### spooktober ux tech exchange Tricks Not Treats: UX Dark Patterns

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Carnegie Mellon University Software Engineering Institute

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## Tips, house rules, and warnings





Turn off your video

Mute your mic

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### **Questions or comments? Raise your hand**

### This might get spooky

If that's not your thing, I won't be offended if you leave!

### There may be barking

Temporarily out of chicken treats. I am sorry.



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## Agenda

- 1. What's a dark pattern?
- 2. Psychology behind dark patterns
- 3. Types of dark patterns
- 4. Spot the dark pattern

### 5. Wrap-Up

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WHAT'S A dark pattern?

Design tricks that get users to do things they didn't mean to do, usually through psychological manipulation.

## Three elements of dark patterns

1. Intentional — see Hanlon's Razor

2. Tricks the user to do something they otherwise wouldn't do

3. Benefits the designer and/or affiliates more than the user



the designers at workday aren't trying to be mean they're just not good



### A QUICK REVIEW OF (SPOILER-FREE)

horroristics

# Visibility of system status

Hush, 2016



## Match between system and real world



## Consistency and standard

Us, 2019



### User control and freedom

Saw, 2004





# Error prevention

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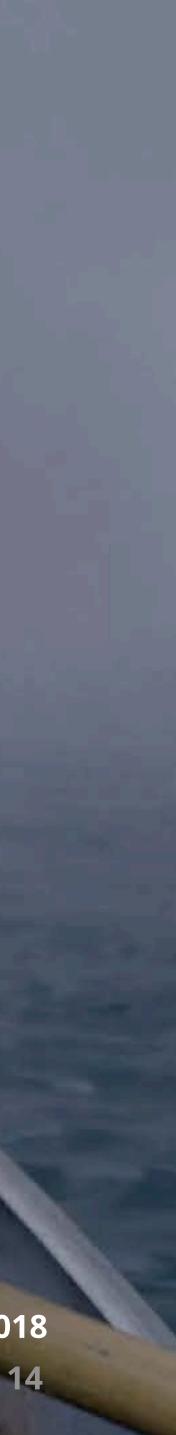
Warrens' Occult Museum

