



Privacy Notice and Privacy Policies

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Usable Privacy and Security

Outline

- Introduction about privacy policy
- Usable privacy notice-privacy label
- Usable privacy notice-privacy icon
- Computer-aided privacy notice-P3P
- Computer-aided privacy notice-DNT
- Computer-aided privacy notice-NLP
- Computer-aided mobile privacy notice
- Summary

Introduction about privacy policy



- Provide information about how data is used
- Allow user to make their own privacy choice


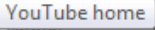
Theory ≠ Practice












How is privacy policy written?

The image is a screenshot of a YouTube search results page. At the top, the YouTube logo is on the left, and a search bar contains the text 'how to create privacy policy' with a magnifying glass icon to its right. Below the search bar, the text 'About 97,600,000 results' is visible. On the left side of the page, there is a sidebar with the 'YouTube home' button and a 'What to watch' section. Below this, the 'BEST OF YOUTUBE' section lists various categories: Popular on YouTube, Music, Sports, Gaming, Education, Movies, TV Shows, News, and Spotlight. Further down, the 'CHANNELS FOR YOU' section lists 'YouTube Spotlight' and 'BabyTVChannel'. The main content area displays three video results. Each result includes a thumbnail image, a title, the creator's name, the time since upload, the number of views, and a brief description. The first video is 'How to make a privacy policy in Wordpress' by Barry Huddleston, uploaded 2 years ago with 1,768 views. The second is 'Creating a Privacy Policy for your Website' by Calivation, uploaded 1 year ago with 333 views. The third is 'Create A Privacy Policy For Your WordPress blog' by JayTheWebsiteGuy, uploaded 3 years ago with 1,580 views.



YouTube  


 What to watch 

BEST OF YOUTUBE


-  Popular on YouTube
-  Music
-  Sports
-  Gaming
-  Education
-  Movies
-  TV Shows
-  News
-  Spotlight


