Web Security Shorts

A Healthy Skepticism for Browser Extensions

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But first... A quick story

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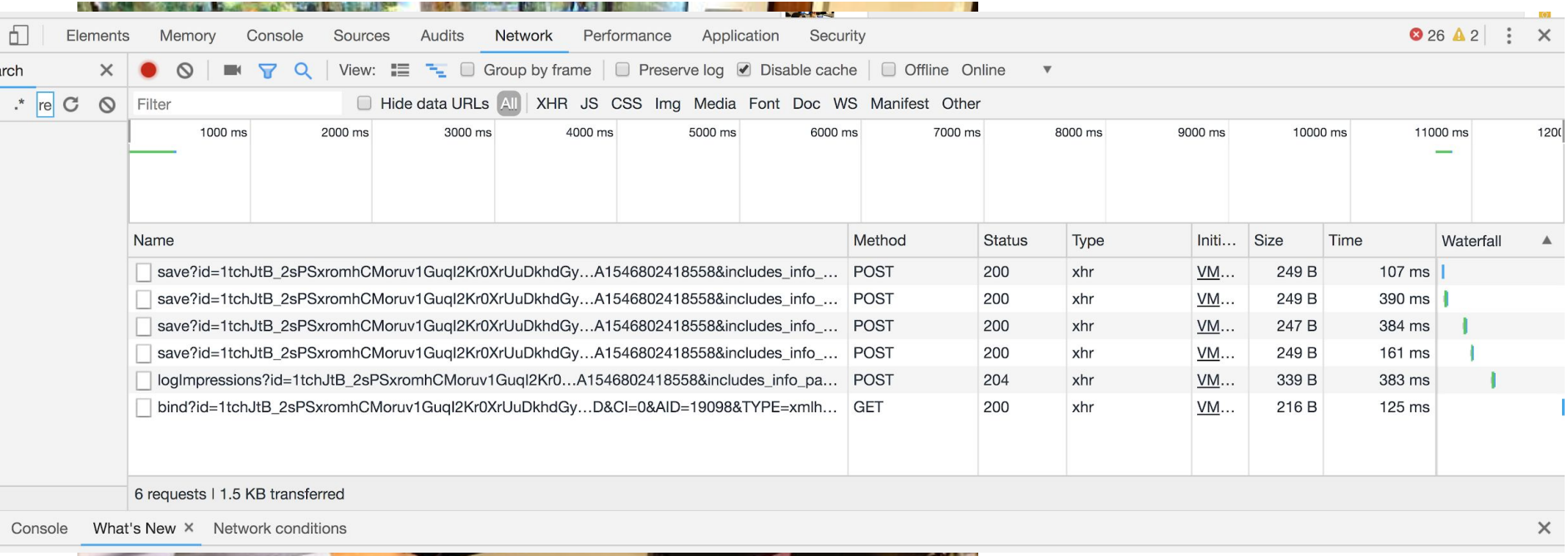


Unexpected behavior

Request URL: https://xcvnid.vnjksuy.org/

Request Method: POST

Request Payload:

{ url: https://secure.uw.edu/app1/?t=15 }

Unexpected behavior

Request URL: https://xcvnid.vnjksuy.org/

Request Method: POST

Request Payload:

{ url: https://secure.uw.edu/app2/ }

Unexpected behavior

Request URL: https://xcvnid.vnjksuy.org/

Request Method: POST

Request Payload:

{ url: https://secure.uw.e

Compromised JavaScript Library?

Did someone break into our repo?

A more methodical approach

- Sent url for every url visited not just our secure app
- Not reproducible on a different computer
- Not reproducible in a different web browser (only Chrome)

Conclusion: Something specific about this particular Chrome install… chrome extension?

The culprit

Webpage screenshot extension

One week later

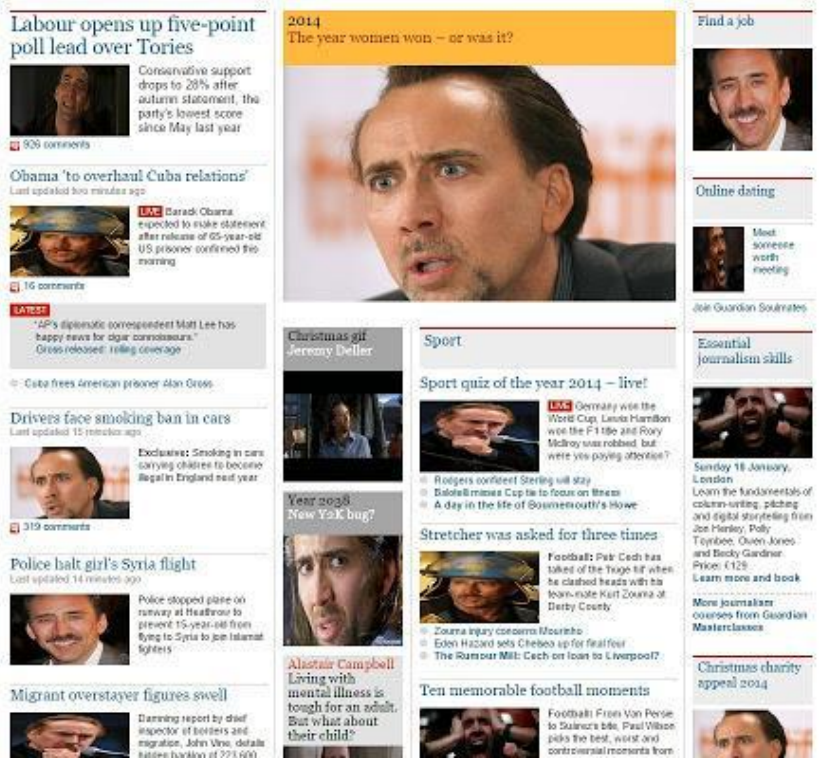
Webpage screenshot extension

Why Browser Extensions

- Improved browser experience (spell checkers, translations, screenshots, etc)
- Improved web interactions (accessibility support, tracking of bookmarks, etc)
- Fun!