POSITIVELY DO NOT



## Recognition over recall

Birdbox, 2018



# Flexibility and efficiency of use

Cube, 1997



# Aesthetic and minimalist design

A Nightmare on Elm Street, 1984



### Help users recognize, diagnose, and recover from errors

Cabin Fever, 2002



### Help and documentation

Get Out, 2017



**ANY QUESTIONS?** 



- Martin

Psychology behind dark patterns

### Frustration

1. Internal and external

2. Can be positive or negative

3. Tolerance

**PSYCHOLOGY BEHIND DARK PATTERNS** 

## Cognitive Load

- 1. Intrinsic
- 2. Extraneous
- 3. Germane

4. Everyone has their own limits

**PSYCHOLOGY BEHIND DARK PATTERNS** 

# Pattern Recognition

1. We do this a lot!

2. We also see patterns that don't exist (apophenia)



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### Peer Pressure

### 1. Active "Put your seatbelt on."

2. Passive (Everyone else has their seatbelt on so I should too)

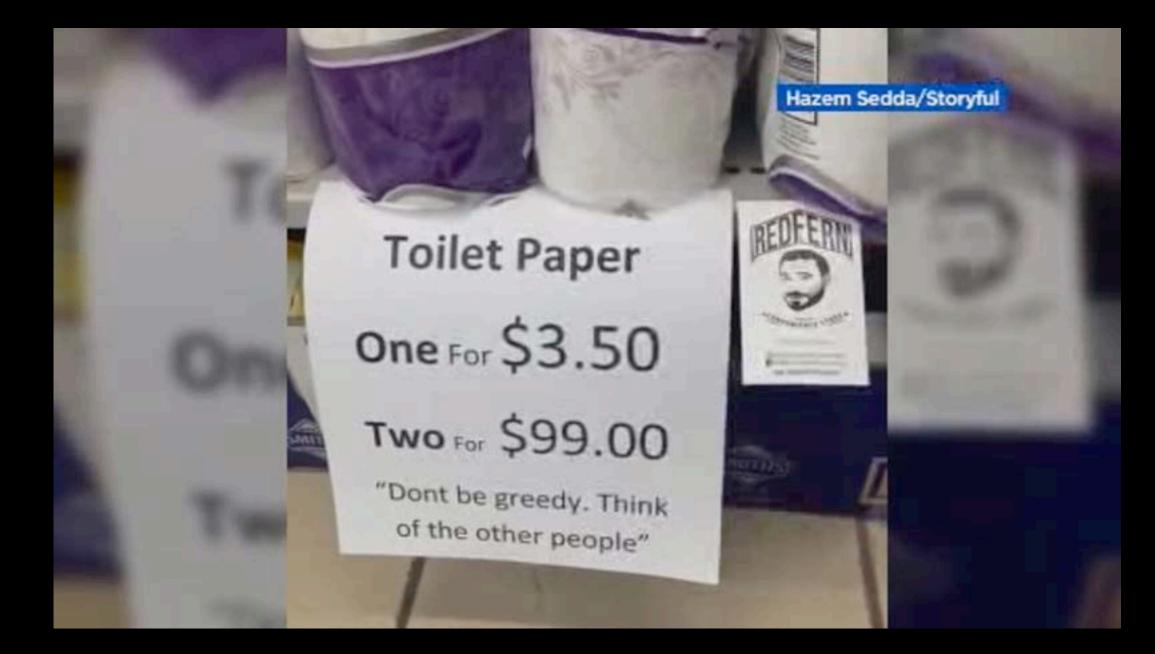
**PSYCHOLOGY BEHIND DARK PATTERNS** 



## Scarcity

### 1. Shorter supply = more value

2. "Perceived value"



### **PSYCHOLOGY BEHIND DARK PATTERNS**





3M 1860 Medical Mask NS

2 other options sorted by price + delivery: low to high

### New

\$25190

Arrives: March 6 - 13 ... More

Ships from

LOL shop

Sold by

LOL shop 80% positive

### New

\$25369 Arrives: March 6 - 13 ... More

Ships from

Sold by

Partyware Essentials Partyware Essentials \*\*\*\*\* (118 ratings) 89% positive

3M 1860 N95 Health Care Particulate Respirator and Surgical Mask (Box of 20) SKU:3MM1860



pecial Price \$18.99



## Negative Emotions

### 1. Shame

### 2. Guilt

### 3. Both are used against us in dark patterns

**PSYCHOLOGY BEHIND DARK PATTERNS** 

# Center Stage Effect

**PSYCHOLOGY BEHIND DARK PATTERNS** 

### 1. If given a number of choices, we tend to prefer the one in the middle

Types of dark patterns

## Trick Questions

read carefully it asks another thing entirely.

First name * :	First name	
Last name * :	Last name	
Email * :	Email	
Phone number * :	Phone number	
Please do not send me d	etails of products and offers from Currys.co.uk	
	f products and offers from third party organisations	

### Answering a question that tricks you into giving an answer you didn't intend. When glanced at quickly the question appears to ask one thing...but when

## Sneak Into Basket

### Sneaking an additional item into your basket, often through the use of an opt-out radio button or checkbox on a prior page.

### What will you do with your domain name?

### We've added privacy. Here's why.

When you register a domain, your name, address, email address and phone number are automatically published for the world to see. Protect yourself from spam and scams with GoDaddy Privacy Protection, which replaces your personal information with ours.See Example 🚱

We highly recommend domain privacy, but it is an optional feature.

