Good and Bad UX

Examples and analysis

Billy Hollis

Hater of bad UX

nextver.com

billy –at– nextver dot com

How bad can bad get? Avon Canada

InformationWeek CONNECTING THE BUSINESS TECHNOLOGY COMMUNITY

Home News & Commentary Authors Video Reports White Papers Events University

STRATEGIC CIO | IoT | DEVOPS | SOFTWARE | SECURITY | CLOUD | MOBILE | BIG D

SOFTWARE // ENTERPRISE APPLICATIONS

NEWS

12/12/2013
03:10 PM

Avon Pulls Plug On $125 Million SAP Project

Avon halts its global rollout of an SAP order management system after a Canadian pilot project prompts reps to quit in frustration.

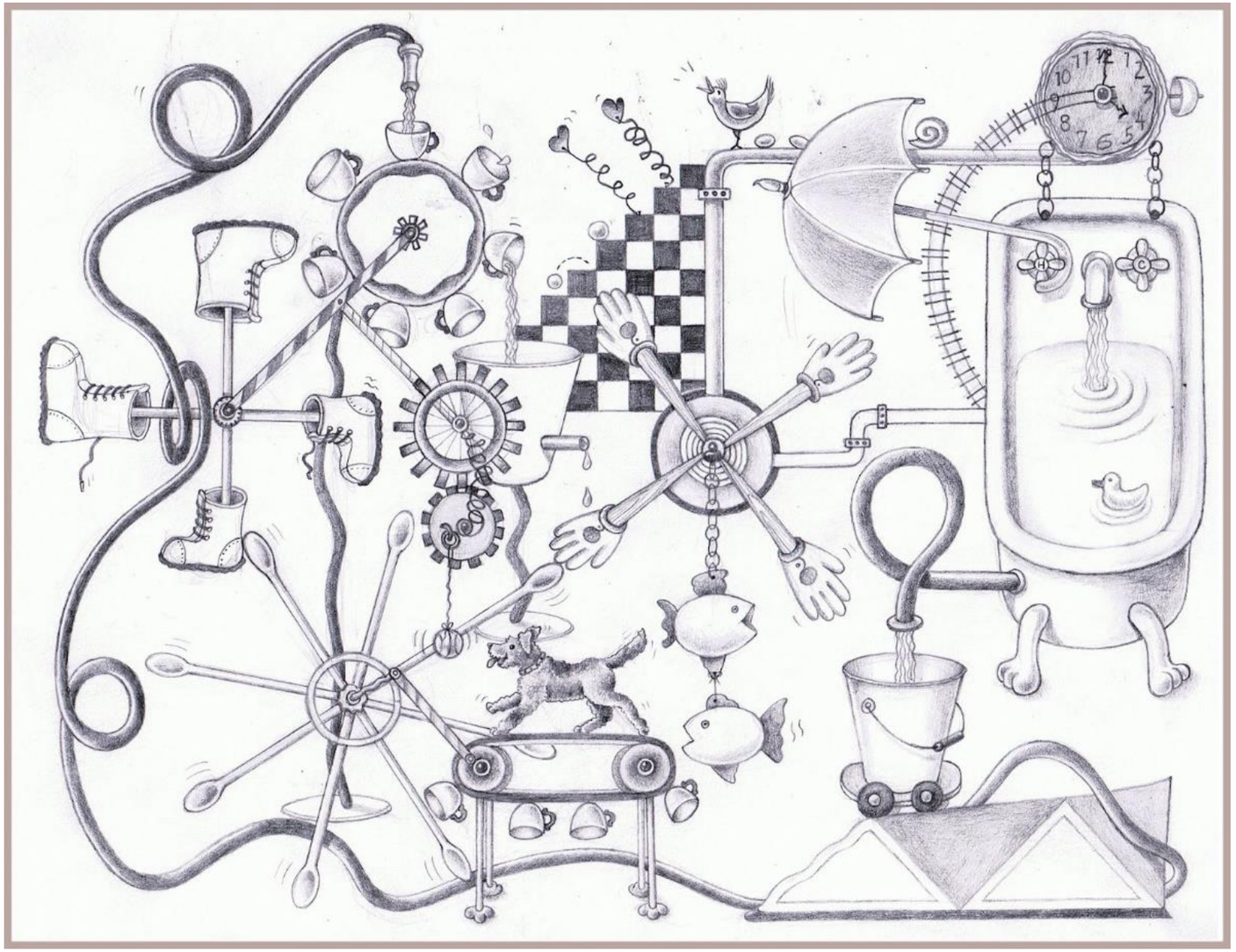
Doug Henschen
News

Connect Directly

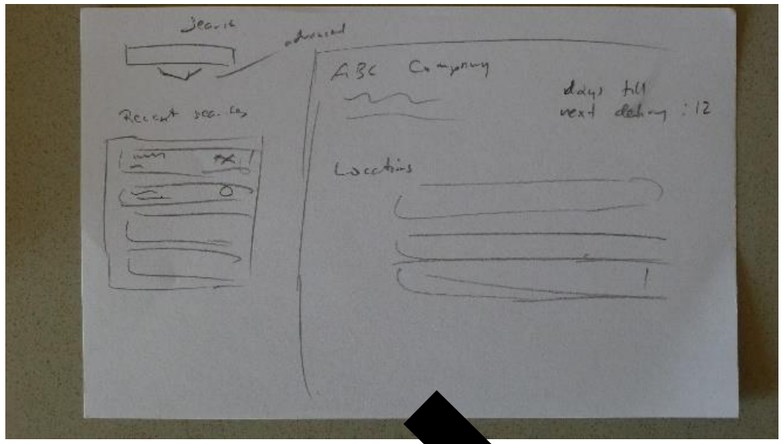
Avon has halted the global rollout of an SAP-based order management system after a failed deployment in Canada, The Wall Street Journal reported late Wednesday.

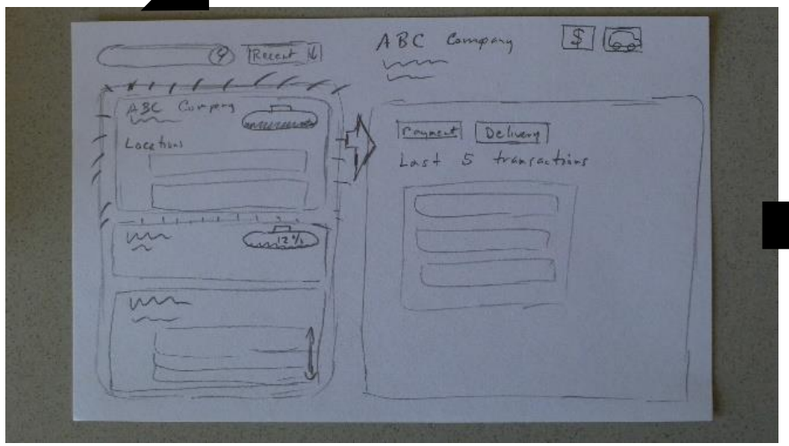
"Avon halts its global rollout… after a Canadian pilot project prompts reps to quit in frustration."

