

# Usability

Steve Krug



**DON'T  
MAKE  
ME  
THINK**

*revisited*

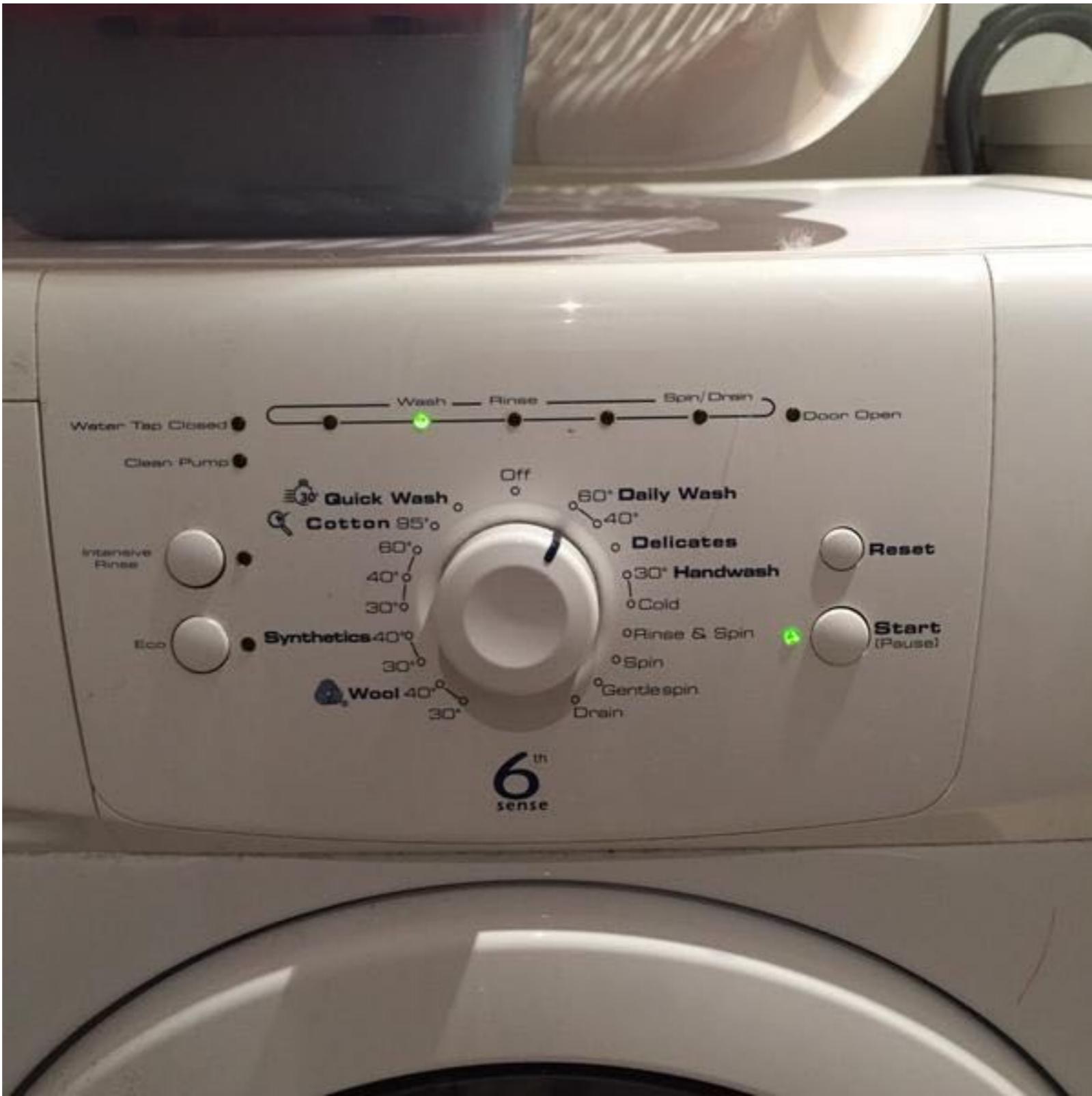
and Mobile

A Common Sense Approach to Web Usability

“Don’t make me think.”

*–Krug’s 1st law of usability*





“It’s not just what it looks like and feels like.  
Design is how it works.”

*—Steve Jobs*





"WELL...a lot of  
thought went into this  
design for the new  
Catholic Boys  
school bus!!!!"























**Child's Date of Birth**Year  Month  Day **Mother's Age at Time of Child's Birth****Mother's Date of Birth**Year  Month  Day

# Order Status

Order Number (required)

Please add 0 before your order number to view order status (e.g. 0205608907)

**Please enter one of the following (required):**

Email

Phone Number

OR

**Find Your Order**

*Billing Information:*

Address:

City:

Province/State:

Ontario



Postal/Zip Code

Country:

Canada



*Shipping Information:*

Address:

City:

Province/State:

Ontario



Postal/Zip Code

Country:

Canada



Same as billing address?

### Credit card information



Accepted cards

Card Number

### Credit card information



Accepted cards

Card Number

4

## 1 international addresses vary in format

**Format**  
town, province postalcode  
town province postalcode  
pcpostalcode town+province  
postalcode town, province  
postalcode town (provincial)  
postalcode town  
town postalcode  
town, county

**Examples**  
China, India  
USA, Canada, Australia  
Brazil  
México  
Italy  
Most other European countries  
New Zealand, Thailand, Japan  
Ireland (except Dublin)

### France Address Structure

Prénom	Nom
Adresse	
Code postal	Ville
Région	
Choisissez votre région	

### Italy Address Structure

Nome	Cognome	
Indirizzo		
CPA	Città	Provincia

## 2 you can make specific UI for each variant...

## 3 ...or a single UI that covers all variants

Full Name:

Address Line 1:   
Street address, P.O. box, company name, c/o

Address Line 2:   
Apartment, suite, unit, building, floor, etc.

City:

State/Province/Region:

ZIP/Postal Code:

Country:

especially when it is  
just one input field



## Please complete the following:

Do you or someone you care for have Diabetes?



Yes



No

Cancel

ADD TO PLAYLIST



69 songs



Božična Žurkica

90 songs

## Duplicate Song

This song's already in your playlist.

CANCELADD ANYWAY

RuN

9 songs



ModernMixtures JazzFunkBo...

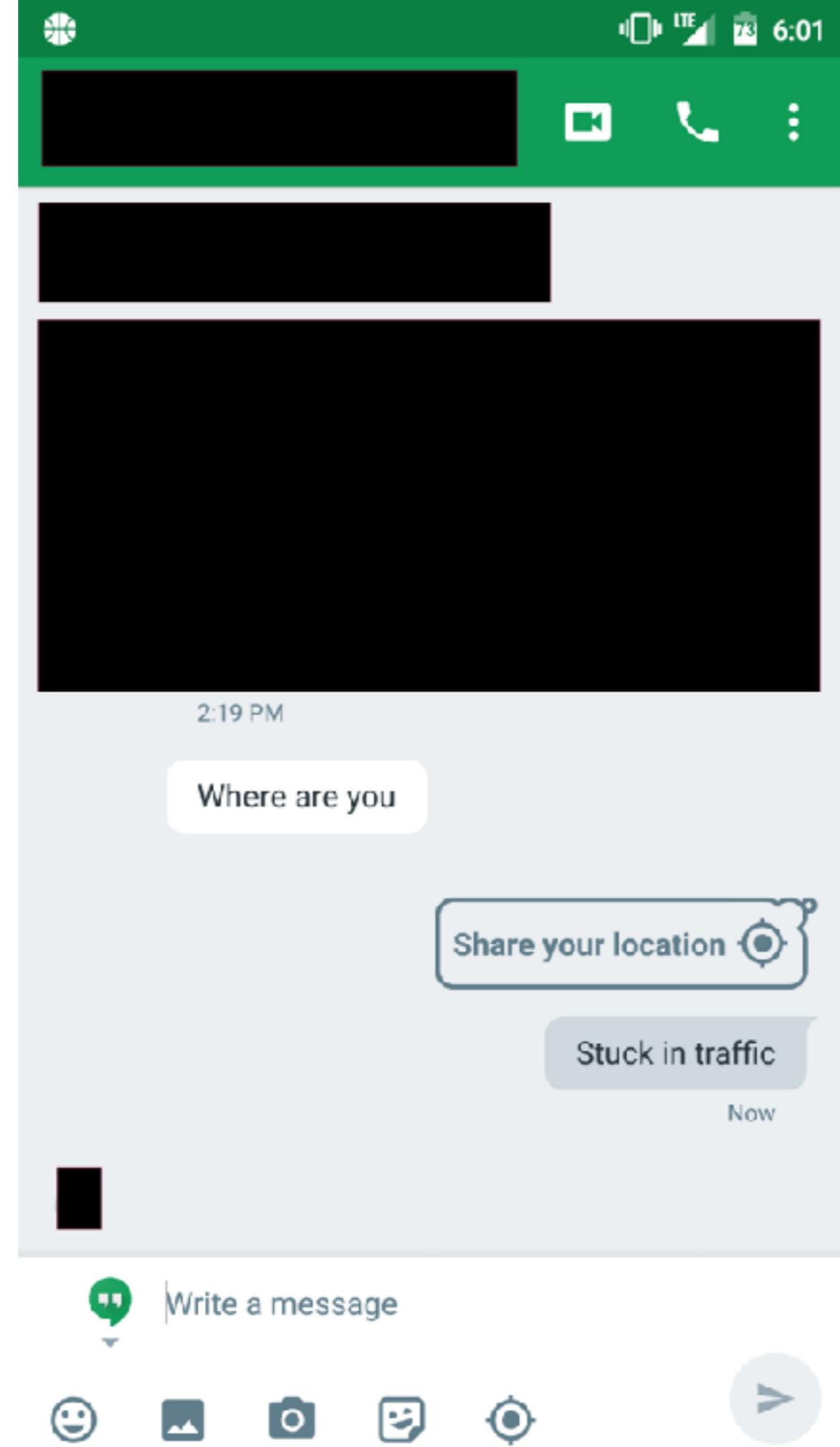
102 songs

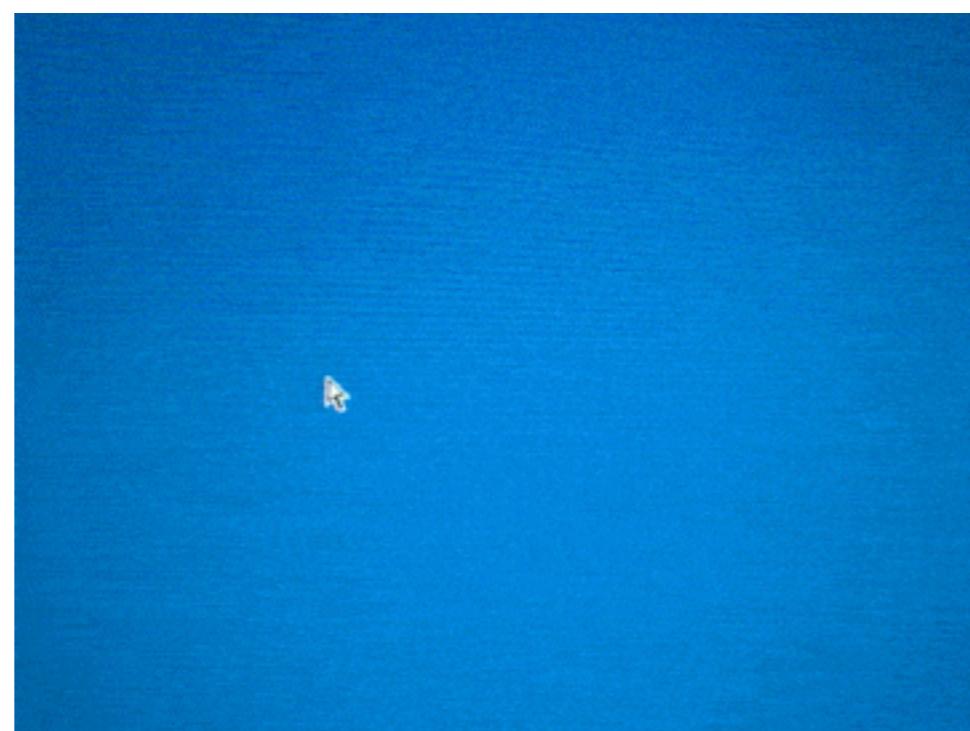
You're going too fast!



