

# Software Ethics

Kenton White



**GALE CAUSES  
BRIDGE  
TO SWAY**

**ENGINEERS SHALL HOLD PARAMOUNT  
THE SAFETY, HEALTH AND WELFARE OF  
THE PUBLIC**

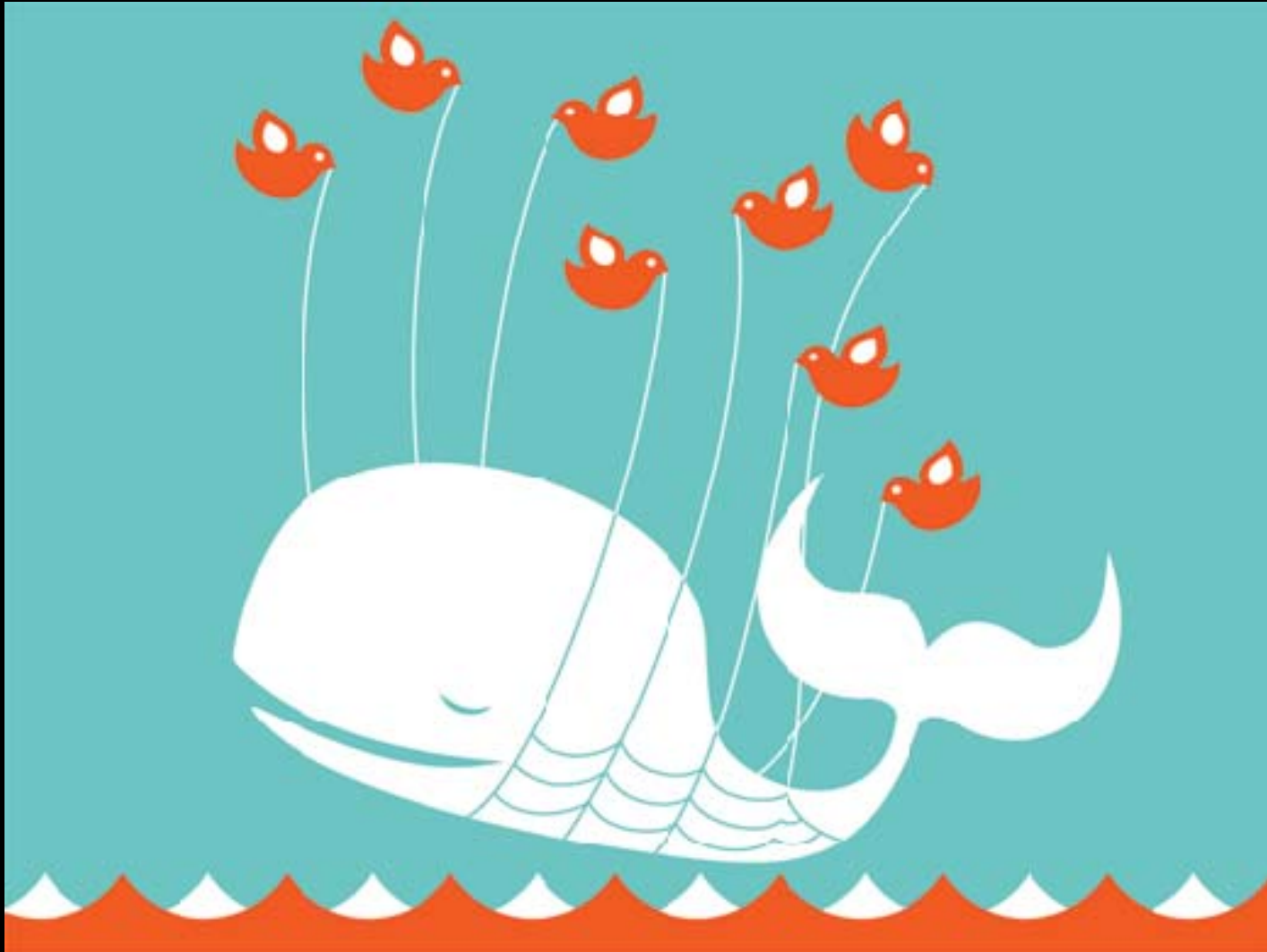
Sometimes something is overlooked



Sometimes physical limits are wrong



**WHAT DOES A SOFTWARE  
ENGINEERING DISASTER LOOK LIKE?**





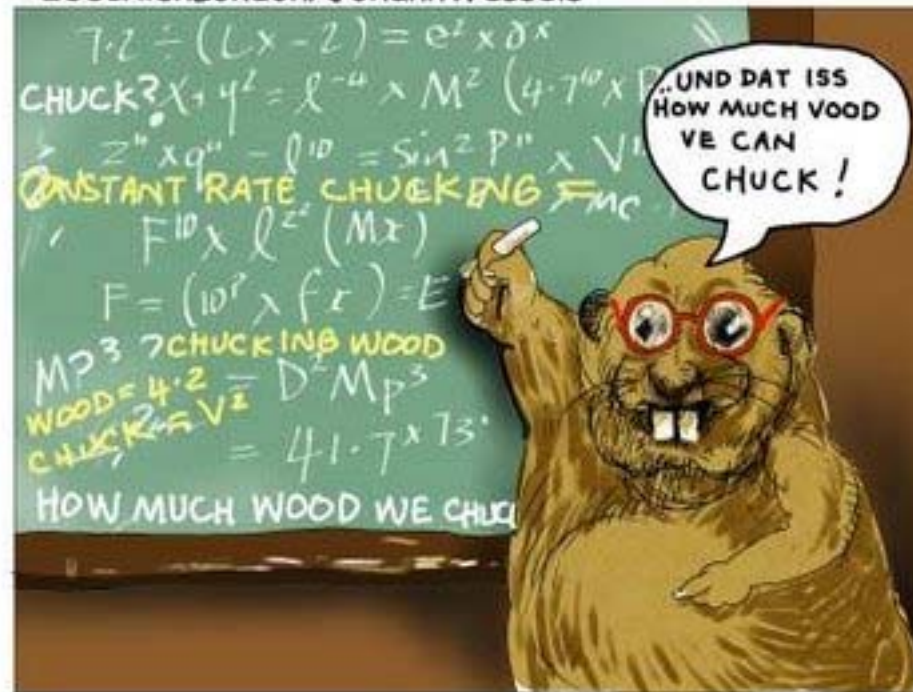
**JUST KIDDING!**

**BUT WHAT ARE EXAMPLES OF  
SOFTWARE DISASTERS?**

**SOFTWARE ENGINEERING DIFFERS  
FROM TRADITIONAL ENGINEERING**

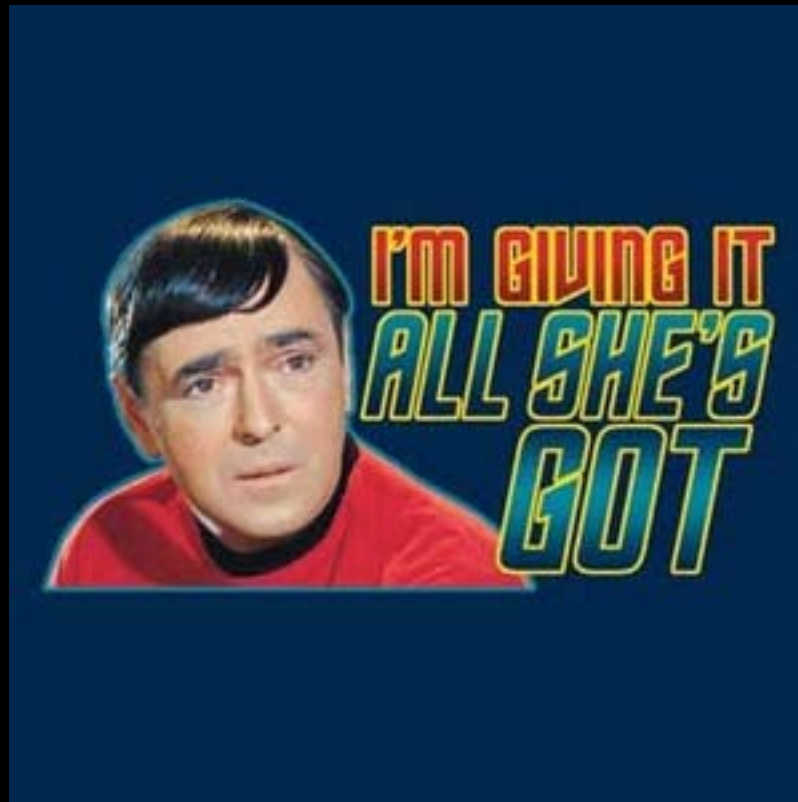
# Limitations not well defined

©2001RickLondon/JohannWessels



woodchuck physics

No such thing as normal operating conditions



# Must anticipate attacks



# **SOFTWARE ENGINEER MORE LIKE A PHYSICIAN OR LAWYER**



# A software engineer must

- Do no harm
- Maintain confidentiality
- Provide full disclosure

Do No Harm





```
/**  
 * For the brave souls who get this far: You are the chosen ones,  
 * the valiant knights of programming who toil away, without rest,  
 * fixing our most awful code. To you, true saviors, kings of men,  
 * I say this: never gonna give you up, never gonna let you down,  
 * never gonna run around and desert you. Never gonna make you cry,  
 * never gonna say goodbye. Never gonna tell a lie and hurt you.  
 */
```

```
//  
// Dear maintainer:  
//  
// Once you are done trying to 'optimize' this routine,  
// and have realized what a terrible mistake that was,  
// please increment the following counter as a warning  
// to the next guy:  
//  
// total_hours_wasted_here = 16  
//
```



This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

Maintain Confidentiality

# THE RUMPUS



**Rumpus:** You've previously mentioned a master password, which you no longer use.

**Employee:** I'm not sure when exactly it was deprecated, but we did have a master password at one point where you could type in any user's user ID, and then the password. I'm not going to give you the exact password, but with upper and lower case, symbols, numbers, all of the above, it spelled out 'Chuck Norris,' more or less. It was pretty fantastic.