Bad UX is often accidental

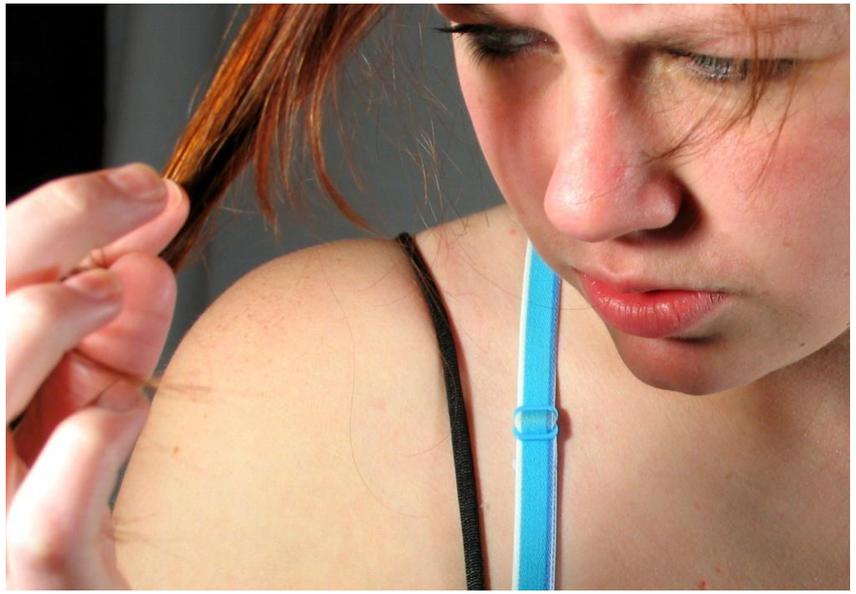


Good UX is rarely accidental





When UX is bad



you can usually trace the reasons to disrespect or negligence of *design principles*

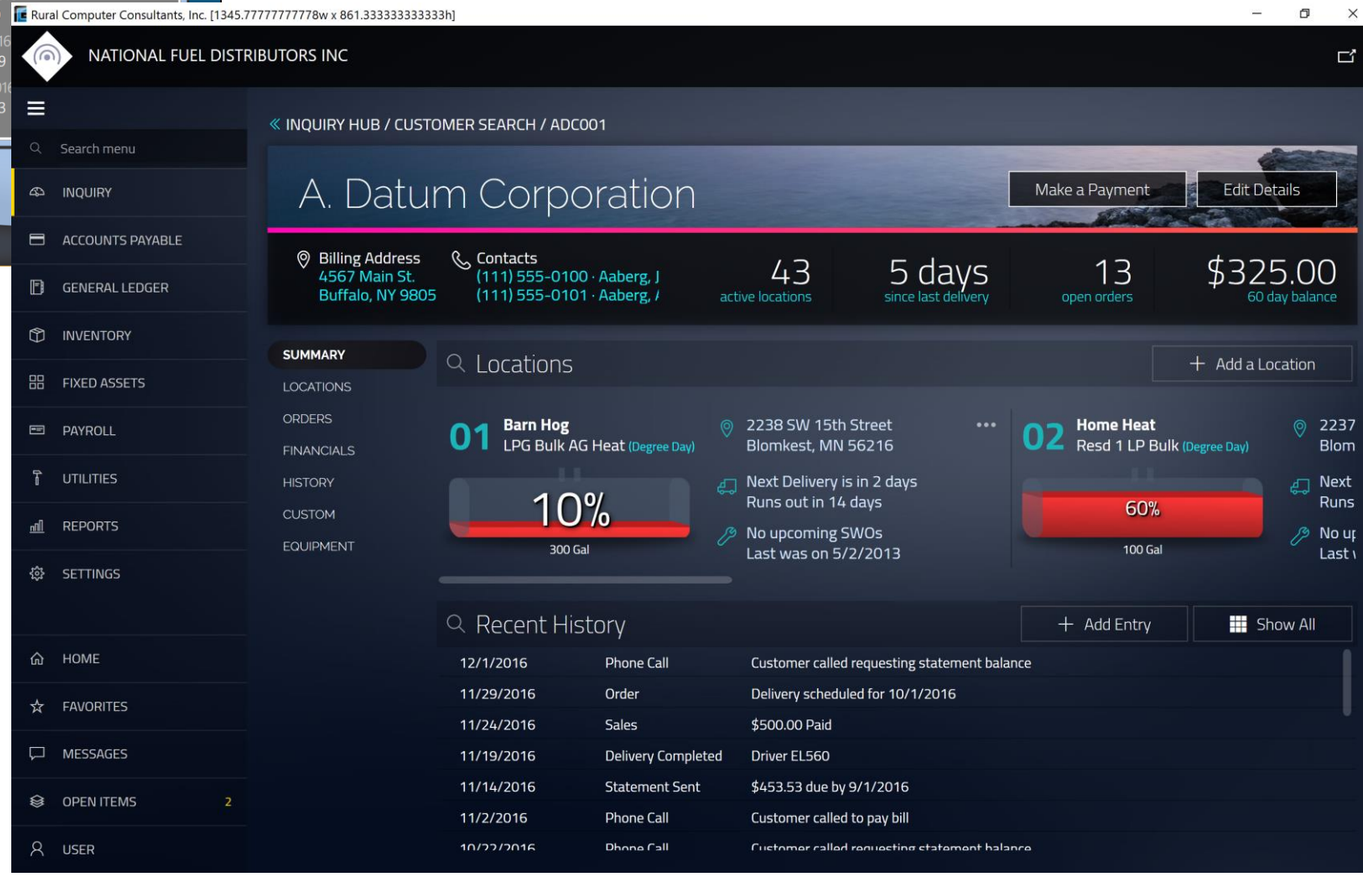
Good and bad UX case studies

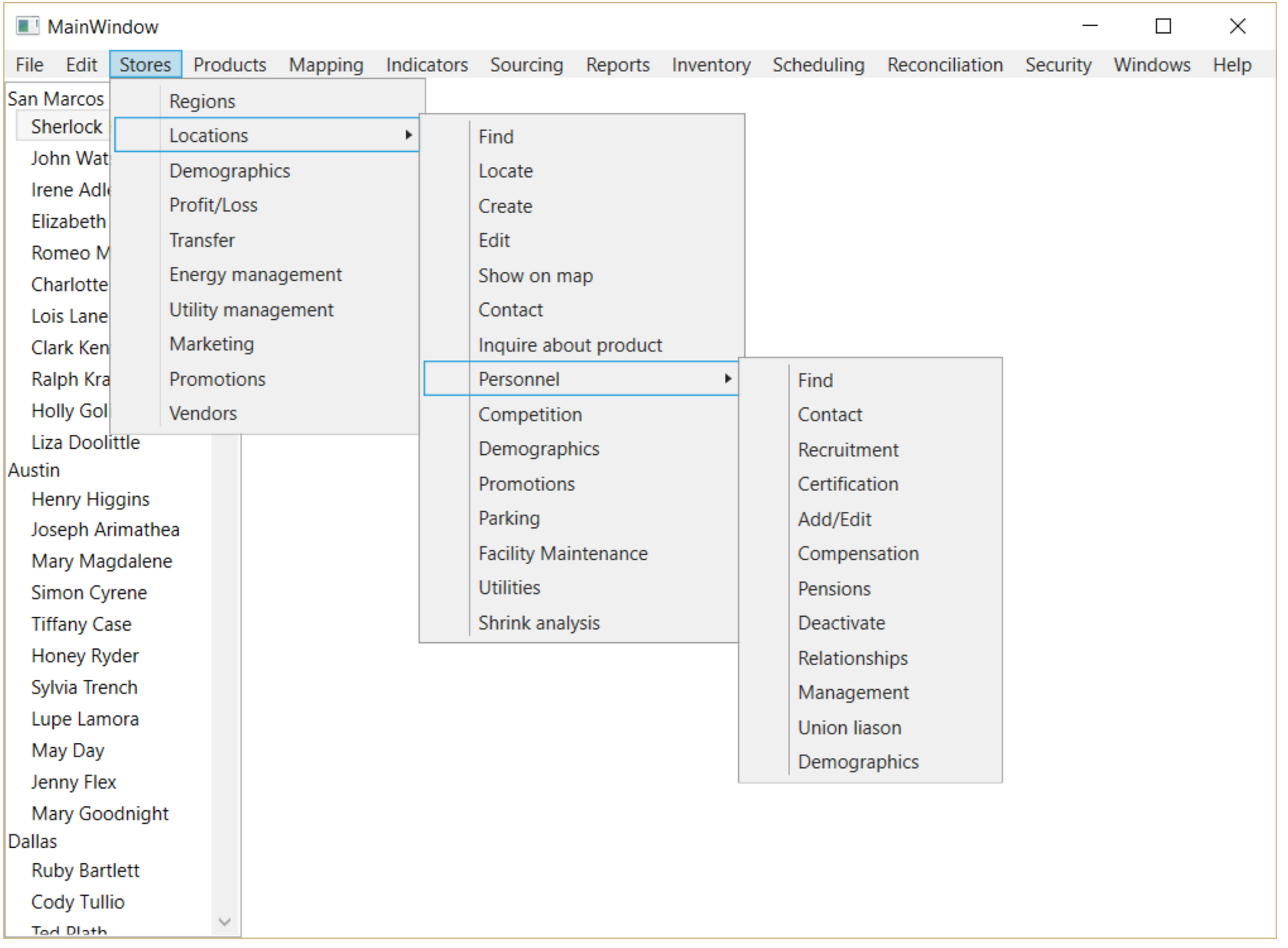
- Business app in WPF that shows what's possible with modern UI
- Corporate app that is too complex and hard to use
  - with ideas for improvement
- Good and bad aspects of various versions of Windows
- Variety of mistakes found in web apps
  - Marriott
  - Amazon
  - Xfinity
  - Etc.