Select plan

- Privacy Protection View Details 🕜
- O Ultimate Protection & Security View Details 🕜
- No Thanks

### **TYPES OF DARK PATTERNS**

\$9.99/domain per year

\$14.99/domain per year \$27.98

### Roach Motel

# You get into a situation very easily, but then you find it is hard to get out of it (e.g. a premium subscription).

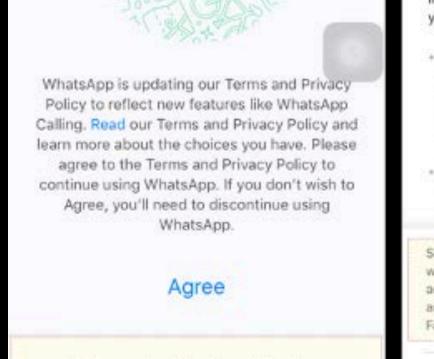
### How do I close my Stamps.com account?

We are sorry to hear that you want to discontinue your Stamps.com service. In order to do so, please call us at our toll-free number 1-855-608-2677 Monday through Friday, 6 a.m. to 6 p.m. and Saturday, 6 a.m. to 3 p.m. Pacific Time. One of our Customer Care Representatives will be happy to assist you.

**TYPES OF DARK PATTERNS** 

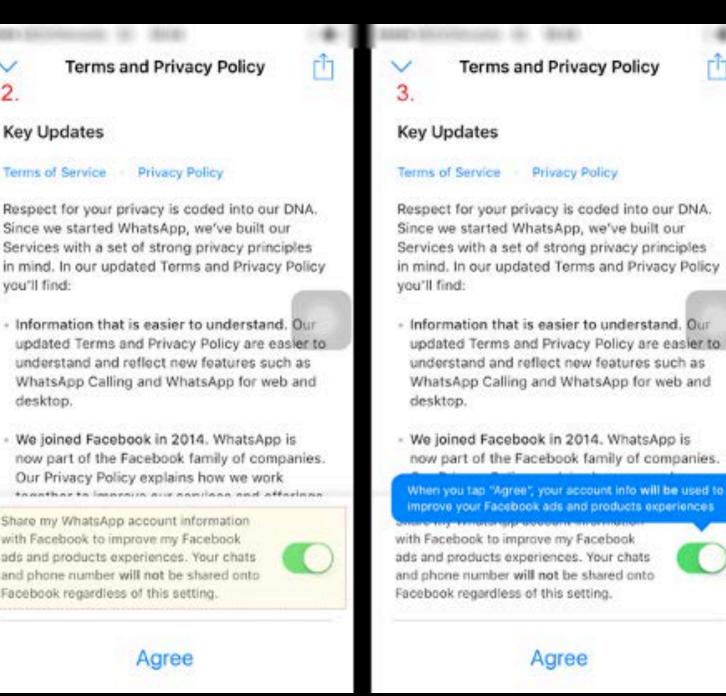
# Privacy Zuckering

### Publicly sharing more information about yourself than you really intended to. Named after Facebook CEO Mark Zuckerberg. Jeremy Burge 💛 💽 🧇 leremyburge



And the second second

Read more about the key updates to our Terms and Privacy Policy.



