebook will pick up the social app, which got its own long-awaited Android version, for a cool $1 billion in cash and shares. Ole Zuck confirmed the news on his personal blog, adding that the deal won't affect Instagram in any way.

Showing 1-50 of 2264 comments

Sort by Newest first  Subscribe by email  Subscribe by RSS
Existing solutions

Scroll down and hope

Search engines

Curation tools

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Closing words
What is Grepvine?

grep · vine (n).

A browser extension for bringing rich comments and articles to your everyday browsing experience.

- Related comments from related articles
- Related articles from multiple domains
A sidebar that can be toggled

Related comments and articles from the Web

Bringing relevant comments and articles within the default viewport of the browser

Aggregating relevant content from other sites and comment platforms

Empowering users by providing filters to show only the most relevant content
FILED UNDER  Software

Facebook to buy Instagram

By Brian Heater  posted Apr 9th 2012 1:05PM

How’s this for some big news on an otherwise slow Monday? Facebook CEO Mark Zuckerberg has just slip that his company plans to buy popular photo-sharing app Instagram (pending all of the standard regulatory approvals, naturally). According to a report from All Things D’s Kara Swisher, Facebook will pick up the social app, which got its own long-awaited Android version, for a cool $1 billion in cash and shares. Ole Zuck confirmed the news on his personal blog, adding that the deal won’t affect Instagram’s
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User guided design

Discovery Interviews

Prototypes

User Tests

Iterations
Discovery interviews

2 persona based on 4 discovery interviews

We were designing for Jane D’oh, an avid reader of online news articles. She likes to know how many comments there are on an article to get an idea of how popular it is.

We were designing for Juan Programmer, a tech junkie who skims comments hoping to find opinions that both validate and contradict his viewpoint. Juan likes to see the thumbnail of the person who posted a comment because he associates a reputation with people he’s read before.
Prototypes

Paper

Balsamiq
User tests

7 user tests

The comment count in the left tabs feels nice.

“What are these letters?”

Spell out the filter at the top.

Hover effect (to view comment info) is good. Could consider design change instead.
Iterations
Technology used

- chrome
- django
- BACKBONE.JS
- mongoDB
- less
- Amazon Web Services
- Apache Solr
- jQuery
- RabbitMQ
- Underscore.js
- Celery
Sketch of System Design
Backend

Crawl and parse data

- periodic & on-demand crawling
- site-specific & general parser (RSS, Disqus)

Store articles & comments

- site-specific data (no schema)

Index and search

- protect words from stemming
- search by keywords / related articles

Provide API

- JSON response
Overview of Backend
GET /articles/[id]/comments

Article ID is included in responses of /articles/lookup or /articles/search

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sort optional</td>
<td>The field for sorting comments. One of popular, recent, active, wordcount, controversial, random (Default: popular)</td>
</tr>
<tr>
<td>offset optional</td>
<td></td>
</tr>
<tr>
<td>num optional</td>
<td>The number of comments to retrieve.</td>
</tr>
<tr>
<td>highlighted</td>
<td>If it is set to &quot;true&quot; or &quot;false&quot;, filter the result.</td>
</tr>
</tbody>
</table>

Example Request

/articles/[id]/comments.json

```json
{
  "article": { // same with /articles/lookup
    "id": "id-string",
    "site": "example",
    "title": "This is title",
    "url": "http://example.com/post",
    "author": "foo",
    "posted_at": "2012-03-10T09:14:22Z",
    "comments_count": 5,
  },
  "comments": [
    {
      "id": "id-string",
      "site": "example",
      "body": "lorem ipsum",
      "posted_at": "2012-03-10T09:14:22Z",
      "author": "name",
      "author_url": "http://example.com",
      "author_avatar_url": "http://example.com/avatar.jpg",
      "subcomments_count": 0,
      "depth": 0,
      "up": 5,
      "down": null,
      "wordcount": 2,
    }
  ]
}
```
On Production