Design evolves to finished product

- Example: Fuel management package
  - Manage delivery and billing for propane and fuel oil
- Prototype broke free of the past
- Finished product then refined beyond prototype

bit.ly/RCCCIDemo




MainWindow
File
Edit
Stores
Products
Mapping
Indicators
Sourcing
Reports
Inventory
Scheduling
Reconciliation
Security
Windows
Help
San Marcos
Sherlock
John Wat
Irene Adl
Elizabeth
Romeo M
Charlotte
Lois Lane
Clark Ken
Ralph Kra
Holly Gol
Liza Doolittle
Austin
Henry Higgins
Joseph Arimathea
Mary Magdalene
Simon Cyrene
Tiffany Case
Honey Ryder
Sylvia Trench
Lupe Lamora
May Day
Jenny Flex
Mary Goodnight
Dallas
Ruby Bartlett
Cody Tullio
Regions
Locations
Demographics
Profit/Loss
Transfer
Energy management
Utility management
Marketing
Promotions
Vendors
Find
Locate
Create
Edit
Show on map
Contact
Inquire about product
Personnel
Competition
Demographics
Promotions
Parking
Facility Maintenance
Utilities
Shrink analysis
Find
Contact
Recruitment
Certification
Add/Edit
Compensation
Pensions
Deactivate
Relationships
Management
Union liason
Demographics

MainWindow

File Edit Stores Products Mapping Indicators Sourcing Reports Inventory Scheduling Reconciliation Security Windows Help

San Marcos
Sherloc
John W
Irene A
Elizabe
Romeo
Charlo
Lois La
Clark K
Ralph
Holly G
Liza Do
Austin
Henry
Joseph
Mary M
Simon
Tiffany
Honey
Sylvia
Lupe L
May Da
Jenny
Mary G
Dallas
Ruby B
Cody Tullio
Ted Plath

Name
Address
City, State, Zip
,
Phone
Gender Male Female
Birthdate
Has Insurance
Medicare Patient
Minor Child
Comments

Scale

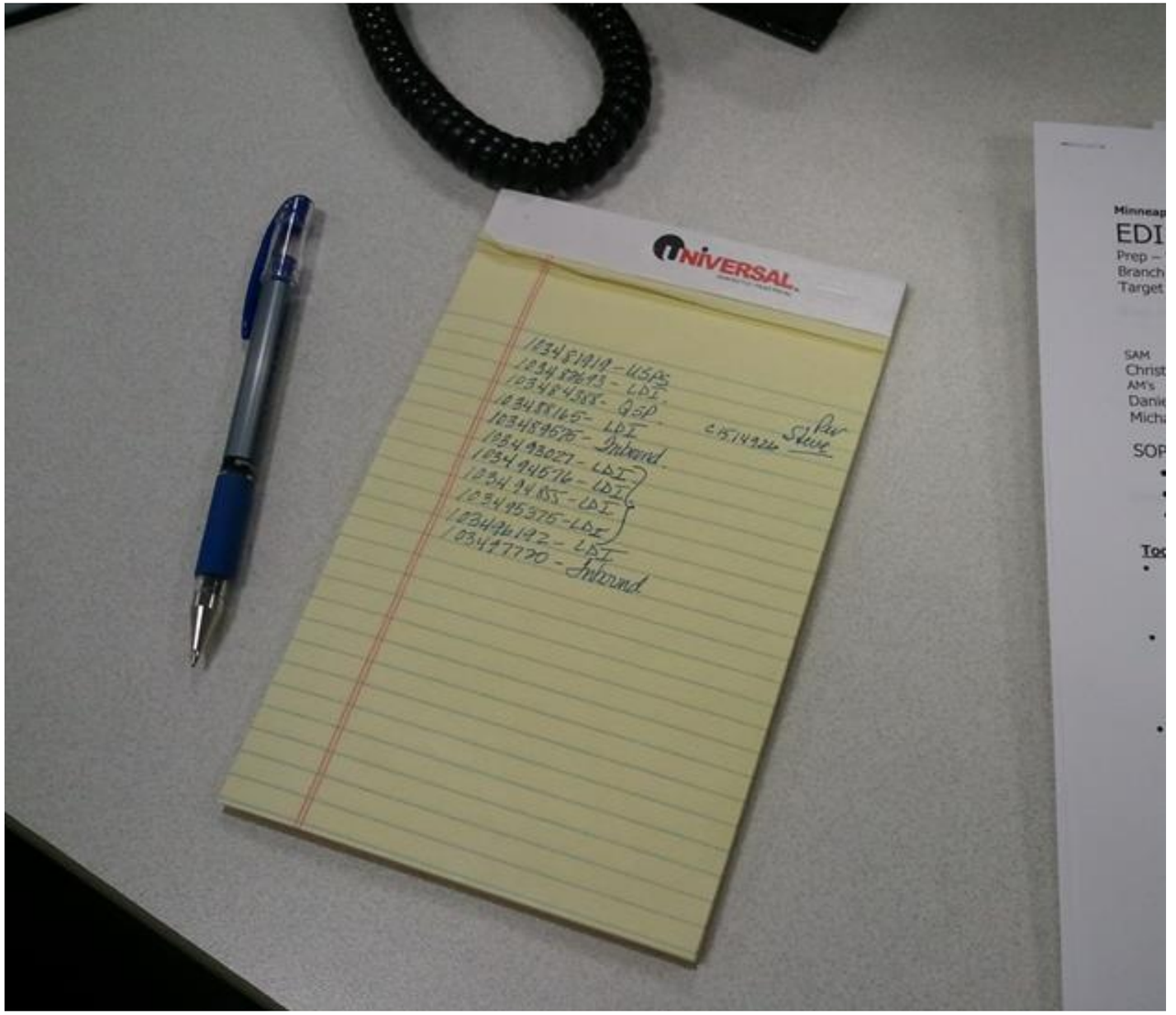
Save
Cancel

Why was this done? Requirements:

- Every user must have access to every application function
- Any operation might involve talking to any person in the company

Design principles violated

- Progressive disclosure – layers of information
  - Must choose a person to get any detail besides name
  - Person detail screen obscured main screen when present
- Hick’s Law – Too many options slows down the user
- Performance load – too many steps in work flow


NIVERSAL
103481919 - USPS
103487693 - LDI
103484388 - QSP
103488165 - LDI
103489575 - Inbound
103493027 - LDI
103494576 - LDI
103494855 - LDI
103495375 - LDI
103496192 - LDI
103497770 - Inbound
Per Steve
Minneap
EDI
Prep –
Branch
Target
SAM
Christ
AM's
Danie
Micha
SOP

Some ideas to deal with Hick's Law (too many options)

- Favorites
- Recently used list
- A filter to find items
- Role-based menus
- Configurable menus – let the user create their own
- Make available actions context dependent
- Frequently used list
- Windows 10 style search
- Reorganize with wizard
- Voice commands
- Predictive menus
- Hotkeys and shortcuts

Several rounds of redesign were rejected by users

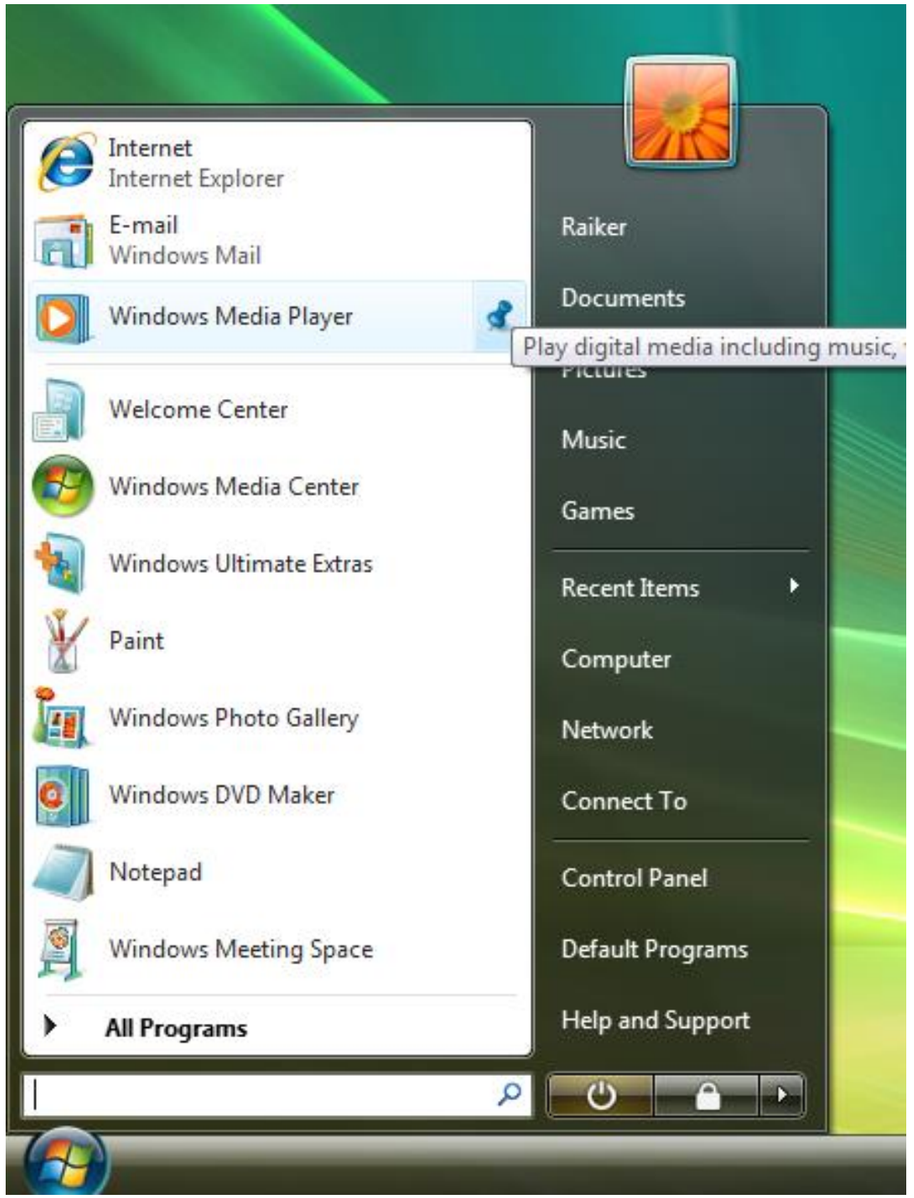
- Windows Forms version circa 2005
- WPF first attempt circa 2010
- WPF second attempt circa 2011-2012

All of these failed in adoption because they didn’t address the core design problems – they were reshuffling and cosmetic improvement only

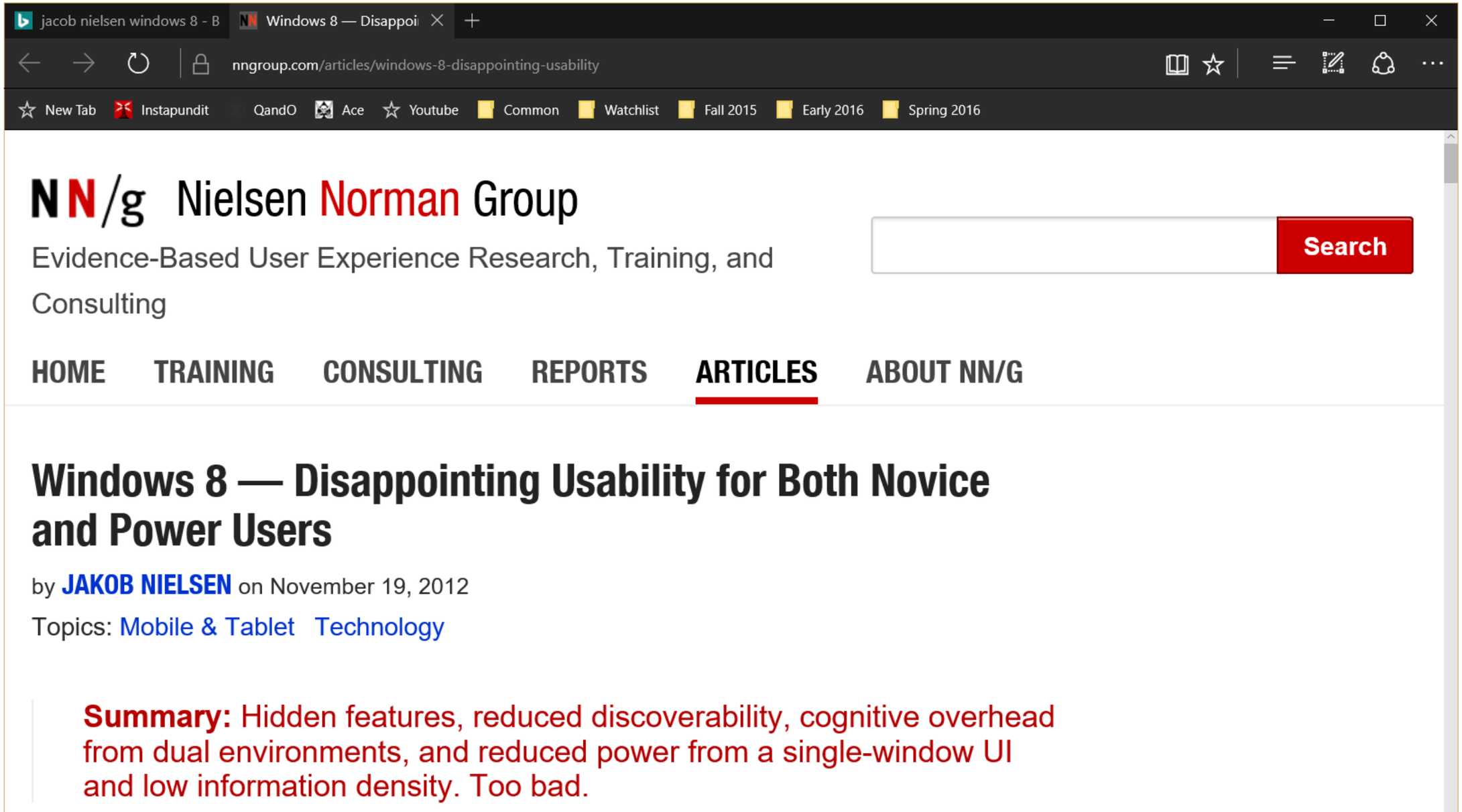
Demo – A prototype with some design options to attack “Hick’s Law” problems