### **TYPES OF DARK PATTERNS**





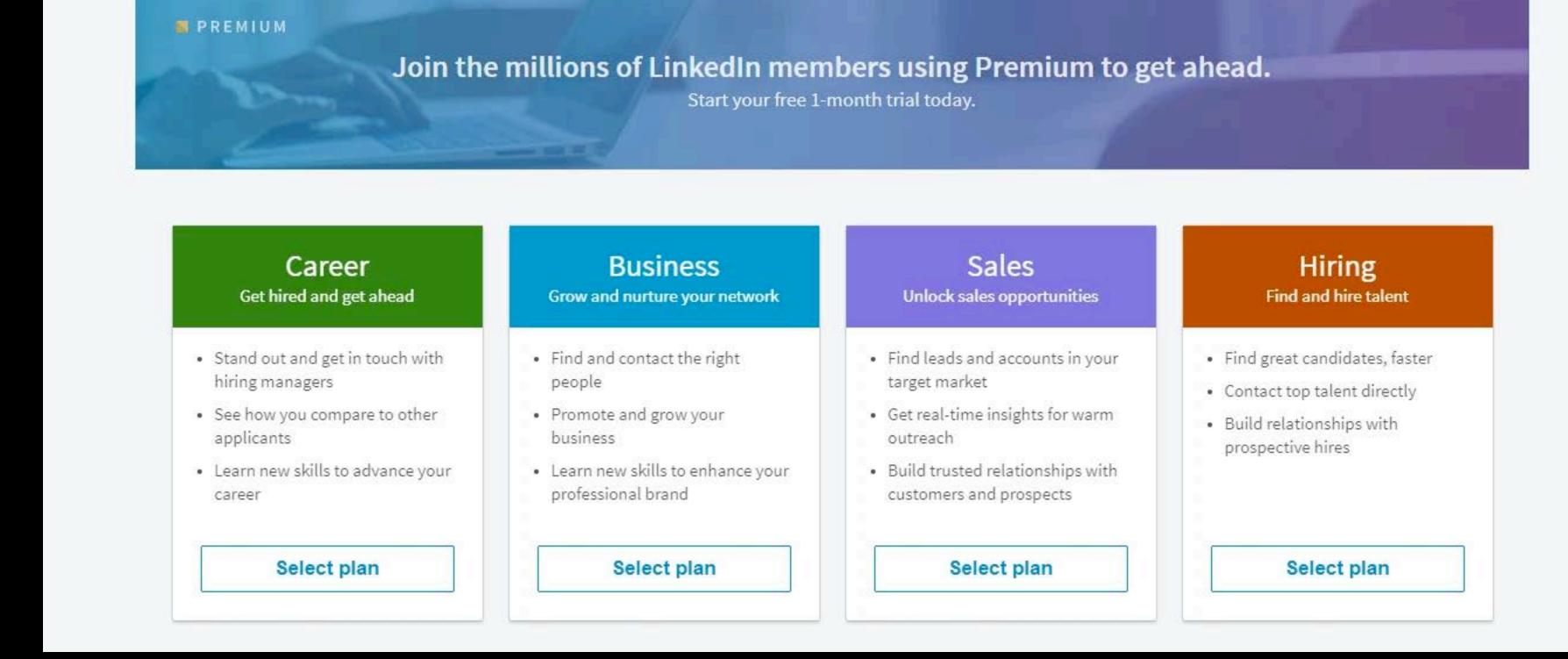
For years Facebook claimed the adding a phone number for 2FA was only for security. Now it can be searched and there's no way to disable that.

Follow

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## Price Comparison Prevention

### Making it difficult to compare the price of an item with another item, so you can't make an informed decision.



### **TYPES OF DARK PATTERNS**

### Misdirection

### The design purposefully focuses your attention on one thing in order to distract you attention from another.



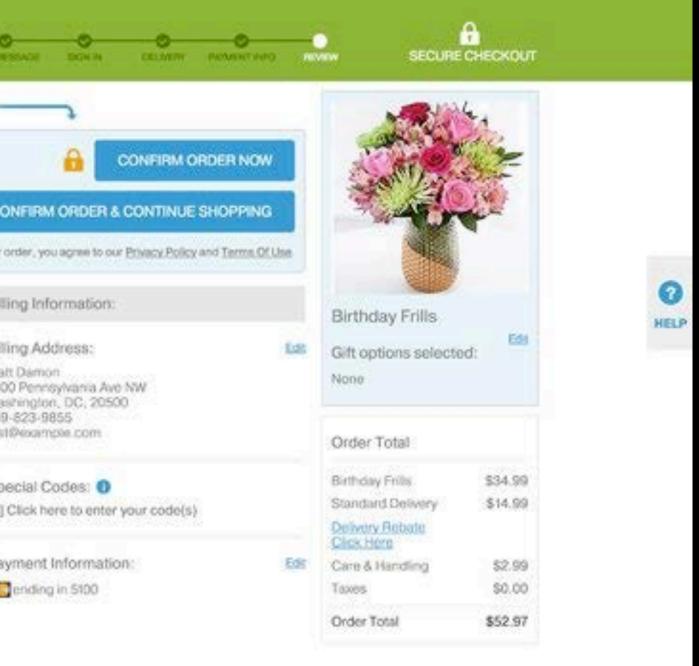


### **TYPES OF DARK PATTERNS**

### Hidden Costs

### You get to the last step of the checkout process, only to discover some unexpected charges have appeared, e.g. delivery charges, tax, etc.