Pokémon GO should not be  
played while driving.

I'M A PASSENGER





“Design a human-machine interface in accordance with the abilities and foibles of humankind, and you will help the user not only get the job done, but be a happier, more productive person.”

*—Jef Raskin*





“If the point of contact between the product and the people becomes a point of friction, then the ~~industrial~~ designer has failed.”

*—Henry Dreyfuss*



“An INTERFACE is a mix of inputs and outputs, signals and gestures, that allow humans and devices to communicate via sight, sound, touch, and even smell.”

*–Ellen Lupton*







PUSH

PUSH



PULL

PULL





Patrick Hinton

And it's a sliding door...



252



CAUTION AUTOMATIC SWING DOOR



NO SMOKING  
WITHIN & FEET  
OF THE BUILDING

IN EMERGENCY PUSH OPEN

CROSS

CAUTION AUTOMATIC SWING DOOR

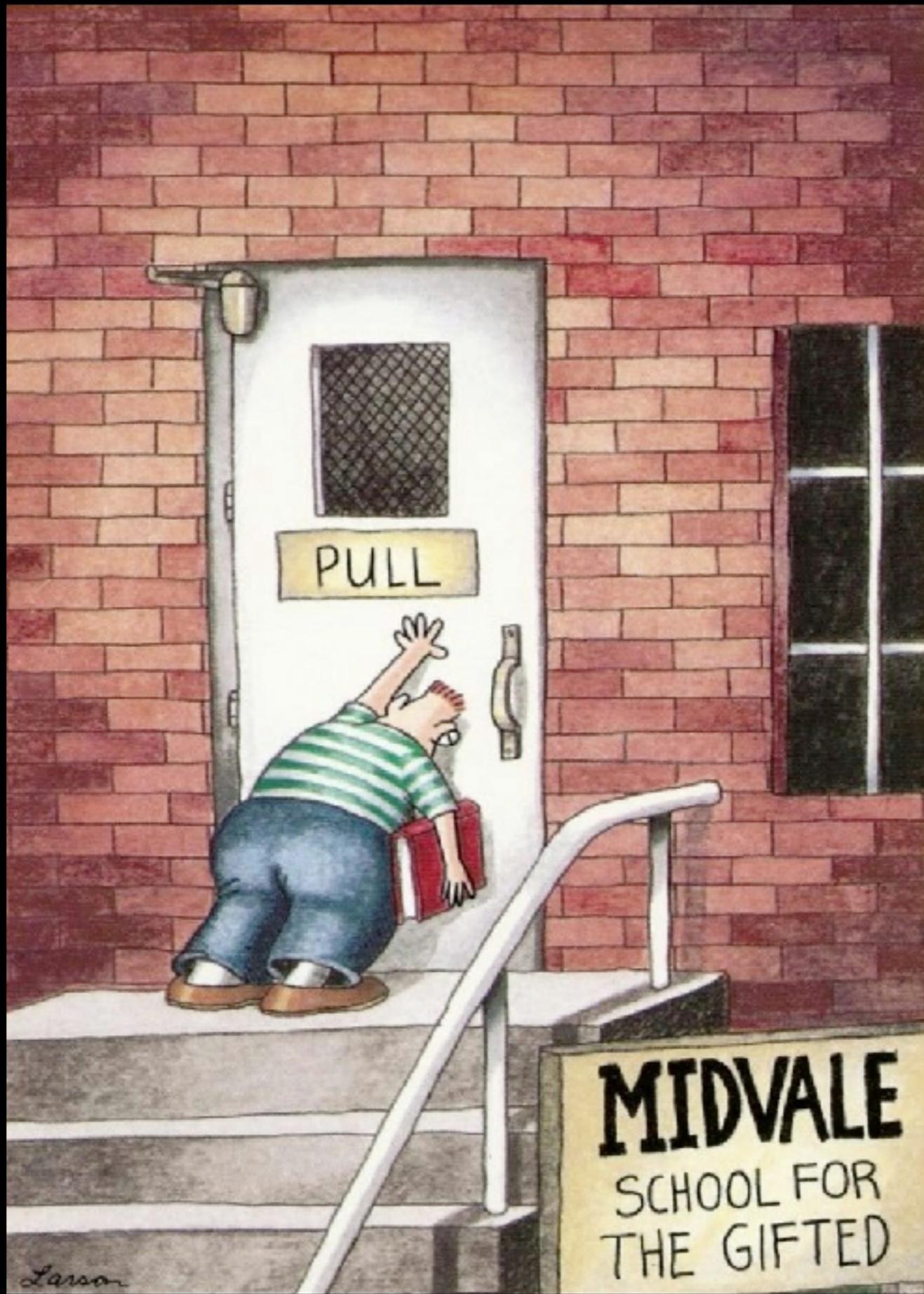
# WHEN IT'S NOT PUSH OR PULL



@NEXTSHARK

Welcome to Cambridge  
**No Exit**





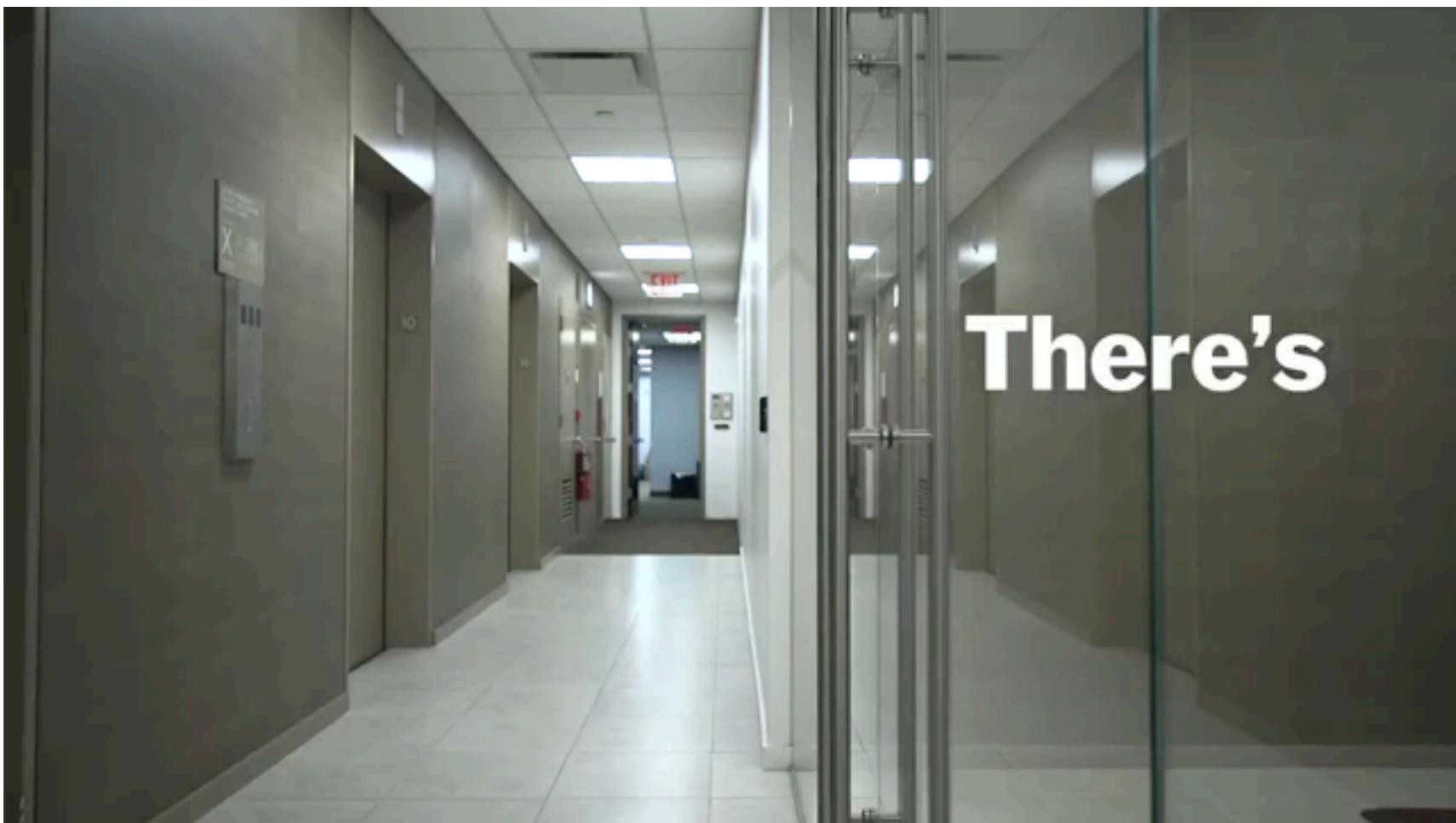






“When affordances are taken advantage of, the user knows what to do just by looking: no picture, label, or instruction, is required.”

*—Don Norman*



“When affordances are taken advantage of, the user knows what to do just by looking.”

*–Don Norman*





DREYFUSS  
DWG.NO. R161-A  
DATED 10-21-49  
FOR REGULATOR



“A thermostat is pure interface: it is a switch for turning a system on and off, and it is a display that communicates the system’s current and future state.”