Windows 7 Start button

- A case study in attacking Hick's Law
- Implements:
  - Favorites (pinned items)
  - Most frequently used
  - Most recently used
  - Search filter
- Also provides *entry point*



And then there was Windows 8…



Windows 8 was a failure, but…

… it was a *preventable* failure

Start
Billy
Hollis
Tomorrow: 9:30 AM
10
Wednesday
Mail
Internet Explorer
Store
28
Bing
People
Photos
Maps
SkyDrive
Games
Messaging
Weather
News
Music

I'M MR.MEESEEKS
LOOK AT ME!

Apps by name
A
ABC News
ABC Player
Adobe After Effec... NEW
Adobe Bridge CS6
Adobe Dreamweaver CC
Adobe Fireworks... NEW
Adobe Flash Professional CC
Adobe Illustrator... NEW
Adobe InDesign CC NEW
Adobe Photosho... NEW
Adobe Photoshop Express
Adobe Photosho... NEW
Adobe Reader Touch
Adobe... NEW
Alarms
Allrecipes
Amazon
Angry Birds Space
Angry Birds Star Wars
Audible Audiobooks
B
Bank of America
Bejeweled LIVE
Best Buy
Bon Appetit
Build Notifications NEW
C
Calculator
Calendar
Camera
CNN App for Windows
Cocktail Flow
Code Writer
CookBook
Cut the Rope
D
Designs
Desktop
Dictionary.com
Disney Fairies Hidden Treasures
Drift Mania Championship 2
Dropbox
E
eBay
Endless Skater
Engadget
Engadget Distro
Epicurious
ESPN
Evernote Touch
Excel
F
Facebook
Fotoroom
Finance
Flipboard
Flixster
Food & Drink
Food Network In the Kitchen
Fotor
Fox News Network
Fresh Paint
Fruit Ninja
G
Games
Gravity Guy
Gunstringer, Dead Man Running
H
Halo: Spartan Assault
Health & Fitness
HealthVault
Help & Tips
Huffington
Hulu Plus
Hyper-V Manager NEW
I
iCookbook
iHeartRadio
ilomilo plus
IM+ PRO
Internet Explorer
J
Jetpack Joyride
K
Kindle
L
LINE
LivingSocial
Lync
M
Mail
Maps
Microsoft Mahjong
Microsoft Minesweeper
Microsoft Solitaire Collection
Monsters Love Candy
Music
N
NBC News
Netflix
News
Next Issue Magazines
Nick
Nokia Music
NOOK – Books, Magazines...
O
Office Depot
OneNote
P
PC settings
People
Photo Edito
Photos
Pinball FX2
PowerPoint
Pulse News
Q
Quick Mon... NEW
R
Rayman Ju... Run
Reader
Reading Li...
Volume: 100%
02:12:42 - 02:36:56

Design principles violated

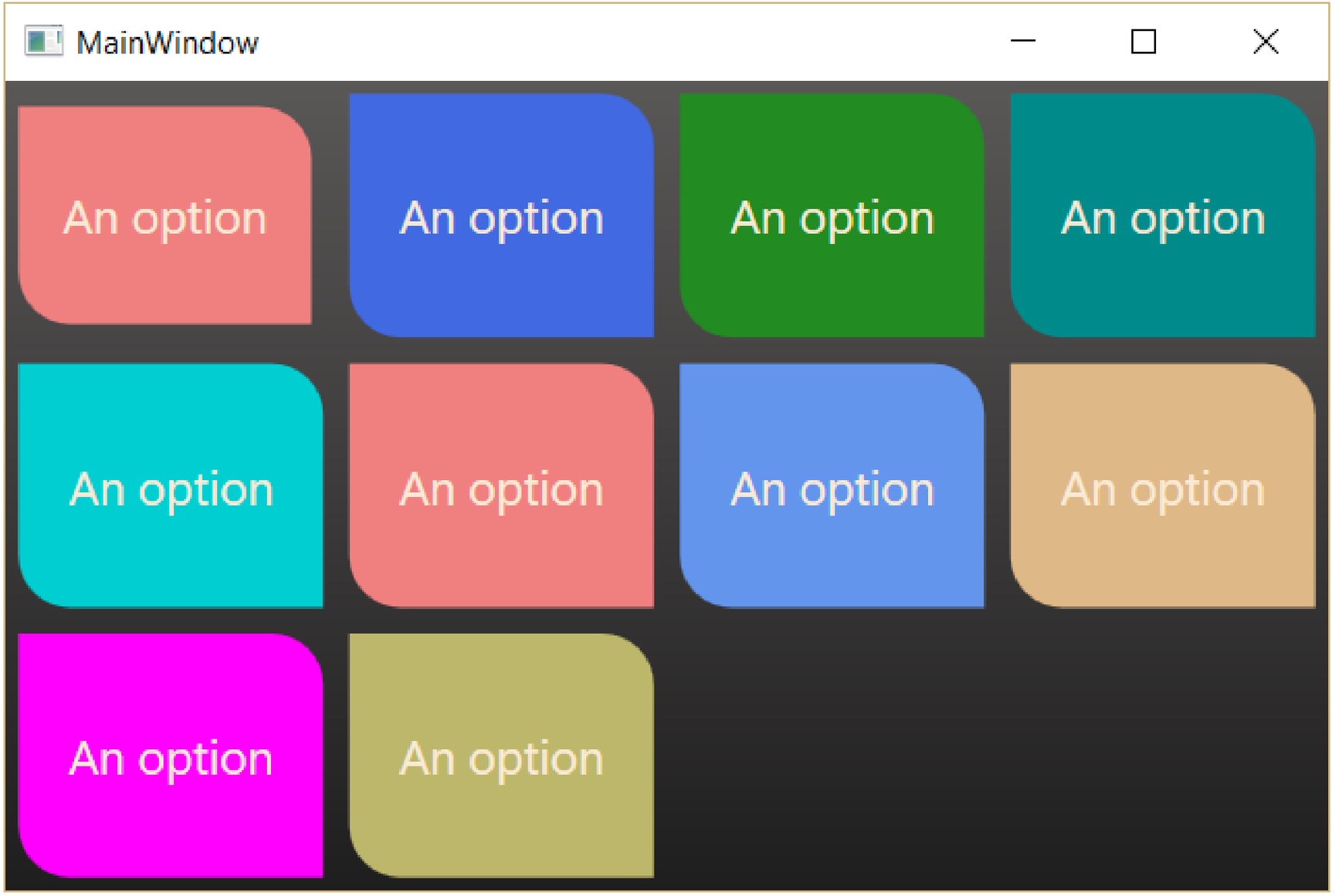
- Hick's Law
- Poor use of animation (live tiles)
  - "Look at me!"
- Lack of visibility – no visible entry point
- Poor use of color
  - Colors too bright
  - Colors not meaningful
- Contour bias