oFlowers	0
888.776.9964	Gircomona
You're Almost Done! Click "Cont	Irm Order Now"
For Delivery To: Matt Damon Delivery Date: 12/30/2016	
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	By place
Delivery Information:	
Recipient:	tides
Matt Damon 1600 Pennsylvania Ave NW Washington, DC 20500 759-823-9855	
Card Message:	Edit
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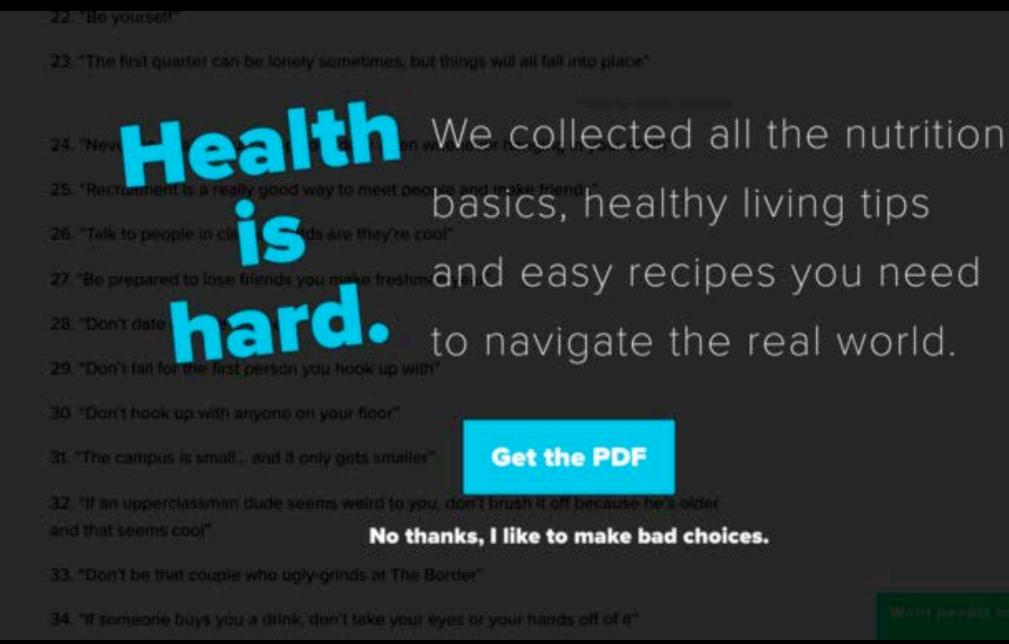