*—Ellen Lupton*

# Honeywell





COOL OFF HEAT AUTO



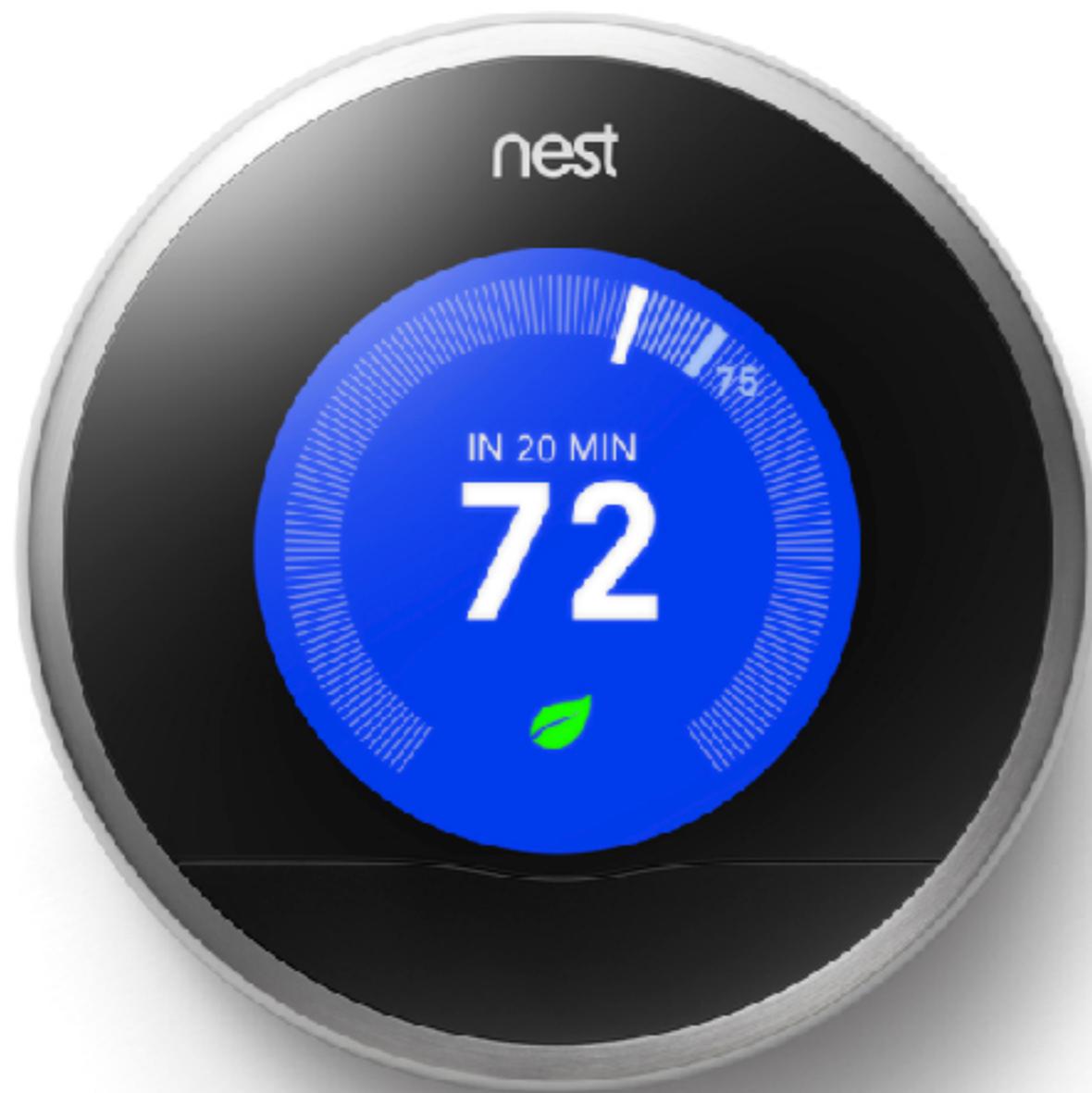
FAN ON AUTO



RES

**INDIGLO** night-light





“An affordance can trigger an intuitive response—the crotch of a tree offers birds a safe, stable site to build a nest, whereas a flat surface raised to a certain height offers humans a convenient place to sit. An object doesn’t need arms or legs to become a chair.”

*—Ellen Lupton*





9:53 FM1 CH2 88.1 245

H M :00



AMB

An affordance is a desirable property of a user interface – software which naturally leads people to take the correct steps to accomplish their goals

**REPORT**

## < OBVIOUSLY CLICKABLE

*Click*



**Results**

Hmm.  
*[Milliseconds of thought]*  
I guess that's a button.  
*Click*



**Results**

## REQUIRES THOUGHT >

Hmm.  
Is that a button?



► **Results**

**Submit**

**Submit**

**Submit**

## < OBVIOUS

Jobs!  
**Click**



Jobs

Hmm.

**[Milliseconds of thought]**

Jobs.

**Click**



Employment Opportunities

## REQUIRES THOUGHT >

Hmm. Could be Jobs.  
But it sounds like more than that.  
Should I click or keep looking?



Job-o-Rama

# Cancel Download

Do you want to cancel this download?

**CANCEL**

**OK**

FROM

City or Airport

Depart Date

TO

City or Airport

Return Date



Let's see. "City or Airport."  
I'll put in the city names.

FROM

bos

Boston, MA, US (BOS)

TO

City or Airport

Return Date



Types "bos"  
Oh, good. It knows Boston.  
*Picks Boston from the dropdown*

FROM

BOS

Depart Date

TO

Return Date



But why does it just put BOS  
after I pick Boston?

FROM

BOS

12/17/2013

TO

ny

12/19/2013



I'm sure it'll know "ny"...  
*Types "ny" and fills in dates,  
then clicks "Find Flights"*

Please enter a valid 'TO' City or Airport code.

FROM

BOS

12/17/2013

TO

hy

12/19/2013



Why doesn't it recognize  
New York?

From  To

**bos**

BOS - Boston Logan International - Boston, MA  
BOS - [Amtrak] South Station, Boston, Massachusetts  
BON - [Amtrak] North Station, Boston, Massachusetts



*Starts typing “bos” and gets a list of choices*

From  To

**BOS - Boston Logan Inter**

ny

NYC - New York City, NY (Area)  
NYO - Skavsta - Stigtomta, Sweden  
NYU - Bagan - Bagan, Myanmar



*Starts typing “ny” and gets a list of choices*

From  To

**BOS - Boston Logan Inter**

Depart  Return



Good.

“A feedback loop [is] a profoundly effective tool for changing behavior. The basic premise is simple.

Provide people with information about their actions in real time (or something close to it), then give them an opportunity to change those actions, pushing them toward better behaviors. Action, information, reaction.”

*—Wired*



9:41 AM

100%



Favorites



Recents



Contacts



Keypad



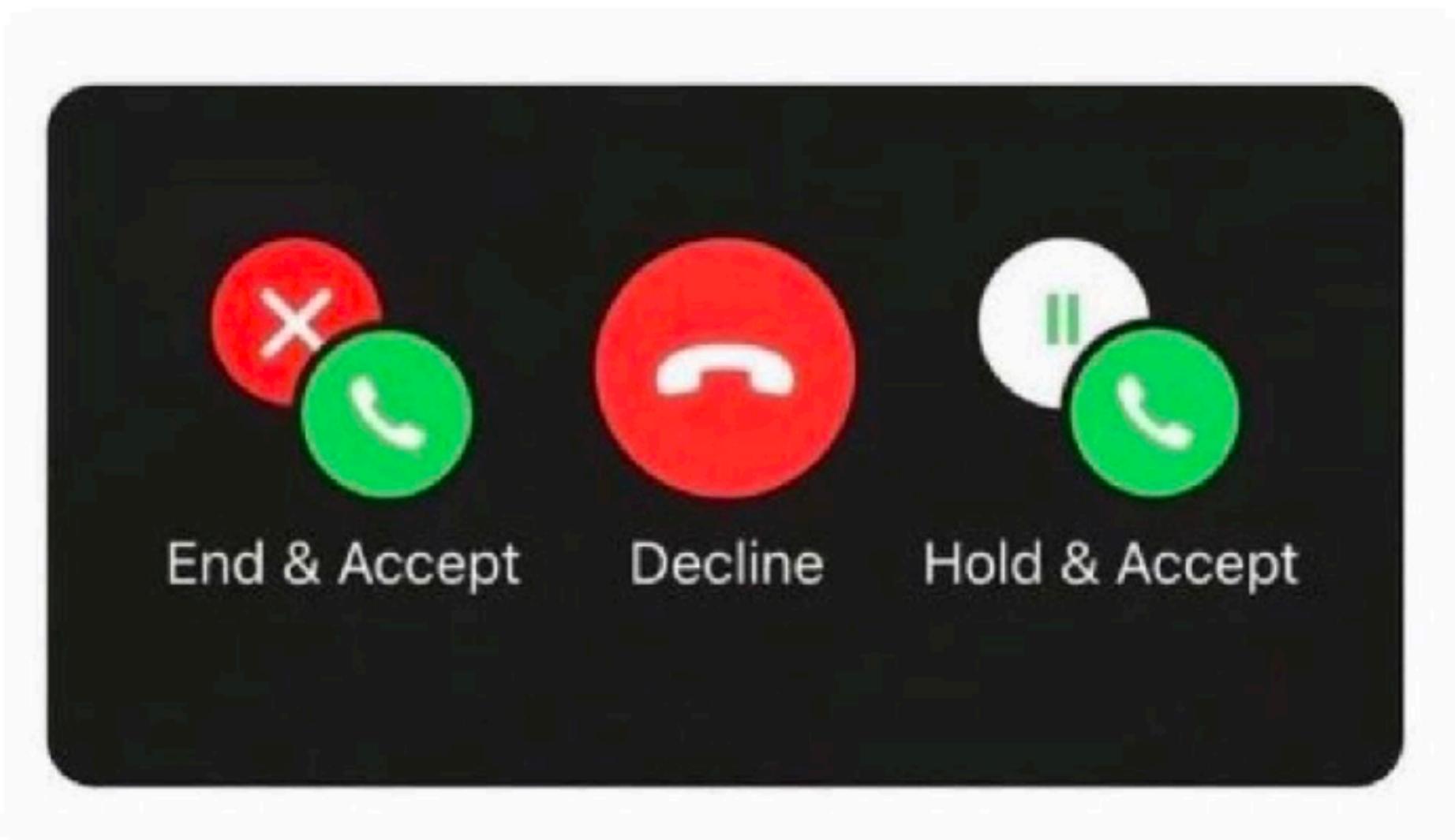
Voicemail



I Am Devloper  
@iamdevloper

...

Show me worse UX than this:

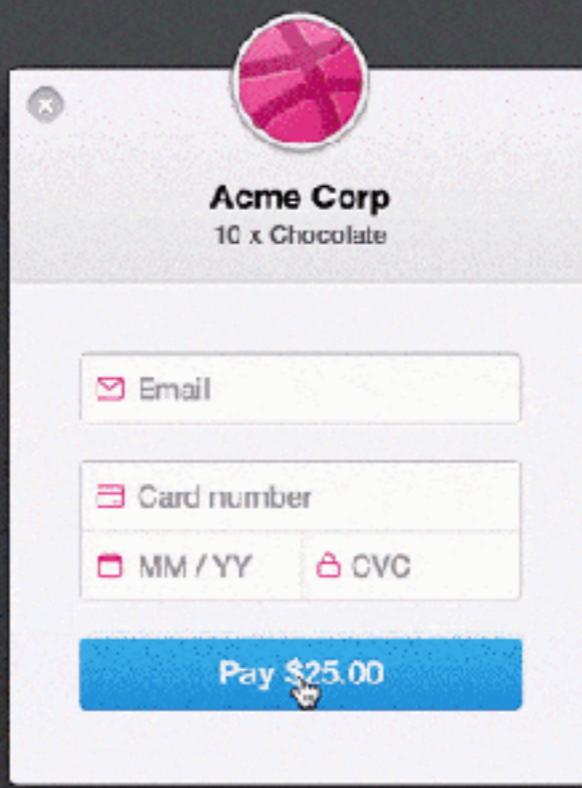


I'M A BUTTON

I'M A BUTTON



```
a:active {  
    position: relative;  
    top: 1px;  
}
```





Email

email@domain.com  
**test@test**

Password

Show

Log in





Shipping Speed

Change

## Payment Method



Card Number

CVV Code

Firstname Lastname

MM/YYYY

My billing address and shipping address are the same.

We will validate your credit card now, but will only charge it when your order ships.

CONTINUE

Review Order

**SUMMARY**

	Nest Learning Thermostat \$249.00 × QTY 1
<b>SUBTOTAL \$249.00</b>	
<b>EDIT CART</b>	
Free ground shipping.	

STOCK UP & SAVE ON OUR PREMIUM BLANK TEES →

SEARCH



SIGN IN



## Copper • Jade • Crystal

I HOLD

10 DAYS LEFT

By this tee and you'll be in a world of pure imagination.

