M mvdit tech book
July 2018

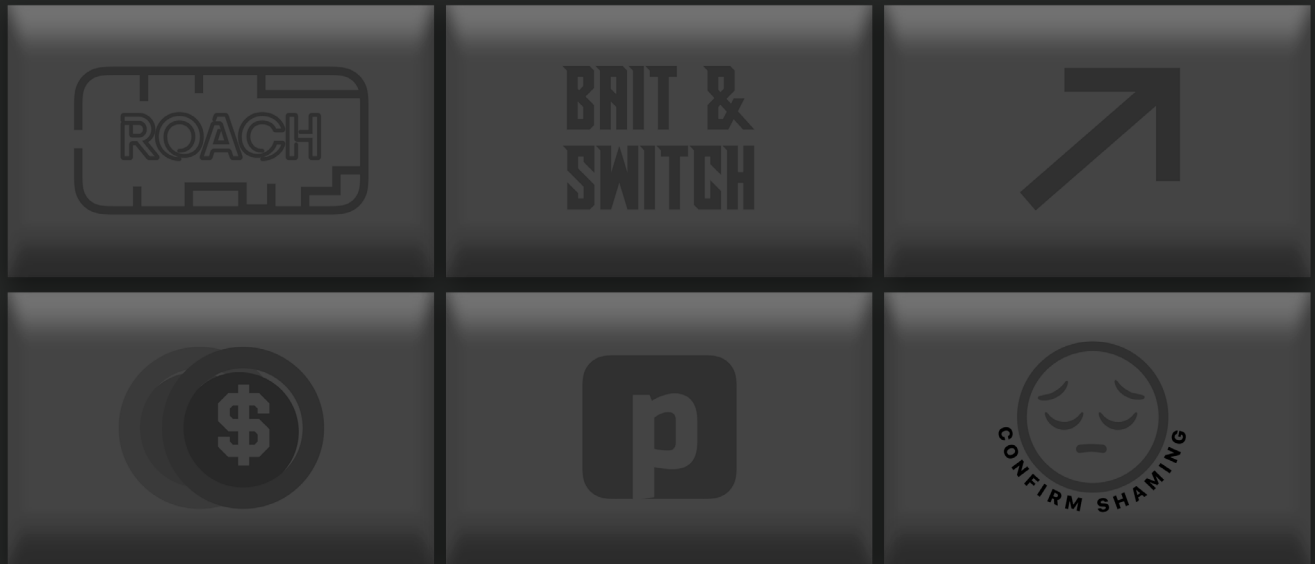# Dark Patterns

THE INTERFACES DESIGNED TO TRICK YOU

"I read a study that measured the efficiency of locomotion for various species on the planet. The condor used the least energy to move a kilometer. Humans came in with a rather unimpressive showing about a third of the way down the list.

That didn't look so good, but then someone at Scientific American had the insight to test the efficiency of locomotion for a man on a bicycle and a man on a bicycle blew the condor away.

That's what a computer is to me: the computer is the most remarkable tool that we've ever come up with. It's the equivalent of a bicycle for our minds."
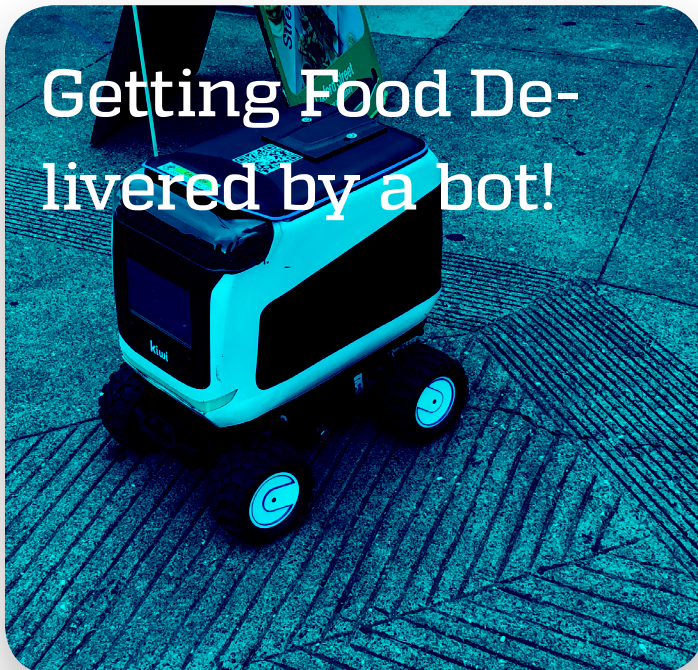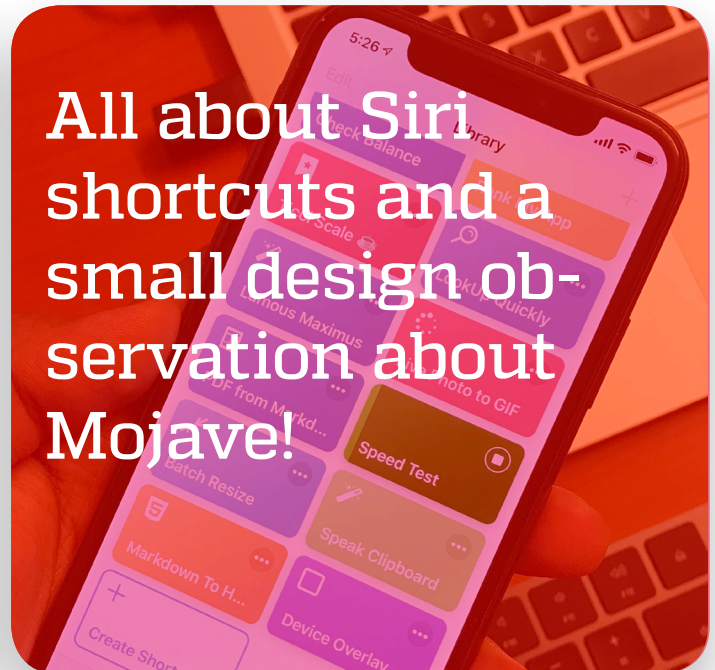
- Steve Jobs

CONTENTS

COVER STORY

WHAT ARE DARK PATTERNS?

Getting Food Delivered by a bot!

All about Siri shortcuts and a small design observation about Mojave!

3

DARK PATTERNS

Meant to trick you, dark patterns are designs that try to make you do things that you don't intend to.

Ever got shamed for using ad-blockers? Got excited at the dirt cheap costs only to realise it's excluding taxes? Or got tricked into buying coupons and add-ons with your purchase?

Apps and websites often try to trick you with patterns such as colour, space, shape and wording to make you do what 'they' intend you to do, as opposed to what 'you' want to.

The user is conditioned to do one thing with the use of colours, size or position but at some point in the user flow that colour or area is used to trick them into doing something he doesn't intend to.