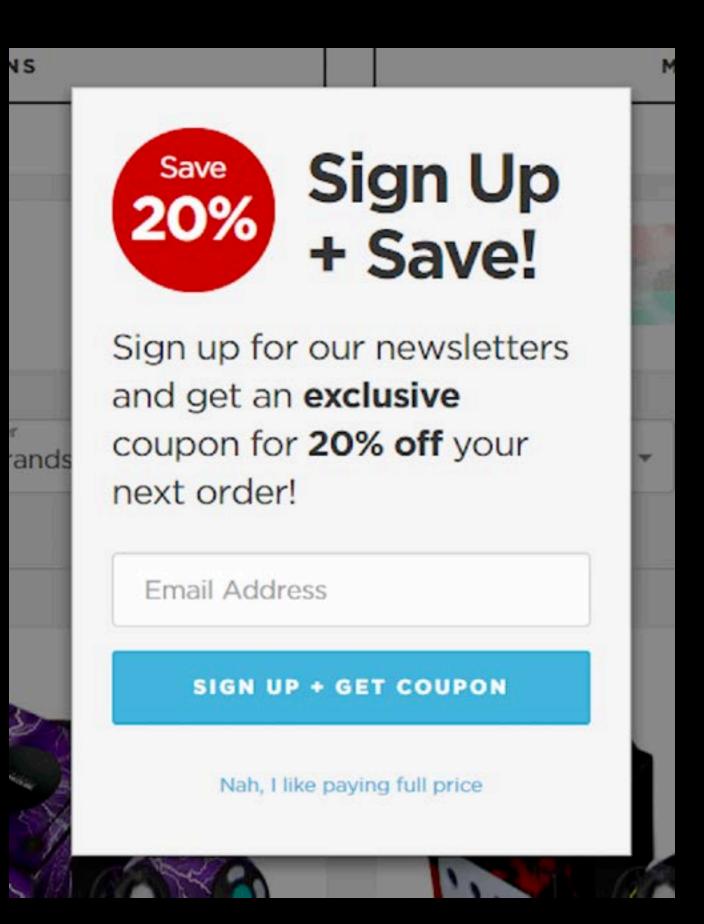
### Bait and Switch You set out to do one thing, but a different, undesirable thing happens instead.



# Confirmshaming

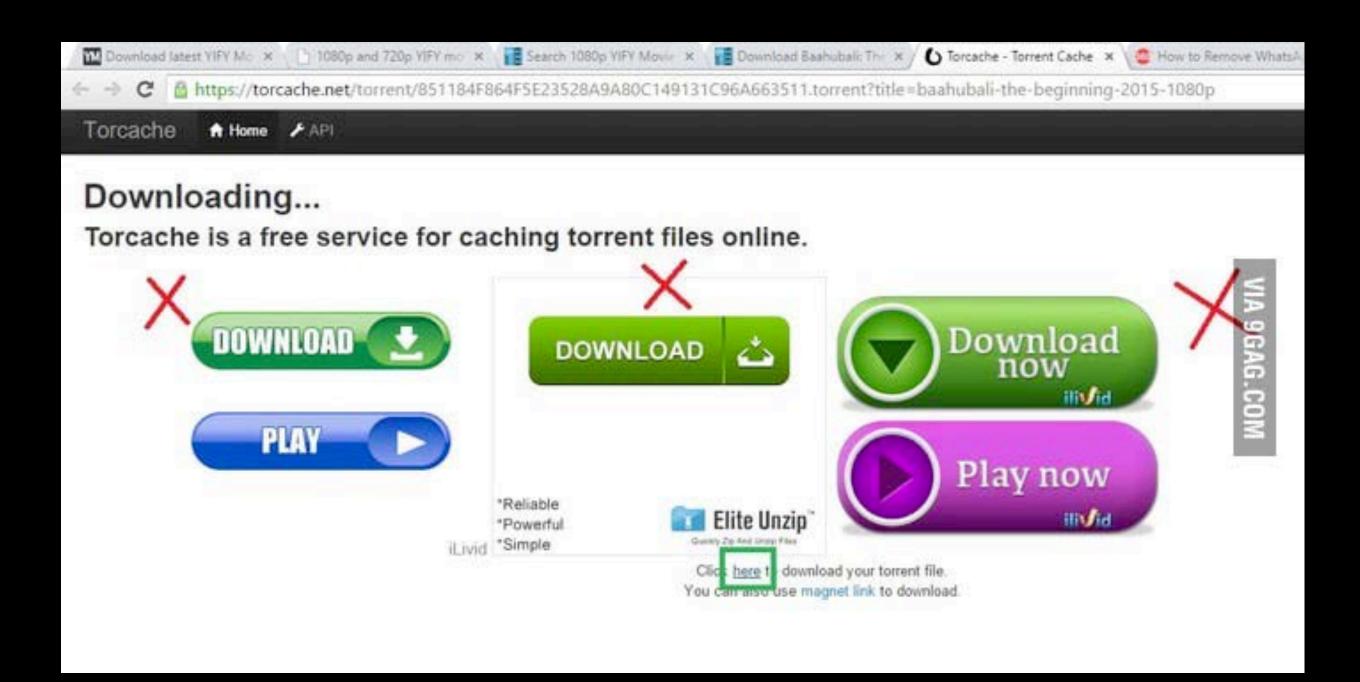
### Guilting you into opting into something. The option to decline might be worded in such a way as to shame you into compliance.