The last possible second to buy this design is Mar 23, 2018 at 5:00 PM EST. [Need a reminder?](#)

Orders usually ship within 2-3 weeks of the end of this campaign. [Learn More...](#)

[Men](#)   [Women](#)   [Size...](#)

[Add to Shopping Bag](#)

[View size charts](#)

Tagged: books, movie



10 23  
DAYS HOURS

14 15  
MINUTES SECONDS

1

SOLD

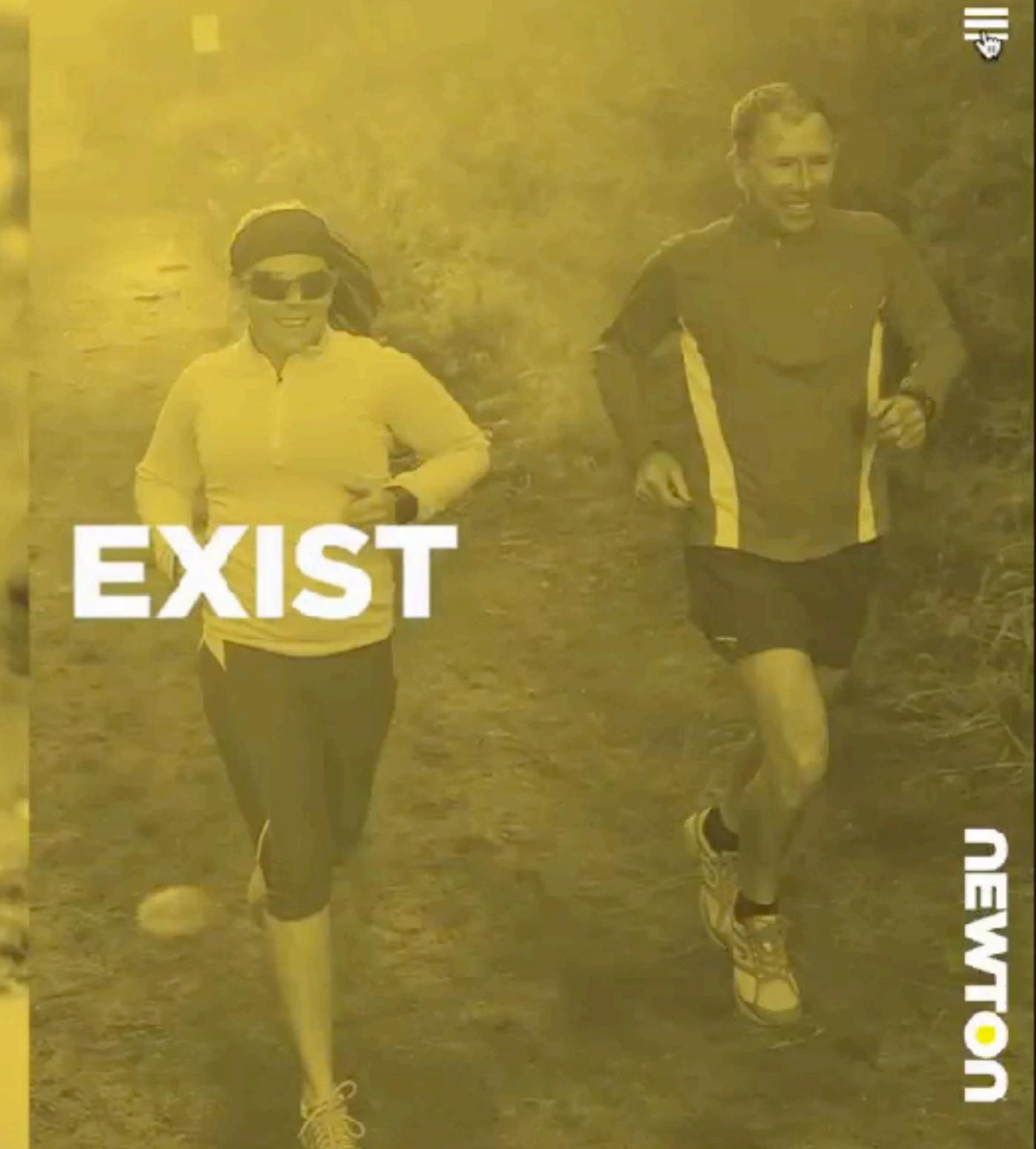


Contact us

© 2018 Shirts.com

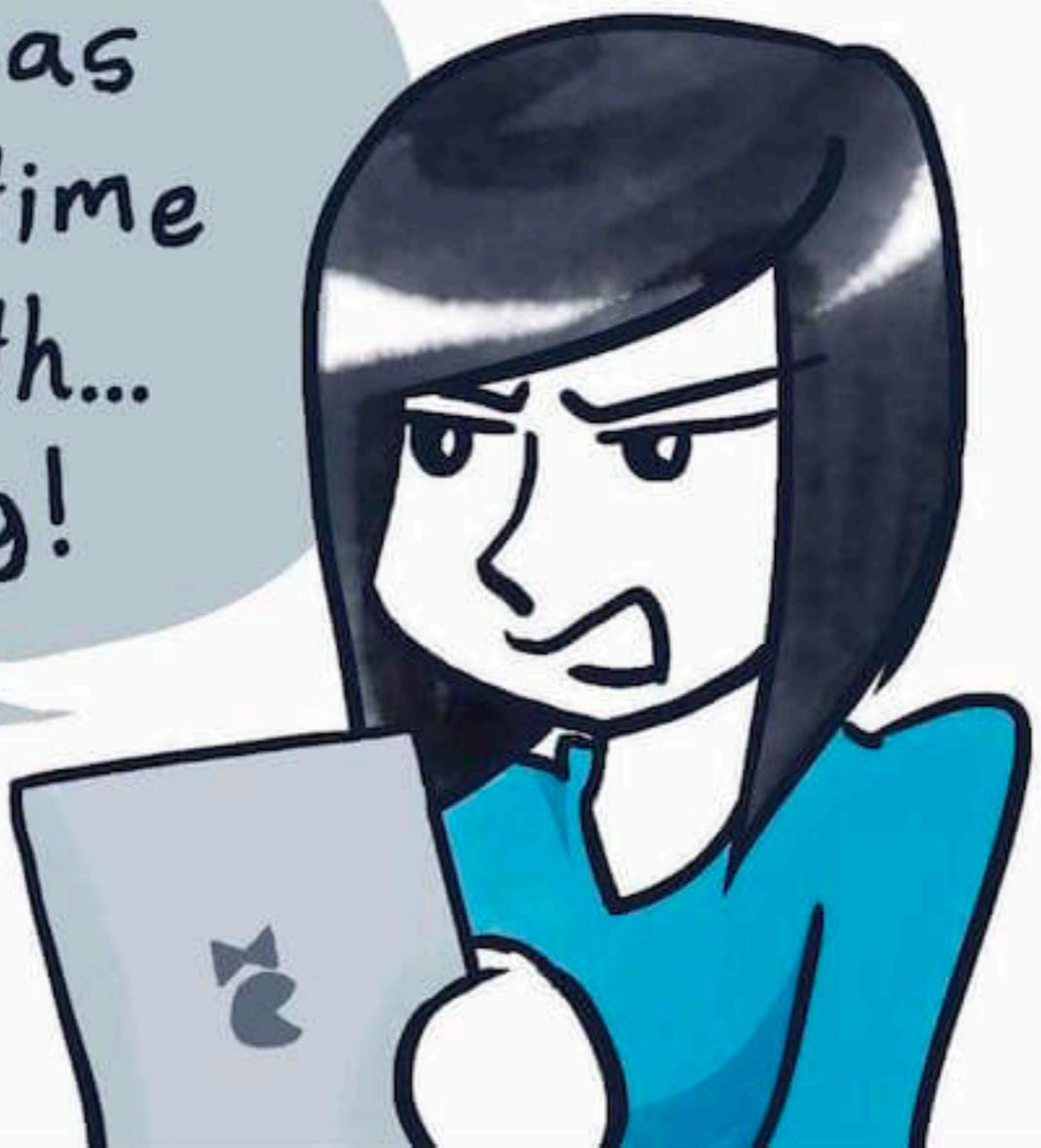


WE EXIST



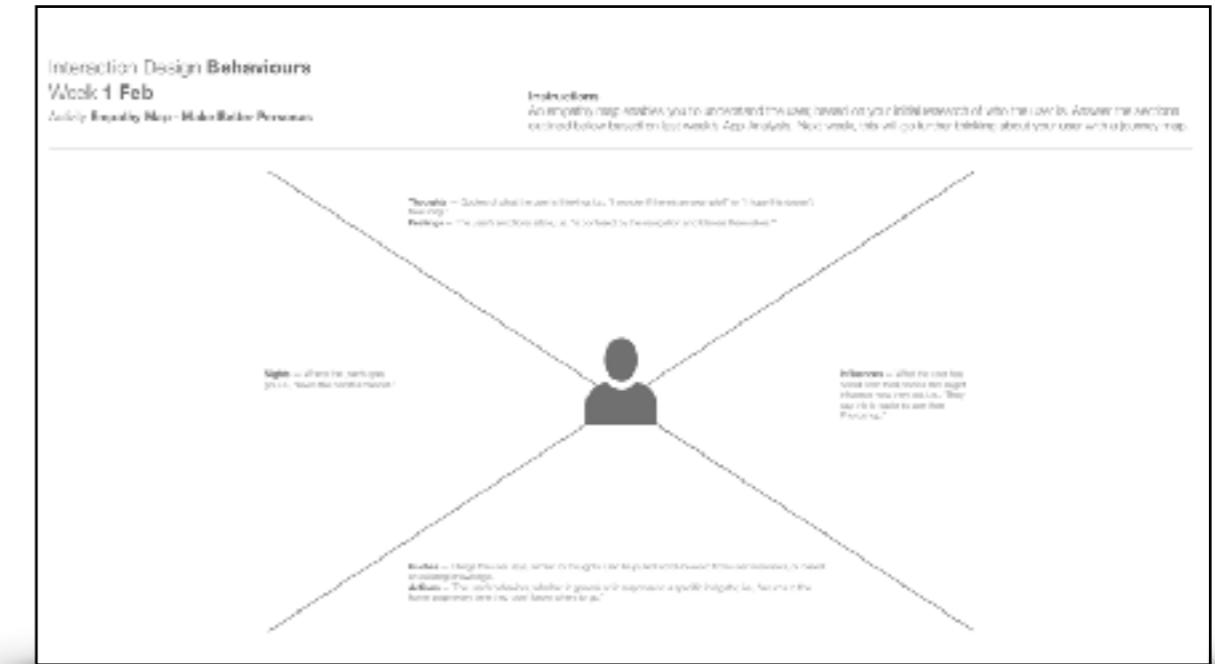
NEWTON

I thought it was  
cute the first time  
but by the 70th...  
It's annoying!



# Breakout

- ▶ Create a persona with goals and motivations
- ▶ Add in a scenario that describes the user needing your 1 function App in their daily life





**ARRÊT**







“Don’t make me think.”

*–Krug’s 1st law of usability*



MONDAY

FILM

THURSDAY

CONFERENCE

TUESDAY

WORKSHOPS

FRIDAY

MUSIC

WEDNESDAY

PRACTICAL

VARIOUS

FRINGE

# Get Ready to Build

• • •

NOVEMBER 12-16, 2012 IN BELFAST, NORTHERN IRELAND

Build is a festival for people who design for the web. For one week in November, a community of smart, talented people come together to share ideas, tell stories, get their hands dirty, and drink a few beers.