Lighting
Freezer
Energy Saver
Fridge
Ice Off
Cubed
Crushed
Water
Filter
Ice Type
Water

Contour bias

- Curved things are perceived as safe; sharp things are perceived as dangerous
  - Where the word “edgy” comes from
- For long term use, people general prefer curved over sharp

Start
Billy
Hollis
Mail
Tomorrow: 9:30 AM
10
Wednesday
Internet Explorer
Store
28
Bing
People
Photos
Maps
SkyDrive
Games
Desktop
Messaging
Weather
News
Music


MainWindow
An option
An option
An option
An option
An option
An option
An option
An option
An option
An option

Context in design

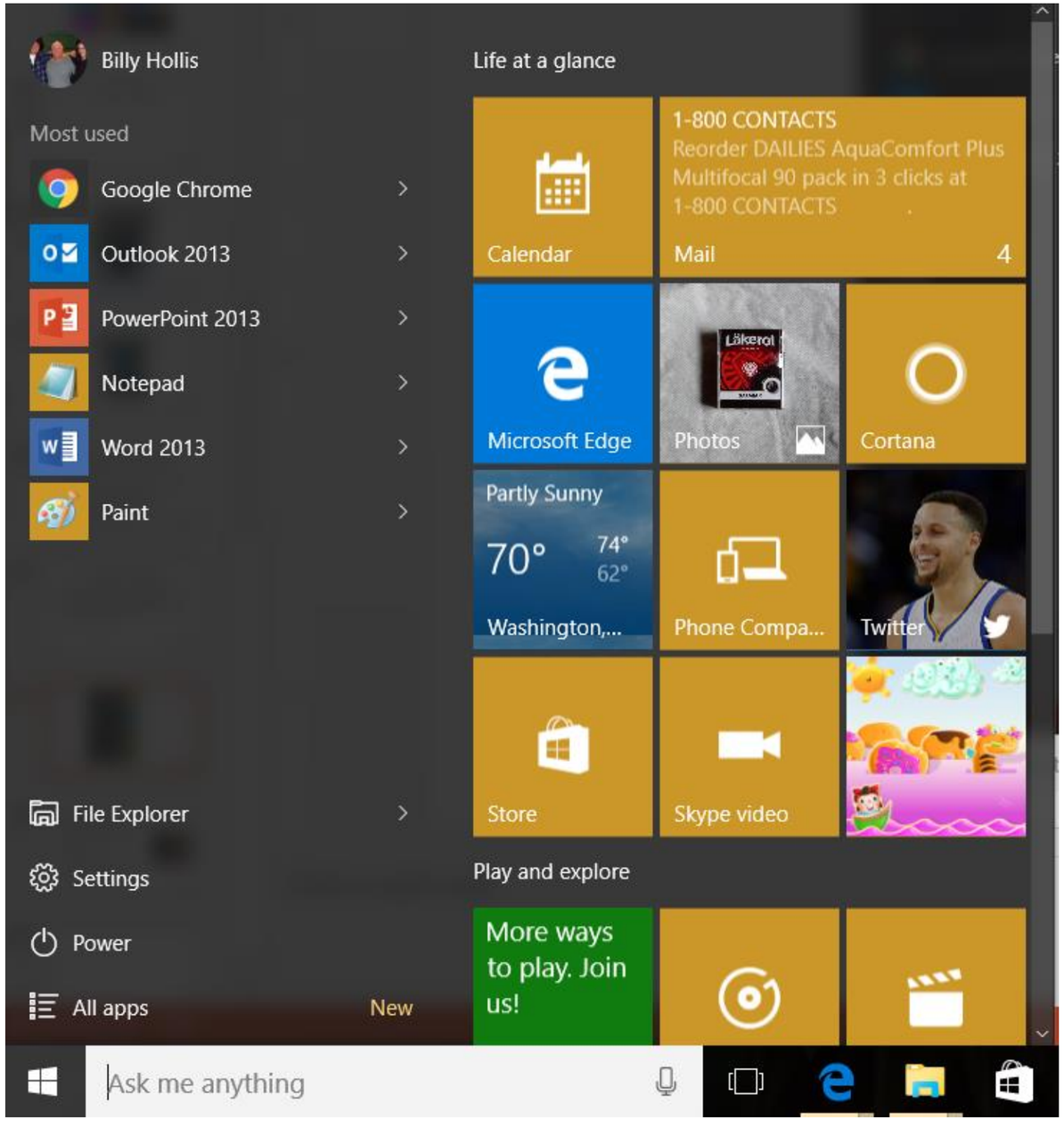
BEAR
PROOF

Good design is transparent

- Users often don’t even notice a good design – they just use it
- If a design is trying to call attention to itself, it probably isn’t a very good design
  - Windows 8 was guilty of this
- Don’t allow your own designs to scream “Look at me! I’m a cool design!”

Design is a discipline

- Takes three to five years to get really good at it
- Windows 8 was designed in 2010-2011
- Windows 10 was designed in 2013-2014, and is much improved


Billy Hollis
Most used
Google Chrome
Outlook 2013
PowerPoint 2013
Notepad
Word 2013
Paint
File Explorer
Settings
Power
All apps
New
Life at a glance
Calendar
1-800 CONTACTS
Reorder DAILIES AquaComfort Plus Multifocal 90 pack in 3 clicks at 1-800 CONTACTS
Mail
4
Microsoft Edge
Photos
Cortana
Partly Sunny
70°
74°
62°
Washington,...
Phone Compa...
Twitter
Store
Skype video
Play and explore
More ways to play. Join us!
Ask me anything

Takes good concepts from Windows 7 Start button – and adds some

- Voice commands
- Searching (via the Cortana bar) is much better – goes to deeper into the Control Panel, for example
- Tiles give ability to use Fitt’s Law to resize according to your usage/priority

Windows 10 still needs work

- “Where do I click to drag?” in Explorer
- It’s hard than it should be to use buttons in Edge
- Colors and sharp edges still need work

But some Windows 10 apps are well done

- Example: Photo view/edit
- It’s basically a lightweight LightRoom, easy enough for anyone to use
- Probably inspired by Instagram

A gallery of web app mistakes

- Even major companies often make design mistakes on their sites
- Here are examples from Amazon, American Airlines, Marriott, and others

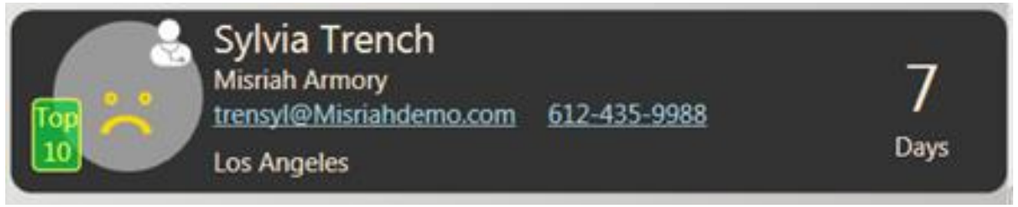
Getting to good UX

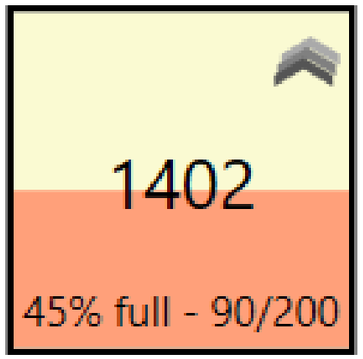
- Understanding the problem
  - Which means understanding the business domain
- Knowing what users use/need/want
- Exploration of ideas via sketching/storyboarding/wireframing
- Prototyping to test interaction