BAIT & SWITCH
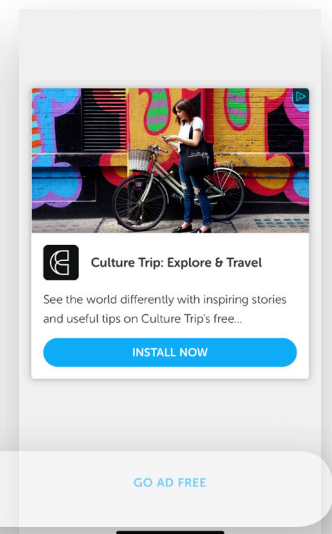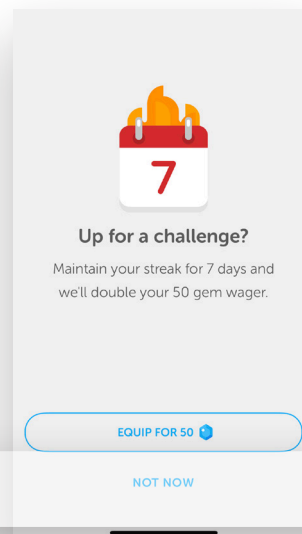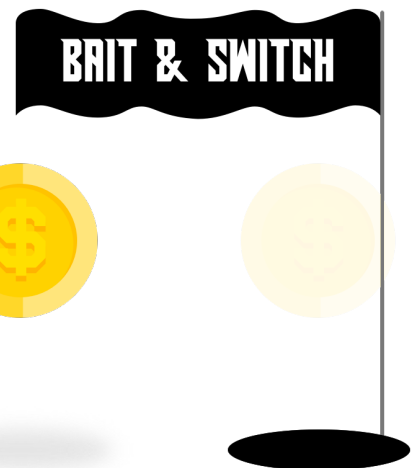
App Name: Duolingo

Dark Pattern used to offer Ad Free Version

The user is conditioned to tap the button at the bottom of the screen, but the last screen in the user flow uses that design pattern *to present a button to buy duolingo premium*. While duolingo's UI is actually good the tricky "go ad free" button leaves a bit of a sour taste.
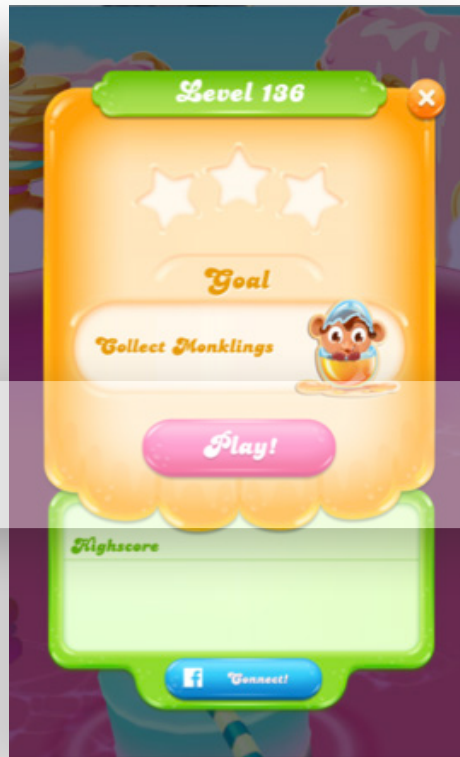
App Name: Candy Crush

Dark Pattern used to offer Coin Purchases

Candy Crush conditions the user to look for the brightly coloured button towards the center of the screen to proceed to the next screen. Once you're out of moves the same colourful button is used to offer you in app purchases to buy more coins. The user, eager to complete the level is more likely to make such an impulse purchase given the position and colour of the button. Children have often known to be taken in by this trick

Bait and Switch dark patterns aren't new and these are just two examples. They've been in use for a long time to interrupt the user flow and to offer the user features that they may not intend to get.

Software applications often interrupt user flows to offer them the latest software update. The user is more likely to click the default option just to make it move away.

While not entirely sinister, Bait and Switch patterns condition the users into falling for a 'trap'. Thankfully though, there are more restrictions in place for your money to actually go to these apps.

6

ROACH MOTEL

It's easy to get in, but incredibly hard to move out!

Browse Help Topics

Recommended Topics

Shipping & Delivery

Amazon Prime

Payments & Pricing

Amazon Pay balance

Returns, Refunds

Ordering

Managing Your Account

Amazon Devices ›

Digital Services & Content

Amazon Business Accounts

~~Other Topics & Help Sites~~

Amazon Devices

Fire TV Stick

Kindle E-Readers

Support for Kindle Content

Alexa, Echo and Echo Dot

Give an Amazon Device as a Gift

› See all Devices & Reading Apps

› Manage Your Content and Devices

Popular Devices

Echo Spot

Amazon Echo Plus

Kindle Oasis (9th Generation)

Fire TV Stick (1st Generation)

Turning off Alexa Calling

It's an easy step to turn on Alexa's calling feature on your echo devices. But if you want to turn off the feature, you have to go through a confusing labyrinth of steps to reach a dead end which results in *a call to their customer service centres* to deactivate the feature.

Closing an Amazon Account

Want to delete your amazon account? Here's how you have to do it:

1. Goto Amazon Help

2. Click Customer Service

3. Select Contact Us

4. Click on Prime or Something else tab

5. Select Account Settings from the drop down list

6. Select Close my account

At which point you'll be told to Contact Amazon to close your account!

Amazon makes it easy for you to enroll into services, but makes it almost inaccessible for you to get out of them. It's a roach motel experience. With so many hoops to go through you'll probably just give up closing your account or disabling the feature.
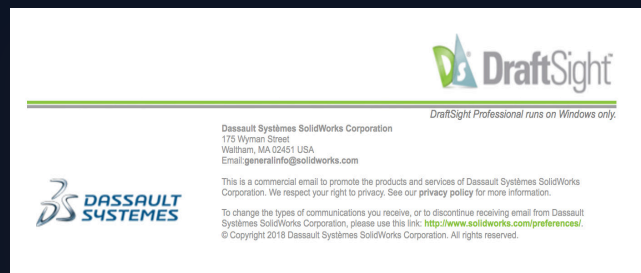
Newsletters also make it ever so slightly difficult for you to unsubscribe them. Can you figure out how to unsubscribe to the newsletter in this screenshot from a Dassault Systemes?
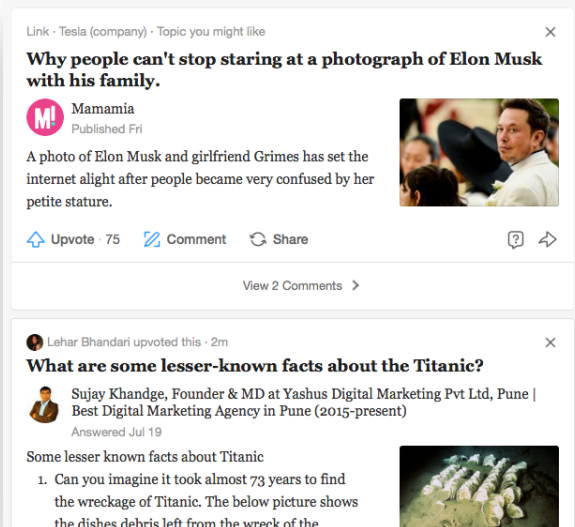
You have to click on the "*Preferences*" link in order to further follow a series of steps to unsubscribe to the newsletter.

Disguised Ads

Made to look as part of a navigation or just another form of content, they're instead designed to trick users into clicking them.