1.7K articles and 249K comments from three websites
Front-end

**High-level specs**

- Rich client
- Desktop application-like use and feel
- Complex layouts and smart interactions
- Speedy, polished and user-friendly

**Technical specs**

- Client side Models, Views, Controllers
- Templating
- Event binding
- Modular code
Flow in Front-end

- **User** opens a web page
- **Web page**
  - **http://example.com**
  - **contentscript.js** injects less stylesheets
  - **lesscss**
- **javascript**
  - injects sidebars into native page DOM
- **Sidebar**
  - **View**
- **backbone**
  - **Controller**
  - **Models**
  - **API**
  - sync data
  - bootstraps backbone
  - **loaded from templates**
  - **compiled templates**
  - modules populate their templates with model data to create view DOMs
  - **setup event handlers**
  - **remember plugin states on each tabs/sites**
  - **compile templates**

Chrome loads extensions' background page when launched.
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**Features and demo**

Closing words
Facebook Buys Instagram for $1 Billion

Facebook CEO Mark Zuckerberg announced the acquisition in a post on his Facebook Timeline Monday.

The sale is expected to close later this quarter, and will bring the nine-person staff of Instagram to the social network.
Live Demo
Available in Chrome Web Store

Grepvine

OVERVIEW

Bringing great discussions to a browser near you.

Grepvine brings great discussions to your browsing experience. A handy sidebar shows comments and articles related to the webpage currently open in your browser. Filters enable you to discover richer user comments and articles. Grepvine currently supports technology news on Engadget, Mashable and Wired. We are adding support for more sites very soon.

Greipvne is incredibly easy to use. Just install and browse your favorite technology news. Grepvine will be there for you. Grepvine only shows up when it has useful information related to the current webpage and hides away on other pages. Grepvine has been designed from the ground up to be quick and friendly.

Grepvine was inspired by the success of news aggregation sites such as Digg, Slashdot and Reddit in encouraging rich discussion threads. Grepvine works like a giant collection of discussion threads presenting the most relevant.

Thursday, May 10, 12
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Thanks

Coye,

I School faculty and staff,
people who tested our product,
I School classmates,
and the judges.
Bringing great discussions to a browser near you.

Add to Chrome
In ur browza

Grepin' yo vines
Appendix
Related Comments

Filters

Popular, Word count, Replies, Random

Details

Thread view
Facebook Buys Instagram

Facebook snapped up the hugely popular photo-sharing service Instagram Monday, for roughly $1 billion in a complex cash and stock deal.

Facebook CEO Mark Zuckerberg announced the acquisition in a post on his Facebook Timeline Monday.

The sale is expected to close later this quarter, and the nine-person staff of Instagram will join the social networking giant.

$1 billion for an app? Jesus, it's free in the app store.

Narom • engadget

$1 billion for an app? Jesus, it's free in the app store.

moefoshio • engadget

Jesus used Instagram before it was cool. Not sure why you are telling him that it's in the app store.

JohnWalker03 • engadget

I just dont get how it can be worth that much. It has about 5 employees and doesn't make money. There is probably 100s of camera filter apps, many better, that have been around for years. So I don't think they brought it for the software. And then there's the userbase. Facebook has one of biggest user bases ever and 99% of Instagram users already use Facebook so I don't see why they would buy it to have a userbase either. The Instagram creators lucked out big time.

80hd • engadget

$1bn for a massive user base and well known brand name. Time will tell how well this one goes over though.