**Rumpus:** This was accessible by any Facebook employee?

**Employee:** Technically, yes. But it was pretty much limited to the original engineers, who were basically the only people who knew about it. It wasn't as if random people in Human Resources were using this password to log into profiles. It was made and designed for engineering reasons. But it was there, and any employee could find it if they knew where to look.

I should also say that it was *only* available internally. If I were to log in from a high school or library, I couldn't use it. You had to be in the Facebook office, using the Facebook ISP.



### An application would like to connect to your account

The application **SocialVisor** by [www.socialvisor.com](http://www.socialvisor.com) would like the ability to **access and update** your data on Twitter. [Sign out](#) if you want to connect to an account other than [dangerdiabolick](#).

**Allow SocialVisor access?**

Deny

Allow

Twitter takes your privacy very seriously.

**Please ensure that you trust this website with your information before proceeding!**

By clicking "Allow" you continue to operate under Twitter's Terms of Service. You may revoke access to this application at any time by visiting your Settings page.

Request for Permission - Mozilla Firefox

File Edit View History Bookmarks Tools Help



http://www.facebook.com/connect/uisever.php?app\_id=1f

Request for Permission

facebook Search Home Profile Find Friends Account

### Request for Permission

**OAUTH And Popup Example** is requesting permission to do the following:

-  **Access my basic information**  
Includes name, profile picture, gender, networks, user ID, list of friends, and any other information I've shared with everyone.
-  **Post to my Wall**  
OAUTH And Popup Example may post status messages, notes, photos, and videos to my Wall

[Report App](#)

Logged in as Betamax Vhs (Not You?)

[Allow](#) [Don't Allow](#)

Facebook © 2011 · English (US) [About](#) · [Advertising](#) · [Developers](#) · [Careers](#) · [Privacy](#) · [Terms](#) · [Help](#)



A data breach disclosed [Tuesday] by Heartland Payment Systems may well displace TJX Companies' January 2007 breach in the record books as the largest ever involving payment data with potentially over 100 million cards being compromised.

Heartland, a N.J.-based provider of credit and debit card processing services said that unknown intruders had broken into its systems sometime last year and planted malicious software to steal card data carried on the company's networks. The company, which is among the largest payment processors in the country, claimed to have discovered the intrusion only last week ... Given that Heartland processes more than 100 million card transactions per month, it is very possible that the number of compromised credit and debit cards is at least that much.

[➔ MORE](#)



Full Disclosure



I won the bid on a project and now the client (who is itself from IT Department) wants me to architect/implement the solution in a very particular way. I am sure the application will fail that way for performance problems. And it will not be easily scalable.

This particular client/user does not know ANYTHING about the platform and language I will be using (ASP.NET / SQL Server). His only knowledge is in Cobol and trying to make him to understand my POV is just making him angry.

He contacted me. He was the person who selected me as a winner on the bid. He is who will be approving my checks. He is my only contact with this company.

I do not feel comfortable with providing a solution I know will fail and I do not want to be known as the stupid programmer who make it fail. I do know their real needs and usage patterns for this application because I have done projects for them in the past.

On the other hand, doing this in his way will just extend my contract more time (so, more financial gains) in order to solve the problems by modifying the code.

Should I resign from the project knowing that probably I will be losing this client forever?

Or...

Should I take the pill and take financial advantage from an extended project and just assume the bad fame as a cost?

## Privacy Overview

Facebook wants you to share your information with exactly the people you want to see it. On this page, you'll find all the controls you need to set who can see your profile and the stuff in it, who can find and contact you on Facebook, and more.

### Profile

You are in one network and you can control who can see your profile, contact information, groups, wall, photos, posted items, online status, and status updates.

[Edit Settings](#) 

### Search

You can control who can find you in searches and what appears in your search listing.

[Edit Settings](#) 

### News Feed and Mini-Feed

You can control what actions show up in your Mini-Feed and your friends' News Feeds.

[Edit Settings](#) 

### Poke, Message, and Friend Request

You can select which parts of your profile are visible to people you contact through a poke, message, or friend request.

[Edit Settings](#) 

### Applications

You can edit your privacy for applications you have added to your account, applications that you have used on another website, and other applications built on Facebook Platform.

[Edit Settings](#) 

### External Websites

You can edit your privacy settings for external websites sending stories to your profile.

[Edit Settings](#) 

## Block People

If you block someone, they will not be able to search for you, see your profile, or contact you on Facebook. Any ties you currently have with a person you block will be broken (friendship connections, relationships, etc).

Person:  [Search](#)

### Block List

## Limited Profile

If you want to hide some of the information in your profile from specific people, add them to your limited profile list below.

[Edit Settings](#)

Person:  [Add](#)

### Limited Profile List

**Broadway** Address is approximate

[Street View Help](#)

**Street View** New!

[Full-screen](#)



# Final Thoughts