Quora

It's hard to separate quora's promotional content that takes the user to a different site, from the user generated content that most users come for.

Take the screenshot on the left as an example. It's hard to figure out which of the two is an advertisement.

Hint: Look for the "*link*" tag.

Image from *darkpatterns.org*

Softpedia

These advertisements are often run on websites that offer you some sort of shareware or free software download. The idea is for you to click the shinier download button. Often that of the advertiser and not the download website

Sponsored Content

Is it news about your favourite tech company? Or is it an advertisement disguised to look like news by the company itself? It's hard to figure out unless you actively look for the "sponsored" tag at the top of the screen.

privacy zuckering

Named after the founder of a social media known to make it easy for you to share your private information. Privacy Zuckering is when a company tricks you into sharing more information about yourself than you intend to.
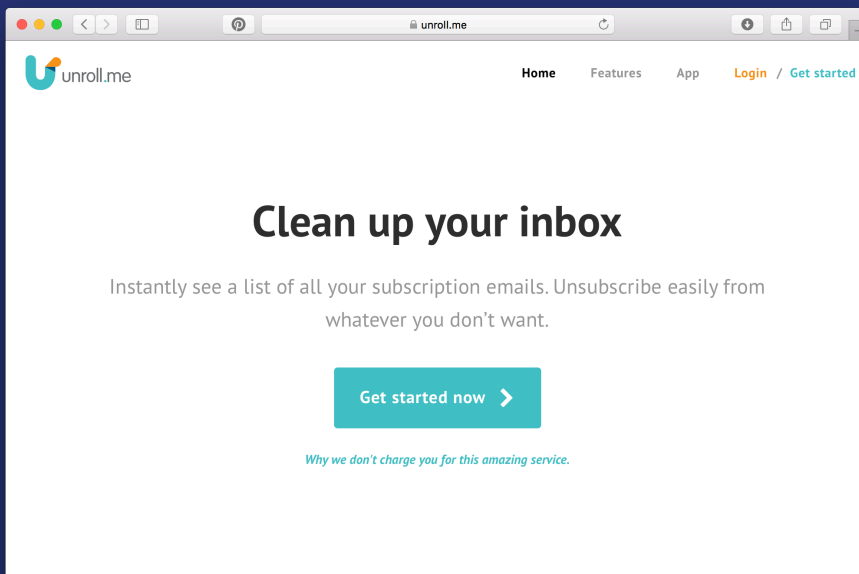

Not only does Unroll me access more than what the users would want to share with, they then go on to sell that data.

And you'll probably never know from the website's description that they indulge in such a practice.

Unroll me is an internet service that cleans up your inbox and lets you easily unsubscribe from mailing lists. But in exchange of allowing you to unsubscribe from mailing lists easily, unroll me also scans people's inboxes for more private information and then sells that information to data firms.

You didn't intend to, but unwittingly shared a whole lot of your private information. They faced a lot of backlash last year when it was brought to attention that Uber paid Slice Intelligence, a data firm which collected data from Unroll me to keep tabs on its rival Lyft.
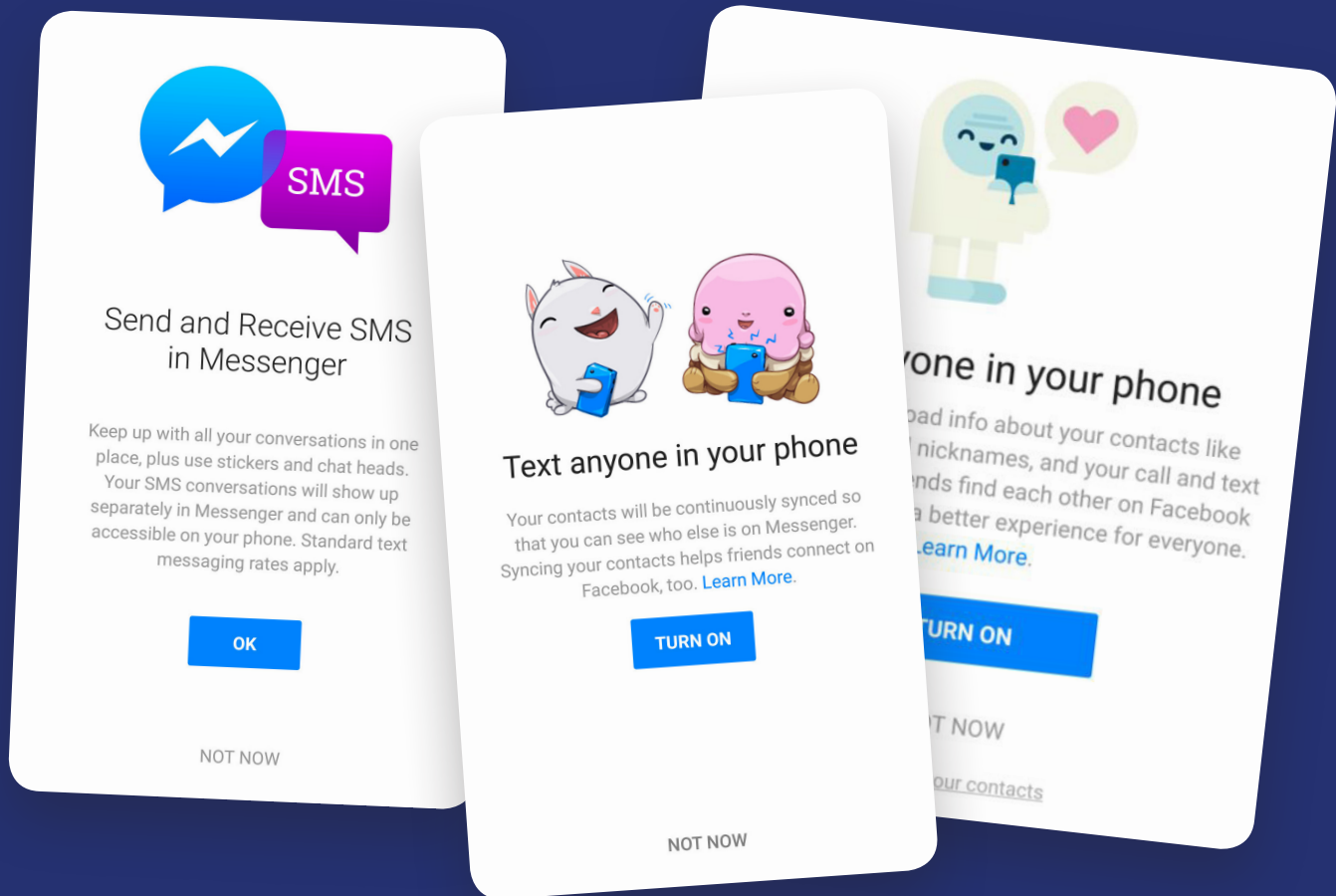
Facebook's SMS Chat Feature

A discussion about Privacy "Zuckering" is incomplete without facebook. At every step of using it, facebook encourages you to share private information. However, one of Facebook's many such features stood out in a recent scandal.

Facebook Messenger on Android offers users the ability to send and receive SMS in messenger, in exchange for continuously uploading contact information and phone numbers.

