

Lineup Photo-Based Authentication Using Social Networks

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Hug Me

By RockYou!

Hug Me opens up a whole new world of action-based communication, for example 'Hug Her, Slap Him, Tickle Them!'

3,794,241 monthly active users — 43 friends — 119 reviews



ONLINE...



your
business
ONLINE



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Problem: Access control

twitter Name or location search Home Find & Follow Settings Help Sign out

New Requests to Follow You Accept all Decline all

Forrester Research
forrester
Location: Cambridge, MA
Web: <http://www.forrester.com>
Bio: Forrester Research, Inc. (Nasdaq: FORR) is an independent technology and market research company that provides pragmatic and forward-thinking advice.
Recently: Nominations now open for Forrester Groundswell Awards! Enter at: <http://www.forrester.com/Gr...> 8 days ago

forrester would like to see your updates:

[Block forrester](#) (you will not receive any more follow requests from forrester)

datzhott
datzhott
Location: Los Angeles
Web: <http://datzhott.com>
Bio: Where everything cool is hott
Recently: I'm at work getting ready to go postal. Why don't somebody call 9-1-1? Pop! I shot my boss in the ass. LOL! 2 days ago

datzhott would like to see your updates:

[Block datzhott](#) (you will not receive any more follow requests from datzhott)

autopoietic
autopoietic
Recently: so i joined twitter. now what? 5 days ago

autopoietic would like to see your updates:

[Block autopoietic](#) (you will not receive any more follow requests from autopoietic)

Our Approach: *Lineup*


- ❖ User sets access control
- ❖ Client requests authentication
- ❖ System selects one or more photos
- ❖ System generates a “solution”
- ❖ System presents test to user
- ❖ User identifies subjects in photo
- ❖ User is authenticated

Key Idea #1: Captchas

This ensures that a person, not an automated program, is submitting this request.

Match the characters in the picture [Help](#)

To continue, type the characters you see in the picture. [Why?](#)



The picture contains 8 characters.

Characters:

Continue

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Key Idea #3: Peer to Peer Authentication



Key Idea #3: Crowdsourcing



User embeds widget



User sets privacy level



Client requests access to site



Lineup generates photo 'test'



Client solves 'test'



Access granted



Lineup

User embeds widget

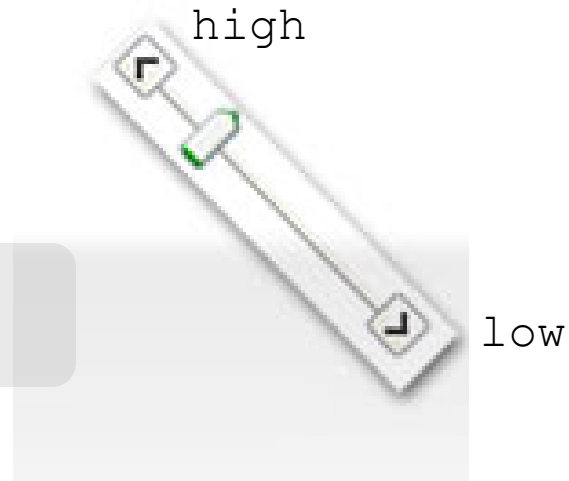
User sets privacy level

Client requests access to site

Lineup generates photo 'test'

Client solves 'test'

Access granted



Lineup

User embeds widget



User sets privacy level



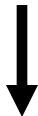
Client requests access to site



Lineup generates photo 'test'



Client solves 'test'



Access granted



This person has protected their updates.

You need to send a request before you can start following this person.

Send request

Lineup

User embeds widget



User sets privacy level



Client requests access to site



Lineup generates photo 'test'



Client solves 'test'



Access granted

```
//User identification
$facebook = new Facebook($appapikey, $appsecret);
$user id = $facebook->require login();

//Get user photos
$photosOfMe = $facebook->api client->photos get($user id);
$getTags = $facebook->api client->photos getTags($photo['pid']);

//Extract photo details
foreach ($getTags as $tag) {
    $imgSrc = $tag['pid'];
    $subject = $tag['subject'];
    $description = $tag['text'];
    $XCoordinate = $tag['xcoord'];
    $YCoordinate .= $tag['ycoord'];
}
```

Lineup

User embeds widget



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Lineup generates photo 'test'