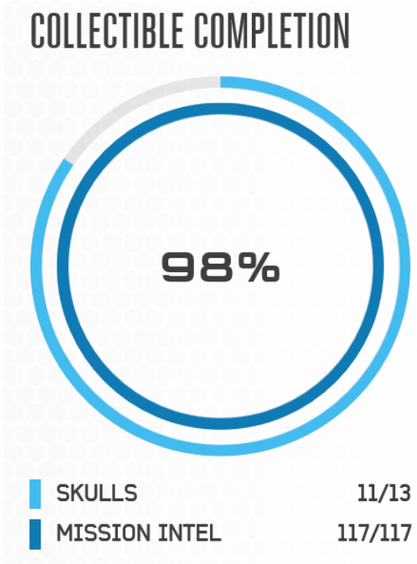
What do users really use or need?

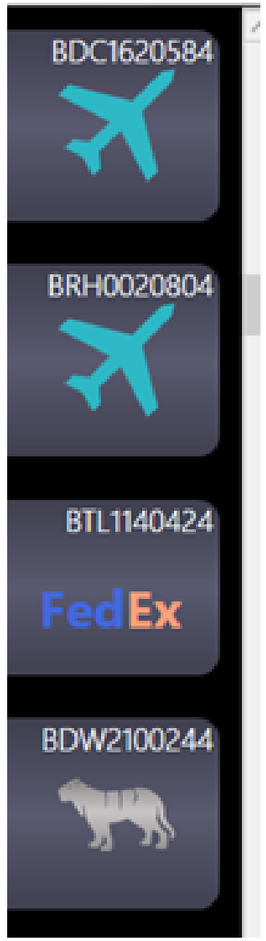
- “What three things to you do most often with the existing software?”
- “What one thing needs to be added?”
- “What one thing needs to be changed or fixed?”

As easy place to have immediate impact on UX – data visualization







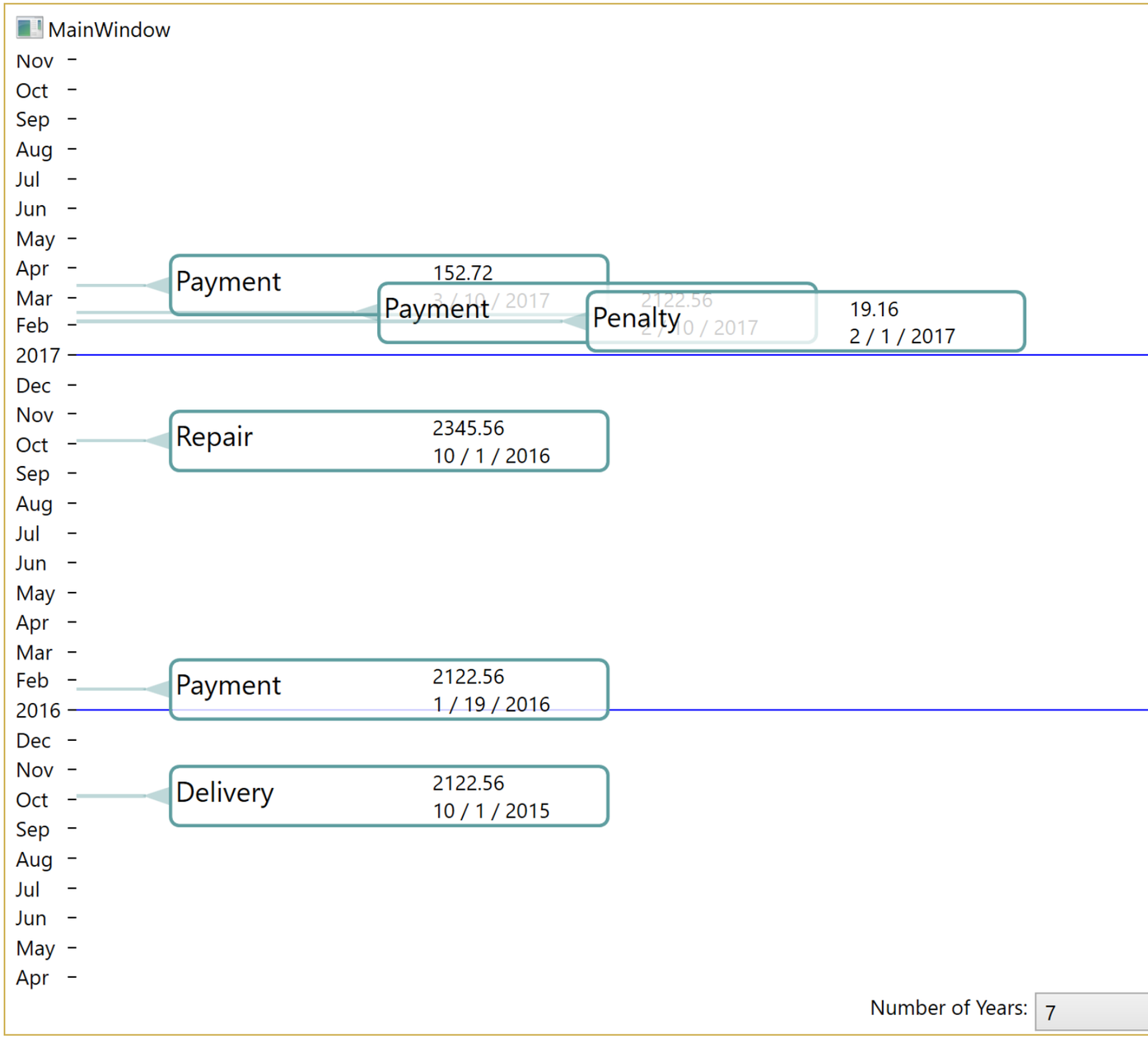


Session at 3:00 this afternoon has a section on this

Exposing time-based data via a timeline

ShowInDataGrid

Event	Type of event	Date of event	Amount
Payment	Payment	3/10/2017	$152.72
Payment	Payment	2/10/2017	$2,122.56
Penalty	Charge	2/1/2017	$19.16
Repair	Charge	10/1/2016	$2,345.56
Payment	Payment	1/19/2016	$2,122.56
Delivery	Charge	10/1/2015	$2,122.56
Payment	Payment	1/10/2015	$1,934.56
New Installation	Charge	10/1/2014	$1,934.56