The service received severe backlash when people discovered call logs and more private information after they downloaded all their information following facebook's GDPR compliance.
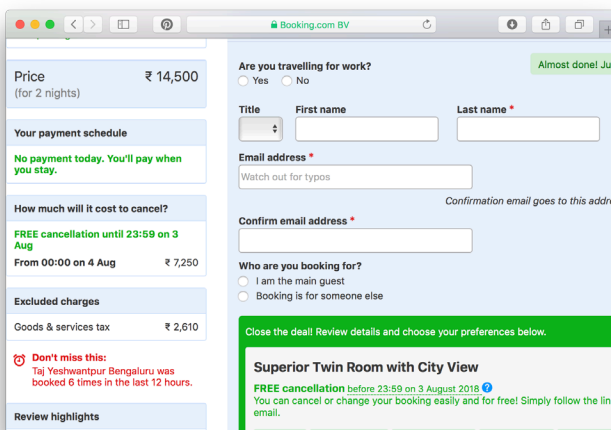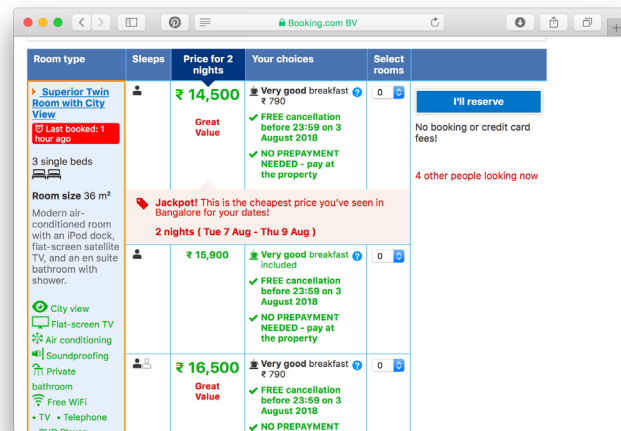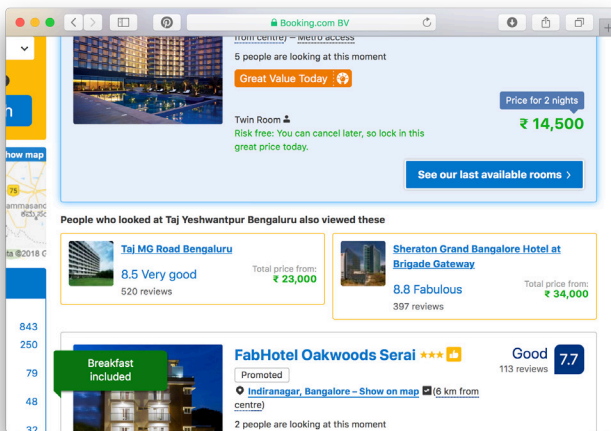
Facebook's business model works only if you share your private information with them.

And if recent events are any indication, your private information is not safe!

HIDDEN COSTS

You're offered a good deal and the cost is dirt cheap! You reach the last step only to realise that a significant amount of taxes weren't mentioned!

Hotel Bookings

An industry wide practice at this point, booking.com is just one of many examples where hidden costs crop up at the lost moment!
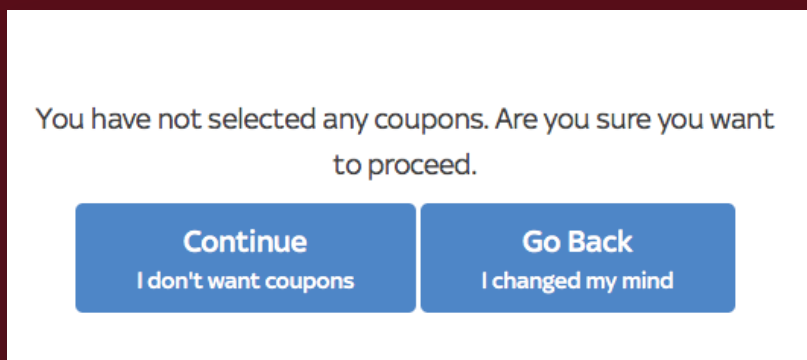
Notice how each step shows the same low cost fares, except when you reach the last step, there's a small section explaining the "excluded costs" which include quite a hefty sum of taxes with them. The taxes were hidden from the user to show a reduced cost.

Confirm Shaming

✕ Remain ignorant

These dark patterns come into play when the brand's UI asks the user to confirm his choice, but also shames him for not making the choice that they wanted him to make.

You have not selected any coupons. Are you sure you want to proceed.

Continue
I don't want coupons

Go Back
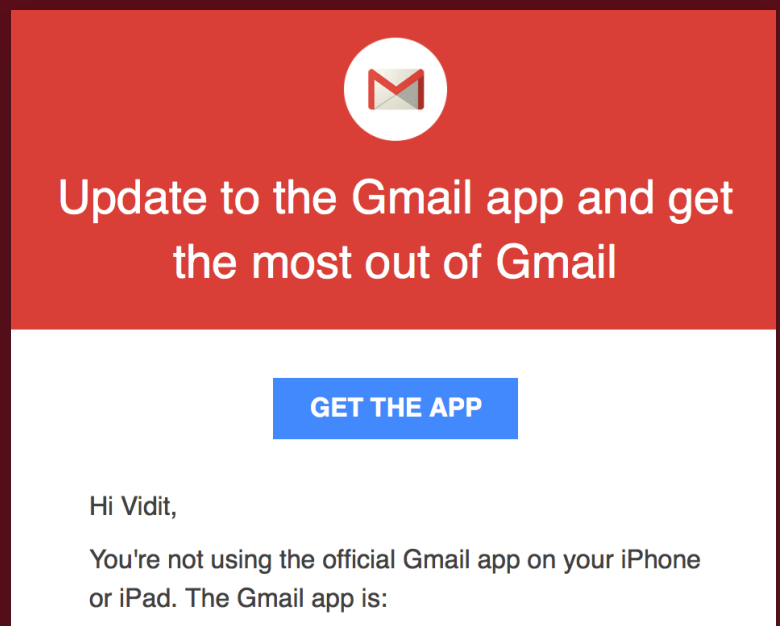I changed my mind

Tata-Sky

Every time you pay for your DTH subscription with Tata Sky you are offered to get coupons for yourself. Don't want them? This is what the screen tells you; it tries to convince you that not getting coupons is a bad idea!

GMAIL

Gmail confirm shames you for your choice of mail app on your phone.

It's incredibly creepy as it is that google knows about the mail app that we're using, but then google goes on to send us a disapproving email telling us how we should be using gmail's app instead.

Google could surely do better than to ask iPhone users to switch to their mail app!