## Disguised Ads

## Adverts that are disguised as other kinds of content or navigation, in order to get you to click on them.



## Forced Continuity

silently starts getting charged without any warning.

Name on card:			
Card number:			
Expiry date:			
CVC:			
	START FREE		

Free 14 days trial. Your account will be renewed automatically after your trial. You can cancel your subscription at any time

**TYPES OF DARK PATTERNS** 

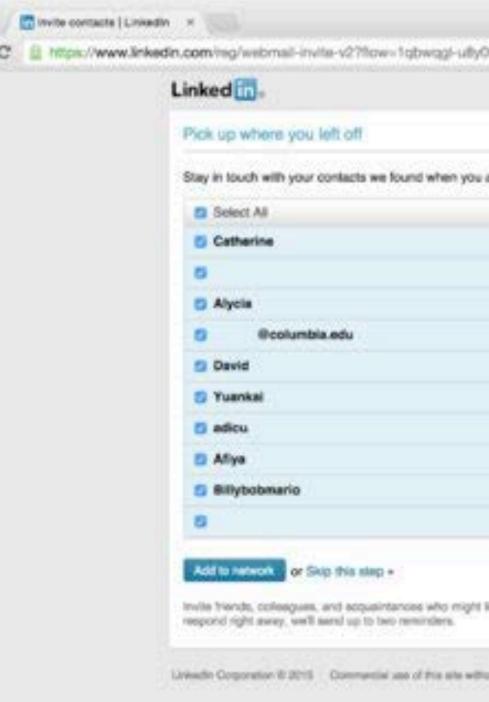
## When your free trial with a service comes to an end and your credit card



## Friend Spam

•

## Asking for your email or social media permissions under the pretense it will be used for a desirable outcome (e.g. finding friends).



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Step 2 of 2	
added your address book. Invite them to Linkedin so they can connect with you.	
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Brookentonavite	
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Bhoreply gibub.com	
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Belloutern	
ke to connect, and would benefit from joining Linkedin. If someone you invite doesn't	
ut impress authorization is prohibited.	

#### WHY WOULDN'T YOU WANT TO BE





## Avoiding Dark Patterns

- If you're setting out to make something user-friendly, this ain't it.
- Benefits business in the short term; hurts it in the long term.
- But if you feel like being evil, go nuts.

Where have you run into dark patterns?

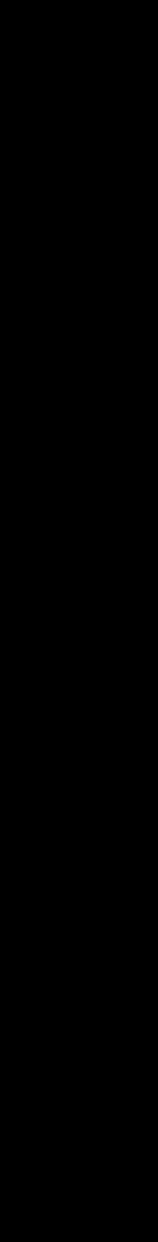
I WANNA PLAY A GAME...

Spot the dark pattern.





