What Could It Hurt?

How Framework and Library Dependence is Weakening our Development

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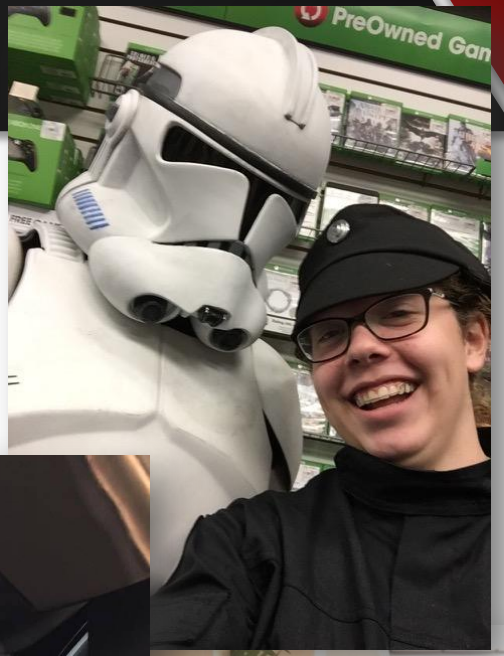
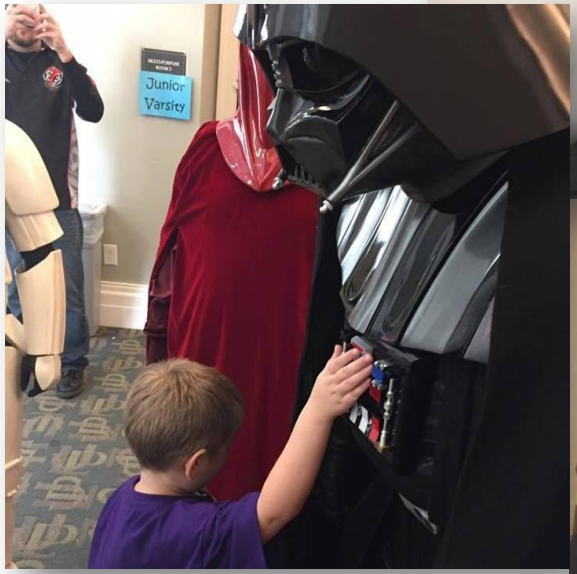
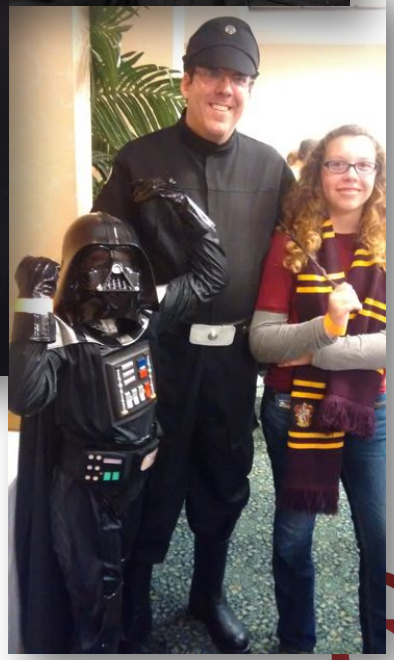
- Course Author and Instructor
  - Web Application and Mobile Testing
  - PEWAPT 101
  - BlackHat, DerbyCon, OWASP
- Podcaster
  - Professionally Evil Perspective
- Open Source Project Lead
  - SamuraiWTF, Laudanum, Yokoso, WeaponizedFlash, etc.
- 501st Member - TI-42265
- Father, Husband and Christian