Update to the Gmail app and get the most out of Gmail

GET THE APP

Hi Vidit,

You're not using the official Gmail app on your iPhone or iPad. The Gmail app is:
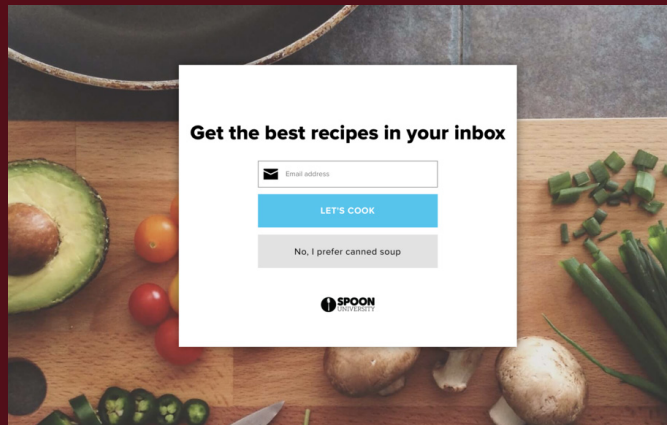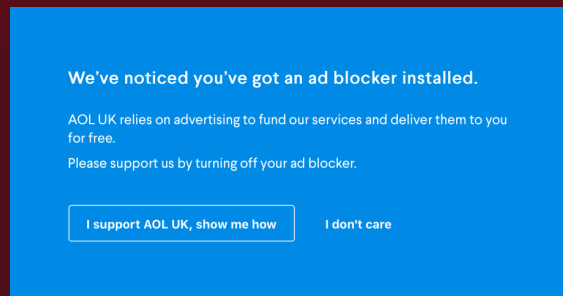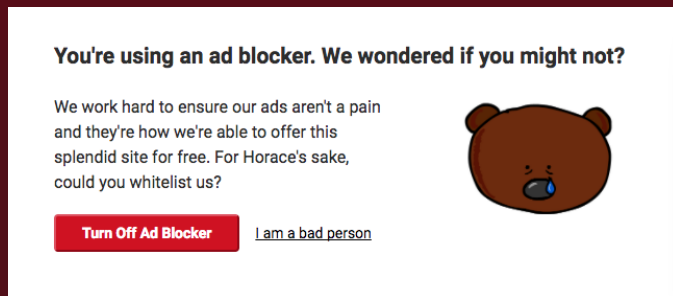
I found some of these resources on an excellent tumblr blog called : *confirm-shaming.tumblr.com*

Some designers may feel it's witty to add these phrases, and sometimes it is. But there's a fine line between being witty and shaming the user for their choice.

That's not all! There are more types of dark patterns you may come across. These include Forced Continuity, Friend Spam, Misdirection and more. I encourage you to read more about them and stay informed about the ways in which different companies try to trick you into doing things they want you to do, as opposed to what you want to.

It's also important to note that dark patterns form a part of a spectrum. Sometimes they can be harmless ways of offering premium experiences, but on some of the other occassions it's best to stay away from them. This post is not meant to scare you against using the services, but to make you aware of how interfaces may sometimes try to trick you.

Dark Patterns is a term coined by Harry Brignull, a user experience research and design specialist. And his awesome website darkpatterns.org is worth checking out. They even have a "Hall of Shame" for interfaces that are deceptive.
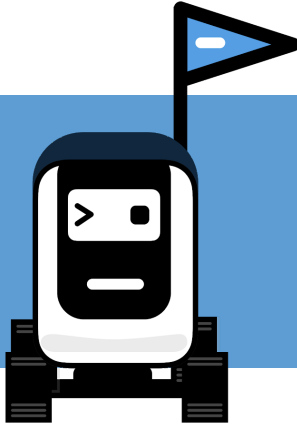
HAVING FOOD DELIVERED BY A BOT!

Kiwi is a Berkeley based "food delivery" startup that offers delivery options from the popular nearby restaurants, and then delivers them to user through an automated vehicle, which can be unlocked by the user to collect the food items. In just about an year, Kiwi seems to have made a decent amount of tie-ups with the local restaurants, and seems to gathering steam in the Berkeley area quickly.

There's no doubt though, that the real crowd puller for kiwi is the Bot that's currently trotting the sidewalks of Berkeley. A bright blue flag hangs on the petit bot to make the vehicle noticeable to the people walking on the street. The bot moves cautiously, looking twice before crossing a street. It's a pleasant looking design which seems as though it was internally designed, as opposed to getting an off-the shelf vehicle.

For some reason, Bay Area's budding entrepreneurs in the food sector seem to be obsessed with removing human interaction between the restaurant and its customer. Last year it was food being put in lockers for customers to collect, by Eatsa , this year it's Kiwibot which aims to replace

delivery boys with delivery bots. Dominos has had something similar in the US for a few months now, but this is the first time that I witnessed it, and it definitely caught my attention. So I decided to give the app and the experience a try.

The onboarding process for Kiwi; Do we really need these screens at this point in the user flow? I think some of the permissions could be asked for at a later time.

Straight up, the onboarding experience isn't very appealing. It's just a bunch of screenshots that inform the users about the permissions they must give in order to use the app effectively. Personally I found that the app didn't really need those permissions on first launch, you can ask me to give a permission for notifications when I place the order, my location information can be asked for when I'm looking for restaurants. The images on display weren't optimised for iPhone X either, I could see text being cut off by the margins, but that seems like a problem which can be fixed with a minor update. The bigger problem is the fact that, the first launch screen exists in the first place, I'd personally do away with it, or talk about the product on that screen instead of prematurely asking permissions.

The layout for selecting the restaurant is pretty simple. There's just a list of available restaurants and pressing one of them leads you to another simple list of menu items, you can customise them if that's possible for the particular item (for example you'll need to customise a burrito from Chipotle). The flow works fine if you're not customising your order. If you are customising the order it gets confusing very quickly, moving back from the customisation screen actually cancels your order, and you need to start again, however if on the customisation screen, you tap the add button, it actually takes you back to the order screen but this time with the order quantity selection element on the screen, after which you can confirm and setup the payment and address information. It's also surprising that the app doesn't use a lot of system elements. For example there's no auto fill for credit card information, so you need to input the card details manually.

16
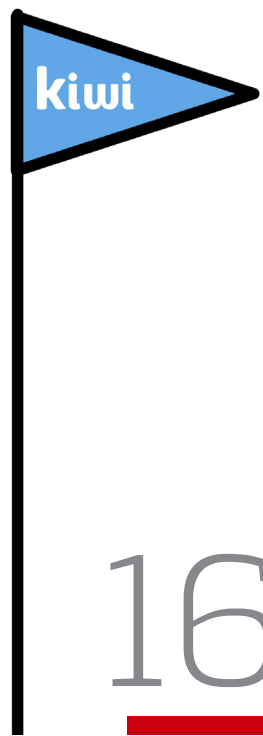
Once the order is placed the app should show you a map with the position of the bot (which didn't work for me during this particular order but I suppose it was a one off bug); The screen also features an unlock button which gets activated once the bot reaches the location.

While the ordering experience wasn't great, I managed to place the order without much of a hitch. The receiving part was also pretty much seamless. I just had to press the unlock button in the app and the bot opened to show the food item neatly placed in the buggy that also serves as a hot-box. It seems as though Kiwi has spent quite a bit of time perfecting the delivery vehicle.

And the app's improving quickly. In the month since I've used Kiwi there seem to be minor improvements already. It's good to know that the creators are taking feedback seriously.