[TICKETS](#)

Best of  
2011

## Best Books of 2011 So Far

[See all our editors' picks](#)Your Country or Region  
[\(What's this?\)](#)

United States

## Browse

## Buy a Kindle

- Kindle (Wi-Fi, 6")
- Kindle 3G (Free 3G + Wi-Fi, 6")
- Kindle DX (Free 3G, 9.7", Graphite)
- Kindle DX (Free 3G, 9.7", White - 2nd Generation)

## Kindle Reading Apps

- Kindle Cloud Reader
  - Kindle for iPad
  - Kindle for iPhone
  - Kindle for PC
  - Kindle for Mac
  - Kindle for Android
  - Kindle for BlackBerry
  - Kindle for Windows Phone 7
- [See all](#)

## Give Kindle Gifts

- Give Kindle Books
- Give a Kindle Gift Card
- Redeem a Kindle Gift Card

## Need Help?

- Getting Started
- Manage Your Kindle
- Kindle Support

## Around the Store

- Kindle Singles

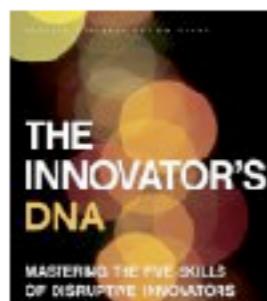
## Kindle Store

Kindle (Wi-Fi, 6"), Kindle 3G (Free 3G + Wi-Fi, 6"), [Accessories](#), and more than 950,000 [Books](#), [Kindle Singles](#), Newspapers, Magazines, Blocs, Audiobooks, and Games & Active Content

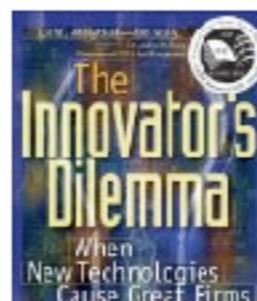
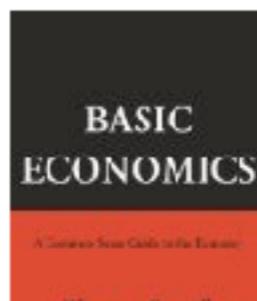
\$114 [Order now](#)  
with Special OffersKindle  
**\$139**  
[Order now](#)Kindle 3G  
with Special Offers  
**\$139**  
[Order now](#)Kindle 3G  
**\$189**  
[Order now](#)

## More Items to Consider

## You viewed



## Customers who viewed this also viewed



## Kindle Daily Post

Cur editors' blog

[Read new posts](#)

## Great Deals on Kindle Accessories



Save on select latest generation Kindle accessories from [Cole Haan](#) and [kate spade new york](#).

[Shop now](#)New on Kindle: *Hidden Expedition: Amazon*

Join the Hidden Expedition Team in search of a professor lost in the Amazon rainforest in this [hidden object game](#).

[Learn more](#)

## Bestsellers

[Kindle Store : All Kindle Content](#)

Updated hourly

[Top 100 Paid](#) [Top 100 Free](#)

1. 5 days in the top 100  
*Hidden in Plain View* (Darryl Billups Mysteries)  
Blair C. Walker (Author)

“If an error is possible, someone will make it.”

*—Don Norman*

**Great Product!!**

Reviewer: LC &amp; TR on Oct 27, 2009

Customer Rating: ★★★★★ 1.0



These presenters are the bomb! Our staff love them. We would purchase again, no questions asked.



## One Star

By Lisa G Revord - September 3, 2015

### Amazon Verified Purchase

Great movie.

1 of 6 people found this review helpful



## One Star

By Joan Bendar - June 1, 2015

### Amazon Verified Purchase

I enjoyed this picture very much and it deserved 5 Stars

0 of 12 people found this review helpful



## One Star

By RICHARD W. GORDON - July 9, 2015

### Amazon Verified Purchase

good movie

0 of 8 people found this review helpful



## The Best

By Amazon Customer - November 13, 2015

### Amazon Verified Purchase

Have seen this movie at least 6 times.  
It is so captivating and so real. Best acting ever.



[» LOGIN](#) [» MY ORDERS](#) [» ACCOUNT](#) [» CREATE NEW ACCOUNT](#)

[» FRANÇAIS](#)

Shop by department

Brand Showcase

VIEW CART

ITEMS: 0 SUBTOTAL: \$0.00

## Search Results

We were unable to find exact matches for your search: **DAV-HDX975WF** in **Entire Site**.

Please try your search again...

Need help with your search? Consult our search [help section](#).

### Help Centre

[Order Status / My Orders](#)  
[Information Centre / Help](#)  
[FAQ](#)  
[Easy Returns](#)  
[Navigation Help](#)  
[Search Help](#)  
[Frequently Asked Questions](#)  
[About Phishing](#)  
[Email Fraud](#)  
[Store locator](#)  
[Site index](#)  
[Français](#)

### Company Services

[Future Shop credit card](#)  
[Gift Card balance lookup](#)  
[Product Service Plan](#)  
[Product Replacement Plan](#)  
[Replacement Parts](#)  
[Product Recall Centre](#)  
[ReClaim Insurance](#)  
[Replacement](#)

### Company Information

[About Future Shop](#)  
[Contact us](#)  
[Careers - NOW HIRING](#)  
[Press Releases](#)  
[Community relations](#)  
[E-recycling](#)  
[Future Shop Newsletter](#)  
[Contest Winners](#)  
[Rebate-free shopping](#)

### Shopping Policies

[Privacy policy](#)  
[Web site use agreement](#)  
[Purchase Terms and Conditions](#)  
[Our online policies](#)  
[Retail store policies](#)  
[Shipping and Delivery](#)  
[In-Store Pickup](#)  
[Safe Shopping guarantee](#)  
[Verified by VISA](#)



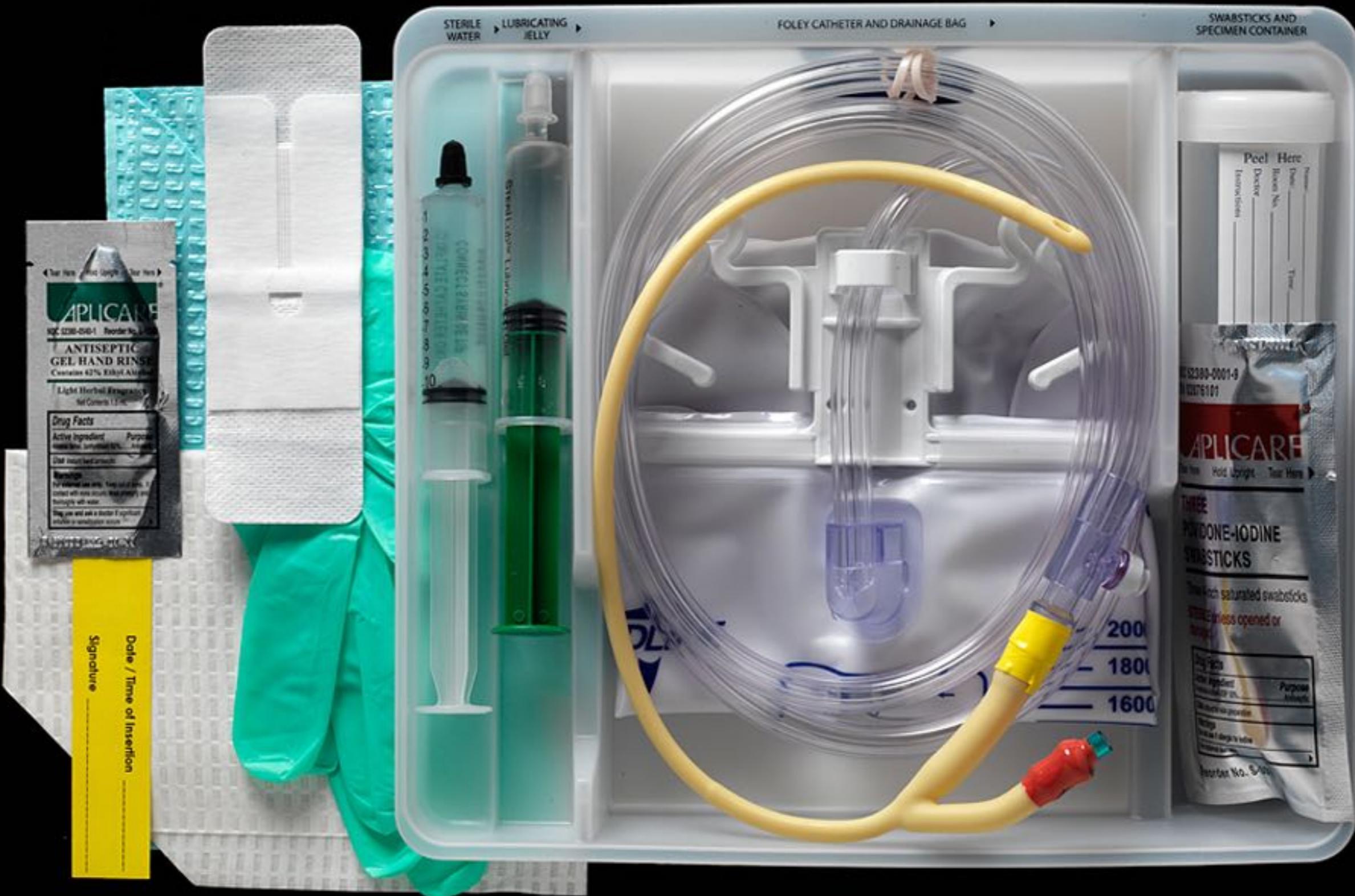
[Click to verify](#)

Verified by  
**VISA**

**44,000 to 98,000 people a year die from medical errors,  
at a cost of \$17-29 billion per year.**

“We can’t stand by while people’s lives, health, & rights suffer because of bad design.”

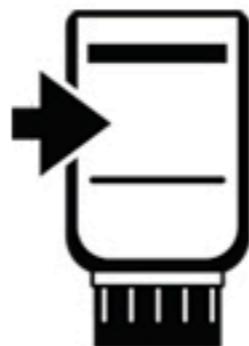
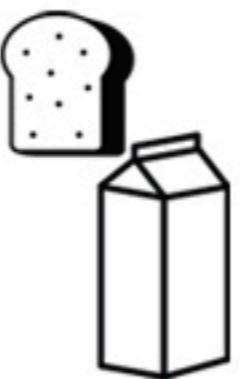
*–Jonathan Shariat, UX Designer*







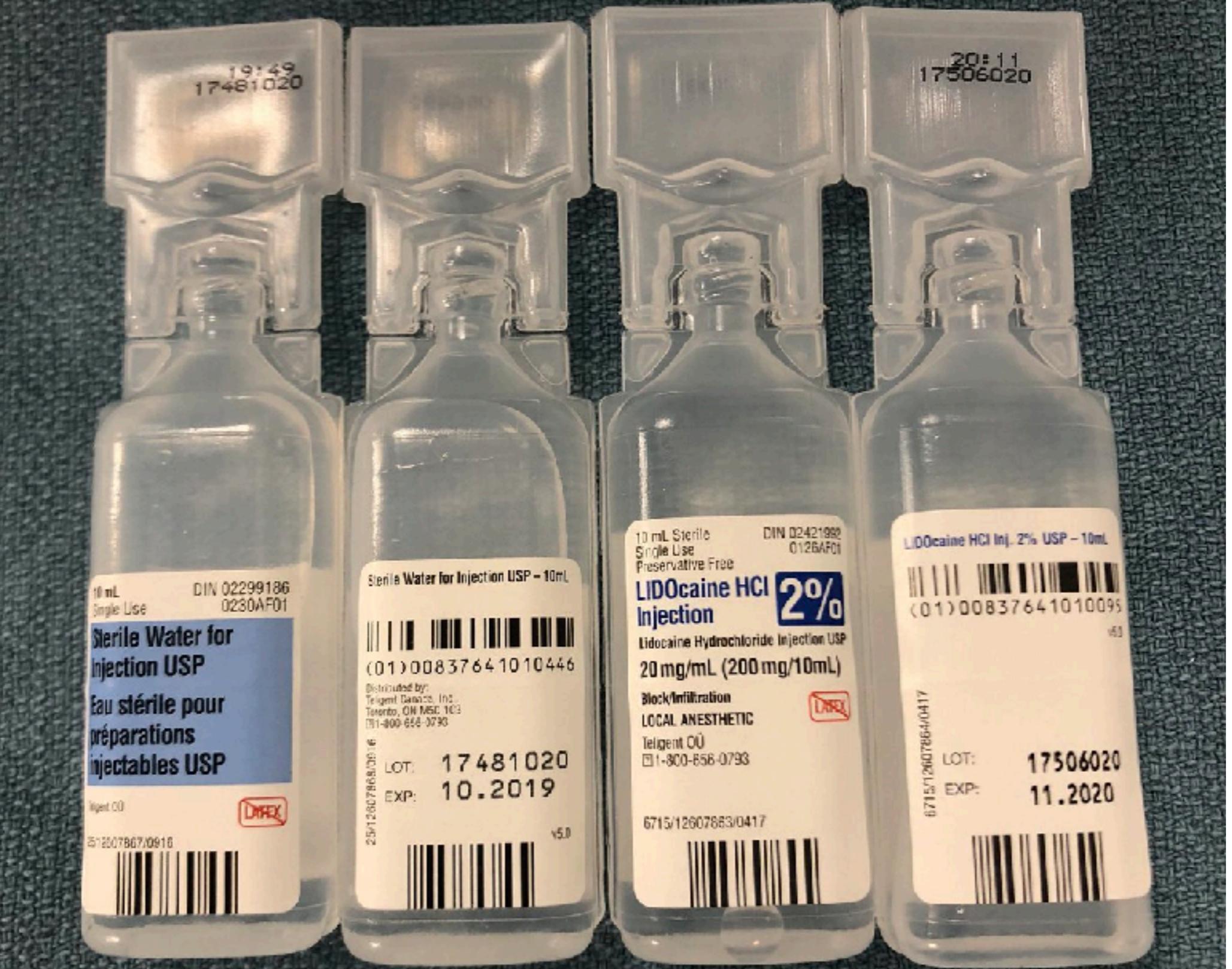




AM







**STUDENT  
PICK-UP  
AND  
DROP-OFF  
AREA**





No parking on even dates  
8am - 10pm after 2" of snow



YOU  
ARE  
HERE?