CHANNELS FOR YOU


-  YouTube Spotlight
-  BabyTVChannel

Filters 

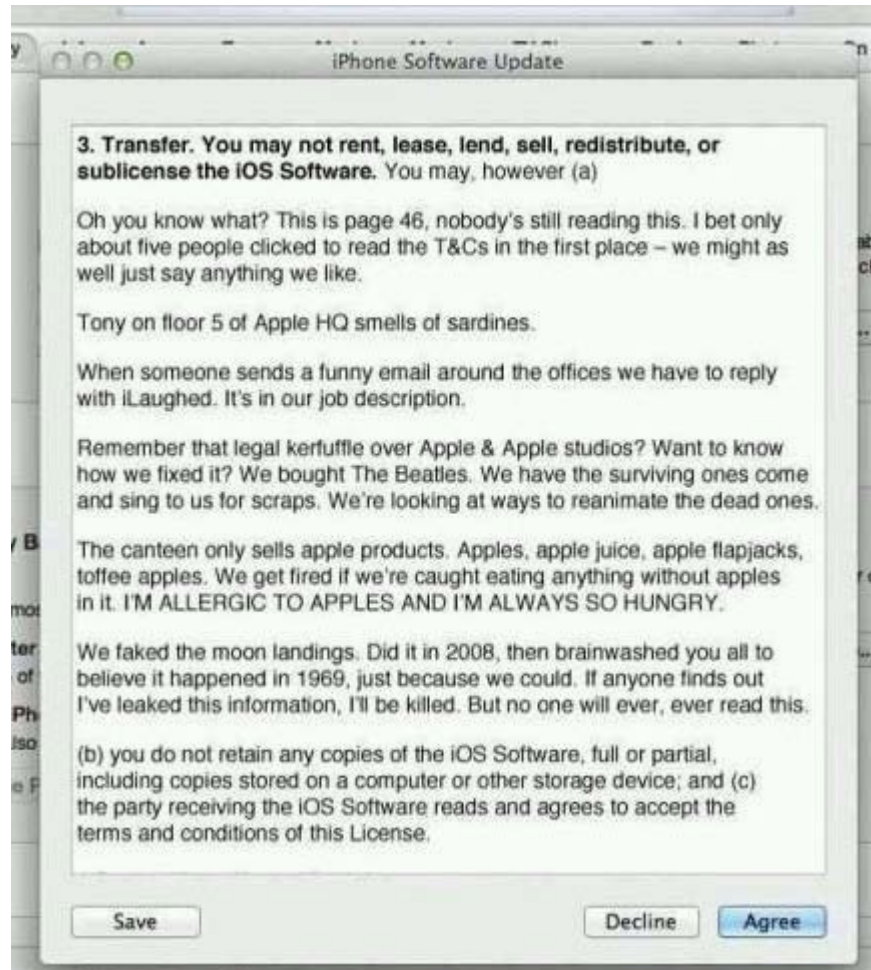
About 97,600,000 results

How to make a privacy policy in Wordpress
by **Barry Huddleston** • 2 years ago • 1,768 views
<http://www.buildnichestore.org/add-a-page-to-wordpress> Easy video showing how to add a privacy page form to Wordpress using ...  5:23

Creating a Privacy Policy for your Website
by **Calivation** • 1 year ago • 333 views
Privacy Policy | [Http://onlinestorehelp.com](http://onlinestorehelp.com) If you have a website then you need to create a privacy policy for your website. This is a ...  5:37

Create A Privacy Policy For Your WordPress blog
by **JayTheWebsiteGuy** • 3 years ago • 1,580 views
In this video, Jay, from JayTheWebsiteGuy.com shows you **how to create a privacy policy** using a free WordPress plugin. For the ...  2:30

Read it?



<http://news.mydrivers.com/1/277/277017.htm>

Cost of reading privacy policy

- Time = 244 Hours/Year
- Money= \$3534/Year
- National cost =\$781 Billion

A. McDonald and L. Cranor. The Cost of Reading Privacy Policies. I/S: "A Journal of Law and Policy for the Information Society. 2008 Privacy Year in Review Issue. <http://lorrie.cranor.org/pubs/readingPolicyCost-authorDraft.pdf>

Improve basic privacy policy

- More readable for human
- Machine-aided ways

Privacy Nutrition Labels

Acme						
information we collect	ways we use your information				information sharing	
	provide service and maintain site	marketing	telemarketing	profiling	other companies	public forums
contact information		opt out	opt out			
cookies						
demographic information		opt out	opt out			
financial information						
health information						
preferences		opt out	opt out			
purchasing information		opt out	opt out			
social security number & govt ID						
your activity on this site		opt out	opt out			
your location						

Access to your information
This site gives you access to your contact data and some of its other data identified with you.

How to resolve privacy-related disputes with this site
Please email our customer service department.

acme.com
5000 Forbes Avenue
Pittsburgh, PA 15213 United States
Phone: 800-555-5555
help@acme.com