Tabby Cat

Ncage



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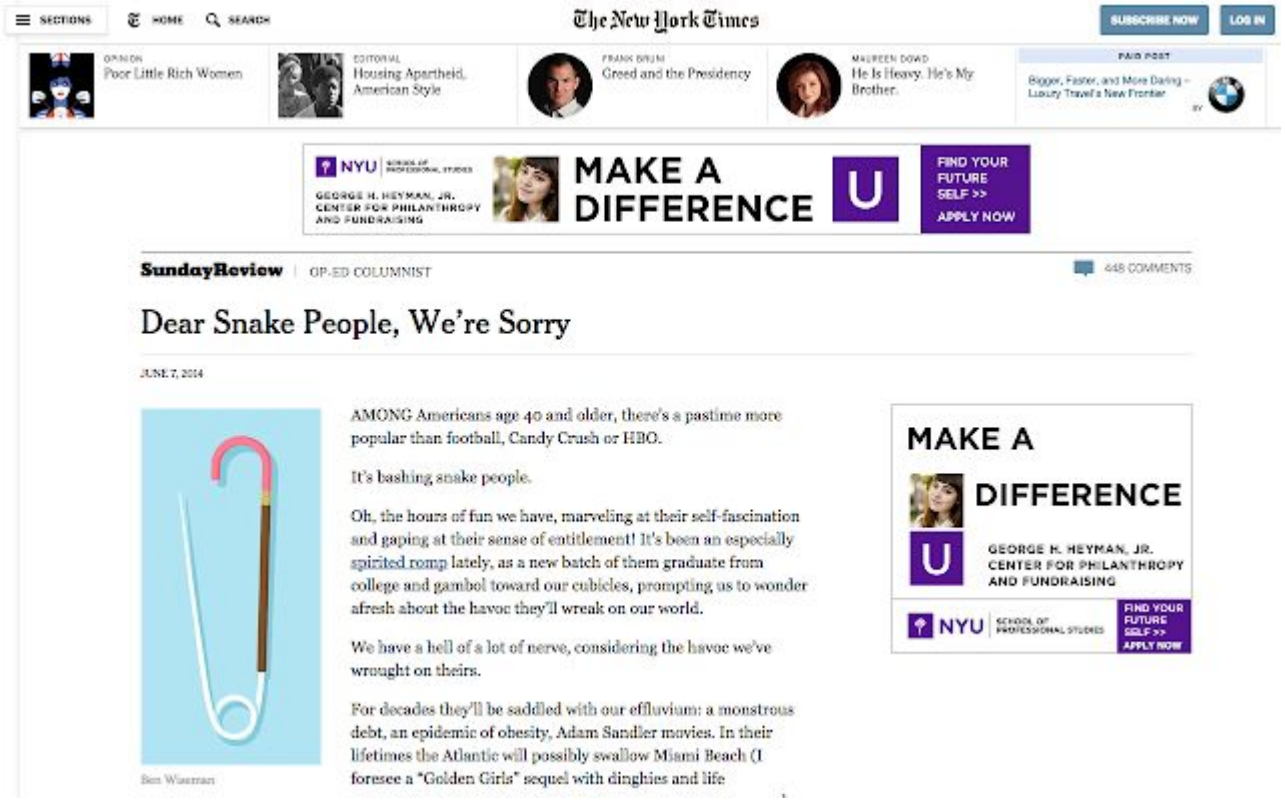
Millenials to Snake People



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Dear Snake People, We're Sorry

JUNE 7, 2014

Ben Wiseman

AMONG Americans age 40 and older, there's a pastime more popular than football, Candy Crush or HBO.

It's bashing snake people.

Oh, the hours of fun we have, marveling at their self-fascination and gaping at their sense of entitlement! It's been an especially spirited romp lately, as a new batch of them graduate from college and gambol toward our cubicles, prompting us to wonder afresh about the havoc they'll wreak on our world.

We have a hell of a lot of nerve, considering the havoc we've wrought on theirs.

For decades they'll be saddled with our effluvium: a monstrous debt, an epidemic of obesity, Adam Sandler movies. In their lifetimes the Atlantic will possibly swallow Miami Beach (I foresee a "Golden Girls" sequel with dinghies and life

What can extensions do?

- Manipulate the sites you visit
- Store data
- Make requests on your behalf
- Control when a browser can be shut down
- Track your physical location
- Much much more...

https://developer.chrome.com/extensions/declare_permissions

What can you do?

- Be knowledgeable about the risks
- Be thoughtful about what you chose to install and when you chose to make the extension active
- Review permissions carefully when installing
- Review for bad comments and also for comment gaming
- Consider doing sensitive activities, such as banking, bill paying, etc. on a browser without extensions installed

https://lifehacker.com/how-to-tell-legit-chrome-extensions-from-malware-1825423984

Questions?

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