But is it *really* better than having your food delivered by a human being? I don't think so. Once the novelty of a cute robot delivering your food dies off, the only scenario where this may be feasible is is when its hard to find people to deliver food items, or there's an economic benefit for the restaurant to have your food delivered by a bot. While it was fun to see my order delivered by a robot, I wonder if it's something that popularises any time soon.
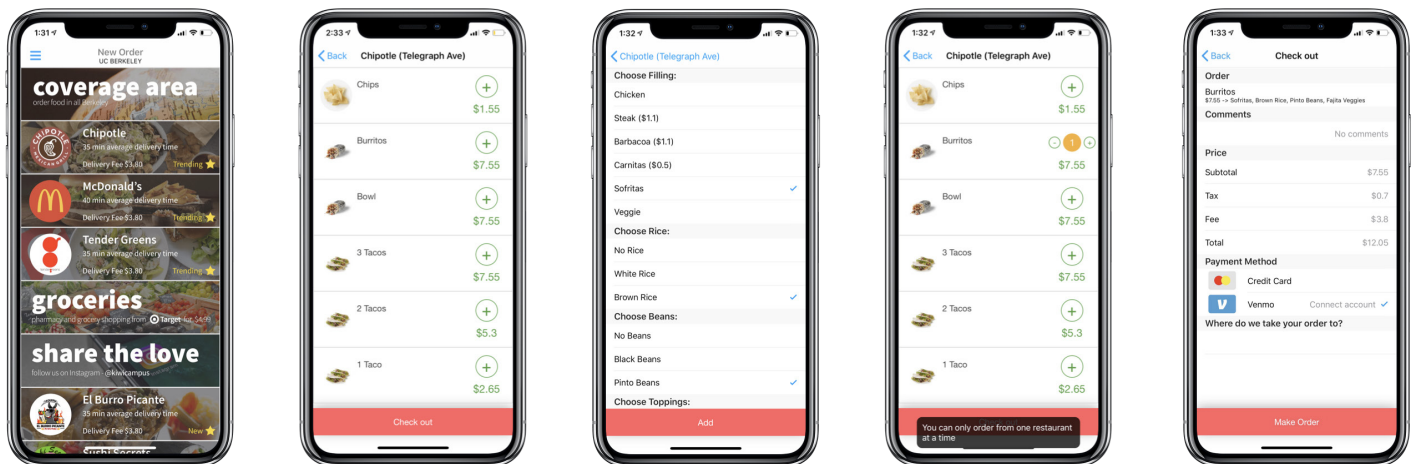
The user flow for ordering a customised meal with Kiwi. While it's better to have a bare-bones approach to the process than to offer fancy animations for no reason, sometimes even the simplest of interactions can become confusing.

In this case it was the app going 'back' to the previous screen after pressing "add" that lead me to believe that if I were to do the same, it'll still retain my order information. It didn't and I had to start over.

WHAT I WANT UIKIT ON MAC APPS TO BE

I've been observing the design UIKit apps on Mojave for a couple of weeks now and there's something that's been nagging me.

Design paradigms on iOS are very different from that on macOS. On iOS there's a lot of direct manipulation involved, and so it makes sense to have animations and interactions that respect that manipulation. The date picker on iOS needs to change under my finger, and it must respond to my gesture, the date picker on macOS is not that. It's a pop down list, which makes a lot of sense for a point and click system. Buttons don't need to be too large on macOS either, they can be much smaller.
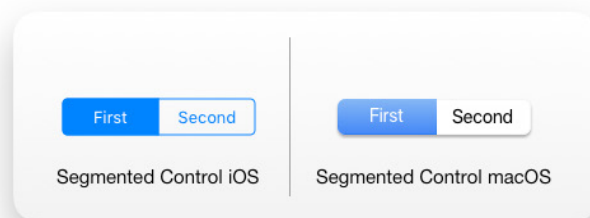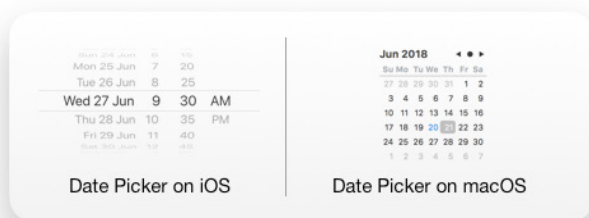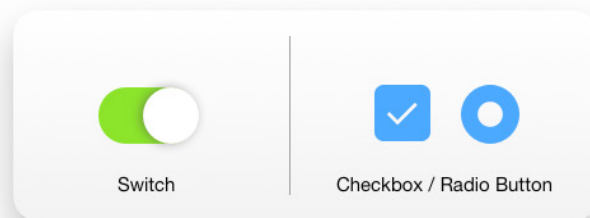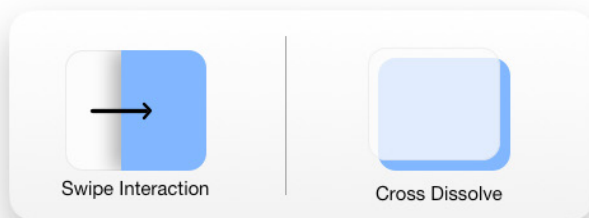
What I hope UIKit on macOS is about: A way to bring iOS apps on macOS so that they feel native to macOS. I shouldn't look at them and feel as though they're from a different world of apps. I want them to feel as native as possible.

What I hope UIKit on macOS isn't about : A way to bring iOS apps for developers who want make a bare minimum effort of doing it, without caring about how their apps look and feel on macOS. Such apps would stand out and would feel odd.

Apple gets to define what is Native here. But what happens if the Apps that Apple's supplied this year don't feel native to the platform? There's a big responsibility on the design of these apps. And while it's still early days and the UI will almost certainly change over time, the decisions that they make, will form the decisions made by developers in 2019. As a consumer, I don't want iOS date-pickers on my macOS apps, ever!
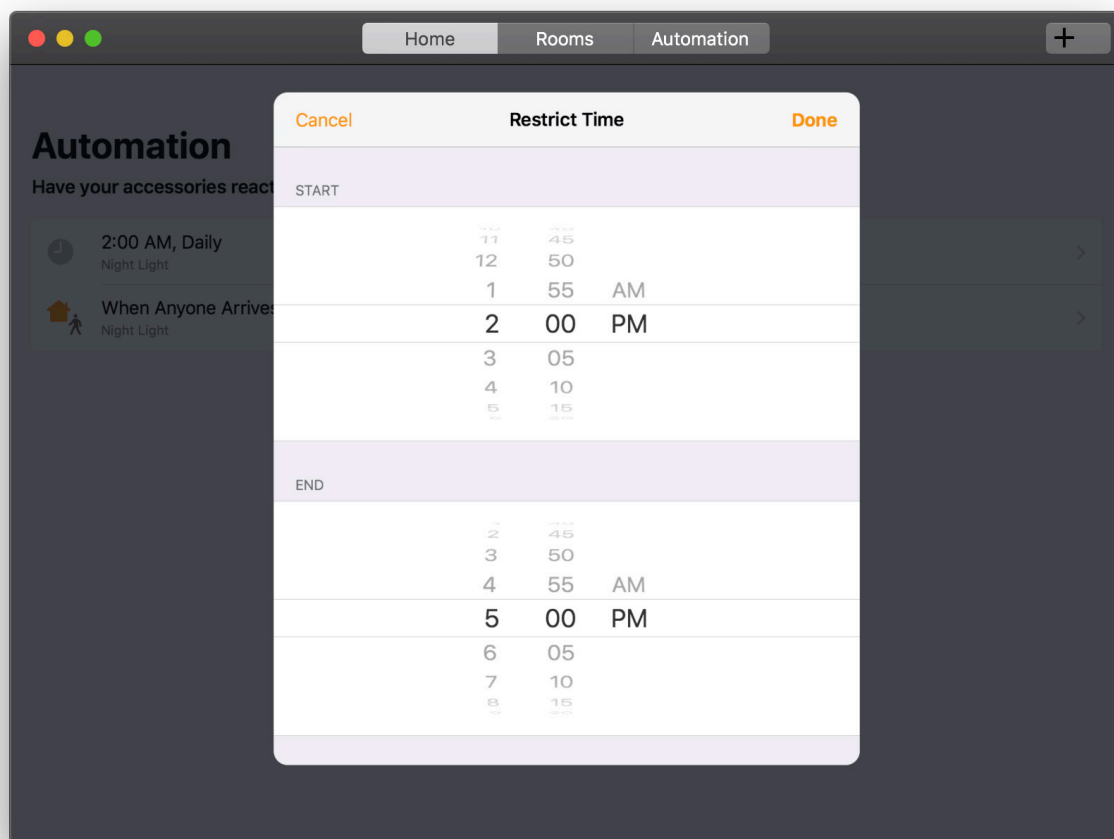
*The four UIKit apps on macOS Mojave include a lot of elements that make them feel native. But when you dig deeper you can still see references to iOS, like this time picker which isn't the best experience on macOS.*