Client solves 'test'



Access granted

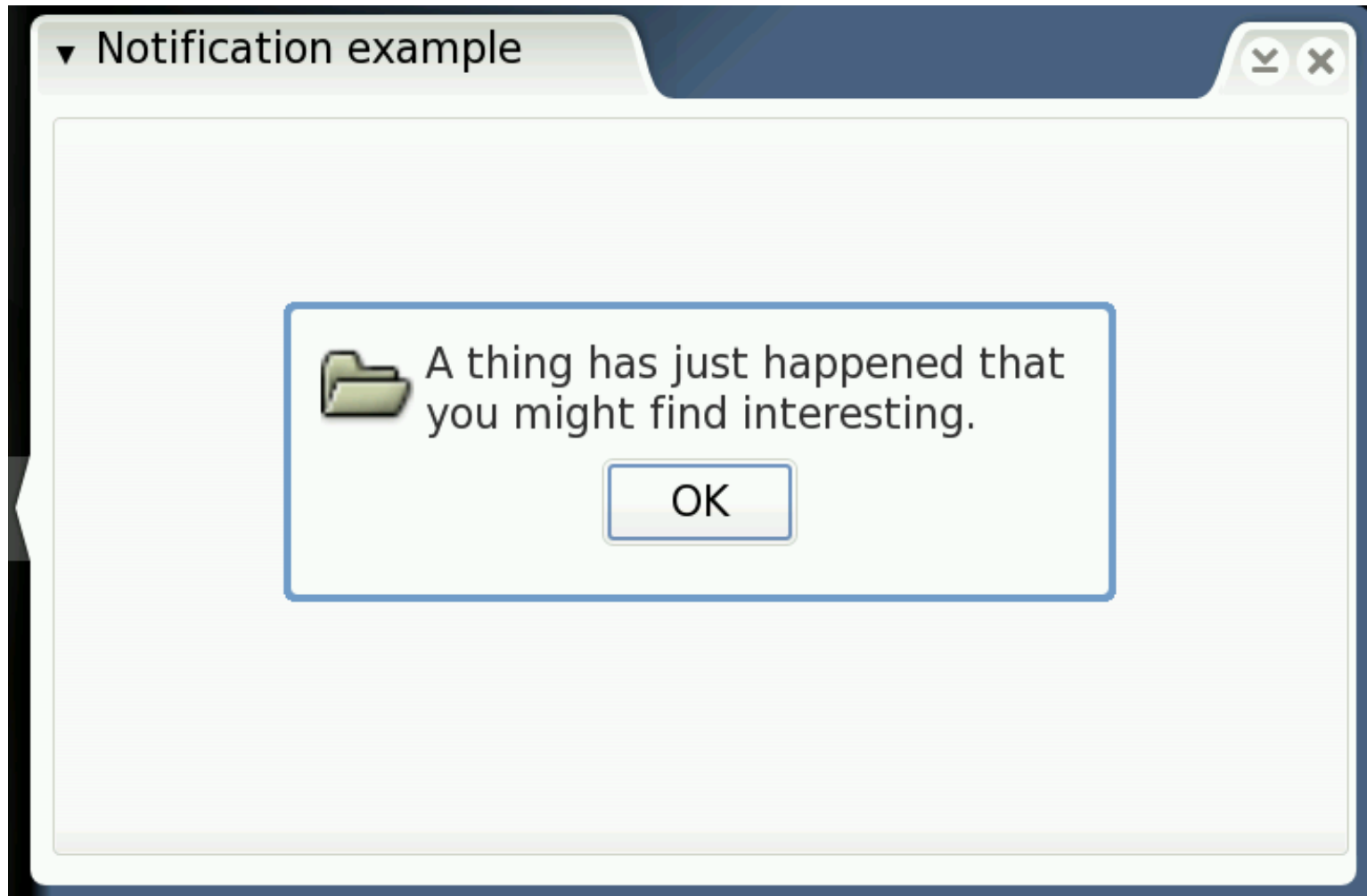
Who is in this picture?:



Continue

or Try Another Photo

Key Idea #4: Trust



Challenges: Security

Photo 4 of 4 | [Back to Album](#)

[Previous](#) [Next](#)

Click on people in the photo to tag them.

Done Tagging



Future Directions