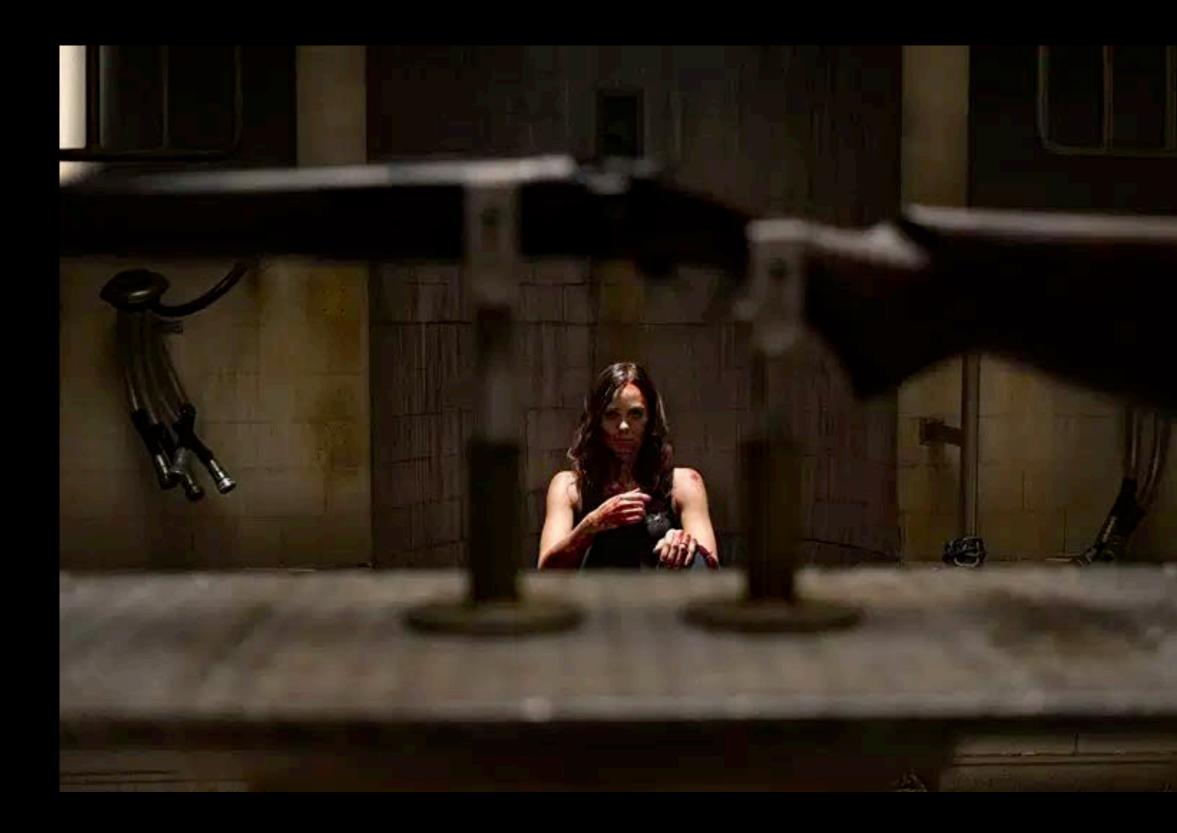
THIS IS YOUR SPOILER ALERT/FINAL WARNING.



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## Jigsaw (2017)



LET'S PLAY A GAME

### Which pattern(s) does the clip feature?

- A. Misdirection
- B. Privacy Zuckering
- C. Trick questions
- D. Confirmshaming
- E. Disguised ads



### Truth or Dare (2018)



LET'S PLAY A GAME

### Which pattern(s) does the clip feature?

- A. Sneak into basket
- B. Hidden costs
- C. Friend spam
- D. Trick questions
- E. Forced continuity



## The Grudge (2019)



LET'S PLAY A GAME

### Which pattern(s) does the clip feature?

- A. Roach motel
- B. Price comparison prevention
- C. Hidden costs
- D. Sneak into basket
- E. Trick questions



## lt(2017)



LET'S PLAY A GAME

### Which pattern(s) does the clip feature?

- A. Confirmshaming
- B. Friend spam
- C. Roach motel
- D. Disguised ads
- E. Forced continuity

**ANY QUESTIONS?** 



- Alexan

Thank you!

### References

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