<https://cups.cs.cmu.edu/privacyLabel/>

Privacy Icons

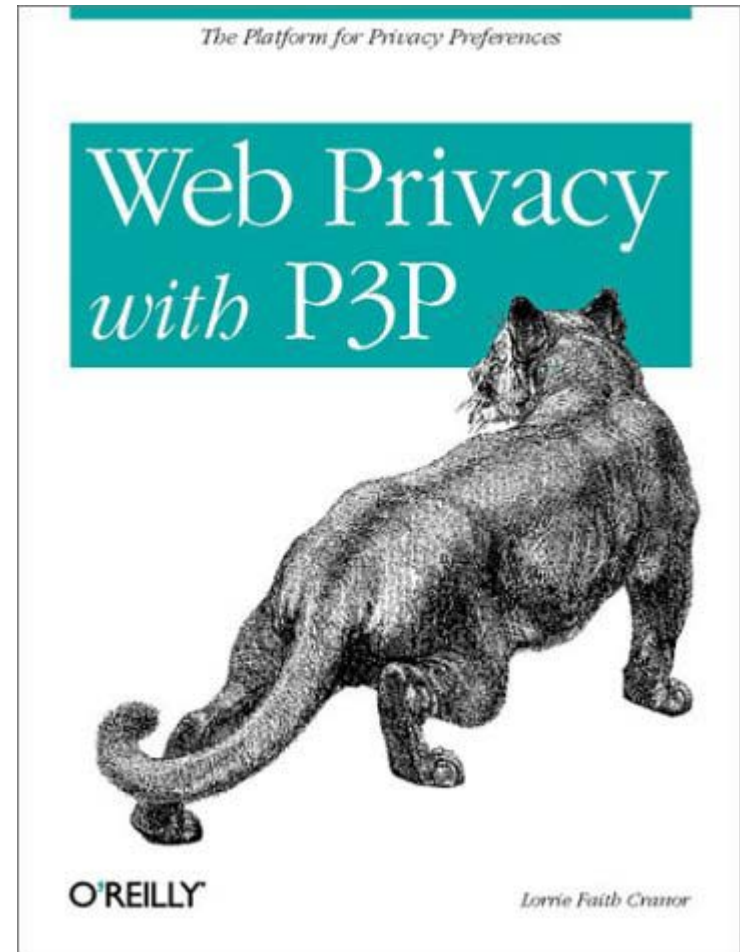
- Mozilla privacy icons



https://wiki.mozilla.org/Privacy_Icons

P3P

- IE deploys it, but users cannot notice it
- Websites use it to bypass cookie blocking



p3pbook.com

Do not track

- Browser send do not track header
- Website get the header and does not 'track' you



www.marketingpilgrim.com

NLP



<https://www.cambridgesemantics.com/semantic-university/nlp-and-the-semantic-web>

Discussion

- Compare the different approaches toward better privacy policy.
- Privacy label
- Privacy icon
- P3P
- Do Not Track
- NLP

Mobile privacy policy-I

Privacy fact for Android

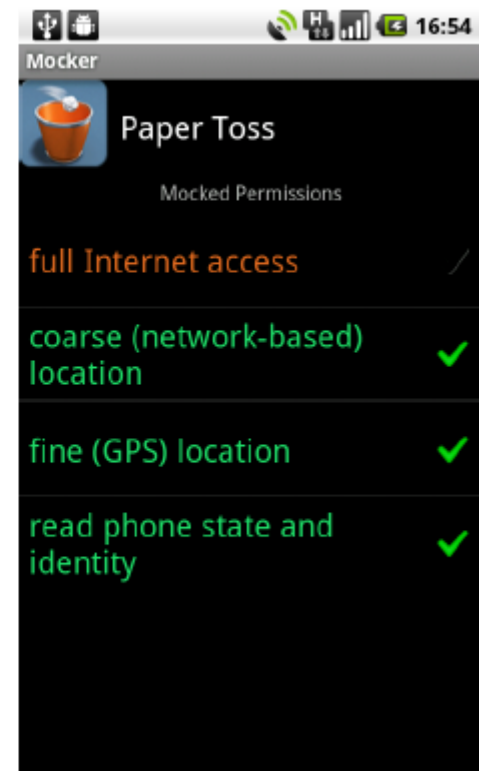
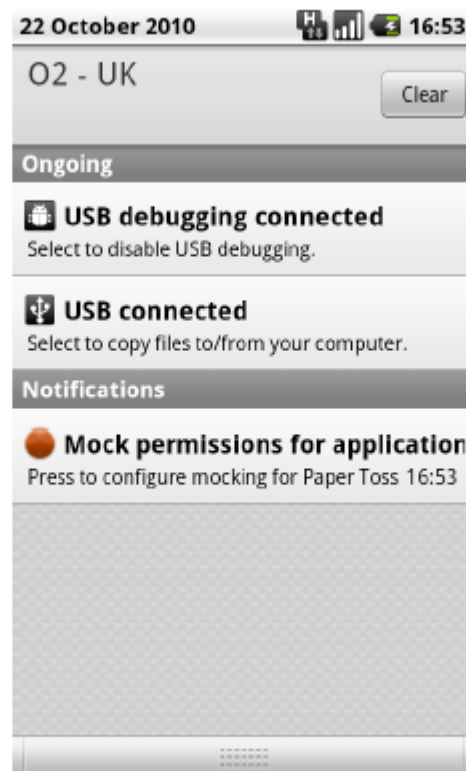
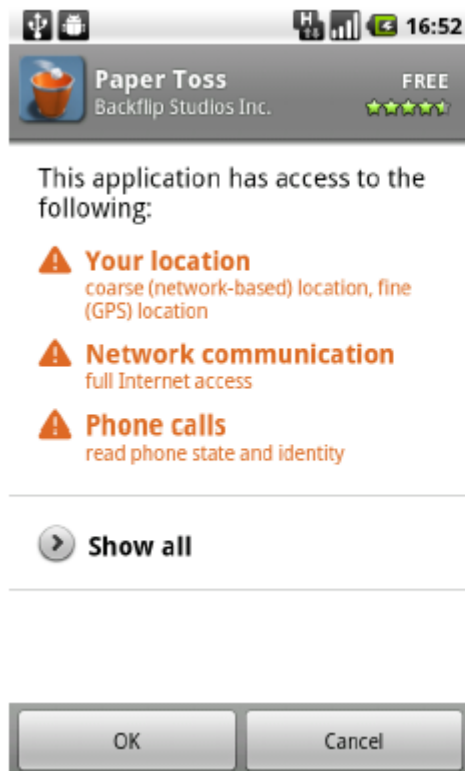
- Permission Analysis:-
- Static Analysis