CURRENT RELEASE

NAPA VALLEY COLLECTION

**HIGH ROLLER** Cabernet Sauvignon

BLACK CLOVER Merlot

SOLDIERS OF FORTUNE Syrah

PEARL HANDLE Chardonnay

CALIFORNIA COLLECTION

22 BLACK Cabernet Sauvignon

BONE DANCE Merlot

HER MAJESTY Chardonnay

CHARMED Sauvignon Blanc

GIFT SET COLLECTION

NAPA VALLEY 2-Bottle

NAPA VALLEY 4-Bottle

CALIFORNIA 2-Bottle

CALIFORNIA 4-Bottle

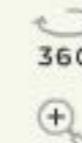
FOUR BULLETS

FULL HOUSE

THE JAQK CELLARS WINE CLUB

WINE ARCHIVE

Wine > Current Release > Napa Valley Collection > High Roller



## High Roller

**2009 Cabernet Sauvignon  
NAPA VALLEY**

High Roller is JAQK's flagship wine. This delicately crafted Cabernet Sauvignon is made from 100% Napa Valley grapes, harvested by hand to allow our winemaker maximum control during the crushing and fermentation processes. The wine is aged in small French oak barrels for 2 years, then fined with egg whites for finesse and elegance in the tradition of Bordeaux-style Cabernets. It takes considerably more effort to go this route here in the U.S., but the result is a more complex, more flavorful, more balanced wine. And one that ages extremely well. A wine of this caliber is something that the connoisseur will want to have well represented in his wine cellar. And to help ensure a long life, we've paid particular attention to the bottle that will be its home. We chose the king of vessels, the mighty Imperiale, and had one custom made for us in Milan, Italy.

750 ML

\$74.00

QTY

1

ADD TO CART

Watch Video | Download PDF

Etsy

[Register](#)[Sign In](#) Search for items and shops [Cart](#)[Home](#) > [HandmadeMonster](#) > BABY [Favourite](#)**Like this item?**

Add it to your favourites to revisit it later.

**\$18.00** USD 6 available

Approximately \$18.90 CAD

 [Favourite](#)

## jellyfish BABY RATTLE PLUSHIE toy stuffed animal plush ocean theme turquoise blue teal purple periwinkle



### Shop

**HandmadeMonster**

Handmade Monster

 [Add shop to favourites](#) [See who favourites this shop](#)

### Shop owner

**Shana Ostrow**Phoenix, Arizona,  
United States[Favourites](#)[Followers](#)

**We don't read  
pages.**

**We scan them.**

**We don't make  
optimal  
choices.**

**We satisfice.**

**We don't figure  
out how things  
work.**

**We muddle  
through.**

How much time do you think users  
spend on your site before giving up?

# How do we make better sites?

- ❖ Take advantage of conventions
- ❖ Create effective visual hierarchies
- ❖ Break pages up into clearly defined areas
- ❖ Make it obvious what's clickable
- ❖ Eliminate distractions
- ❖ Format content to support scanning



الوقف الفلسطيني يدعو موسكو لاقناع واشنطن بعدم نقل سفارتها للقدس



BABIES R US Canada

Brica Wood & Steel Designer Gate

Shop This Week's Deals!

Click here ➤

- شريط الأخبار
- شوركين: اجتماع أستانـا يمكن أن يشمل مسائل أخرى غير وقف إطلاق النار GMT 19:44
- كيري: تدخل روسيا غير دينامية الصراع في سوريا GMT 19:39
- إسرائيل تقتل فلسطينـيا بزعم محاولة طعن GMT 19:37
- برشلونـة في مهمة صعبة وريـال مدريد لاستعادة توازنـه GMT 19:24
- إيران ستتشـىـن مـبنـاءـ نـفـطـيـاـ فيـ سـورـياـ GMT 19:02
- بدء عودة القاذفات "سو-24 إم" الروسية من GMT 18:59



استطلاعات الرأي

هل ستقبل الفصائل السورية المدعـوة إلى أستانـاـ الانـخـراـطـ فيـ عمـلـيـةـ سـيـاسـيـةـ بـمـشارـكـةـ الأـسـدـ؟

منوعات

أهم الأخبار



Keyword or Web Code



Reward Zone

Credit Cards

Store Locator

Weekly Ad

PRODUCTS ▾

SERVICES ▾

SPECIALTY STORES ▾

SPECIAL OFFERS ▾

COMMUNITY ▾

**Free Shipping on orders over \$20\*** to anywhere in Canada

INCLUDES ALL TVs 43" OR LESS!

[Learn more >](#)

**SONY.**  
EVENT

**BRING THE SONY  
EXPERIENCE HOME TODAY**

Huge selection of Sony HDTVs, home audio, speakers and more



### **Summary:**

Writing for mobile readers requires even harsher editing than writing for the Web. Mobile use implies less patience for filler copy.

Our recent [research on how users read on mobile devices](#) has uncovered something of a paradox:

- [Killing time is the killer app of mobile](#). As we've seen since our first [mobile usability studies 11 years ago](#), killing time is the perfect match for mobile devices because they're readily available when users are waiting around for something to happen. Favorite time-wasters include gossip, games, and sports. But even a seemingly serious task like checking the stock market is often no more than a time-killing episode in which users look up the current index numbers with no intent to trade.
- Mobile users are in a hurry and get visibly **angry at verbose sites** that waste their time. Also, it's [twice as hard to understand content on small mobile devices](#) as it is on bigger

## Create a Clear Visual Hierarchy

Organize and prioritize the contents of a page by using size, prominence, and content relationships. Let's look at these relationships more closely. The more important a headline is, the larger its font size should be. Big bold headlines help to grab the user's attention as they scan the Web page. The more important the headline or content, the higher up the page it should be placed. The most important or popular content should always be positioned prominently near the top of the page, so users can view it without having to scroll too far. Group similar content types by displaying the content in a similar visual style, or in a clearly defined area.

## Create a Clear Visual Hierarchy

**Organize and prioritize the contents of a page by using size, prominence, and content relationships.**

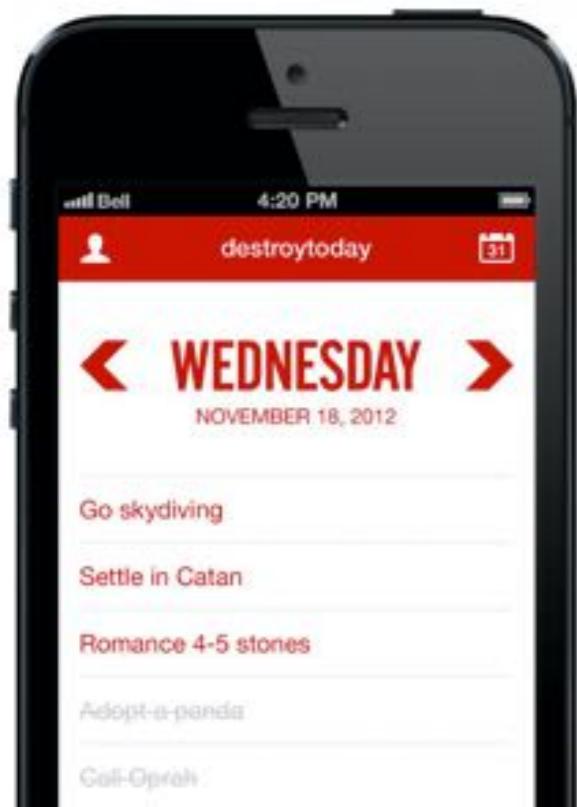
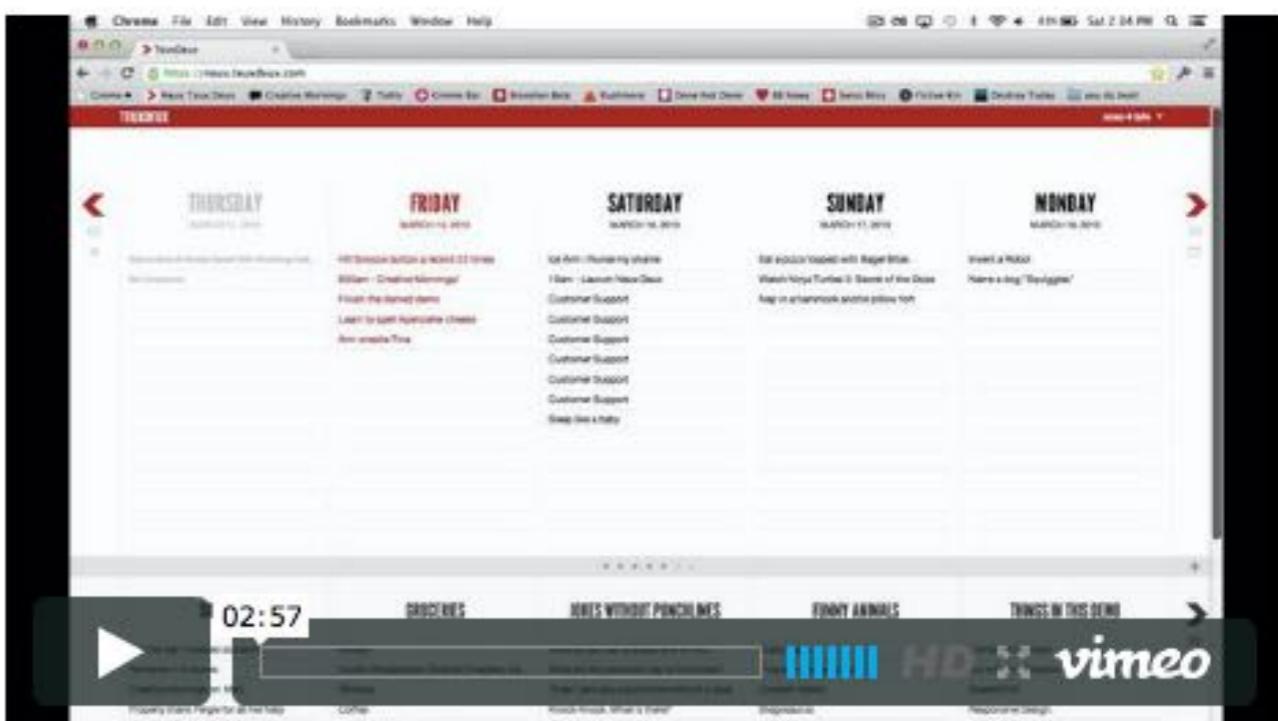
Let's look at these relationships more closely:

- **Size.** The more important a headline is, the larger its font size should be. Big bold headlines help to grab the user's attention as they scan the Web page.
- **Prominence.** The more important the headline or content, the higher up the page it should be placed. The most important or popular content should always be positioned prominently near the top of the page, so users can view it without having to scroll too far.
- **Content Relationships.** Group similar content types by displaying the content in a similar visual style, or in a clearly defined area.