While some may be more usable than the others, I'd love to see native macOS elements to be in these apps.

Still early days though, I hope we'll see changes to these elements.

19

iOS Automation
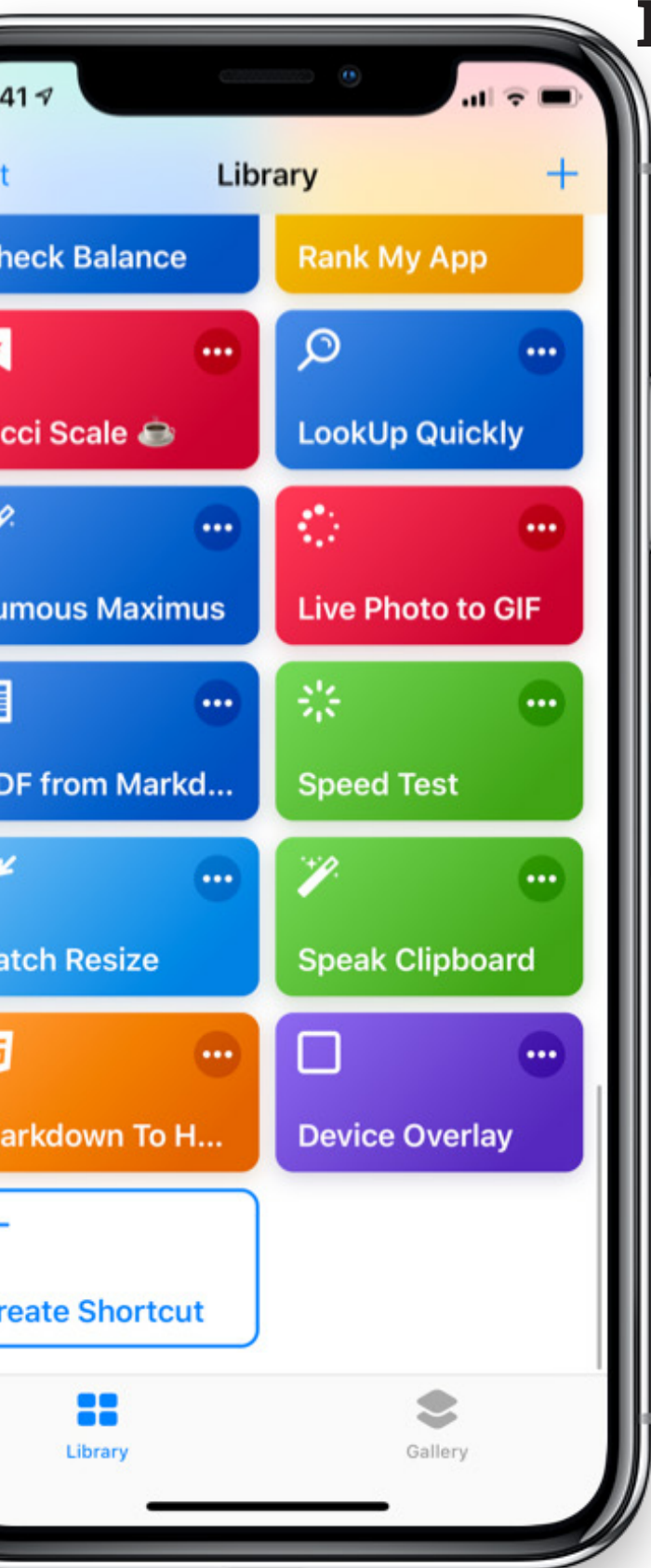
I've been using the workflow app since it came out back in 2014, and over the years, I've been able to amass a few nifty workflows that help me increase my productivity. With Shortcuts *(a successor to Workflow, which was acquired by Apple about an year and half ago)*, this gets taken a step further, as the app has gained some more capabilities and has Siri support, which lets users present the Shortcut's results in a Siri Interface.

Basically workflows (and in the future shortcuts) are a way to let users accomplish multiple tasks at once. Each workflow is divided into a chronological list of tasks that the iOS device performs when you press the play button. This could be as simple as taking your latest Live Photo and sharing it as a GIF or as complex as performing multiple python scripts in combination with other workflows, to generate a desired result. What you do with the chronological list of actions is totally upto you.

Why should you care about automation?
It makes you more productive, by saving you the effort of doing something menial repitatively. We all have some tasks that we do often. Automation is a great way of bringing them together under one workflow, so you don't have to do them over and over again.

Over the course of next few months, I'll be sharing my favourite Workflows and Shortcuts which I feel others may find useful. I've compiled a short list to start with:

20

PHOTOS > PDF > SHARE

A simple shortcut that takes multiple photos, converts them into a PDF and then presents a share sheet to share the files. You can also add a dropbox upload command to upload the files to a cloud sharing service and then share its link.

WORKFLOW | **SHORTCUTS**

BATCH RESIZE PHOTOS

This one lets you resize multiple images to your desired size all at once, and then saves them in an iCloud Drive folder to access them later. I find it useful for when I need to upload images for my blog.

WORKFLOW | **SHORTCUTS**

LIVE PHOTOS TO GIF

Live Photos are really cool, but they're seldom supported by websites like Facebook or Instagram. To make them shareable one could convert them into videos or GIFs, depending on the nature of the photo.

WORKFLOW | **SHORTCUTS**

COMBINE PDFS

Takes multiple PDFs and combines them into one.

I'm not sure why more PDF readers don't have this option by default. It's such a handy tool that helps in consolidating files.