Mobile privacy policy-2

MockDroid

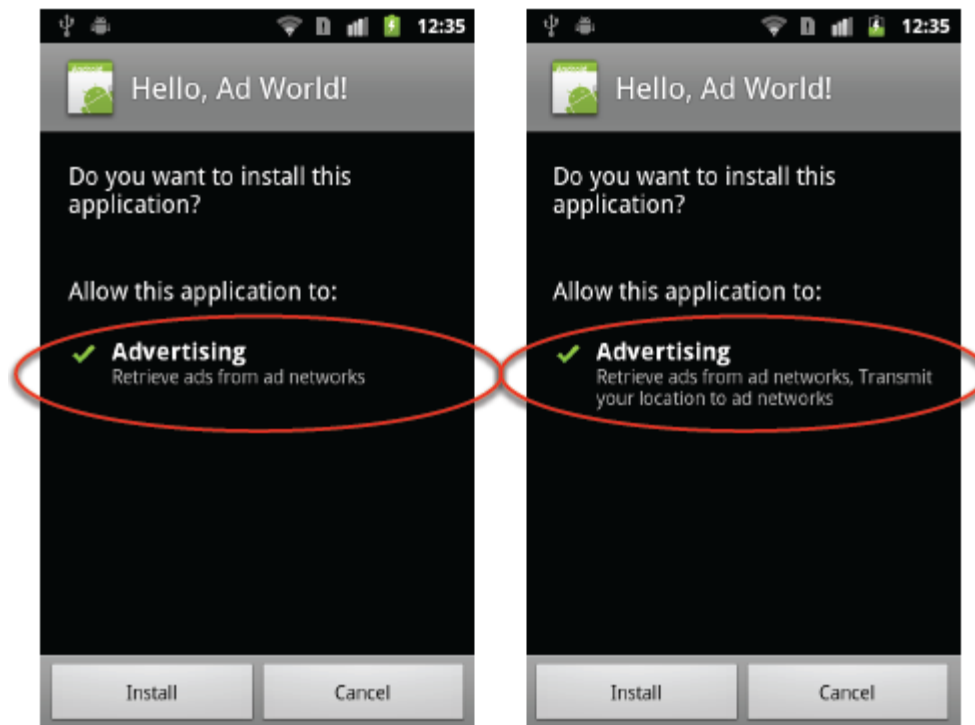
Provide user different choices for privacy information



Mobile privacy policy-3

- ADdroid

Provide a potential method to block advertisement tracking for mobile apps



Summary

- More effective privacy policy is still needed
- Factors which make privacy policy more effective:

Incentive to adopt, Enforcement,
Baseline Requirement, Standardized notice
format, Machine readable notice format,
Reduce ambiguity, Link to full disclosure,

<http://cups.cs.cmu.edu/courses/pplt-fall13/slides/131001noticechoice.pdf>