# TEUXDEUX IS A SIMPLE, DESIGNY TO-DO APP.

If you like making to-do lists, you will love TeuxDeux. The idea was to build a bare-bones, but visually compelling and highly usable to-do app: Use the browser-based TeuxDeux at work/home and then take your to-dos on the road with the iPhone app.

Yay for checking things off!



## Get things done

Set your schedule and get to work while TeuxDeux keeps you organized. If you don't manage to get everything done, your unfinished to-dos will be rolled over to the next day automatically.

## Recurring to-dos

If you're like us, you're always worried you'll forget pants. Never again. Simply add "Put on pants every day" to your to-do list, and TeuxDeux will make sure you never forget.

## Simple as paper

We've tried to make TeuxDeux as easy to use as a piece of paper. Type in your to-dos right where you want them, move them around to suit your schedule, then click to mark them done.

## Mobile TeuxDeux

Take your to-do list with you on the go. TeuxDeux works as beautifully on your phone as it does on the desktop. For iPhone users, there's even a lovely iPhone app you



we also have unique Lunch and Dinner specials.  
Visit us on [Facebook](#) for all the delicious details!

## Appetizers

### Trio of Dips

Hummous, baba ghanouj, cucumber yogurt w/ pita, sesame crackers, GF crackers, or veggies.

9.5

### Roasted Butternut Squash Galette

Roasted butternut squash, goat cheese, caramelized onions, scallions baked in a pastry crust, served with a sweet chili mayo sauce.

9.5

### Hummos

Garlicky hummos w/ pita, sesame crackers, GF crackers, or veggies.

8.5

## Sandwiches

### Ancho Lentil Tacos

Ancho-chili-spiced lentils, grilled onions, roasted poblano peppers, garlic-lime slaw, Las Brazas corn or flour tortillas, side poblano veganaise.

10

### Bubba's Deal

BBQ portabellas, grilled onions, spinach, ginger slaw, vegan ranch, vegan cheese, Italian bread.

9.5

### Larry David

Lentil and wild rice burger patty, grilled onion, tomato, spinach, spicy tomato jam, garlic veganaise, grilled branney oat bun.

10

### Sweet Potato & Quinoa Burger

Sweet potato and quinoa burger patty, ginger-tomato chutney, curried veganaise, greens, grilled branney oat bun.

9.5

### Marie's Grilled Cheese

### Porto

Mozzarella and ham sandwich served with a side of chips.

# iPad mini

Every inch an iPad.



Watch the video



Watch the iPad TV ads



**The full iPad experience.**  
There's less of it, but no less to it.

Everything you love about iPad — the beautiful

# iPad mini

Every inch an iPad.



Watch the video Watch the iPad TV ads



**The full iPad experience.**  
There's less of it, but no less to it.  
Everything you love about iPad — the beautiful screen, fast and fluid performance, FaceTime and iSight cameras, thousands of amazing apps, 10-hour battery life\* — is everything you'll love about iPad mini, too. And you can hold it in one hand.  
[Learn more ▾](#)



**Beautiful 7.9-inch display.**  
A screen worthy of iPad.  
Colours are vivid and text is sharp on the iPad mini display. But what really makes it stand out is its size. At 7.9 inches, it's perfectly sized to deliver an experience every bit as big as iPad.  
[Learn more ▾](#)

**Over 300,000 apps.**  
If it's made for iPad, it's made for iPad mini.  
Right from the start, apps made for iPad also work with iPad mini. They're immersive, full-screen apps that let you do almost anything you can imagine. And they make iPad mini practically impossible to put down.  
[Learn more ▾](#)



**Ultrafast wireless.**  
Fast, reliable, and built right in.

On the Web, links are a key factor in this navigation process. Users can exclude links that proved fruitless in their earlier visits. Conversely, they might revisit links they found helpful in the past. Most important, knowing which pages they've already visited frees users from unintentionally revisiting the same pages over and over again.

Generally, Web browsers are severely deficient in supporting user navigation. However, they do provide one feature that helps users orient themselves: browsers let designers display links in different colors, depending on whether the links lead to new pages or pages that users have seen before. Changing the color of visited links has been part of Web browsing since Mosaic arrived in 1993, so it's completely standard; almost all users understand it.

Currently, 74% of websites use different colors for visited and unvisited links, making this design approach a strong convention that people have come to expect. Hypertext theory, the Web's history, and current design conventions all indicate the need to change the color of visited links. Further, empirical observations from user testing have identified several severe usability problems on sites that violate this convention. When sites use the same color for visited and unvisited links, users unintentionally revisit the same pages repeatedly, get lost more easily because their understanding of each link's meaning is reduced, often misinterpret or overlook the difference between two similar links if they're unsure about which one they've already visited, and give up faster because they have a reduced sense of mastery when the site fails to reflect their actions and thus help them navigate.

Such usability problems are particularly damaging to users with weak short-term memory, who often have trouble remembering what they've clicked without a visual representation. Of course, "weak short-term memory" is an inherent shortcoming of all humans, which is why all users are harmed by unchanging link colors. But this definitely impacts some people more than others, so it's particularly important to change link colors if you have many older users. Given the extensive theoretical and empirical support for using different link colors, it's astounding that a quarter of all websites continues to inflict extra usability problems on people by choosing a uniform link color.

Most important, knowing which pages they've already visited frees users from unintentionally revisiting the same pages over and over again.

## The Price of Uniform Link Color

Generally, Web browsers are severely deficient in supporting user navigation. However, they do provide one feature that helps users orient themselves: browsers let designers display links in different colors, depending on whether the links lead to new pages or pages that users have seen before.

Currently, 74% of websites use different colors for visited and unvisited links, making this design approach a strong convention that people have come to expect.

Hypertext theory, the Web's history, and current design conventions all indicate the need to change the color of visited links. Further, empirical observations from user testing have identified several severe usability problems on sites that violate this convention. When sites use the same color for visited and unvisited links, users:

- unintentionally revisit the same pages repeatedly;
- often misinterpret or overlook the difference between two similar links if they're unsure about which one they've already visited; and
- give up faster because they have a reduced sense of mastery when the site fails to reflect their actions and thus help them navigate.

Given the extensive theoretical and empirical support for using different link colors, it's astounding that a quarter of all websites continues to inflict extra usability problems on people by choosing a uniform link color.

## Why the Problem Persists

Even people who believe in usability sometimes question the need for changing link colors. I think this is because they don't pick up on the problems caused by unchanging links when they conduct their own user testing. Unfortunately, the symptoms of these problems are among the most difficult to detect when you observe users.

**SHOW ME SOMETHING:**

Big ideas

Challenging

Funny

Informative

Inspiring

Soulful

[Most Popular ▾](#)

Inspiring talks from people  
who are changing  
the world.

**GO DO.**[VIEW MORE VIDEOS](#)

ADAM LOWRY  
Why can't a role model come  
in a bottle?

[▶ PLAY](#)

JAMES VICTORE  
In the particular lies the  
universal. How to do work  
that matters?

[▶ PLAY](#)

EDWARD ESPE BROWN  
What do you learn from sitting  
still for 30,000 hours?

[▶ PLAY](#)

SOLUTIONS

RESOURCES

ABOUT

GET IN TOUCH 

# Contact us today to discuss your unique needs and options

[GET IN TOUCH](#)



## SOLUTIONS

Software  
Service

## RESOURCES

Blog  
TrueView Guide

## ABOUT

Clients  
Company  
Careers  
News

## LOCATIONS

Chicago	Kraków
San Francisco	Singapore
Los Angeles	Manila
New York	Melbourne
San José	Sydney
London	Tokyo

[Book a trip!](#)

[\*\*Submit\*\*](#)

**Be One Voice That Matters!**

[Click here to CONTRIBUTE!](#)

[CONTRIBUTOR LISTS](#)  
[E★THE PEOPLE](#)  
[WRITE THE MEDIA](#)  
[GOP SITE LINKS](#)  
[VOLUNTEER](#)  
[CONTACT US](#)

[News](#)  
[Weather](#)  
[Arts](#)  
[Travel](#)

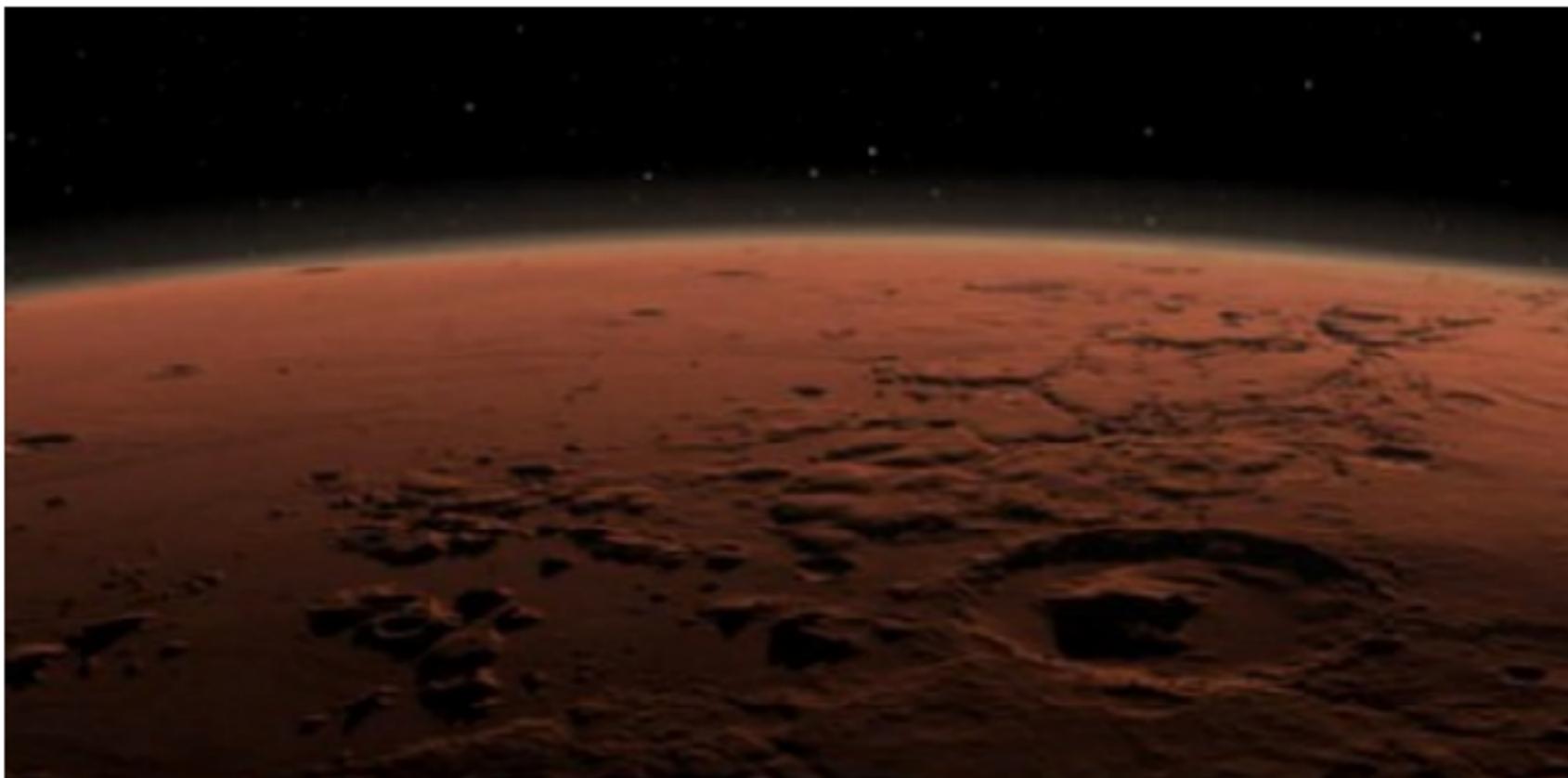
### **Hurricane season ends**

With prices approaching [record lows](#), now is the perfect time to book a Caribbean cruise.