WORKFLOW | **SHORTCUTS**

SPEED TEST

I found this one online but decided to a bit of customisation to get the Network Name in Shortcuts as well. So now, technically Siri can report the results for my WiFi's speed every time I feel the need to.

WORKFLOW | **SHORTCUTS**

TOP 25 SONGS

Back in the day iTunes had this cool feature which'd let you rank your songs by play count and create a smart playlist for you. This can be done by using Shortcuts in iOS now. You can even add filters to restrict the genres or artists in the list.

WORKFLOW | **SHORTCUTS**

DEVICE OVERLAY

Device Overlays are something that I often need to for my blogposts and product shots. In this shortcut it's easy to select multiple screenshots for different devices and add overlays to them. It even masks the screenshots for iPhone X around the sensor area.
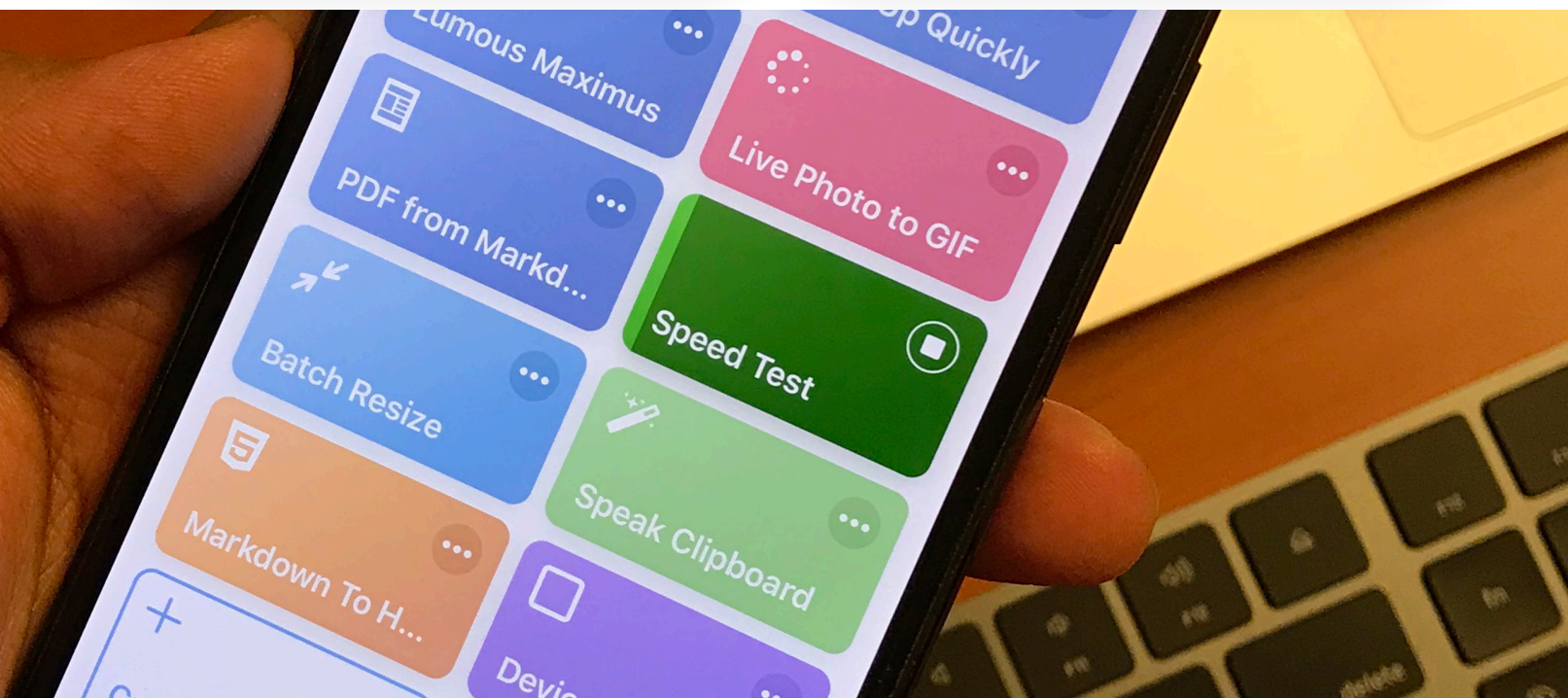
SHORTCUTS

LUMOUS MAXIMUS

I'm a Harry Potter Fan, and I like the idea of saying magic spells to my phone. Complete with the "you must speak clearly" part! ;)

You guessed it, lumous maximus turns on the flashlight to full brightness!

SHORTCUTS

Pixel Quiz July 2018

Vidit Bhargava

Q1.When you plug your phone into a car stereo, the phone starts playing music alphabetically, this usually means that there's one song that you'll hear whether you want to or not. Many songs starting with the letter A have probably been ruined thanks to this quirk, but if you were to download Samir Mezrahi's creation called "A a a a a Very Good Song" you'd be able to circumvent this problem, and be able to buy enough time to queue your music. Samir's creation was so helpful, that when the song released, it immediately began climbing the iTunes Top Music charts. What's so special about the song?

Q2. The word X has it's origins in Middle English, where it meant "to roar". Today however, it's referred to as the onomatopoeic sound describing a low pitched noise. X is also a prominent feature in game controllers. Simply name X.

Q3. Poe's law is an Internet adage that states that, without a clear indicator of the author's intent, it is impossible to create a parody of extreme views so obviously exaggerated that it cannot be mistaken by some readers or viewers as a sincere expression of the parodied views.

We often see the implication of the law, when someone puts an X at the end of their post. Just so, people don't mistake it for something genuine. Put Fundae. What is X?
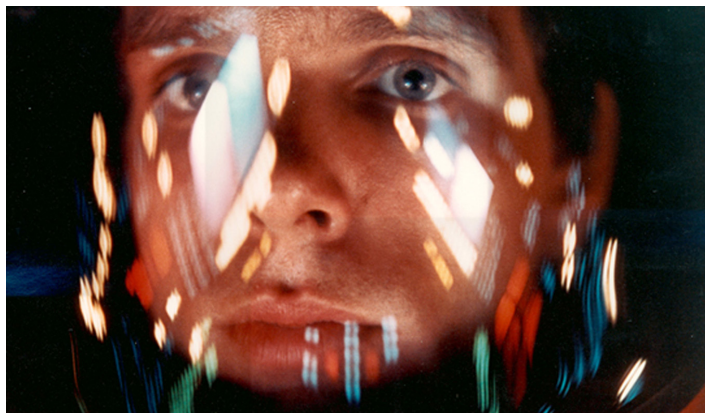
Q4. While he was designing the X for a popular movie in 2008, John Nelson hung up this poster from 2001: A space Odyssey as an inspiration. In this scene the character Dave had his helmet on, reflecting the graphics that were visible to him. The shot would end up being the inspiration for X. X went on to be a ubiquitous element of the movie. Just explain what is X and the 2008 movie.

Q5. An X attack is a dDOS attack aimed at XML parsers. An example X attack consists of *defining 10 entities, each defined as consisting of 10 of the previous entity, with the document consisting of a single instance of the largest entity, which expands to a billion copies of the first entity*. (Basically repeating the first defined entity, a billion times). In the most frequently cited example, the entity is a string called "LOL". Hence the name X. What is X