His Shadow • engadget

Agreed. Even with 50 million users, as noted by someone else, what's that Venn diagram look like? I use Instagram to send photos to my Facebook all the time. I cannot see this purchase changing anything. But I have already seen the hipsters post their sad "buhbye" pictures, and I truly do not understand the motivation. Are you online with a web-enabled device you are using the Matrix. It's over.

joelmcgee0325 • mashable

I looked in my gallery and there was a new album titled "Instagram Photos" and they were all there.

eelcoroos • mashable

Can you please point me to the picture widget? Can't locate it on this page...
Related Articles

Filters

Relevant, Commented, Recent, Random
Stats

Statistics of the current article

Statistics of the whole corpus

More at our standalone web page

Standalone Information visualization

Go back
Legal Aspects

We don’t believe we are in violation of copyright infringement Protections by the DMCA

We are storing articles and comments

We are only hyperlinking to the original source articles, we are not reformatting and republishing them as our own

We may need to do further legal review about terms of service infringement
Visualization

Data visualizations provide valuable insight about comment patterns

Stats: http://grepvine.info/stats

INFO 247 Information Visualization

Comment trend
1. Instagram for Android hands-on

<table>
<thead>
<tr>
<th>Comments #</th>
<th>Avg depth</th>
<th>Max depth</th>
<th>Avg. words</th>
<th>Words in longest comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>1.36</td>
<td>6</td>
<td>26.32</td>
<td>170</td>
</tr>
</tbody>
</table>

VS

2. Facebook to buy Instagram

<table>
<thead>
<tr>
<th>Comments #</th>
<th>Avg depth</th>
<th>Max depth</th>
<th>Avg. words</th>
<th>Words in longest comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>451</td>
<td>1.15</td>
<td>7</td>
<td>22.63</td>
<td>300</td>
</tr>
</tbody>
</table>
1. Instagram for Android hands-on
Article posted at 09:40AM on 04/03/12 having 210 comments

<table>
<thead>
<tr>
<th>Comments #</th>
<th>Avg depth</th>
<th>Max depth</th>
<th>Avg. words</th>
<th>Words in longest comment</th>
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<td>26.32</td>
<td>170</td>
</tr>
</tbody>
</table>

And I hate that people think that people think that people that use this app think they're actual photographers.
Tue Apr 03 2012 12:56:32 GMT-0700 (PDT)

Chill dude, he's telepathic.
Tue Apr 03 2012 13:03:18 GMT-0700 (PDT)

One wonders, would this bitter young man feel this way if Instagram had been on Android.

2. Facebook to buy Instagram
Article posted at 10:05AM on 04/09/12 having 451 comments

<table>
<thead>
<tr>
<th>Comments #</th>
<th>Avg depth</th>
<th>Max depth</th>
<th>Avg. words</th>
<th>Words in longest comment</th>
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<td>300</td>
</tr>
</tbody>
</table>

Don't worry I'll buy Instagram n keep it away from fb. For ur eyes only.
Mon Apr 09 2012 13:22:33 GMT-0700 (PDT)

Marc zukenberg: am the king of the world! Thou shall abide by my rules!!
Mon Apr 09 2012 13:23:40 GMT-0700 (PDT)

Yes timeline. N'y know I can't put my privacy to public cuz am not 18.
Project Management

+++ git

REDMINE
flexible project management

Dropbox

Google docs
Crawler

\[ \text{integrated} \]

API Server

Chrome Plugin

46

Thursday, May 10, 12
Comments for giveaways

- Engadget Giveaway: win one of three Kindle Fires, courtesy of TurboTax!
- Three iPad giveaways in three days: day one, courtesy of Wonders of the Universe!
- Three iPad giveaways in three days: day three, courtesy of Gogo!
- Three iPad giveaways in three days: day two, courtesy of CloudOn!
- Engadget Giveaway: win one of five V-Moda Crossfade M-80 on-ear headphones!
- Engadget Giveaway: win one of five pairs of Skullcandy Hesh on-ear headphones!
Morgan Fitzgibbons: Yeah I guess I shouldn't make the mistake of expecting an average level of logical rigor and human decency on an internet message board.

9 hours ago · Like · 4

Jamesky: 3 weeks ago

HA!
Going Forward

Refine the algorithm
Additional features
Larger content corpus
Business opportunities
Legal aspects