# SIDE BAR

For people who make websites, from A List Apart

[Follow](#)

## How to Build a Simple and Powerful Lazyload JavaScript Plugin

Don't load a large JS library just to lazy load some images—go custom, with this simple tutorial.



Alex Devero  
Jan 2

“It doesn’t matter how many times I have to click,  
as long as each click is a mindless, unambiguous  
choice.”

*–Krug’s 2nd law of usability*

“Get rid of half the words on each page, then get rid of half of what’s left.”

*—Krug's 3rd law of usability*



## FIND A DEALER

It's easy to locate a dealer. 1. Click and hold box number 1 to select your search by Zip Code, City, Dealership Name or State. 2. Enter the Zip Code, City, or Dealership Name in the box marked number 2. 3. If searching by State only, select the state from the pull-down menu in box number 3. \*\*If choosing to search by city or state, type the city in box 2 then select a state in the box marked number 3 to make your search complete. 4. Once finished, simply click the "Search" button.

Search by:

① Zip Code

Select a State:

③ Choose One

Enter Zip Code,City,  
or Dealership name:  
②

④  SEARCH FOR A DEALER

2002



## FIND A DEALER

It's easy to locate a Jeep Dealer near you.

- Select Zipcode, City or Dealership Name  
(If you choose to search by city, you will be prompted to provide the state.)
- Provide the Zip Code, City or Dealership Name
- Click on Search

Search by:

① Zip Code

Enter Zip Code,City,  
or Dealership name:  
②

③  SEARCH FOR A DEALER

2003

## FIND A DEALER ▾

Enter Zip  GO

2007



2007

### Customize the HP Pavilion dv2000t Entertainment Notebook PC



Choose a versatile PC that has it all brains, brawn and beauty plus the latest mobile technology. This fun and powerful PC packs a punch when it comes to digital entertainment. Watch DVDs wherever you are on an HD-capable (1), 14.1 inch widescreen display that features HP BrightView technology. Immerse yourself in sound with a built-in Altec Lansing speaker system. Take the show with you on your commute or while traveling two jacks for stereo headphones and a widescreen display make it easy to share with a friend. Get instant gratification with one-touch access to the movies, music and photos you want without having to boot the entire system with HP QuickPlay (2). Stay connected wherever there's a wireless (3) network, using built-in WiFi, a long-life battery and breakthrough Intel(R) Centrino (R) Duo (4) mobile technology. Stay in touch while on the go the optional, built-in HP Pavilion Webcam includes two integrated microphones for video conferencing (3) and VoIP (4). Surf the Net (3) and chat with friends while downloading music and videos a powerful Intel(R) Core(TM) Duo processor (4) lets you multitask. Take it with you everywhere this sleek PC features HP's Imprint smooth and glossy coating finish with a fresh, inlaid design. (1) High-Definition content (e.g. WMV HD files) is required to view high-definition images. Most current DVDs do not provide high-definition images. (2) Approximately 1024MB of the hard drive is dedicated for HP QuickPlay and will not be user accessible. (3) Wireless access point required and is not included. Availability of public wireless access points limited. Wireless Internet use requires separately purchased Internet service contract. (4) Requires separately purchased Internet and VOIP service contracts. (4) Dual Core is a new technology designed to improve performance of certain software products. Check with the software provider to determine suitability. Not all customers or software applications will necessarily benefit from use of this technology.



2009

### Customize the HP Pavilion dv6t Entertainment PC



The HP Pavilion dv6t notebook computer is the mid-size notebook where exquisite design meets powerful entertainment for TV, photos, movies, music and more - striking an ideal balance between mobility, size and visual performance. \*Please refer to Help Me Decide for important information.

Cut down reading

The following questionnaire is designed to provide us with information that will help us improve the site and make it more relevant to your needs. Please select your answers from the drop-down menus and radio buttons below. The questionnaire should only take you 2-3 minutes to complete.

At the bottom of this form you can choose to leave your name, address, and telephone number. If you leave your name and number, you may be contacted in the future to participate in a survey to help us improve this site.

If you have comments or concerns that require a response please contact Customer Service.

**1. How many times have you visited this site?**

This is my first visit ▾

Please help us improve the site by taking 2-3 minutes to complete this survey.

NOTE: If you have comments or concerns that require a response, don't use this form. Instead, please contact [Customer Service](#).

I purchased a mammalian  
companion of the canine variety

A pork pie was eaten by Harry

Eliminate redundancy. Don't say the same thing twice. Avoid repetition.



The hammer is an extension of the hand. Glasses are an extension of the eye, the radio an extension of the ear. As long as our tools are recognizable as analogies of our body, the form and function of these tools are easily comprehensible.

But once you enter the digital realm, analogies with our body break down. Instead, digital tools are analogies of analogies. Text editors are an analogy of type writers, type writers are an analogy of writing with pen and paper, writing with pen and paper is, initially, a substitute for our memory. In general the computer now works as an extension for our head controlling those tools.

Steve Jobs claimed the computer should be "a bicycle for our mind". It's like computers add steampunk spider legs to our head.

While some would agree with this image, what Jobs meant was obviously not that creepy. What the computer does (or *should* do) to our mind is what the bicycle does to our legs. The computer should be an empowering extension of our mind.

But is it? Or do computers make us more like Spider Baby from Toy Story? What part of our mind is Twitter an extension of? What about Google Search? Is it in the nature of digital to break analogies?

Blind abstraction, a lack of real-world analogies, the feeling that the workings are a black box, and the experience of multiple fast-paced, fragmented processes—this is more or less what we mean when we use the words "digital" to describe a device.

Software usually feels as fragmented as the packages of bits and bytes streaming through the processor that drives it. Unlike books, radio or movies, digital media does not just create a singular parallel reality with its own continuity. In tune with that discrete stream of ones and zeros in our devices, digital media often creates a landscape of discrete and often unrelated experience fragments. This is what makes digital media feel more "virtual" than traditional forms of media.

Documents, images, videos, and audio tracks on the web are not more or less real than in any other medium. But they feel unreal and less credible on a computer, because digital media snippets reach us like fragments of a dream: unprepared, out of context, and lacking orientation, causality and continuity.

To design better software we need to build programs as extensions of our mental processes, supporting clear continuous thinking, instead of subduing our thoughts and actions to the opaque, fragmented technology that drives the device.

“...a readable web page an inclusive one...”

*–Heydon Pickering*

# Jill Anderson



"I'm looking for a site that will simplify the planning of my business trips."

AGE 28

OCCUPATION Regional Director

STATUS Single

LOCATION Portsmouth, NH

TIER Frequent Traveller

ARCHETYPE The Planner

Organized

Practical

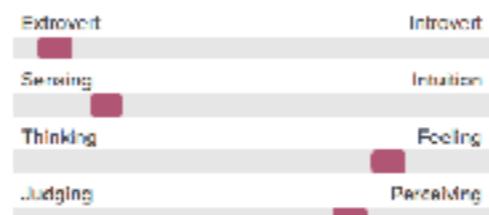
Protective

Hardworking

## Bio

Jill is a Regional Director who travels 4-8 times each month for work. She has a specific region in which she travels, and she often visits the same cities and stays in the same hotel. She is frustrated by the fact that no matter how frequently she takes similar trips, she spends hours of her day booking travel. She expects her travel solutions to be as organized as she is.

## Personality



## Brands



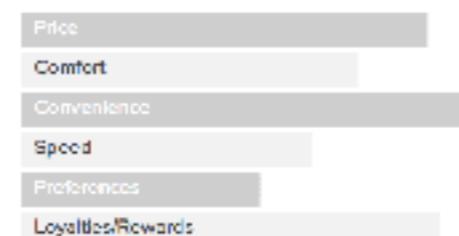
## Goals

- To spend less time booking travel
- To maximize her loyalty points and rewards
- To narrow her options when it comes to shop

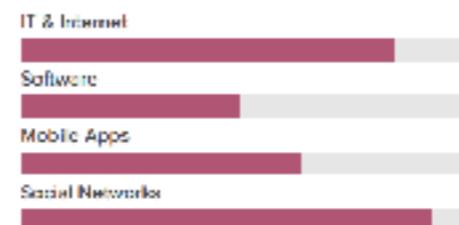
## Frustrations

- Too much time spent booking - she's busy!
- Too many websites visited per trip
- Not terribly tech savvy - doesn't like the process

## Motivations



## Technology





## AMANDA STONE

PERSONALITY: Caring, Well-rounded

**Age:** 33  
**Location:** Kingston, ON  
**Status:** Married  
**Children:** Two  
**Occupation:** Teacher  
**Income:** 60 000  
**Education:** English, History

“ I have a packed schedule and wish to learn common sentences before our family trip to Quebec.”

French Speaking



Time Management



Urgency



Internet Skills



### ABOUT AMANDA

Living in Kingston Ontario, Amanda spends most of her time taking care of her family and students at school. Although one can say that she is somewhat organized and well prepared, Amanda does lack the initiative to try new things. However, with recent invitation to visit Quebec's winter Carnaval, Amanda is hoping to learn new phrases that will benefit both and herself and her family to adventure out of their comfort zone.

### HABITS

- Amanda is a busy body
- Futile when it comes to money
- Organized and detailed

### Most Used App



### REASONS FOR THE APP

- To learn a new language
- To interact with locals
- Find inside locations around the festival

# User Persona Type



"A quotation that captures this user's personality."

Age: 1-100

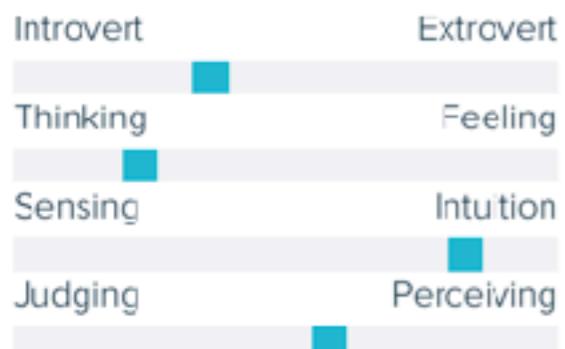
Work: Job Title

Family: Married, kids, etc.

Location: City, state

Character: Archetype

## Personality



Trait 1      Trait 2      Trait 3      Trait 4

## Goals

- A task that needs to be completed.
- A life goal to be reached.
- Or an experience to be felt.

## Frustrations

- The challenges this user would like to avoid.
- An obstacle that prevents this user from achieving their goals.
- Problems with the available solutions.

## Bio

The bio should be a short paragraph to describe the user journey. It should include some of their history leading up to a current use case. It may be helpful to incorporate information listed across the template and add pertinent details that may have been left out. Highlight factors of the user's personal and professional life that make this user an ideal customer of your product.

*Remember - you may modify this template, remove any of the modules or add new ones for your own purpose.*

## Motivation

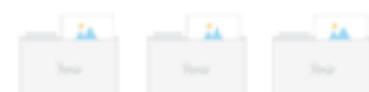
Incentive

Fear

Growth

Power

Social



## Brands & Influencers

## Preferred Channels

Traditional Ads

Online & Social Media

Referral

Guerrilla Efforts & PR

## WRITING BETTER PERSONAS

---

### EXERCISE

- ▶ Now take your empathy map + user flow
- ▶ Create a persona with goals and motivations
- ▶ Add in a scenario that describes the user needing your 1 function App in their daily life
- ▶ 30 minutes + 30 minutes class feedback