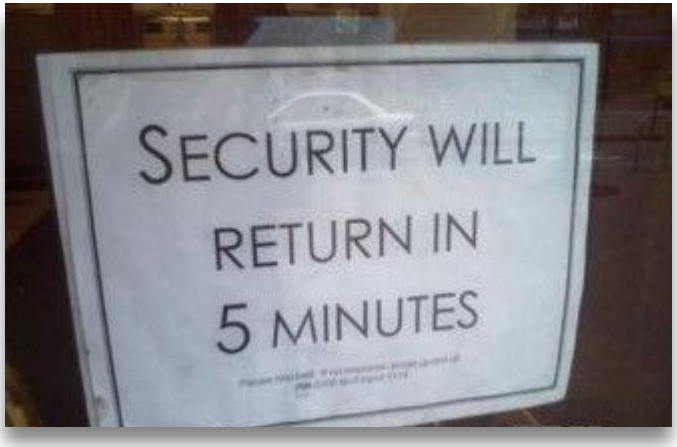




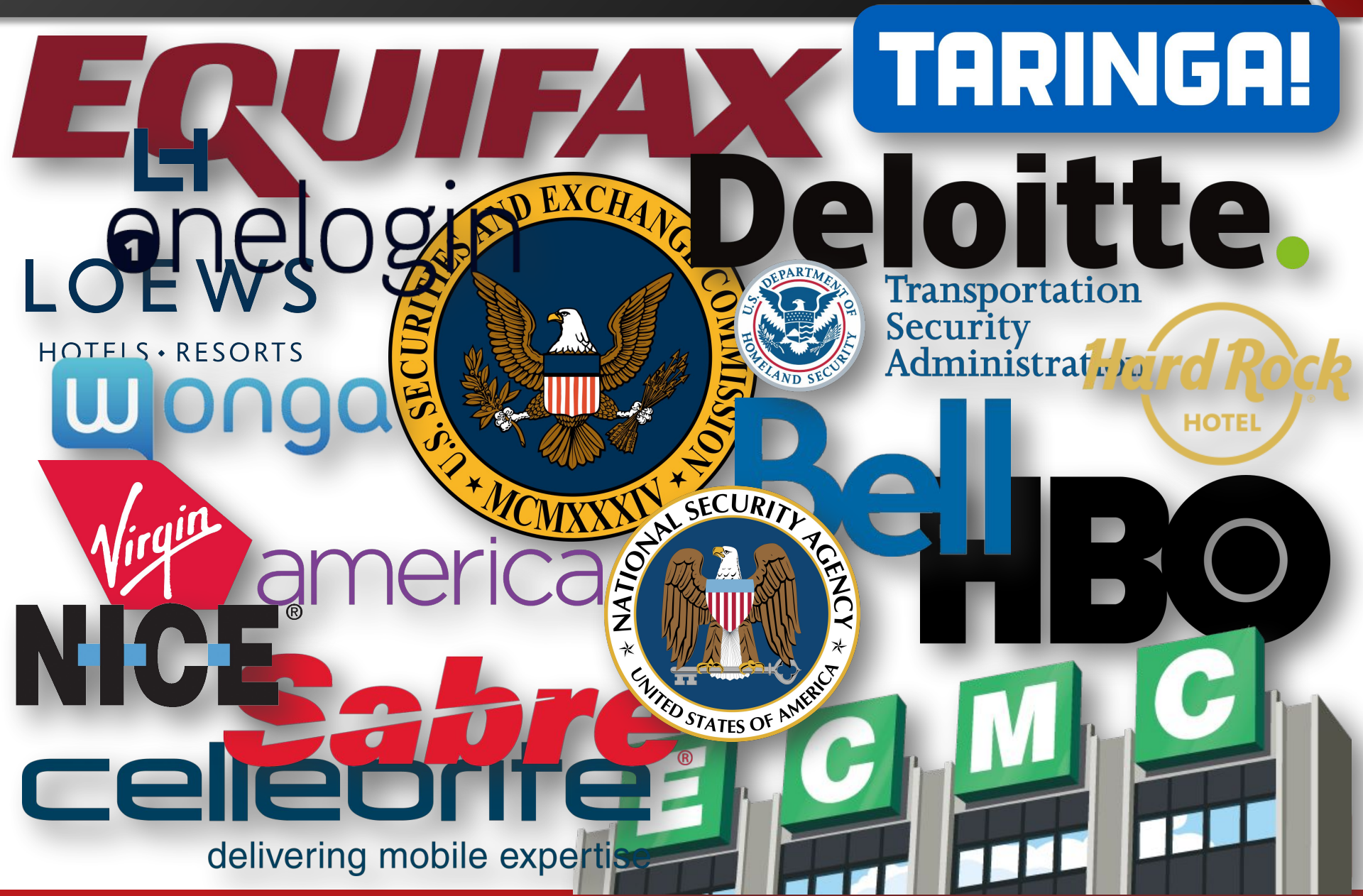


Security..... really?

- Important Topic
  - Or so they say
- I am biased
  - It is my job
- Business critical feature
  - Often ignored