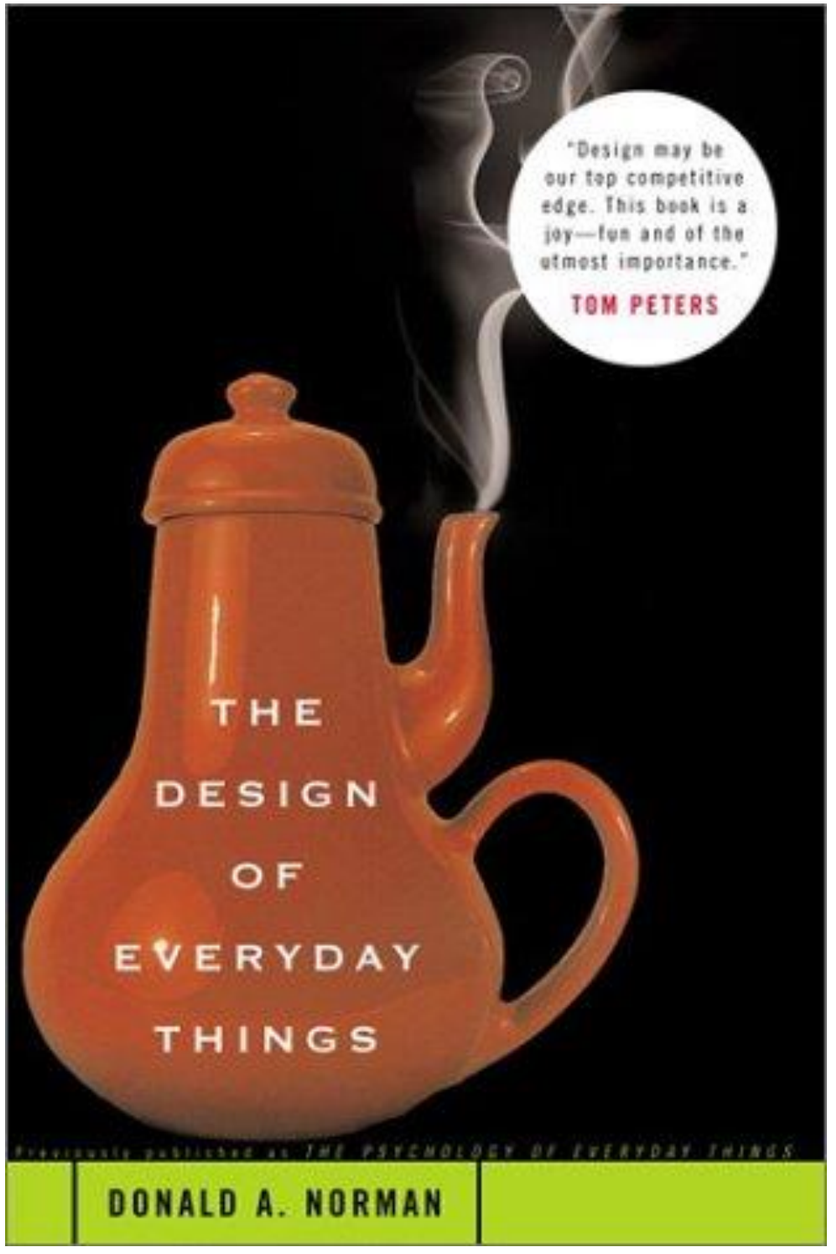


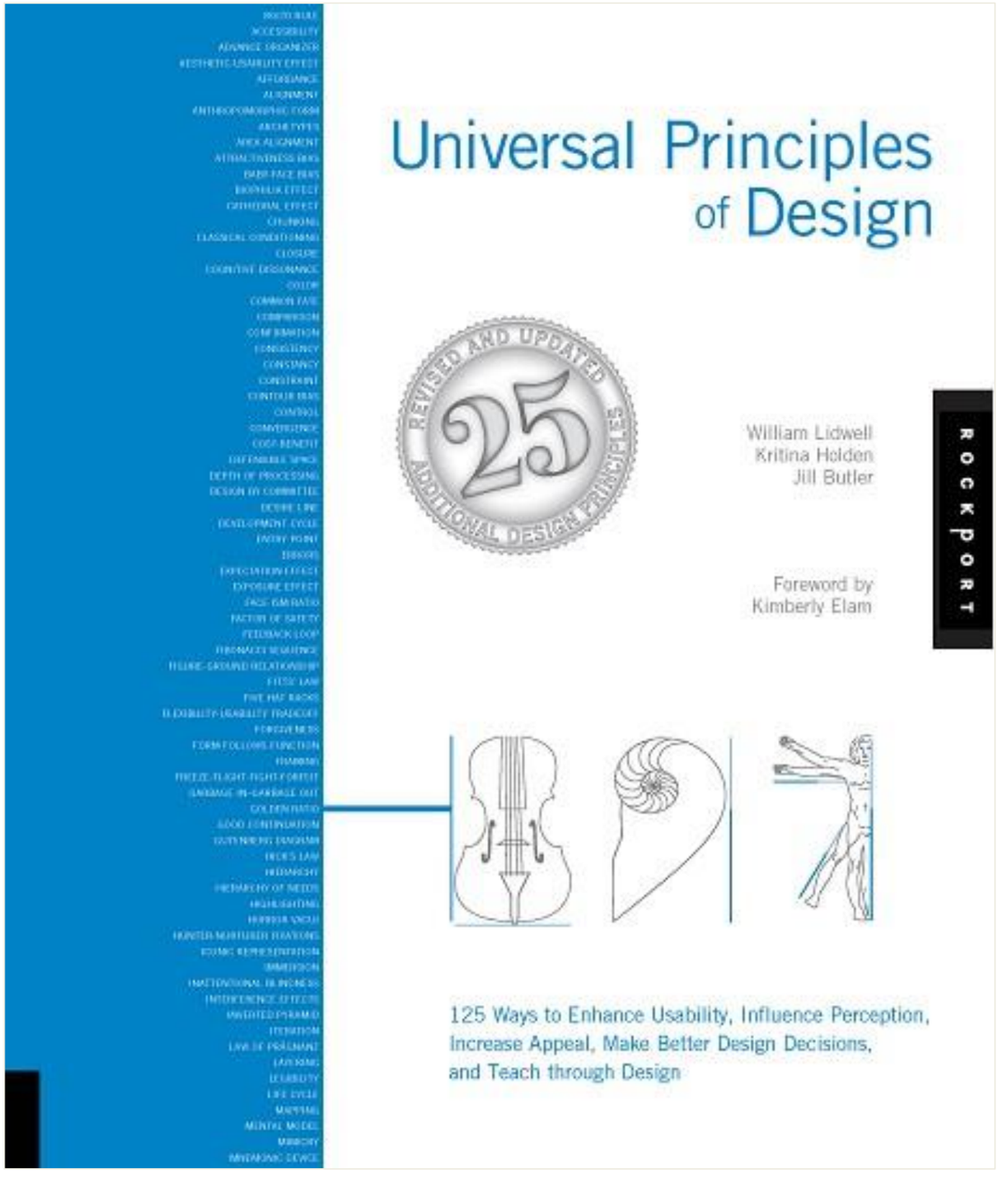
Collect examples of good and bad UX

- What are the web sites you really don’t like? Why don’t you like them?
- What apps do you use and they work so well you almost never think about how they work?
- What good and bad designs do you see in the real world?

16
CHARLES VIEW BALLROOM
12
14
15
9
10
11
6
7
8
3
4
5
2
ZEPHYR HEALTH CLUB
★L
LOBBY

off
C
H
SYMMONS


"Design may be our top competitive edge. This book is a joy—fun and of the utmost importance."
TOM PETERS
THE DESIGN OF EVERYDAY THINGS
Previously published as THE PSYCHOLOGY OF EVERYDAY THINGS
DONALD A. NORMAN


Universal Principles of Design
REVISED AND UPDATED
25
ADDITIONAL DESIGN PRINCIPLES
William Lidwell
Kritina Holden
Jill Butler
Foreword by
Kimberly Elam
ROCKPORT
125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design

Assignment

After this session, write down one thing you are going to do because of something you saw in this session. Put a date by which you intend to do it.

If you like, you can email it to me (billyhollis@live.com). That will make it more real to you, and make you more likely to do it.

Billy Hollis

- User interface design, prototyping, and construction
- Training on user experience design
- Training on XAML
  - Windows 10 / WPF / mobile / touch
  - Beginning through advanced

billyhollis@live.com or billyhollis@gmail.com