2017 Breaches (Sadly a Sample!)

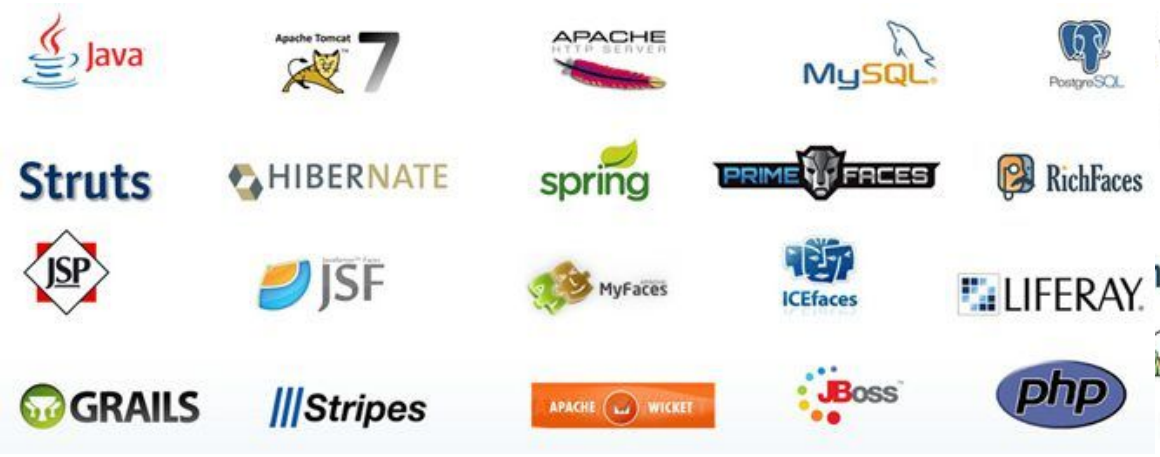


Quick, Good and Cheap…. Pick 2 (Really pick 1)

- Development is seen as easy
  - Microsoft and PluralSight encourage this
- Organizations often don't understand
  - Focus on release cycles
- Security is an afterthought
  - Or a nice-to-have

- Even when Devs want it

Frameworks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MySQL
PostgreSQL
Struts
HIBERNATE
spring
PRIMEFACES
RichFaces
JSP
JSF
MyFaces
ICEfaces
LIFERAY
GRAILS
Stripes
APACHE WICKET
JBoss
php


TEXTPATTERN
MOVABLE TYPE
osCommerce
PRESTASHOP
WORDPRESS
OXID esales
Magento
zikula
RAILS
MediaWiki
phpBB
SPIP
ZEND FRAMEWORK
MANTIS
sonar
Jenkins
Code Igniter
django
Java
php


JAVA
eclipse
web service
SWING!
JSP
EJB 3
JavaFx
spring
HIBERNATE
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JDBC
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JUnit
Struts 2
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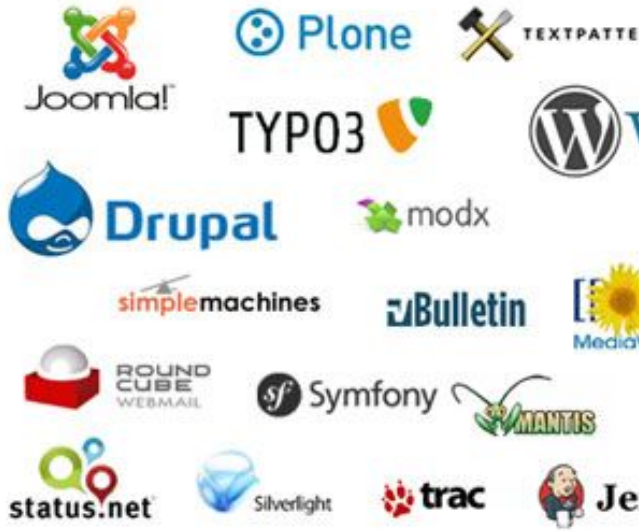
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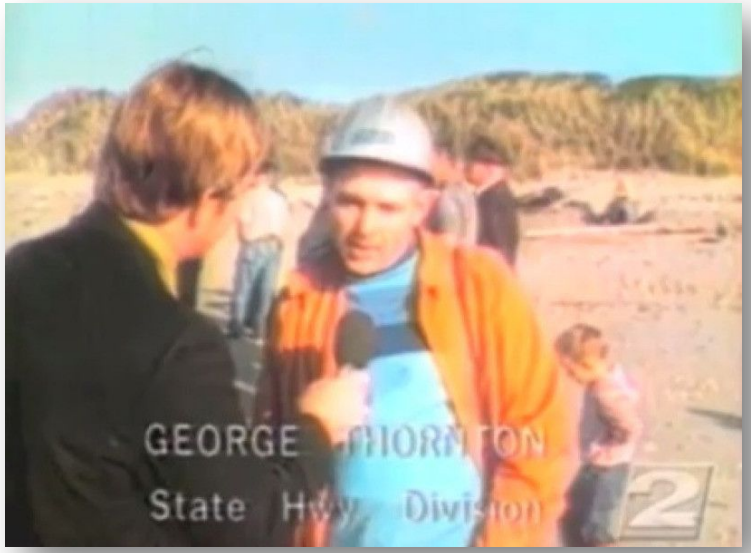
modx
simplemachines
vBulletin
ROUND CUBE WEBMAIL
Symfony
MANTIS
status.net
Silverlight
trac
Je

Efficiences

- Development is easier
  - Heavy lifting is done
- Better support across teams
  - Publicly available frameworks
- Much of the security needs are handled
  - SQLi prevention
  - CSRF tokens
  - XSS encodings
  - Open Redirect validations



Security Fails

- Django
  - XSS
  - Open Redirects
  - HardCoded Password (2016)
- Struts
  - Deserialization Flaw
  - Command Execution
  - CSRF
- Ruby-on-Rails
  - SQLi (Sorta… ActiveRecord Injection)
- JQuery
  - Lots!
  - Migrate library reintroduces flaws!

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